Art as 'Artificial Stupidity'

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Thesis submitted for the Degree of Doctor of Philosophy

University of Sussex

June 2016

Acknowledgements

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UNIVERSITY OF SUSSEX
MICHEÁL O'CONNELL, DEGREE OF DOCTOR OF PHILOSOPHY
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SUMMARY PAGE

Through treatment of selected interventions and artworks, the thesis investigates relationships between cybernetics, conceptions of intelligence and artistic practice. The works in question are primarily the artist's own, documented in the thesis and a separate portfolio. Specifically, intelligence's downside, the controversial notion of stupidity, has been reappropriated as a means of considering the way artists intervene and how art, as a system, functions.

The term 'artificial stupidity' was invented in reaction to a particular construal of what Artificial Intelligence (AI) meant. The notion has been employed since, and the thesis discusses interpretations and uses of it. One meaning relates to an ability to become, or make oneself, 'stupid' in order to facilitate discovery. In the conclusions, the arguments are extended to 'art as a social system' (Niklas Luhmann), suggesting that it survives and reproduces through a wily kind of pretend idiocy combined with occasional acts of generosity to other systems.

The research methodology is threefold. Firstly, unapologetically playful approaches, characteristic of the artistic process, were utilised to generate ideas. Thus, art becomes primary research; an equivalent to experimentation. Secondly conventional secondary research; the study of texts; was conducted alongside artistic production. Thirdly the works themselves are treated as raw materials to be discussed and written about as a means of developing arguments.

Work was selected on the basis of the weight it carries within the author's practice (in terms of time, effort and resources devoted) and because of its relevance to the thesis themes i.e. contemporary and post-conceptual art, the science of feedback loops and critiquing intelligence and AI. The second chapter divides interventions and outputs into three categories. Firstly, the short looping films termed 'simupoems', which have been a consistent feature of the practice, are given attention. Then live art, in which a professional clown was often employed, is considered. Lastly a series of interactions with the everyday technological landscape is discussed. One implication, in mapping out this trajectory, is that the clown's skills have been appropriated. 'Artificial stupidity' permits parking contravention images to be mistaken for art photography, for beauty to be found in courier company point-of-delivery signatures and for the use of supermarket self-checkout machines, but to buy nothing.

The nature of the writing in chapter 2 and appendix A (which was a precursor for the approach) is discursive. Works are reviewed and speculations made about the relationship with key themes. The activities of artists like Glenn Lygon, Sophie Calle, Samuel Beckett are drawn upon as well as contemporary groupings *Common Culture* (David Campbell and Mark Durden) and *Hunt and Darton* (Jenny Hunt and Holly Darton). Chapter 3 includes a more structured breakdown and taxonomy of methods. Art theories of relevance including the ideas of Niklas Luhmann already mentioned, John Roberts, Avital Ronell, Mikhail Bakhtin, Andrew Pickering and Claire Bishop are called upon throughout the thesis.

Interrogation of the work raises certain ethical or political questions. If there are good reasons for the unacceptability of 'stupid' when applied to other human beings, might it be reasonable to be disparaging about the apparent intellectual capacities of technologies, processes and systems?

The period of PhD research provided an opportunity for the relationship between the artist's activities and the techo-industrial landscape to be articulated. The body of work and thesis constitutes a contribution to knowledge on two key fronts. Firstly, the art works themselves, though precedents exist, are original and have been endorsed as such by a wider community. Secondly the link between systems and engineering concepts, and performance-oriented artistic practice is an unusual one, and, as a result, it has been possible to draw conclusions which are pertinent to technological spheres, computational capitalism and systems thinking, as well as art.

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1. Background, overview, methodology, definitions

1.1. Thesis structure

The thesis, which is organised into four chapters, begins with the story of how the PhD question itself evolved and with a preliminary defining of some key concepts. In so doing chapter 1 demonstrates how creative practice can inform research and indeed how practice, even in its undoing of knowledge, *is* research. This relationship between actions, thinking and writing, amounts to the methodology. The key themes of the dissertation, simultaneously relevant to my practical activities and hopefully those of others, are revealed in this first chapter. The sequence of events which resulted in the notion of 'artificial stupidity', so central to the research from that point onwards, is outlined in chapter 1.

Having established how art-oriented production can influence thinking, chapter 2 reviews specific works of mine from the past decade. This writing is carried out with the overriding themes of the thesis in mind but also in order to extract other meaning, and feed the categorising process which takes place in chapter 3. Chapter 2 is organised into sections dealing with the signature moving-image pieces I call 'simupoems', then live work, and lastly the interventions which have featured increasingly during the period of this PhD. Appendixes A and I, review an installation by artist Glenn Ligon and a short novel by Samuel Beckett respectively. The contents of these two appendices are mostly relevant to chapter 2. Appendix A laid the basis for the discursive and occasionally digressive approach which would be applied in treating my own output. Beckett's piece was useful for interrogating the significance of medium, and questions of form and content. In chapter 2, reference to or reflection on works by artists such as Sophie Calle, Sarah Lucas, Paul McCarthy and

groupings which have become active in recent years like *Hunt and Darton* and *Common Culture*, informs the treatment. Writing by Mikhail Bakhtin and Claire Bishop is cited.

Before attempting a more rigorous classifying of my work in the second part of chapter 3, it was considered important to locate which theoretical models are most usefully applied, to the framework of art, as it is discussed in this thesis. Niklas Luhmann's systems approach, the cybernetics paradigm, and the ideas of writer and critic John Roberts, are given attention[1]. Then, taking into account chapter 2's attention to particular works, the second part of chapter 3 attempts to carry out as detailed a categorisation of my practice as possible. A table is produced listing day-to-day working methods, strategies, themes of interest and outcome intentions. This table forms the basis for segmenting the practice in other ways. It should be noted that part of the goal in being so analytical is to test the limitations of systematic breakdown and illustrate the possible 'stupidity' of such rigour: hence the section title 'Analysis paralysis'.

Finally, in chapter 4, the evolution and likely perspectives for my practice, are discussed. Research was art-practice led so the socio-political and psychological dimensions had not been fully investigated. However, with reference to a particular exhibition and associated writing, conclusions are distilled out which connect social attitudes to intelligence with ideas about technology and a broader definition of AI being posited. System theory and the invented concept, artificial stupidity, are brought to bear in discussing what artists do and what they produce. A concluding argument is that if we care to see art as a system, then it is one which perseveres through cleverly 'acting the fool' but occasionally offering gems to other functional systems.

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[1] Chapters 1, 2, appendices A and I, in their direct dealing with practice examples, and the concluding chapter 4, cite these too, along with other theorists and thinkers.

1.2. Introduction

I completed the doctorate, mainly on a part-time basis, over six years. During that time the practice progressed from one in which the kind of activity described in section 2.2 was typical: scenarios involving performers, mainly a professional clown, were designed and directed. Appropriated objects, photographic tools, digital recording and display machineries were often incorporated into the orchestrated routines. The use of cameras, together with actors, in artist run spaces and galleries, meant an easy classifying of this kind of work as live art or conceptual photography. Oddly, also, the attempts to create routines for actors to perform in, appeared analogous to my experiences in fields of computer modelling and simulation. In both cases a desire for repeatability is satisfied through the creation of sequences of instructions, but the code can never be comprehensive enough to completely predict or control outcomes. This, and more patent links with computation, not least the fact that 3D modelling and animation software was used to create the 'simupoems' discussed in section 2.1, made technology art, digital art or new media art potential homes for the practice too. The temptation to be comprehensively drawn in to communities associated with any of these disciplines, and others such as experimental film, art-activism and artists' books publishing, has been resisted. On the other hand, the notion of the feedback loop and critiquing cybernetics and systems of control was important to me. So too were the reductive approaches and formal clarity associated with conceptual art historically, which remains influential today (Osborne, 2014). My special interest is in human engagement with technological, often photographic, and computational elements (but understood as components in overarching systems) whether the effect is seen as a tethering, about mediation or the

presumption that human beings are only one set of agents in a network of actors.

Section 2.3 of the thesis marks a turning point for the practice[2]. The work I do now has its roots in the first project described in that section: *Contra-Invention* (cf. infra, p.115). Instead of inventing routines, as I used to, everyday mechanisms are now interrogated directly. Initially the aim was to find contemporary 'readymade' artefacts, ostensibly mundane data and digital imagery, but the investigations themselves became interesting. These actions can be interpreted as a lampooning of functional apparatus. Recently I have been made aware of how, in the early twentieth century, US-based slap-stick comedians (Charlie Chaplin, Buster Keaton and Harold Lloyd in particular), as well as the Russian avant-garde of that time, were responding directly to the Fordist/Taylorist manufacturing society which was emerging at pace about them (Hatherley, 2016). My work would appear to be in-line with these historical movements, except that I am dealing with the digital and highly automated network of today. Production is no longer only centralized but distributed and understood as a 'supply chain' which includes transport, circulation, consumer activities, order-processing, demand forecasting, quality assurance and monitoring. The network does comprise similar elements to those which were important a century ago. Scientific management and in-effect Taylorist principles are still employed but now deeply encoded. The tendency is to overlook the older forms but motor vehicle and heavy transportation infrastructures for instance are still dominant in the digital era, having expanded and developed enormously. New sophistications, complexities,

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[2] This is a slightly modified version of a paper published in the proceedings for a conference of *Computers and the History of Art* (O'Connell, 2015c)

computational components and artificially intelligent elements are increasingly embedded in the flows. Past employment provided me with insights of this type[3], and therefore the subject matter is of no surprise (cf. infra, p.151).

Even though cascading upwards from this focus on systems would eventually lead to capitalism as a whole, no grand political ambitions are being claimed. Purposeful mechanisms are approached simultaneously as idiot and possessor of inside knowledge. I had experimented with comedy performance, the persona of the clown I worked with has perhaps been appropriated but also 'serious' bodies of knowledge gained at different times from experience in engineering simulation, as a political activist, parenting and working in education are influential. The performing and interacting with the functional world is thus, to employ the phrase I invented in the course of the research, a prime example of 'artificially stupidity'. My interactions are not really stupid, just as the technology being interacted with, is not, in my view, really intelligent. The term artificial stupidity then can be employed to describe both the methods of intervention described in section 2.3 and to poke at the auras which often surround AI, new media, today's algorithms and plethora of applications.

Simultaneously I was concerned about definitions of art including the gallery systems. A way of testing assumptions at first was to attempt to have works appreciated, literally, in art-space and gallery contexts. More often, but not always, it was a case of being left on the outside of established institutions. Now I am less concerned about immediate connections with formal structures (though ironically more opportunities have presented themselves to exhibit). The continuing partial sense of outsiderism, it should be added, is arguably of a

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[3] In fact, one of the simulation packages I specialised in for a number of years was named Taylor II (King, 1996) after Frederick Winslow Taylor.

very different kind to that ascribed to 'outsider artists' because the former position is by no means naïve. Standing at the boundary but having awareness for how the system inside works, of its fragility, as well as allowing integrity to be maintained, presents a potentially healthy threat to the institution within.

Another change is that my tangible output now rarely comprises of physical readymades but mostly digital materials, appropriated data and photography, which may be compiled into moving image pieces, self-published books or used as components in fabricated works. The latter includes the looping films or 'simupoems' which remain a consistent feature of my practice (section 2.1). Increasingly also I provide instructive footage, tools and methods as well as documentation of interactions with the functional apparatuses.

The PhD relies heavily on the notion of art as a complex communication system (Luhmann, 2000) but how is the work situated with respect to other debates on contemporary and especially post-conceptual art? John Roberts, in *The Necessity of Errors*, gives attention to three perspectives on modernism at the turn of the nineteenth into the twentieth century (2011, pp.214–230). With reference to August Strinberg's *On Chance in Artistic Creation* (1894) Roberts argues that the notion of 'systematic antisystematicism' (2011, p.218), as it emerged from impressionist and post-classical practices, continued to be a factor long into the twentieth century. This, despite the direct, as well as indirect, impact of the Russian Revolution on avant-garde activities, and despite Duchamp and the growth of conceptualism. Art ought to have ended apparently. George Santayan's *Reason in Art* (1905) pointed to its necessary submission to utility: '[t]he job of the artist is to give "practice everywhere the greatest affinity to the situation"' (Roberts, 2011, p.222). It was not until Debordian Situationsim, and later the rise of conceptual art proper, that a more self-destructive phase was ardently entered in to.

Claire Bishop's elucidating on the end-of art is referred to in the dissertation (cf. infra, p.112) as is Roberts' talk of 'post-art art', 'art after the end of art' (cf. infra, p.134) and the twentieth century as a deflationary and self-ironizing period (cf. infra, pp.133, 176). I conduct my activities, fully aware of, and interested in this trajectory but wonder why, despite the momentum, what is called art (avant-garde and otherwise) has not fully left the stage (cf. infra, pp.112, 130) or been absorbed by other spheres. Two forces may be at play. The first of these is the unexpectedly drawn-out but eventual quenching of the Russian revolutionary project, which includes the stalling of linked twentieth century Leftist ambitions, most notably 1968. The aftermaths of key political events had given substance to a merging of art and productive life, and the idea that the distinction 'art' would become unnecessary. As Roberts points out, though Santayana was no Leftist this was the gist of his prophecy/desire (Roberts, 2011, pp.222–223). That is not what transpired however, as we have said. A second explanation arises from art being understood as a notion which has its origins, as a system, precisely during the period of Renaissance and Reformation. Luhmann's analysis tends to support this (2000, pp.133–184, 137). Therefore, art as we know it, is closely connected with the advent of the bourgeois order, though it can claim for itself practices and propensities which were evident in the medieval period and before. Though art, in Luhmann's sense, as a social system, was spawned during one revolutionary period and, paying attention to Roberts' points, conceivably ought to have been killed off as a consequence of a second revolutionary stage, arguably it detached itself and became sovereign so to speak. In systems theory terms, 'autopoiesis' (cf. infra, pp.133-134, 167, 203) describes how systems give birth to others. Political processes then could dent or irritate but not determine a qualitative end to art. Roberts is critical of Luhmann's dismissing the ramifications of art for other systems and vice-versa (2015, pp.57–63). I am sympathetic to Luhmann's

position but less categorical, seeing potential for more substantial influences and overlaps than he does (as discussed in sections 3.1 and 4.3 for example). The line of thinking leads, on a practical day-to-day basis, to a defence of adopting an elusive stance, one which is neither credulously accepting of the inevitability and need for art, nor fashionably hostile to its continuing existence. It adds legitimacy to the decision to remain non-committed to sub-disciplines, genres and specialist communities. John Roberts talks of a 'vast amount of artistic production that is temporal, discursive and post-object centred' and he lists groups and individuals who are synonymous with this '"post-art" and "post-artist" shift' (2015, p.25). While I accept these descriptions of the situation and, also, appreciate the value of the term post-conceptual artist, the failure of the death of art presumably also permits a readdressing of apparently outdated practices, mindsets and conceptual frameworks. It ought to be possible to reimagine the tacit aims or mentalities associated with Romanticism, modernist anti-systematic systematicity, post-modern cynicism or humanism. Likewise, with anachronistic (but peculiarly widespread) practices such as painting. With these ideas in mind, Michael Polanyi's pseudo-religious notion of 'indwelling' (2009, p.17), which implies a meditative surrender of sorts to artefact, so that interpretive bases overlap, is of interest to me. Spectator/participants can get inside author/creators via artworks and vice versa. I would extend the thinking however to include any machine, design or 'intelligence' constructed by another.

Having made the case for not getting too close to any 'set', it is nevertheless possible to describe how the work relates to genre and existing contemporary movements. Most certainly my work is of the relational variety but the antagonistic spirit Claire Bishop gives attention to, associated with artists such as Artur Żmijewski, Santiago Sierra, Christoph Schlingensief (2012a, *Participation and Spectacle: Where Are We Now?*, 2011), and groupings or

individuals mentioned in the dissertation such as *Common Culture*, *Hunt and Darton*, *Azorro Group*, *Bank* or Erica Scourti, has more bearing. Though practitioners such as Sarah Lucas and Martin Creed are referred to positively, I have gravitated towards a conclusion that the label 'contemporary art' too, is insufficient for describing my endeavours. Its most common proponents are operating according to standards which are intractably out of tune with the current period. Rather than straightforward 'institutional critique' I am content to accept the existence of art's institutional frameworks but equally, I may simply ignore them (cf. infra, pp.153, 160, 165). The critical techniques employed by art against itself can be directed also at aspects of the world at large, which is presumably original in the sense that 'knowledge of the way the critical categories of art production have been dispersed into nonartistic locations has barely been addressed in current theoretical writing' (Roberts, 2014, p.1741/6041). One strand of this, if taken to an extreme, would amount to a conscious art-activism but I have, in the writing, attempted to develop a distinct position which, without belittling the importance of political activity, defends an apparently uncommitted attitude. Post-conceptual art, on the other hand, is a broad term, and, as I have indicated, one which I am comfortable being aligned with.

In addition, the discipline of photography is unavoidably relevant to my practice. This became obvious firstly when *Contra-Invention* was selected for a touring exhibition called *From Here On* (cf. infra, p.119) which placed me with a group of artists addressing how the emergence of 'digital' had undermined photography's, only recently achieved, respectability. *Contra-Invention* (section 2.3.1) marked a practical change in direction during the period of the PhD and has been followed by other work of this nature: projects entitled *Missing You* and *Less* (section 2.3.2). Amusingly the exhibition, which included only the utilitarian photographs appropriated from municipal parking contravention

systems, was also long-listed for the *Deutsche Börse Photography Prize* (cf. infra, p.119). Much of my work does relate to photography then in its current evolution which crosses with concepts of data, hacking, compression, surveillance, 'sousveillance', documentation and mediated communication. The social ontology of photography (Roberts, 2014); its traditionally understood veridical links; is pertinent. Photography's uncomfortable violating characteristics recurrently place it outside established institutional norms. I was able to make a connection with past work by Sophie Calle (cf. infra, p.113), which is doubly interesting because though she is often described as a photographer, the term hardly does justice to her accomplishments. Critical reception of the *Contra-Invention* exhibition placed me in a camp with the likes of Pavel Maria Smejkal (2010) and Jenny Odell (2016) then, and in the same orbit as practitioners such as Mishka Henner (2016b) and Paul Soulellis (2016) who are strongly influenced by the ideas and activities of Kenneth Goldsmith (2016). A hastily produced catalogue for *Contra-Invention*, compiled using standard desktop tools and an online print-on-demand service, had been included in Martin Parr's best photobooks list (cf. infra, p.119). I was invited to join *ABC Artists' Book Cooperative* (cf. infra, p.153), originally set up by Joachim Schmid (LensCulture, 2016), which advocates the use of print-on-demand publishing as well as querying the status of photobook production.

Simultaneously the thesis develops arguments about computational capitalism. The field of cybernetics has been influential and in fact the original intention was to make its relevance to art the subject of the PhD (covered in section 1.3). Use of cybernetics is still made throughout the writing in three ways. Firstly, cybernetics, the science of feedback, is a tool for evaluating my own work, secondly feedback loops are often consciously built into works and, thirdly, art is discussed as a system and, what's more, a cybernetic system. Though I am not attempting to provide a rigorous description of cybernetics'

own evolution, that history is implicit. The distinction between first and second order cybernetics is inherent to the discussion of *Now Man* for example. *Now Man* can be understood as a system of feedback loops but with the observer contained within it i.e. a second order cybernetic system (cf. infra, pp.81-82). Niklas Luhmann's *Art as a Social System* (2000) has been a major influence as stated, and cybernetics can be seen as a subset of, or overlapping with, general system theory. In addition, a sceptical attitude towards cybernetics fundamentalism is maintained. The limitations of cybernetics, and by implication systems theory too, are discussed. Unpedantic applications are proposed; epistemological, rather than ontological usage is advocated. Cybernetics, when understood merely as a technology, tended to become either a source of anxiety or the opposite, a belief system or religion, and so it appears with AI nowadays. The attention given to AI and tangible new technologies hides a lack of critique for pre-existing codes, processes and procedures, which may have little to do with computing as it is normally understood, and this is a point developed in the dissertation, and drawn out in the conclusion. Though the work is not intended to be activistic then, a point which is reasserted in the bottom-up analysis in section 3.2.1 (see Factor 10), it can be construed as such after the event and thus trigger thinking and debate. Inferring that the digital network, social media and machine intelligence are incorrectly being treated as more legitimate causes for concern than the 'bigger picture' comprises a political statement.

A point made frequently in the dissertation is that one can remain ignorant of the potential meanings and interpretations while producing art. And that is not to imbue such seemingly unthinking behaviour with mystique. In fact, the apparent paradox of splitting oneself in two intellectually is a primary definition of artificial stupidity. The question of conscious spectating is to a large degree separate from producing I argue. And what is the PhD writing

if not a protracted exercise in conscious spectating? Someone else might offer a different response to these artworks, which is not to suggest at all that they are somehow unresolved from the point of view of the art system. It has been possible in the writing for me to deliberate in section 2.1 about the problems with automobiles and technology underutilisation, in section 2.2 about *Now Man* as a work which questions the seductions of technological feedback loops and media control, about *Rearing* as a comment on industrial food processing and capitalist waste and *Worn Outing* as a challenge to high-street conventions, consumerist habits and dress codes. *Contra-invention*, *Missing You* and *Less* (described in section 2.3) play games with everyday procedural routines. In addition, the case is made that the decidedly modest nature of these provocations, by the standards of hacking, can have more import than shock tactics. The two works, resulting from the no-budget residency which helped to kick start the PhD development proper (as outlined in section 1.5), *A Nod to Turing and Creed* and *A Nod to Gormley*, were certainly not simply meant as appreciations of artists Martin Creed and Anthony Gormley. They might be considered examples of Arte Povera (Tate, 2017b), and are at least privately sarcastic about the comfortable authority exercised by, what is now, a quite corporate contemporary art scene. In two ways then, the foregrounding of matters political is almost inevitable. Firstly, new discoveries are made in the subsequent receipt of work as we have just outlined. Secondly, to completely ignore the ordinary facts of a politically loaded landscape, would be observationally specious, and, in fact, more dramatically political. The latter line of thinking was firstly expanded upon in reviewing of Glenn Ligon's work in appendix A and is raised elsewhere in the thesis.

'Contributions to knowledge' are summarised in the concluding section of chapter 4 but where and how do these ideas materialise in the writing, in its reflection on practice? It may be obvious to state that the conclusions drawn

were not available in advance of the writing but books, texts and papers are often written with pre-conceived outcomes in mind. Here, however, it was not a case of 'writing up' the PhD once the practice was complete: the writing took place simultaneously with, and in relation to, practice. License was taken to be discursive, particularly in chapter 2, as a means of discovering and teasing out the important arguments. This is not to suggest an inefficiency of purpose because allowing arguments to develop in a recurrent manner across the thesis gives a stronger sense of the chronology and how practice has informed thinking.

The invention/discovery of term artificial stupidity, in reaction to the concept of artificial intelligence during the short residency in the artist-run project space, is described in section 1.4 and 1.5. The two primary uses artificial stupidity can be put to are first expressed in section 1.5. The term can mean mockery of AI or describe a kind of intelligent or pretend stupidity employed positively by artists, as we have said. The practice of painting, when seen as an unnecessary but deliberate form of limitation or as conscious luddite behaviour, is explored as one candidate for the definition artificial stupidity. Further interpretations are articulated elsewhere in the writing. In section 2.1 the act of collaboration with someone possessing expertise in a different discipline is characterised as artificial stupidity. Also in 2.1, the purposeful acceptance of errors and deliberately doing things 'wrongly' are included as examples. The absurdity of the game *Now Man*, discussed in section 2.2.1, and the usefulness of a clown's ability to 'act stupid' are added to the mix. This ability to deliberately misunderstand can be adopted as a kind of productive stupidity when applied to everyday functional systems, and is cited as crucial to the later work described in section 2.3. In chapter 3, which firstly works with theories relevant to deciphering my artistic practices, other interpretations of the expression artificial stupidity are cited: its negative meaning as a reflection of

intellectual cowardice (cf. infra, p.134) is mentioned, a stupidity to being pedantic about representation or trying to create comprehensive empirical models is suggested (cf. infra, p.145). Similar points are made about the attempts to be pedantically categorical in section 3.2.1 and in appendix H: there is both a practicality and a madness to such exercises. Potential future use of the term as licence to deal differently (for artistic purposes it should be stressed) with political histories or emotionally loaded subject matter, is intimated in the first section of chapter 4. In order to synthesise conclusions three different meanings, for artificial stupidity, emanating from Ada Lovelace, Avital Ronell and John Roberts, are referred to in section 4.2. Lovelace, astonishingly considering she was writing in the early nineteenth century, was correctly concerned about the tendency to trivialise the future potential for machine intelligence. Ronell, amongst other things, uses the exact term, artificial stupidity, to deal with the social misuse of intelligence measurement[4]. Roberts emphasises the significance of a kind of false stupidity, characteristic of artistic behaviour: stupidity as a retort to power. His version is of the kind which is key to navigating *duh? Art and Stupidity*, an exhibition also examined in section 4.2. The three definitions tie in with those already discussed in the writing. And to illustrate the range of possible applications for the concatenation of the word 'artificial' with the word 'stupidity' (i.e. not just those relevant to art and the themes of this thesis) appendix H comprises of a more expansive breakdown of definitions. The fact that artists often conduct themselves in ways which appear stupid from the outside, combined with the notion of art as social system, leads to a final important use of the term. Artificial stupidity, it is argued, is a characteristic of the art system's behaviour (with respect to other functional

[4] Her book *Stupidity* (Ronell, 2002) has been an important source.

systems). I reason that if the art system were presumed to have agency, it would be a court jester of sorts: it would benefit from acting stupid.

In the closing paragraphs of section 4.2, it is also argued that technology cannot be truly intelligent, not least because it is emotion-less and therefore literally stupefied. The implication is that it would be reasonable, if not progressive, to adopt a position of superiority, and to 'other' AI instead of fearing it. The point about slower, pre-computing, bureaucratic systems, being equivalent to AI, which arises firstly in section 2.2.2, is returned to in chapter 4 too. It is there that the proposition is made that critical attention ought to be given to the former kinds of procedures, codes and systems of work, as well as high speed computational processes. In concluding I also posit that less-rigorous applications of systems theory are defensible, implying that there is a place for empirical, flexible or even playful uses. This thinking arises from experience in industry, from reading texts dealing with the subject of complexity, from writing in response to art works in section 2 and in the appendices, and lastly from engaging with theoretical frameworks in section 3.1. In addition to these key arguments, secondary and perhaps localised, contributions to knowledge are underscored in sections 4.3 and 4.4. These, in turn, cross reference other sections of the thesis and practice work.

I assert also that the art works themselves, treated mostly in chapter 2, and particularly those initiatives discussed in section 2.3, constitute a significant contribution to knowledge. Contextual and historical comparisons can be made, and are, but this is original work, and has been endorsed as such. The following is a list of the key works produced during the period of the PhD:

Type	Activity Title	Year Initiated	Work/Run Title	Year	Type	Duration/ Items/Dimensions
Live	Rearing	2006	Rearing, The Phoenix, Brighton	2010	Performance routine	36min 1 clown 1 director 12 doz. med. sized eggs
			Rearing, Disruption II, Swansea	2012	Performance routine	1hr 4min 1 performer 12 doz. med. sized eggs
			Rearing, Matt's Gallery, London	2014	Performance routine	1hr 4min 1 performer 12 doz. med. sized eggs
			Rearing Vessels	2006	Readymade/ Sculpture	4 children's potties, 2 green, 1 white, 1 ochre, each 28 x 25 x 17cm
	Now Man	2007	Now Man, The Joinery, Dublin	2010	Video Document	DV PAL 1min 23sec
			Now Man, Friese-Greene, Brighton	2010	Performance game	1hr 1 performer Other players
			Now Man, Friese-Greene, Brighton	2010	Video Document	DV PAL 2min 32sec
			Now Man, Wandesford Quay, Cork	2012	Performance game	1hr 1 clown Other players
			Now Man, Wandesford Quay, Cork	2012	Video Document	DV PAL 3min
			Now Man, Phizzfest, Dublin	2012	Performance game	1hr 1 performer Other players
			Now Man, Phizzfest, Dublin	2012	Video Document	DV PAL 3min
			Now Man, Over and Out Gallery, Lincoln	2012	Performance game	30 min 1 performer Other players

Type	Activity Title	Year Initiated	Work/Run Title	Year	Type	Duration/ Items/Dimensions
			Now Man, Over and Out Gallery, Lincoln	2012	Video Document	DV PAL, 3min
			Now Man, Puppet Talk Symposium	2013	Performance game	20min 1 clown Academics
			Now Man, Puppet Talk Symposium	2013	Video Document	DV PAL, 1min 39sec
			Now Man puppet	2007	DV Camcorder and cabling	13 x 8 x 8cm 2m cabling and charger
	Worn Outing	2011	Trial run, Artists Masked Procession	2011	Performance intervention	1hr 2 participants
			Worn Outing, London	2012	Performance intervention	2hr 1 director 1 clown 7 actors
			Worn Outing Photo-outfits	2012	Prints/Photo-outfit	7 A0 photo-outfits, each made of two 119 x 84cm, 4 colour, 3 black & white
Residency	Occupant #6	2012	A Nod to Turing and Creed	2012	Simupoem/Algorithm	Sinclair ZX81, 17 x 18 x 4cm Analogue TV
			A Nod to Gormley	2012	Readymade/ Sculpture	48 milk containers, each 25 x 9 x 8cm and 1 similar, filled to varying levels arranged 7 x 7
Intervention/ Hack	Contra-Invention	2008	Contra-Invention Triptych	2010	Prints	3 pairs of 180 x 120cm digital inkjet prints on corrugated plastic

Type	Activity Title	Year Initiated	Work/Run Title	Year	Type	Duration/ Items/Dimensions
			Contra-Invention Reflectograms & Portraits of the Artist	2010	Prints	9 digital inkjet prints, each 22 x 38cm
			Contra-Invention Catalogue	2010	Print-on-demand book	Paperback, 84 pages, 29.69 x 20.98cm, full colour interior
			Contra-Invention, Torn Parking Fine	2010	Readymade	In frame, 32 x 23 x 2cm
			Contra-Invention, Later Portrait of the Artist	2012	Digital image	Jpg, 640 x 480 pixels
	Missing You	2012	Missing You Large Prints	2013	Prints	7 digital inkjet prints on paper, each 84.1 x 119cm,
			Missing You Medium Prints	2013	Prints	7 framed black & white photos, each 41 x 29 x 2cm
			Taking the Proverbial	2013	Readymade/ Sculpture	Plastic sledge, 93 x 50 x 17cm, urine, photo 38 x 26.5cm
			PODS	2013	Video slideshow	DV PAL, 3min
			Piss-take 01	2014	Print	Framed dried image from Taking the Proverbial, 53 x 43 x 3cm
			PODS	2014	Print-on-demand book	Hardcover (& dust-jacket), 104 pages, 22.86 x 15.24cm, black & white interior
			Delivering	2014	Video (Simupoem)	HDV PAL, 18sec loop

Type	Activity Title	Year Initiated	Work/Run Title	Year	Type	Duration/ Items/Dimensions
	Less	2014	Less	2014	Print-on-demand book	Paperback, 112 pages, 17.48 x 10.8cm, black & white interior
			Exchanging	2015	Video (Simupoem)	HDV PAL, 4min 15 sec loop
			A0 Zero Receipt Posters	2016	Print-on-demand	118.9 x 84.1cm print on paper
			More Less	2016	Print-on-demand book	Paperback, 116 pages, 29.69cm x 20.98cm, black & white interior
			How to Buy Nothing	2016	Video (Instructive)	HDV PAL, 1min 4sec
Misc.	One off Simupoems	2004	Boring	2012	Video (Simupoem)	DV PAL, 3min 30sec loop
			Busting	2016	Video (Simupoem)	HDV PAL, 3min loop
	One off books		A Tribute to William Klein: Photography is not Permitted	2012	Print-on-demand book	Paperback, 92 pages, 26.04 x 16.84cm, black & white interior
	Delivering a Paper	2016	Delivering a Paper, Impact Symposium	2015	Performance	30min 1 reader
			Delivering a Paper, Bleeding Hearts Club	2015	Performance	10min 1 reader
			Delivering a Paper, LowTechLab London	2016	Performance	10min 1 reader
			Delivering a Paper, Paper	2015	Document	13 page A4 academic paper

The remaining sections of this chapter give an account of how the thesis question arose through a combination of study and practice, as well as introducing key definitions and initiating arguments which reappear, and are developed further, in later chapters.

1.3. Cybernetics and art

The original proposal for this PhD attempted to connect the transdisciplinary field of cybernetics and art. Given my experience in both spheres, thanks to more than a decade of employment using mathematical modelling and computer simulation, another decade as a practicing artist and qualifications in both engineering and fine art, something of value seemed liable to emerge. Much has been made, after all, of counterpoising and juxtaposing technology and art, philosophy and art, certain craft skills and art, so why not make use of the cybernetics philosophy? In addition, cybernetics, the science of feedback loops, which has its etymological origins in steering, navigation and the 'art of governing' (OED, 2015b), was one of the frames of reference in my MA dissertation about the relationship between comedy and contemporary art.

The first significant computer art exhibition, *Cybernetic Serendipity*, took place at the ICA, London in 1968 (Reichardt, 1968). Revisiting the motivations for this seminal show would potentially reveal principles which had since been overlooked, or forgotten. For those who like to view history mechanically as a series of stages the year itself conceivably marks the switch from modernism to post-modernism. Computing was still a verb then; the emphasis was on processing power. Later weight would be given to data management and information storage capacity but these were mere requirements at first. The fact that the Central Processing Unit (CPU) in most machines, now lies idle most of the time, is overlooked but calculation power and perhaps the networking potential was precisely what excited people initially. Cybernetics was about the dynamic relationships, about action, and was in fact conceptually unsympathetic to the need to accrue information for the purposes of representation. Moreover, cybernetics was understood as a systems science and

philosophy of sorts and not associated only with computing and new technology. As time progressed fashionable usages of 'cyber' as prefix in new media contexts helped in bringing about looseness in meaning. The actual connection between the original cybernetics idea (concerned with 'nature' as much as computing and to the analogies between all systems) and the later conflated definition, 'relating to (the culture of) computers, information technology, and virtual reality, or denoting futuristic concepts' (OED, 2015a) is therefore tenuous. Caroline Bassett links the demise of 'first wave' cybernetics to post-modernism, deconstruction and to the critique of structuralism (2014, pp.63–72). Indeed structuralism, one theorist had previously declared, 'quite simply is cybernetics' (2014, p.62). More complex adaptations like 'fuzzy cybernetics' did emerge later (2014, p.98) and even in vilifying particular forms of cybernetics, leading theorists recognised it as having potential 'to produce grounds for play' (2014, p.72). Without dismissing the importance of arts and humanities engagement with new technology, nor ignoring the value of hefty compilations such as the *Cybercultures Reader* (Bell and Kennedy, 2007) and the validity of terms like cyberpunk, cyberbully, cybercommunity, cyberspace, cybersex and cybercrime, the fundamentals and elegance of the original cybernetics were undoubtedly diluted for a period of decades.

A re-emergence of interest has been noticeable however and cybernetics remains fascinating both as a tool for experimentation by artists and designers, and as a theoretical framing device. Cybernetics seemed particularly helpful in evaluating some of my own activities and output. It would be interesting to apply the thinking to the work of other artists too regardless of their purposes or whether they were aware of the field at all[5].

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[5] It is as reasonable to permit evaluations of artistic outputs which were not conceived of by the artist as it is to apply new theories to the past or to admit to unconscious motives for human behaviour.

The creation of the PhD proposal and preliminary research coincided with new writing on the subject. For example Andrew Pickering's *The Cybernetic Brain* was published (2011). Sections of that book give attention to the significant influence cybernetics had on the artistic practices emerging in the 1960s and '70s (2011, p.384). Douglas Hofstadter's *I am a Strange Loop*, published in 2007, seemed pertinent. An article by Etan Ilfeld in MIT's *Leonardo* journal dealt precisely with the subject of *Contemporary Art and Cybernetics* (2012). Events such as The Showroom in London's *Signal:Noise* explored 'the influence of cybernetics and information theory on contemporary cultural life by testing out its central idiom, "feedback", through debates, performances, and events' (2012). The momentum has continued: later Raven Row, another art space in London, organised an exhibition of Stephen Willats' cybernetics-influenced artworks and produced a catalogue to coincide with it (Sainsbury, 2014a; b).

As my research progressed it became obvious that cybernetics' relationship to the arts was increasingly the subject of investigation. This discovery had the effect of simultaneously validating the initial hunch that the area was worthy of study and undermining my motivations for pursuing it. In fact, the title to Etan Ilfeld's article was almost identical to the first research proposal heading adopted for this thesis. As it happens, and this surfaced in an interview conducted with Ilfeld in 2012, his emphases were different[6], and besides the Leonardo article was one short piece of writing. Further inquiry uncovered other relevant texts including *The Science of Art: the Cybernetics of Creative Communication* by R. E. Mueller (1967). Could a more specific line of investigation be generated from the queries outlined in the original proposal?

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[6] Along with studying the influence of cybernetics, I am interested in a more radical examining of the state of art.

Subordinate issues and questions, which had surfaced during research and through practice, looked increasingly promising.

1.4. Intelligence and AI

Much of the initial excitement centring on cybernetics arose from the connotations for understanding intelligence and the human mind. Grey Walter's 'tortoises', rudimentary robots which he constructed in the early 1950s, were viewed as simple intelligent systems (Pickering, 2011, p.48). Many of the early devotees to this new science were situated in psychiatry, dedicated to understanding the brain in context, and that was their motivation for attempting to build intelligent machines (Pickering, 2011).

As noted earlier, the ease with which cybernetics and computing were eventually associated is ironic because, as time progressed, questions of data storage took precedence over CPU power. It is however the action-oriented aspects which are the essence of cybernetics thinking. Pickering repeatedly emphasises the fundamental suspicion the pioneers of cybernetics had of modelling reality against the alternative: interacting with it. He argues that science can be seen not only as representational but as 'a mode of performative engagement with the world' (2011, p.19). Approaches to artificial intelligence (AI) which emphasised only the quantity and quality of information, such as 'expert systems' (OED, 2015c), never fully lived up to expectations possibly because of this lack of appreciation for performativity[7]. Sadie Plant highlights the fact that 'human experts often do not function at a cognitive level' (1998, p.171). A less capturable and more complex scenario is also indicated by Edwin Hutchins when he states: '[h]umans create their cognitive powers by creating the environments in which they exercise those powers' (1996, p.169). Presumably Margaret Boden, who drew on computational concepts to study

[7] Blay Whitby does emphasise the practical benefits which were realised through creating expert systems by comparison with more flamboyant areas of AI research (c2003, pp.29–33). But the success is partly due of the former's relative simplicity and the ambitions being so tangible.

creativity and 'intuition' (1992), was in a minority as computing spread because for most other researchers the drive to create intelligence looked more exotic than attempts to understand it. She was interested in the latter. AI, as a field, survived, transformed and expanded in different directions (Whitby, c2003, pp.66–69), but one could argue that the arrival of digital computing and the rate of development led to a rush in the direction of simulation and representation. Consequently the kinds of elementary queries put by the likes of Grey Walter, Ross Ashby, Gregory Bateson, Stafford Beer and R. D. Laing, all early advocates of cybernetics theories (Pickering, 2011), were less likely. In other words, computing gave impetus to cybernetics experimentation initially but further technological progress undermined that interest.

The links between cybernetics and study of the brain, intelligence and AI are being mentioned here to lay the basis for a more specific research question. The recognition that views, about what exactly intelligence is, vary dramatically, is pertinent to the direction of this inquiry too. Howard Gardner's concept of *Multiple Intelligences* (2006), Edward De Bono's thinking caps (2000), discussions about left brain and right brain modes of thinking (Mcgilchrist, 2012), 'flow' (Csikszentmihalyi, 2008) and Nigel Thrift's term 'intelligencings' (2008, p.463), in this case the sheer variety of discussions on the subject, is evidence that defining intelligence remains an ever-open question.

1.5. Practice as research, 'artificial stupidity'

Before proceeding it should be stressed that the criticisms voiced about a particular work below are intended in a similar spirit to when academic or political differences are foregrounded. Arguments in these two spheres are not always conducted respectfully, true, but that is the ideal. Also another event or piece might have sufficed, so in that sense, the work reacted to, is a 'straw man'. After deliberating it was decided to include the critique to avoid underplaying the importance of such sparring and so as not to ignore the passions aroused.

An exhibition in 2012 organised to coincide with the centenary of Alan Turing's birth (Lighthouse, 2012) devoted a proportion of its space to toy-like apparatuses which roughly mimicked what humans do. One work, *My Robot Companion* (Clark, 2012; Dumitriu, 2013), may have been presented differently in other situations – the exhibition toured – but at the original venue, Lighthouse (Lighthouse, 2016), it was difficult to see firstly how the vaguely interactive construction was original art-wise and secondly how it connected with very topical subjects as it purported to. Links with a seductive research area – i.e. the debate about latest developments in robot intelligence, the simulation of affect, artificial nannies and carers – do not guarantee that exceptional artworks or thought-provoking interventions will be produced. Bias was a factor no doubt because of my unease with representation, and with figuration in particular, but the outcomes appeared superficial and even banal despite the undeniably intriguing scientific, psychological and philosophical inquiries being conducted by collaborators (Adaptive Systems Research Group, 2012). Impatiently I concluded that the creation did little more than the presence of a mannequin would by prompting questions about the human tendency to anthropomorphise. The emphasis was on how these artefacts

looked, their mechanical behaviour, so that to a child say, they might appear intelligent or alive in some way.

It is true that increasingly 'embodiment' is seen as crucial in addressing the situated nature of human consciousness (Prinz, 2008). Also the cultural significance of technological embodiment has been discussed (Balsamo, 1995). Nothing about *My Robot Companion* however indicated awareness of these important trends. This negative standpoint, which was grounded in my knowledge of what engineering simulation could do (cf. supra, p.36, cf. infra, pp.51, 68 and appendix F) and with what artistic techniques could not, left me unenthusiastic about appearance-oriented representation. I felt an affinity for the aversion to representation common amongst modernist artists but also amongst many of the advocates of cybernetics (cf. supra, p.30). For the British cyberneticians, the brain 'was not representational but performative' (Pickering, 2011, p.6).

The question is complicated because 'representation' means different things to different people and issues of embodiment are surely tightly linked. Embodiment can refer to the physical matter housing a computational mechanism, in other words a platform, and that is different to the conception that the 'body' itself *is* the computational mechanism[8]. Interestingly, a letter to Ross Ashby reveals that Alan Turing saw no benefit to creating special robotic machines (Turing, 1946). He stressed that Ashby's self-regulating 'homeostats'[9] (Ashby, 2008b; a) could exist in a simulation. So it seems that Turing did not harbour worries about representing in the sense of creating a model of the

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[8] Perhaps this is what Stafford Beer was getting at in his peculiar poem written in 1964: 'Computers, the Irish Sea' (Pickering, 2011, p.288)

[9] 'The homeostat - a bulky and somewhat baroque machine built from military surplus parts - had a single purpose: to regain stability in response to perturbations in its environment' (British Library, 2016).

electro-mechanical devices. It should be noted however that Turing's view expressed here was the unorthodox one at that time. This was before it became commonplace to simulate systems on digital computers. Also holes can be picked in fundamentalist resistance to representational modelling (scientific or otherwise). Ashby's devices, like Grey Walter's tortoises, were more obviously physically embodied dynamic mechanisms, but, as the nickname for the latter suggests, open to being anthropomorphised. In addition, when one kind of body emulates another or adapts performatively to its environment cybernetically, then by default a model of what is outside is being created: is that not representation? Opposition to representation starts to become aporetic. Turing, in his lack of concern about simulating, would, most likely, have been uninterested in whether the material nature of a calculating-machine could influence outcomes. But the difference actually with the cybernetic approach, one which Pickering draws out, is to do with the relationship between ontology (put crudely: what there is) and epistemology (what is known about what there is). Referring to Stafford Beer and others, Pickering writes of 'a vision of knowledge as part of performance rather than as an external controller of it' (2011, p.25). Conventional science wants to know. If the equivalent of an algorithm can be presumed to exist within a system then, for the cyberneticists, it would *not* be necessary to describe that mechanism precisely. Engineers, coders and model-builders work from the opposite direction: they create a system which then comes to life and quite naturally they believe that they understand what it is they have built. Mostly science has seen its task as to get

inside the Black Box[10]. If orthodox intelligence has been associated with these latter kinds of knowing then, obversely, cybernetics sees the value of innocence.

Another reason for my reaction to *Intuition and Ingenuity* (the title of the show at Lighthouse) is that propositions which challenge what constitutes intelligence or sentience, artificial or not, interest me. The variety of definitions of intelligence has already been mentioned (cf. supra, p.31). The fact that present-day search engines with their hidden algorithms, and tools for data and text mining already amount to impressive examples of AI (referred to as Good Old Fashioned AI or GOFAI (Pickering, 2011, pp.6, 62) in the field) can easily be overlooked. A broader conception of intelligence is inferred by Nigel Thrift. His notion of 'intelligencings' (cf. supra, p.31) implies temporal phenomena not situated concretely in something like a brain. At any rate applications already available online, across the network or installed on mobile devices, *are* all embodied, just not in human-shaped forms. There is a material basis to computing[11]. Intelligence might be something to notice in the world as much as create, to borrow what is surely the twentieth century's most important art term: a 'readymade' (Tate, 2016a). The branch of a tree which springs back into position, when disturbed by a gust of wind is intelligence of a sort, a deceptively simple self-regulating system, in-tune with its environment, and capable of managing contingency.

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[10] Ross Ashby gave attention to the origins of Black Box theory in electrical engineering and its wide application (1956, pp.86–120). Andrew Pickering, building on Ashby's writing (2011, pp.19–20), defines it thus: 'A Black Box is something that does something, that one does something to, and that does something back—a partner in, as I would say, a dance of agency [(1995, p.21)]. Knowledge of its workings, on the other hand, is not intrinsic to the conception of a Black Box' (2011, p.20).

[11] Film maker and theorist Hito Steyerl, amongst others, strives to remind us of the physicality of the digital (from 2m18s: *Hito Steyerl interview at Picture This*, 2011) but it is the whole architecture which must be considered, rather than her stress on the waste produced. The ever changing architecture of the network constitutes the body in which intelligence is situated.

At the same time as *Intuition and Ingenuity* I had been offered a no-budget one-week residency in a nearby underground[12] art space entitled *Occupant* (Pryde-Jarman, 2012c). Given my background and the feelings stirred up, it seemed fitting to use the opportunity to respond to the Turing show. The week of experimentation proved surprisingly fruitful in that it generated the eventual focus for this PhD. The residency, in fact, demonstrated precisely how art practice can be part of a research methodology.

Though my concerns at first were based on 'gut feeling' it seemed legitimate to poke fun at the officially endorsed exhibition. Whether art is a proper realm at all for communicating something about a famous mathematician was one question on my mind. Could or should these two worlds be forced together? I considered this question based on past experience. Algorithmic simulation had been my professional 'bread and butter' for a period and along with realising the limitations and misunderstandings possible I became aware of the charms of these dynamic models. Simulation model building is a balancing act between necessary pedantry and the application of 'broad brush stroke' assumptions. It was noticeable that though models were built for some predetermined purpose they also acquired a life of their own. Long before reading Jean Baudrillard (1994) I realised that simulations were significant systems in their own right.

With some of these thoughts in mind the residency proceeded. Final pieces were produced and presented at the end, along with workbooks and notes on the key ideas which would inform my outlook from that point onwards.

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[12] The term underground has lost its edge but the space in question had been formed out of three rooms in a basement underneath another building (Pryde-Jarman, 2012a; b): it was literally so.

By coincidence, having regretted selling an old ZX81 computer on E-Bay a few years previously, I had managed to track down another which arrived

Figure 01 *Occupant* residency setup, 2012

serendipitously just as the residency began (Figure 01). The primitive machine boasted 1K of memory, required an analogue television set as monitor, its programs were stored on cassette tapes, and the keyboard consisted of pressure pads (Terrell and Simpson, 1982). Nevertheless, the ZX81 was ground-breaking and popular in the early 1980s because it was robust (there were no moving parts), small (167 x 175 x 40mm and 350 grams) and relatively cheap (it cost about £70 then). I had bought one second-hand in 1982, from a fellow student, while studying chemical engineering. Though mainframe computers were available to us then, I was also interested in what could be done independently at home. The ZX81 permitted the testing of basic algorithms and iterative methods.

Thirty years on I was curious about what might be possible given the extreme limitations of using such a machine. To compound the problem of the technology being outdated, the analogue television acquired as monitor did not work reliably. The equipment was faulty in other ways: it was not possible to record or save the contents of memory to cassette or emulator. Each time the ZX81 was powered off all the code was lost! Admittedly not much could be stored on a 1K machine anyway, ten to twenty lines of BASIC, so records of these displayed on screen were easily captured using phone camera (Figure 02). The realisation that a contemporary mobile device was vastly more powerful, and that the phone's lowest camera resolution was far in access of the 0.003 megapixel[13] display possible with the ZX81, added a twist of irony. As someone

[13] Though number of megapixels has become the norm as a digital camera metric it can also be applied to screens and other image display devices. I am fond of carrying out the simple calculations to make analogies and did so, for example, for silk images produced on Jacquard Looms during an artist intervention in Macclesfield, UK (O'Connell, 2014b). A typical laptop screen now would be equivalent to at least 1 megapixel. In 'Graphics Mode' the ZX81 gives 64 x 48 = 3072 pixels or 0.003072 megapixels.

who had been an advocate of *The Lowtech Manifesto*[14] (Wallbank, 1999) it was no more interesting to adopt a Luddite position than compete with latest industry breakthroughs. The attitude could be applied to exhibition and documentation too. Polished, high production-value assets are not always superior, nor essential practically. During the artist's talk at the end of the residency the audience were requested to use their mobile devices to video the eventual animation produced. As well as orchestrating the documentation, in doing so more attention and increased interaction with the work was being demanded. So mixing old technologies with new and pushing unlikely elements together is not, for me, a cause for concern: quite the opposite.

Reappropriating from *Intuition and Ingenuity*, the exact idea I was sceptical about, I went ahead with a plan to combine computing hardware, algorithmic techniques, and to be unapologetic about the relationship with art. Examples of contemporary art to work with were sought.

Artist Martin Creed's *Work No. 1020* involving ballet dancers and performance, initially executed at Sadler's Wells Theatre (Creed, 2009; Anderson, 2009), included a film projected on a large scale at the back of the stage. The film was described at a later exhibition thus: 'an LED video screen shows a man's torso in profile. His penis grows erect, then droops, again and again, in an endlessly repeated performance of human engineering' (Searle, 2014). The piece would be used (and just how will be described in the pages which follow) but had not been consciously selected to suit the Turing centenary celebrations in 2012. The corporeal dimension inherent in Creed's film might play off well against an otherwise dry technical backdrop. It is now well known however that chemical castration was imposed on Turing in the

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[14] I still am. In January 2016 I participated in an international Lowtech event in London (Marroquín, 2015).

Figure 02 *A Nod to Turing and Creed,* the code, 2012

months prior to his premature end (Davies, 2009). His sexual orientation had been unacceptable then, probably even to himself. By chance rather than design presumably the film does draw attention to the matter of what images, and what acts, are tolerable and can be admitted to[15]. Any connections of this type were not worked out in advance: I was being 'stupid', contrasting ideas, individuals, their works and bits of equipment. The Lighthouse show suffered, in my opinion, from a lack of transgression. It was hoped that some of the impact of Creed's piece would rub off. While not wanting to inflame for the

[15] Even though Britain's Mull of Kintyre test forbidding the depiction of erect penises is most likely an 'urban legend' (Armstrong, 2009) or (excuse the pun) fallacy, the perception that such bans exist says something about what is morally acceptable and what is not.

sake of it, the introduction of some element of danger, felt justified. It seemed reasonable to make associations between Turing's 'intuition and ingenuity' and the artistically critical mind-set.

I wondered about the practicality of simulating the sequence in Creed's work using the 1K computer and rendering it out on the linked television screen. With the ZX81's version of BASIC I wrote code which used the equation of a straight line, combined with a quadratic element (Figure 02) to introduce bend. The movement was then animated. A three-way tension was operating in my mind between the works at Lighthouse, Creed's minimalist but precisely documented erection routine, and the impossibility of achieving photorealism on an old ZX81. The final work, entitled *A Nod to Turing and Creed*, plotted a line of asterisks, cleared them and then plotted them again at slightly different angles to simulate the effect depicted in Creed's film. The curved line rotated upwards about a pivot point and then back down again repeatedly (Figure 03, p.42). By chance the rate of increase and decrease, which was a function of limited processing speed only, corresponded well with the durations in Creed's original film. The fact of poor display quality, probably due to the incompatibility of the computer and the newer analogue television set in use, meant occasional blurring around the displayed asterisks. Serendipitously the points connected, as if interpolating, to create a more convincing impression. So, along with the code (the content), the particular qualities of the hardware in use (the form) influenced behaviour.

Towards the end of the residency the import of having restricted myself in this extreme way became apparent. *My Robot Companion* was, I felt, 'stupid' but unwittingly and uncaringly so. It was not stupid enough. I reacted

antagonistically[16]. *A Nod to Turing and Creed* was calculatedly stupid or artificially stupid. This stumbled-across term 'artificial stupidity', which

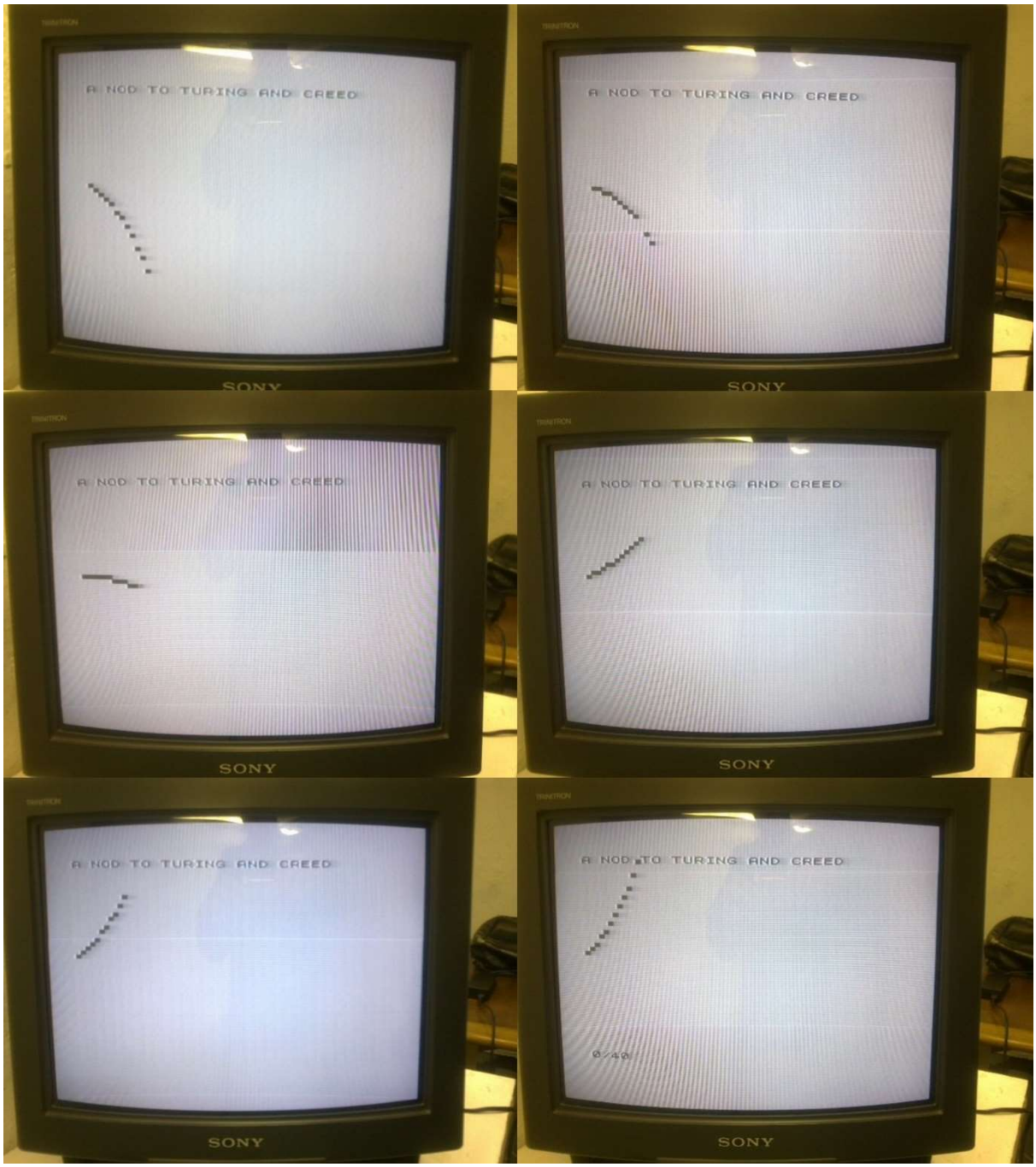

Figure 03 *A Nod to Turing and Creed*: screenshots (follow left to right, top to bottom), 2012

[16] I did not concern myself greatly with promotion of the work to the Lighthouse exhibitors, but nor was the intention to be underhand. I communicated openly with participants there and even requested inclusion, if the *Intuition and Ingenuity* exhibition toured.

sounded firstly like a lampooning of AI, appeared both novel and linked with my interests in cybernetics, art, and in critiquing technology. Could the idea be unpacked and applied to what artists do? For good reason 'stupid' is an almost unacceptable term but could it be reappropriated? Perhaps prefixing with the word 'artificial' would be a means of reclaiming it because then the intentionality is underscored.

Mentions of the idea of a knowing (or artificial) stupidity in the literature were found later (see chapter 4 & appendix H) but to begin its uses were explored without such awareness. The most obvious application was with respect to the faulty aspects of technology and the inevitable design glitches. In other words, at moments artificial intelligence might be better described as artificial stupidity. Experiences in industry had left me with many anecdotes. One project for a food processing company, for example, centred around a high-speed packing line, producing filled pancakes. Robotic arms had, at great expense, recently been introduced, to individually lift frozen pancakes from a conveyor belt and place them in boxes flowing along belts moving in the opposite direction. This was a complex task which had previously been carried out by human operators who were reassigned to other roles within the factory. Though the accuracy and speed at which the robots worked was astonishing to witness, there was a problem with the new system. The arms used suction to grab the chilled pancakes from the conveyor belt but, every so often, one of them would suck contents from a softer pancake into its mechanism. The number of units had been optimised so that when even one of the eight robots ground to a halt, processing capacity for those still running was not enough to pack the boxes. A proportion of the pancakes would escape the robotic arms, flow past, and be dumped onto the floor. It was as if the machines had acted in solidarity with the factory staff because the latter needed to be brought back to assist. Charlie Chaplin could not have authored the scenes that followed, with

operators negotiating their way around confused looking robots in order to prevent overspill.

A second implementation of the term artificial stupidity could be to describe the common artistic practice of purposely limiting one's own room for manoeuvre, as had been done by using redundant technology during *Occupant*. Limitation seems stupid but artists often employ it. The habit runs counter to one common cliché, namely that art is about uncontained and open-ended freedom of expression. Margaret Boden confronted this assumption in her seminal work on creativity with statements such as 'to drop all current constraints and refrain from providing new ones is to invite not creativity, but confusion' (1992, p.82) and '"Anything goes!" is not a good motto for the arts' (1992, p.132). Paradoxically restrictions appear to increase the chance of creative breakthrough. Whilst the self-imposed constraint decided upon for the *Occupant* residency was to use one of the first-ever affordable home computers, a more frequent example is the practice of painting (in the very literal sense: through the application of paint mixtures onto support). The sheer numbers involved, and the widespread continuation of painting in art education, suggests that a minority see choice of Renaissance, or evenNeolithic, media as a problem. Some do recognise that their tools and materials add up to a convenient form of constraint. It was through such awareness that it was possible for abstraction to develop historically, and for painting to be self-referential and ironizing on the history of painting. John Roberts comments on the impressionist's valuing of "deliberate mistakes in execution and technique" (2011, p.211). Otherwise painting would simply be stupid and not knowingly so. If illustration is the objective, then there exist many more efficient and powerful methods, not least photography, and a plethora of software and hardware. If depiction is not the aim, then why fixate on paint: the world is full of other fascinating materials?

Arguments in support of the outwardly anachronistic activity can be listed though. A tradition and framework has been forged; painting can refer to previous painting as we have said; mutual understanding of the medium may be important. Sentiments along the lines of 'painting is fun' can be defended. Paint offers particular kinaesthetic, chemical and physical qualities. Its visceral nature and immediacy are seductive and peculiar, as are the contents of eggs employed in another work of mine *Rearing* (discussed in section 2.2.2). As it happens painting materials are evolving anyway: acrylic only became available in the 1940s. These media remain one means of image making. Then there is the art market which encourages continuity of a sort: the buying and selling of paintings has precedent. Painters are liable to, either furtively or openly, embrace commercial structures in order to sell work, reach audiences and continue functioning materially as artists. The business side is seen as problematic but Niklas Luhmann, for one, plays it down: 'one should not overestimate the irritating effects of the market on the production of art. Precisely the demand for artistic originality prevents the artist from working with an eye to the market' (2000, p.243). A wider conception of painting could include manipulation with digital tools. Ironic use of paint has been mentioned: its use could even be a provocative gesture against those who dismiss it. The term painting is often shorthand for a thought process or praxis as opposed to being actually medium-specific. Something should be added about the use of paint and other traditional approaches in art education. Their employment is a way of learning through enactment and re-enactment. An artist may claim no interest in, nor possess much fact-based knowledge of art history, say, but be tacitly informed thanks to practical experience with materials.

Having said all this, a high proportion of what goes on must be driven by sentimentality, nostalgia and naivety. Hence the non-ironic existence of the 'Sunday painter' stereotype, the proliferation of hobbyist courses and

traditional art materials outlets. Painting as artificial stupidity or intelligent limitation accounts for only a fraction of what goes on. The position argued in these sentences seesaws because the practice of painting can be judged stupid or deemed intelligent. Either side of the debate is possible to defend. In conclusion, it is curious though that something like oil painting on canvas is considered by many to be the most usual artistic device when it could just as easily count as the most eccentric.

The way new gadgetry excites, and artists feel compelled to employ the latest technological breakthroughs, is an equal and opposite problem. Exhibitions which emphasise the capabilities of cutting edge tools often reflect a curious conservativism, a need to be linked to artistic tradition, which ignores the conceptual breakthroughs and more complex questions about what art might be. Uncovering the qualities of any medium can be revealing, including the noise and associated glitches. Whilst wary of the affection which grows too easily for precisely these characteristic faults[17], I believe that worthwhile discoveries can result from maintaining an open-minded stance. 'Manufactured or archival reproducibility of phenomena, including those sometimes spuriously overvalued as heritage, is at odds with serendipitous, accidental, or other crucially productive acts like inefficiency and forgetting' says Sally-Jane Norman (2013, p.277). Misuse and stupid application opens up creative possibilities with any technology. And the same goes for interpretation: the defectiveness of art collective *Blast Theory*'s game *Day of the Figurines* had interested me more than its purported aims (O'Connell, 2007).

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[17] One thinks of the fashion for 'shabby chic' (OED, 2016d). The design principle and Eastern philosophy wabi-sabi gives legitimacy by suggesting that '[o]bjects and environments that embody naturalness, simplicity, and subtle imperfection achieve a deeper, more meaningful aesthetic' (Lidwell, Holden and Butler, 2010, p.256).

Apart from the chance occurrence of owning one, and being familiar with it from my youth, in selecting the ZX81 for the residency at Grey Area (Pryde-Jarman, 2012a), I was conscious of its untypicality as an artistic tool. Secondly questions about Alan Turing and the history of AI were at the fore and the machine provided a suitable playground for exploration. In using the antediluvian platform, questions were thrown up too about the evolution of computing. An efficiency in coding was enforced due to lack of processing power, storage capacity and computer memory. The limitations served as reminder that 'computing' is what computers are for; it is their 'schwerpunkt' as games designer Chris Crawford would put it (2003, pp.71–72). Processors were increasingly underutilised with the move to desktops and personal computers (cf. supra, p.26) whereas the CPUs of mainframes had been kept busy. In that sense the older machines were used more intelligently. Search engines now however orchestrate an impressive dance between networked storage and processing power. Mobile computing is changing the situation too because much of the work of device apps is carried out on servers, allowing economies of scale to be exploited again. It is curious to observe these swings of the pendulum in technology history. To compensate for the ZX81's primitive keyboard a technique was invented which meant that when pressure-pad 'L' was pressed the Basic language command LET would appear on screen, when 'P' was pressed the command PRINT appeared, and so on. This novel idea for speeding up the typing process disappeared when better desktop keyboards could be mass produced but it returned a few decades later, with mobile telephony, as 'predictive text'.

It is appropriate to refine the research methodology during the course of conducting research, instead of determining it in advance. Grounding reflection in practice in this way can vindicate the importance of the artist's discourse with respect to others caught up in the 'practice turn' (Schatzki and Knorr

Cetina, 2000). Methods cannot always be written up prior to activity. Film director Andrew Kotting agreed with the appraisal of comedian Stuart Lee, whom he'd worked with (*Swandown*, 2012), when he said: 'well all Kotting does is, he goes out into the landscape, he likes a journey, and then he reverse engineers meaning into it afterwards' (Kotting and Jackson, 2015). Likewise the significance of the sequence of events described in the previous pages only became obvious subsequently. Niklas Luhmann's writes that an artist 'must, so to speak, let the emerging work show… what has been done and what can be done' (2000, p.38) and John Roberts cites André Breton: "Illumination comes afterwards" (2011, p.236). In reaction to Wittgenstein's proposal that '[w]hereof one cannot speak, thereof one must be silent' (Biletzki and Matar, 2016), Michael Polanyi substantiated a belief that 'we can know more than we can tell' (2009, p.4). This admission of tacit knowledge is surely central to how artists operate. It may explain why artists can be deemed wise even though the content of what they know is not immediately made explicit. Artworks produced or critical actions taken are conceivably a step towards foregrounding that which has not yet been articulated. Luhmann points towards such possibilities (2000, pp.17–18). Speculatively it is the negotiation between two imagined poles of expressible and covert knowledge which leads to resolution of artistic outcome.

Philosopher and music theorist Henk Borgdorff points out that 'the borderline between artists and researchers is being blurred' (2012, p.178) in an interview which discusses what 'artistic research' means (2012, pp.177–183). The *Occupant* residency fitted with his definition in stressing two key characteristics, namely that 'artistic research takes place in and through the making of art' and 'the outcome of artistic research… partly at least, is art' (2012, p.182). During the *Occupant* residency both a hypothesis (that the term

artificial stupidity would be useful to interrogate, especially in relation to art) and an art work, *A Nod to Turing and Creed*, were produced[18].

A threefold research methodology emerged then. Firstly, unapologetically playful approaches, characteristic of stages in artistic projects, were utilised to generate ideas. In this way art is primary research and equivalent to experimentation: it is a form of thinking. Secondly, conventional academic secondary research, the study of texts and writing was conducted alongside artistic production. Thirdly the works themselves were treated as raw materials or case studies to be written and talked about, with the benefit of insider knowledge, in order to develop arguments. Channels for discussion included conferences, symposia, exhibitions, artist talks, presentations, papers and the content of this thesis[19]. Figure 04 is a poster produced in 2012 for a research-student event following initial brainstorming about where to take the research. It should be noted firstly that the artworks, which must be judged on their originality in the context of art, do not constitute the research but facilitate it. Secondly, in contrast to research which aims to build upon existing models of understanding, artistic investigation can undo contentment with knowledge, as a means to building it up again or discovering something new. In that sense art can be a kind of anti-research. Viktor Shklovsky's specifying that '[t]he technique of art is to make objects 'unfamiliar', to make forms difficult, to increase the difficulty…' (2003, p.280) can be interpreted in these terms too, and applied, not just to objects, but to sets of ideas.

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[18] Another work, *A Nod to Gormley* (O'Connell, 2014d), was also produced during the residency.

[19] As well as exhibiting and conducting art-oriented events (O'Connell, 2015b), materials were presented at many workshops and symposia (Chevalier, 2013a; b, 2014; O'Connell, 2014b; Grant, 2014; Hignell and Bright, 2015), and often at the Creative Critical Practice Research Group (CCPRG) convened at the University of Sussex (Chevalier, 2016).

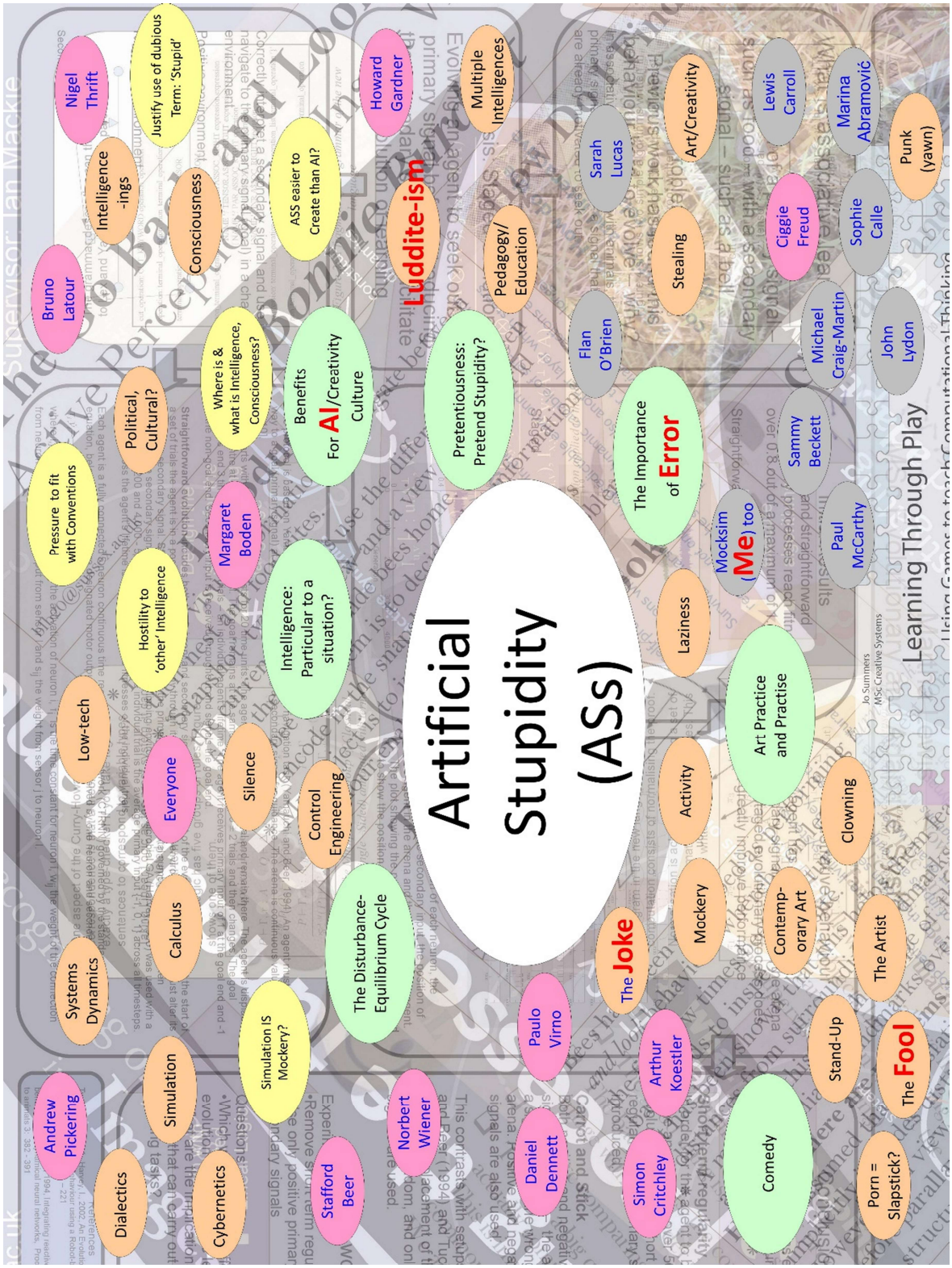

Figure 04 Poster produced for research student event as overview of current ideas, 2012

1.6. Feedback and feedforward

Before proceeding it is useful to define a number of key influencing cybernetic concepts and to connect these with the theme of intelligence. Cybernetics is the science of feedback loops. Less frequently referred to than feedback is the concept of 'feedforward'. Both terms will appear when discussing individual works. Understanding of these concepts and cybernetic systems was gained initially from hands-on experience designing, tuning and simulating Emergency Shutdown System (ESD) logic (see footnote, appendix E, p.221) and PID control systems (IADC Lexicon, 2015), for oil and gas platform operators. Other positions involved developing system dynamics (SD, cf. infra, pp.54-56) models to assist with strategic decision making and later I ran a course on computer games design[20]. In all of these arenas, and to some extent other areas of experience such as discrete event simulation (DES, cf. infra, p.68), feedback and cybernetics concepts feature. Texts associated with each define, or refer to, the importance of feedback (Harriott, 1964, pp.5–6; Luyben, 1973, pp.317–321; Vennix, 1996, pp.31–36; Crawford, 2003, p.174; Salen and Zimmerman, 2004, pp.213–227; Lidwell, Holden and Butler, 2010, p.92) and occasionally feedforward (Harriott, 1964, p.6; Luyben, 1973, pp.431–451). Jimi Hendrix and groups such as *The Jesus and Mary Chain* had used feedback purposely and, while a student of art, the applicability to other performance practices notably stand-up comedy (footnote, appendix A, p.211) were looked into. I began to acquaint myself with some of the classic texts on cybernetics (Ashby, 1956; Beer, 1959; Pask, 1968; Wiener, 1954, 1965) and stumbled across experiments like *Project Cybersyn* (Transmediale08, 2008; Morozov, 2014).

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[20] Katie Salen and Eric Zimmerman devote a chapter of their book on game design fundamentals to cybernetics (2004, pp.219–233).

Rather than citing from the sources mentioned above I find it more incisive to demonstrate what feedback and feedforward are through an example I have often used. Think about taking a shower in unfamiliar accommodation. Increasingly showers are automated but, even there, a familiar challenge presents itself. Typically, the flowrate would be set first and then the water temperature adjusted by turning a dial. The process of arriving at a comfortable temperature involves a degree of trial and error. The dial is turned one way and, when the water becomes too hot, back again until a suitable setting is converged upon. The ease with which the optimum (or satisfactory) temperature is reached is a function of the particular plumbing, the lengths of piping, the heads of pressure and more. These structural parameters give the system its particular time delays, lags, 'time constants'[21] and sensitivity. The process of discovering the desired setting is known as feedback control. Feedback is firstly a means of learning about, or interacting effectively with, an incompletely understood external system.

When the shower is used a second time the settings are reinscribed and with a few repeats memory alone can be relied upon. With time these actions become habit. Taking action based on what is known in advance is described as 'feedforward' control. Feedforward is about formulaic behaviour but it offers speed. Disturbances can be reacted to immediately or even pre-empted.

That is not the whole story: reality is more nuanced and complicated. A combination of feedback and feedforward is always essential in fact. If water is drawn from the same source through a tap being turned on or toiled flushed, then readjustments to the shower setting may be necessary. An element of

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[21] In control theory the concept of lag is different to time delay. A system might begin responding immediately to a step change in input but then gradually approach the final value. Useful definitions of concepts such as time constant and dead time and are provided by Jacques F. Smuts (2011).

feedback permits adaption to minor disturbances. As time goes on intelligence of the system is built up so that it becomes possible to respond to even multifaceted upsets, predominantly through the mechanism of feedforward. But in extreme cases, sensitive system dynamics, long 'dead times' or dysfunctional mechanisms can complicate the situation so that the temperature overshoots or undershoots. It might not be possible to control the system satisfactorily. Worse still, one's own interactions could make matters worse.

So feedforward is the praxis resulting from already accumulated knowledge whereas feedback is a mechanism for dealing with the (as yet) unknown. Feedback is empirical learning. It could be said that all feedforward is the result of historical feedback. Feedforward is the embodiment of feedback. The ability to interact using feedback is itself either learned or built-in and so could be labelled second order feedforward. In the tree branch example given earlier (cf. supra, p.35), the feedback mechanism is embodied in the properties of wood.

Adult human beings, if portrayed in systems terms, function mostly through feedforward with corrections and adaption being provided by feedback. In fact, the user of an unknown shower would arrive armed already with knowledge from previous experience of similar apparatus. Already, at least three very different kinds of intelligence have been described here. Feedforward, feedback and the combining of both, correspond with human competencies of knowing, learning ability and mental agility across both, respectively. Historically education was connected with the first of these, the ability to accumulate, retain and use knowledge. Pickering, writing in 2011, asserts that: '[f]ormal education largely amounts to acquiring, manipulating, and being examined on representational knowledge' (2011, p.13). Undoubtedly the world now, with its incorrigible demands for creativity, necessitates more of the feedback-type intelligence and mental dexterity. The existence of a Jisc

(formerly the Joint Information Systems Committee) paper, emphasising the benefits of feedforward as well as feedback for students (Ferrell and Gray, 2013), shows that the former should not be dismissed outright though. Feedforward aligns with ideas of craft, the trades and skill. Feedback, together with this ability to draw upon knowledge, maps better onto the notion of art, especially conceptual and post-conceptual art. It does not take too much imagination to see how, in an environment where one type of intelligence is lauded, other types would be treated with suspicion, feared or deemed stupid. So in trying to define these cybernetics terms, arguments raised earlier (cf. supra, pp.31, 35) stemming from the difficulty in pinning down what intelligence is, are extended.

Self-regulating mechanisms can be consciously constructed or found in natural systems. The scope appears almost infinite. The shower anecdote cannot do full justice to the intricacies of more complex formulations. Looping systems which link and overlap with others can be envisaged. Unusual dynamics and the potential for many kinds of instability exist. Consider the feedback commonly linked to audio circuitry (cf. supra, p.51), which is the result of a 'reinforcing loop', also known as 'positive feedback', or 'runaway' (see appendix F, p.223). Much longer timescales are involved, for example, in climate change but the kinds of equilibrium, 'dynamic equilibrium'[22] and variability, noticeable there, are analogous with what happens in localised settings, at infinitesimal durations or even in electronic circuits.

System dynamics (SD) is a field, inspired originally by Jay Wright Forrester (System Dynamics Society, 2016), in which cybernetics ideas are applied mainly to modelling industrial, business and economic systems. The

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[22] The term dynamic equilibrium means slightly different things in different fields such as chemistry (Lee, Wang and Wang, 2013), continuous and discrete event simulation (DES). It is mentioned also in appendix F when discussing Simple Harmonic Motion (SHL).

methodology for producing SD models involves determining which factors are important and linking those factors in a 'causal loop' diagram before dividing the system into 'stocks' and 'flows' and embedding data and equations (Radzicki and Taylor, 1997). From very simple building blocks the most complex simulations can be created.

SD is mainly utilised for corporate modelling and a mind-set which, while revealing counterintuitive effects, does not purport to be fundamentally critical. The same applies with common applications of other computer simulation techniques (dynamic, continuous and discrete event simulation): questions of ideology, embodiment, ontology and epistemology would not usually be raised by the users of these tools, nor their clients. In addition, SD enthusiasts tend to overestimate what can be achieved with system theories and simulation, as exemplified by Forrester's own, in retrospect astonishingly ambitious, attempts to model *World Dynamics* (1973). Voices such as Herbert A. Simon's must have been in the minority, when, in the 1960s, he hinted at the need for the 'development of a body of knowledge and technique for dealing with complexity' (1962, p.482). Industrialists, business people and engineers purport to be uber-pragmatic but just as the structuralism which 'owes a debt to cybernetics and information theory… was never as *hygienic* as its adherents thought it could be' (Bassett, 2014, p.10), so it is with the tools they invent. The applications are nevertheless vast and though, ironically, the foremost demand for exact prognostic outputs is the one least likely to be satisfied, simulation can be valuable for visualising, foregrounding, understanding, training, to aid discussion and collective agreement, and reduce the likelihood of miscommunication and design errors. It is a pity that these, now very affordable, applications are almost monopolised by corporate interests. For artists, the concepts can be something to experiment with practically, as a means of subverting or framing understanding. In my case the science and

mathematics of feedback (appendix F, pp.222-245) was something to utilise in these ways.

If feedback is about navigational intelligence and feedforward does not demand interaction, then culture might be defined in terms of the latter, as the entire body of accumulated knowledge which is stored and can be passed on. This conception of culture includes data, facts and information about the mechanism of interaction. Culture is stored on servers, in books or concretely in the shape of physical architecture, infrastructure and artefacts, as well as in human memory. Archiving can be conscious or incidental. Information about how to obtain information (the scientific method for example or pedagogical theories), call it meta-knowledge, forms part of the infrastructure, and presumably the structuring can cascade upwards in 'object-oriented' fashion. Feedforward fits with a more traditional notion of what intelligence is (simply information) and this has been the historical emphasis in education systems (cf. supra, p.53). Being able to retain and recite was considered impressive. The role of teachers was to tell pupils what to do. Being cultured amounted to possessing, and being able to act upon, this knowledge.

Feedforward does not have to be about quantity of information, it should be added, but its inviolability. Cast iron is durable and solid but brittle, a material which, in cybernetics terms, corresponds to an extreme example of feedforward. Steel, on the other hand, is elastic to a degree, and so capable of better relating to its surroundings.

Doubtless a difference with most animals is that we humans possess more ability to learn through feedback and to retain new information for feedforward purposes. Natalie Pollard, in an article exploring the relationship between rudeness and stupidity (2013, pp.83–103) presents the latter as the reverse of mental dexterity. For J.M. Coetzee, she states, stupidity 'describes habituated, unchanging behaviours that privilege fixed ideas of the good and

the true, and which defensively cleaves to them when exposed to rival positions' (Pollard, 2013, p.85). If, for Claire Colebrook, writing in another article in the same issue of *Parallax* journal, feedback is stupidity then it is 'at once the death of thinking but also its life' (2013, p.33). The cybernetics philosophy has to be about the tension between necessary ignorance and familiarity, corresponding to the extremes of feedback and feedforward respectively.

Higher order cybernetic systems can be envisaged for which other systems are simply subsets. Idealised cybernetic models cannot address the noise and nonlinearity experienced in the real world, nor our ever-changing reading of what exists. The paradigm is useful nevertheless in framing understanding of many phenomena including the interventions and artworks described in the next chapter.

2. Interventions, art practice and works

Work has been selected for discussion here on the basis of the weight it carries within the practice (in terms of time, effort and resources devoted) and secondly because of its relevance to the motifs of this thesis, i.e. contemporary and post-conceptual art, the science of feedback loops and a critiquing of intelligence, and intelligent systems. The writing in appendix A, a response to an installation by artist Glenn Ligon, tested the method employed here in facing my own work[23]. His *Call and Response*, an exhibition at London's Camden Arts Centre (2014), called for a response in connection with the practices of interest to me. The installation, *Live,* pertained to familiar subject matter[24] and employed comparable strategies[25] to my own. Experiences working with contemporary grouping *Common Culture* (David Campbell and Mark Durden) are also drawn upon, when discussing Ligon's piece in appendix A, just as work by Sophie Calle, a novel by Samuel Beckett (the latter dealt with in more depth in appendix I) and live art duo *Hunt and Darton* (Jenny Hunt and Holly Darton) are referred to in the chapter sections which follow. The nature of the writing is discursive. I review and speculate about the relationship with key themes. In the treatment, which, as has been said, includes relevant digression, the ground is laid for the structured breakdown and taxonomy of methods in chapter 3.

The work is grouped under three headings for moving-image, directed performances and 'hacks'. The simupoems, short looping films, which have been a consistent feature of my practice, are given attention in 2.1. One of these

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[23] Appendix B documents part of the research into *Live* too: professional stand-up comedian Stephen Carlin (Burgess, 2010) was interviewed about his experiences at the installation.
[24] Performance, feedback loops, humour and earnestness, upturning representation, the socio-political, liveness, questions of life and death.
[25] Subtraction, appropriation, destructive methods and montage, alternative means of screening.

(*Boring*, 2012), which incorporates photographs captured while trapped in a nine-hour traffic jam, is focused upon. In section 2.2 live art is considered, beginning with *Now Man*, in which participants respond to the movements of a swinging camcorder (O'Connell, 2014e). Typically the same professional clown (IMDB, 2016; Bennett, 2016) was employed in the executing of performances but that evolved to include other players and also myself. Lastly, and most importantly, because this is work I intend to do more of, a series of interactions with the everyday technological landscape is discussed in section 2.3. One implication in mapping out this trajectory is that I have learnt from the clown, been an apprentice of sorts. I now play the fool, but as a means of creative unearthing. Parking contravention images are mistaken for art photography, beauty is found in courier company 'point of delivery' signatures, and supermarket self-checkout machines are used, but to buy nothing. This is not idiocy but artificial stupidity in that readymades are extracted, assets appropriated and procedures hacked: a) to produce original artworks and b) to point at the peculiarities in an all-encapsulating supply chain (IADC Lexicon, 2013).

2.1. Films: the 'simupoems' and *Boring* (2012)

For over a decade I have produced short moving-image pieces; looping films combining virtual '3D' models, physics-engine-inspired dynamic effects, mathematical principles and simulation techniques, incorporating imported imagery, captured sound or appropriated assets. These experimental films[26], termed 'simupoems' (after Man Ray's cinepoems but with the prefix simu instead for simulation), have many features in common with each other but do not consciously abide by the conventions associated with the medium of film. For me, they represent a new, be it localised, genre. Just as misuse is a factor in the investigative activity, it can be applicable in the production phase of work. Whether the functionality of these tools is shown off does not concern me. In fact, my drive is in the opposite direction (High level strategies list, point b, cf. infra, p.150). If 3D Modelling tools impress primarily because they automate the creation of classical perspective, then it is precisely that feature which may be switched off (Sheerin, 2014). Glitches in how the software works, including mistakes and oversights occurring during development, may be allowed to remain.

In their not nesting comfortably within traditional arts/crafts categories the simupoems present a number of challenges. 'Your work seems to come from nowhere' I was once informed by an artist friend (see e-mail from Huw Bartlett, appendix G). In reality it has been neither an aim to create work which fits neatly within existing genres nor to evade easy classification. These films are not examples of 'outsider art' (Clarke and Clarke, 2013) either. Even when contextual linkages are not knowingly injected, conventions can be

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[26] The category experimental film is an anomaly because these films are not experiments. Nevertheless, the term is employed (sparingly) because it is a way of distinguishing from mainstream filmmaking, movie culture and so on.

unsuspectingly abided by, having been absorbed through social osmosis or similar. Polanyi's defence of 'tacit knowing' (2009, pp.3–25) supports such a proposal. The simupoems could be said to borrow tacitly from the histories of experimental film, cine-poetry, photography, experimental music and sound art, modernist and abstract art, and are concomitant with ubiquitous features of the digital era namely: the slideshow, the ident and the screensaver.

The challenge in positioning these works indicates a twofold general problem of classification. There is the difficulty of categorising a type of work and the fact that every instance, regardless of how it has been categorised, is unique. This issue is one which arises especially for artists because they are in the business of 'creating' (even when that means appropriating, selecting, distinguishing, intervening, reframing and being creatively uncreative). Alchemy was an ontological project given-up-on long ago or at least superseded by science, but artists hang onto it as an epistemological pursuit[27]. Before looking at a particular work (*Boring*, 2012) it is convenient to deviate and probe into a broader question here because it bears relevance to my practice and the themes of the thesis. To create useful taxonomies is ordinarily judged sensible. On the other hand, '[r]esistance is also needed to counter the indiscriminate application of terminologies or taxonomies to different phenomena: this tendency in the so-called creative industries', Sally-Jane Norman says, 'may correspond to hegemonic attempts to engulf art that otherwise hovers awkwardly beyond definitional reach' (2013, p.285). Distinction, once it starts, i.e. the act of distinguishing, is inexorable, an example of reinforcing feedback (cf. supra, p.54). In Luhmann's words '[o]nce a distinction is drawn, a sequence of operations is set in motion, as it were,

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[27] Michael Craig-Martin's An Oak Tree (Tate and Manchester, 2002) is a prime example though he was not treating the question as one of epistemology versus ontology.

spontaneously' (2000, p.31). Though every invented category must be inadequate in its description of the particular, complete refusal to recognise classes is impossible to countenance too. Conundrums mount up: 'using a distinction to illustrate the lack of differentiation in the distinguished defies the distinction's functional purpose as difference' (Luhmann, 2000, p.29). Philosophically Samuel Beckett was surely engaged with problems of this nature. The thought that describing is impossible coupled with the fact of doing it, or having to proceed anyway, is a key theme in his writing. 'Even though everything seems inexpressible, there remains the need to express', he said (Shainberg, 1987, p.103). It is no wonder that the title given to one key selected anthology (taken from Molloy) is: 'I can't go on, I will go on' (Beckett and Seaver, 1992). The motivation for raising these points here is triggered by frustration about how to categorise the signature looping films, and indeed *whether* to categorise them. The problem of whether to consider the films works at all, whether to invent a genre and then to give each simupoem a title, is compounded by my discomfort with 'making' and commitment to appropriation, remixing, recycling, reusing and intervening. The simupoems however are largely 'mashups'. They are fashioned firstly through forcing seemingly incompatible elements together and then worked upon so that no one component dominates in influence. As a kind of power-balance is approached other tensions within the work make themselves apparent. Through these manoeuvres - the addition and subtraction of elements and the accentuation and dampening of other effects - the overall connotative possibilities may be intensified. The hope is that new levels of poignancy, affect and meaning are revealed.

I have allocated the simupoems the first position in this chapter because they represent a consistent and vital feature of my practice. These films are least easy to defend in a context which rates conceptual and post-conceptual

activities, interventions, antagonistic relational art, politics and hacktivism. David Beech, in an article reminding that 'the aesthetic' should not be conflated 'with the visual' (2016, p.7) does propose that artworks can be divided, 'into two categories: those that hold our attention and those that send us out into the world' (2016, p.7). The accent with these films is towards the former whereas much of my other work conforms with the latter. Though integration of appropriated raw materials is often a key strategy, so too is the 'making' aspect. These are not examples of 'readymade' puritanism. The simupoems are designed to be looked at, listened to and experienced at the perceptual level and, in that sense, there is a harking back to modernist or pre-modernist ideals. It should be noted though, that even Duchamp's *Fountain* had been inscribed with the much-debated name R. Mutt (Howarth and Mundi, 2015). Some embellishment was permissible. Complete rejection of earnest formalist thinking is not my aim anyway. It ought to be possible to defend the right for someone to write poetry instead of 'finding' it, Kenneth Goldsmith style (*Assume No Readership*, 2014). The tactic of retaining links with an era when formal considerations were of primary importance, whilst inventing new principles, can be a means of posing questions about the state of art in what John Roberts calls its 'deflationary' period (cf. infra, p.133). The bluish grey background selected for *Boring* made sense in that it distinguished, but also conflictingly linked, the film to the PowerPoint aesthetic and simultaneously acted as mute sky or 'light at the end of the tunnel'. Practically the colour (see Figure 05, p.65) complimented the oranges and ochres dominating in the central rectangles. If traditional principles are observed or broken with, that is from a position of awareness: notice the poor composition and use of available screen space in *A Nod to Turing and Creed* (Figure 03, p.42).

Boring took its title from the fact of having captured the photographic raw materials while trapped for many hours in a major traffic jam on London's

orbital motorway (BBC, 2011). Three people had been badly hurt in the accident which caused the tailback highlighting one difference with other kinds of queues. Traffic jams often amount to an eerie aftershock of some original human trauma. Drivers may be bored by the experience but are also aware that the delay barely conceals the most widespread form of violence. Shortly after entering the tailback, which involved long periods of complete standstill followed by occasional slow movements forward, the power in my phone handset expired. I had, in the months before, been discussing responding to a music composition/sound narrative by composer Stace Constantinou, called *Trainofthoughts* (2015b), through the creation of a moving-image piece. As a result, there was a CD version in the car. Furthermore, I happened to have a DSLR camera with me. The delay (which I was not to know would last nine hours) provided ample opportunity to listen to the thirty-minute composition. During one of the periods of sporadic traffic movement, the camera was placed on the dashboard, facing forward, so that the lens looked through the windscreen, and the shutter release activated at every transition or cut in Constantinou's music. The game was invented only to alleviate the boredom and in the belief that any links between the resulting photographs and the sound track would be arbitrary. I am sceptical about the presumption of meaning when a pattern from one source is imposed upon another. The Fibonacci Sequence is relied upon as if it represents some universally employable aesthetic system for example (Lidwell, Holden and Butler, 2010, p.94). Regardless of whether Constantinou's stated interest in applying number theory and mathematical patterns to his musical arrangements (2015a) can be justified, it felt appropriate to devise a system. At the very least the activity did increase attention to the structure of the composition. In order to simplify the process all of the images were captured at the same settings: a longish exposure time of 1/25th sec, a narrow aperture of f22 and a lens angle of 17mm. It was

dusk so the slower shutter speed helped achieve satisfactory exposure levels, at the expense of increased motion-blur. On reflection the longer exposure times meant that the resulting images embodied something of the true dynamics of the situation.

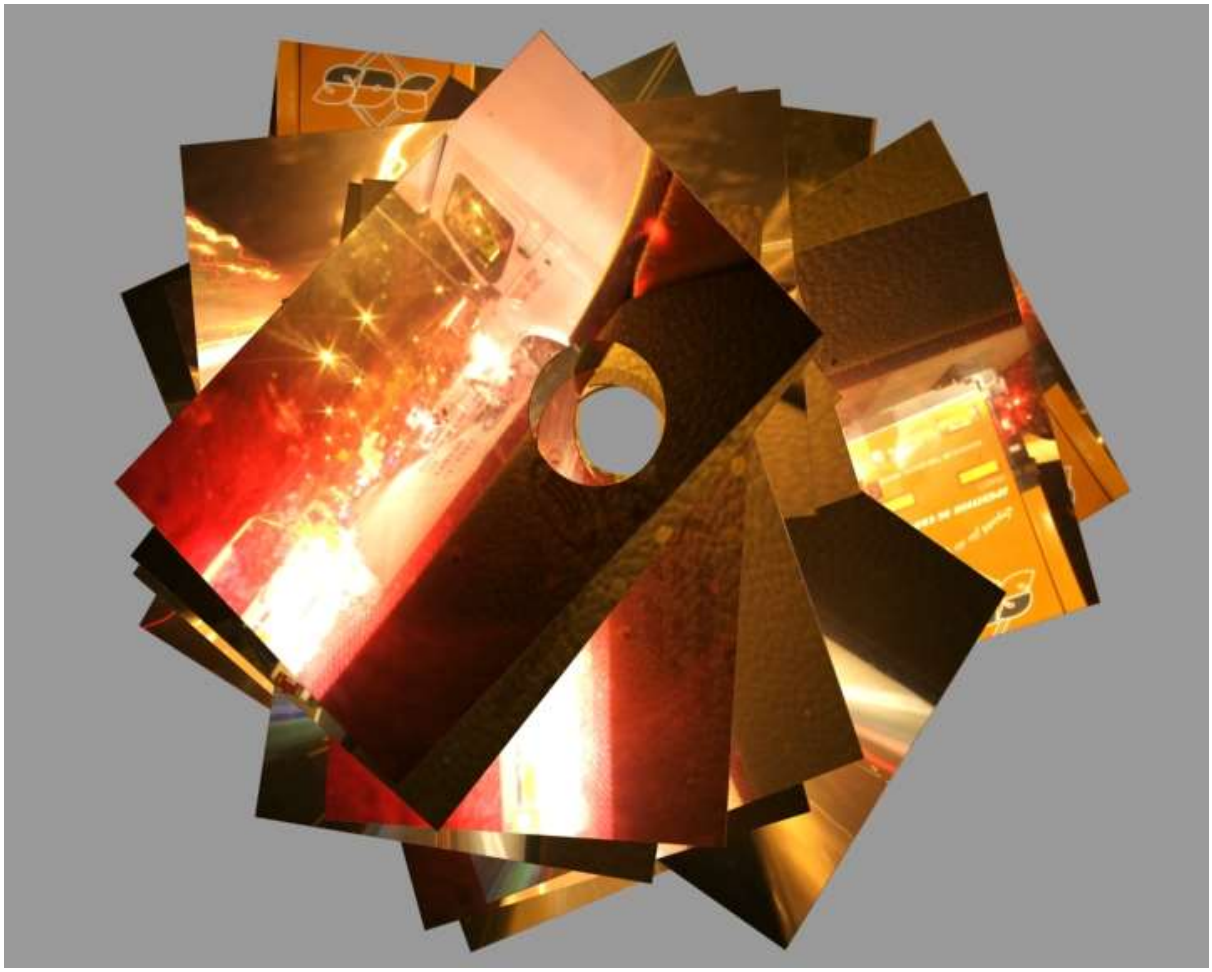

Figure 05 *Boring* still, 2012

The event resulted in a series of photographs which could be classified as low quality or high depending on the criteria of interest. They were printed out, and different ways of displaying them experimented with. My thoughts connected ideas about traffic congestion, images of cars, a project called *Contra-Invention* in progress at that time (discussed in section 2.3.1), and the relationship between moving image and stills photography. Filming the

physical prints from above as I dropped them was a possibility. The fall could be controlled by cutting a hole in each image and using a vertical shaft of some sort as guide. Obliterating part of the images would satisfy further my general desire to undermine the meaningfulness of representative images. If associations would be made with the slide-show aesthetic then so be it, but original ways of sequencing the images were being investigated. Eventually the idea of a physical setup was abandoned and 3D modelling software with a physics engine made use of instead. Digital versions of the images containing virtual holes could be dropped down an invisible cylinder (Figure 05). This permitted control over the process and the filming. Other unusual options could be opened up: perspective was simply switched off (cf. supra, p.60), something which is not conceivable in the real world or with a camera. It was interesting to undermine normal expectations with such software too and embrace certain glitches and bugs. Continued experimentation resulted in the simupoem *Boring*.

The promise to Stace Constantinou had been fulfilled and, in not linking the film to his audio track, it would be possible for the works to be presented either together or separately if desired. This was something we had discussed in advance. The strategy for collaborating was inspired by a series of prints Patrick Caulfield had produced in response to the poems of Jules Laforgue (Caulfield and O'Brien, 1995). Caulfield's pictures were not illustrations of the poems, nor had the poems been created in the knowledge that a visual artist would respond to them in the future. Constantinou and I discussed the collaboration at a conference later (Grant, 2014) and in doing so unearthed another construal of artificial stupidity. In the interests of efficiency, one can choose to remain ignorant about a particular discipline but nevertheless leverage the knowledge of others through collaboration.

Boring was completed for a joint exposition with Stace Constantinou in May 2012 (The Horse Hospital, 2016). The venue offered to us, built in the eighteenth century, turned out to be particularly apt, as foregrounded in a review by Mark Sheerin: 'The two works combine in a dryly amusing way at the Horse Hospital, itself once a pit stop for London cabbies. A place for breakdowns and delays' (2012). Constantinou's narrative piece incorporated many inferences to commuting on London Underground's Northern Line. If not noticing these obvious connections until they were pointed out in the review, is an example of stupidity then there were further examples. Amazingly I had not consciously picked up on the blatant pun, and multiple meanings, of the title, *Boring*, until it was pointed out during a screening. There are a few ways of viewing these kinds of oversights. The phenomenon is very relevant to one of the themes of this thesis: how alternative (easily derided) modes of thinking, are common to artistic practice. The reasons for not seeing the obvious at first could be attributed to slow-thinking or laziness but another reading is that a lack of concern was somehow intended. If a person benefits from trusting in what their unconscious provided once, then the fear of handing over power again is reduced. Risk-taking involves following hunches and impulses and having the nerve to look stupid. Counterintuitive approaches bring results just as a good joke can materialise when not trying to be funny. Sister Corita Kent and John Cage's advice to art students is decades old now but remains an indication of how different the mentality encouraged amongst artists is, compared with normal concepts of research. Rule six states that 'Nothing is a mistake. There's no win and no fail, there's only make', and rule eight advises: '[d]on't try to create and analyse [sic] at the same time. They're different processes' (Kent and Steward, 2008, p.46). A common artistic strategy is to escape one's own analytical tendencies.

The interest in a traffic jam should be no surprise because during the 1990s, for a living, the creation of discrete event simulation (DES, cf. supra, p.51) models was my specialism. DES is a statistical technique which allows models of traffic flow systems of any type to be constructed for the purposes of experimentation, answering 'what ifs' and improving design, without having to resort to complex queuing theory mathematics. Such models demonstrate the emergent properties and occasionally chaotic nature of processes of this type, in which widgets, products, entities or people, may all flow through systems of interlinked operations and buffers. Simulation generally allows a slowing down and/or speeding up of time to give new insights. Industrial engineers pay close attention to queues and their significance. I grew to understand the causes of backlogs and the effects of buffering. Delays and hold-ups themselves seem stupid, are frustrating but are also necessary. Just-in-Time (JIT) or Kanban manufacturing (Institute for Manufacturing, 2016) transformed many areas of industry eradicating the need to hold stock but there still exist trade-offs - between factors such as the desire for flexibility, resource utilisation, storage capacity and queuing time. These engineering tools I've occasionally revisited, but with experimental and critical intentions in mind. DES was not employed in developing *Boring* but my interest in the not-so-glamorous subject of queuing, stems from that period of industrial employment. To create *Boring* another kind of modelling, a physics engine (cf. supra, p.66), was used. The Newtonian principles, calculus (given attention in appendix F), and numerical methods for solving the equations are familiar too. In addition to deliberately subverting the functionality of the tools in use, occasional errors in the rendering and computation were noticeable. These faults are intriguing in their not being foreseen and secondly in the way they interrupt algorithmic perfection. At about forty seconds an unexpected spinning motion occurs (*Boring*, 2012) for example. In the interest of abiding by the early modernist and Bauhaus

principle of 'truth to materials' this disturbance in the calculated dynamics was allowed to remain.

DE simulations rarely give an impression of what it is actually like to wait in line. If James Joyce saw mistakes as 'portals of discovery'[28] then the queue is a physical place individuals are ported to. Returning to the significance of being in a particular one, touched upon already (cf. supra, p.64), during the nine-hour period amongst thousands of unprepared travellers, all kinds of complaints, minor crises and emergencies were observed. People became hungry, tired; they needed to relieve themselves, and occasionally vulnerable individuals had to be assisted out. Along with the negative impacts of such delays, are there benefits in being forced to halt? Long ago (1977) Ted Nelson prophesised a new world marked by a change from 'the "waiting operator" to the "impatient user"' (Huhtamo, 1999, p.106). The former order of experience has become increasingly unlikely. Queues were recognised as a 'captive audience' and exploited for marketing and service announcements, and then fixed screens were superseded by mobile devices and smartphones. The backlog of 2011 offered a rare opportunity: it was neither easy nor safe to access mobile devices because of the prospect of sporadic movements forward. Also given the duration, batteries ran low: mine had cut out early on, as stated. In a world where people are 'always on' and tethered to technologies (Turkle, 2008), this traffic jam imposed a contemplative state. A combination of the effects of being incarcerated, and a desire to be productive with whatever remained live (a DSLR and the car's CD player), resulted in the raw material for *Boring*. Drawing guru Betty Edwards writes, 'that driving on the freeway probably

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[28] The famous quote, taken from Ulysses, is 'quite different to the usual adage about learning from mistakes' (appendix A, p.205)

induces a slightly different subjective state that is similar to the drawing state [i.e. right-brain mode]' (1993, p.5)[29]. The stops and mini-dramas en-route

Figure 06 Installation shot *Boring*, Wandesford Quay Gallery, Cork, Ireland, 2012

[29] Could the seductiveness of such experiences partly explain why a seemingly irrational (and stupid) form of transport has become so widespread?

pepper the musical score of normal driving with other temporal, and narrative-oriented, effects.

As well as permitting a misreading of the traffic jam as opportunity and conjuring up a scheme for capturing photographs based on a musical composition, and accepting errors in the production phase (cf. supra, p.68), another instance of artificial stupidity surfaced at the exhibition stage. In *The Horse Hospital* and later at other events the film was screened concurrently on different devices: projectors, screens, and a mobile handset (Figure 06), located around the space. The unconventional approach to presentation was not detrimental and, in fact, complemented Constantinou's soundscape, which naturally penetrated the volume in its entirety. It was a way of presenting visual material as if it were audio.

In this instance the film had been produced without a soundtrack (cf. supra, p.66) but silence is a feature of many of the simupoems. Apart from linking with Cageist history (MoMA, 2013) and the points made about Glenn Ligon's installation (appendix A, pp.198, 202, 204) there is a doubly derogatory connotation in that 'dumb', an archaic term for those who could not speak, remains slang for stupid. One of the origins of the word stupid is connected with temporary speechlessness, '[h]aving one's faculties deadened or dulled; in a state of stupor, stupefied, stunned; esp. hyperbolically, stunned with surprise, grief' (OED, 2015f). Silence is double edged though, because it can just as easily be linked to intelligence as ignorance: speaking too much and speaking before thinking are also seen as indicators of lack of intelligence. Sharing of information freely is not always prized. Intelligence, in its connection with espionage entails secrecy, which puts severe limits on communication. In addition, there are associations between intelligence and the silence required for listening. But silence can be controversial and advised against. John Roberts gives the subject attention, with reference to contemporary avant-garde

activities, and points out that both Stalinism and early Catholicism saw silence as a threat (2015, pp.184–185). When film editing is taught, students are advised that a sound-track, at the very least 'white noise', should always be included. I often break this rule.

In a final nod to stupidity, somewhat cheekily, groups of unwitting passers-by, clearly participating in a corporate team building 'treasure hunt' exercise, were encouraged to enter the exhibition space on the off-chance that they might find clues. The result was a particularly attentive audience at points during the showing. Whether this kind of pranksterism amounted to artificial or real stupidity, on our part or theirs, is a matter for debate.

In the past the ideas for simupoems came from simply paying heed to everyday time-based patterns, simplifying and attempting to model them. Simulation was never intended to be meticulous, nor were the end results representations, but modelling reality could be a stage in the process. Observations were made of a tyre swinging from a tree and inebriated late-evening travellers attempting to balance on London Underground (appendix F, p.227). Molecular movements were modelled using the principle of Brownian Motion (OED, 2016c). Mathematical techniques were used (cf. supra, p.68) and basic routines written to solve these, or purpose built physics engines resorted to. Recognition that the simupoems possessed certain musical qualities led to collaboration with percussionists. I was, at first, wilfully opposed to a narrative-oriented means of dealing with time. The relationship between a 'timeless order and the time order' illustrated by Bohm and Peat using the example of a flowing stream interested me: movement 'can be studied by following an object that floats along it, in a time process… [but] it is also possible to consider the entire stream all at once' (2000, p.195). It was hoped that these films would capture and/or engender similar effects. Now the processes and interventions which occupy me, described in section 2.3, address the timeline but on a

grander scale. The flows of information and materials through circuitous industrial systems are exploited instead.

2.2. Performance and *live art*

2.2.1. *Now Man* (2006-2013)

Figure 07 *Now Man* at Permanent Gallery, Brighton, 2008

In addition to availing of 3D modelling, simulation techniques and soft digital tools in the past decade, moving-image work of other sorts has been produced. *Now Man*, (O'Connell, 2015a), a performance game invented in response to an offer to be part of a small group exhibition (Pryde-Jarman, 2007), was one source of such footage. In preparing for that show I began playing with the dark-comedy idea of 'hanging' the professional clown (IMDB, 2016) I usually worked with. One result from these experiments, *An Attempt at an*

Autobiography, looked like an impossible or daft suicide attempt (Figure 08). A toilet chain was looped around the neck of the participant - initially the clown – and passed up through a pulley attached to the ceiling[30], then back down again to be held by the same individual.

Figure 08 *An Attempt at an Autobiography,* Grey Area Gallery, Brighton, 2007

On a wall nearby was displayed a copy of 'Ernest Withers' iconic photo *I Am A Man* depicting a garbage collectors' strike in Memphis in 1968' (Panoptican Gallery, 2016)[31]. Other experiments included my asking the performer to move along trajectories of curved lines on the wall with a plan to sequence the captured still images into a stop-frame animation. It occurred to me that the process could be inverted by instead hanging the camera or camcorder. Eventually a routine was settled upon, in which the clown would react to the movements of a swinging camera suspended from the ceiling. The LCD display screen on the camcorder was turned forward and the performer instructed to

[30] Comparisons could be made with scenes from an early Buster Keaton film (*Convict 13*, 1920)
[31] Interestingly I discovered later that Glenn Ligon (discussed in appendix A) had responded to the same photograph and placard slogan, 'I am a man', in a work of his.

attempt to remain within frame (Figure 07). The performer was, in effect, tethered to the screen, which, in turn, was attached to the ceiling. The aim, at first, was simply to collect the camera's video footage recorded from when the camera was launched to when it eventually settled. Since then *Now Man*[32], or variations of it, has been run as a live event in many locations (O'Connell, 2014e).

A run typically lasts between two and four minutes. In the early stages the task is almost impossible because the camcorder rotates and swings wildly. Next when the movement slows it becomes easier to predict which direction the lens will point. The improvement is counteracted though by the fact that the actor is becoming tired from the exertions. Finally, the camera slows almost, but never completely, to a halt. In this last period the performer is still expected to remain sensitive to the subtle effects and oscillations and to avoid contravening the rectangular border. Eventually a decision is taken to arrest the process and stop the camera.

In *Now Man* technology is deliberately misused. A 'pointless' process has been invented which is different to implying that no precision was involved, nor care taken, in developing the work. The motives can be understood better if a distinction between 'aesthetic and non-aesthetic reason'[33] is acknowledged. Clear directions evolved during the experimental phase, the technique of hanging and spinning needed to be learned and understood. In accordance with my interest in 'expediency' and 'truth to materials', as well as misuse, the camera is suspended on its own power cable. The particular

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[32] The title *Now Man* was decided upon before recognising it as a pun on Bruce Nauman. The connection seemed highly appropriate, given the nature of past performance and video work of his, such as *Walking in an Exaggerated Manner Around the Perimeter of a Square* in 1969 (MoMA, 2016) and *Clown Torture* from 1987 (Art Institute Chicago, 2016).

[33] John Roberts often employs the distinction (2015, p.71; Livingston, 2012).

qualities of the electrical cable affect the dynamics and consequently impact on the recording. The performer's freedom to 'show-off' is severely limited due to the challenges of the game. In being prevented from demonstrating prowess the clown too is misused. The original desire to work with performers (in 2005) stemmed from an unease with depicting. I chose to employ a real person but therein lay a contradiction because an actor by definition is 'in character'[34]. That is why situations were designed which would limit the performer's ability to perform. The fact that a comedic actor was being employed increased the potential for undermining of the workings. Idiocy is connected with honesty, and cunning distrusted (appendix H, p.240) as Avital Ronell highlights (2002, p.304) in elaborating on 'the case against' the former (2002, pp.294–310). Jokes puncture usual expectations but arguably only expose a layer of deceit. Finally, the high-energy actions appear inappropriate in the confined spaces and galleries in which the performance was usually orchestrated, amounting to another kind of misunderstanding of functionality.

It turns out that the invented routine is accidentally utilitarian in at least one respect. As a method of documentation the approach would be 'stupid' but the footage, despite its primary characteristic of motion-blur, does give a sense of the material qualities of the space. When viewing records afterwards, temporary pauses are noticeable which correspond to the stop-start dynamics of the camera, as the flex winds and then coils up again, and also due to the irregular pendulum cycle. Special attention is given to what is being depicted at these moments of clarity precisely because of their rarity. Documentation of the space is expressed also through the acoustic record, captured as the actor

[34] The peculiarity of the ease with which people are seduced by performance conventions is highlighted in the discussion with Stephen Carlin, appendix B (p.212).

gallops around and abruptly changes direction in tandem with the swinging camera. The nature of the room can be heard.

Already the apparent absurdity of the game fits with some credible definitions of the invented notion, artificial stupidity. Deliberate irresponsibility was a factor in the use of equipment and in the directives given but, if one chooses to, worth can be found in the resulting footage. It makes no sense to call the actions stupid from the standpoint of aesthetic reason. Items of meaning and artistic relevance have been created, a series of experimental films and a live art event, produced.

Artificial stupidity can also be employed as a description of the ability to act stupid, either for entertainment purposes, with artistic intent, or for other reasons. Experiments were carried out involving player-participants other than the performer of choice. The clown is 'better' at the game and not only because he has gained experience through repeated runs over a period of years. It is noticeable that trying to outwit the camera and pre-empt its movements, especially in the frantic initial stages of each run, does not improve the chances of achieving the objective (remaining in frame). Non-actors sometimes begin by finding smart solutions – such as simply standing still - but it is the aptitude for chasing the camera naively, in the manner of a dog pursuing a passing car, which reaps rewards. The clown simply obeys orders and does not give up easily. Though the, ostensibly intelligent, refusal to move as an initial tactic is perfectly rational, it is not in the spirit of the game; the clown would never be so wilfully uncooperative. This raises questions again about what exactly it means to be intelligent. *Now Man* provides further evidence of a historical suspicion that idiocy is not always what it seems. 'Being a fool is being stupid, whereas playing the fool can be a demanding exercise of intelligence', says Daniel Dennett et al (2011, p.15). Acting of all sorts, particularly acting the fool, permits an individual to convincingly opt out of operating calculatedly. Diderot was

first to foreground the paradox of actors being able of trick themselves (1883). The history of inclusion of jesters, fools and buffoons in drama, literature and as live performers in court, at carnival and the circus is confirmation of societal valuing of such devices. It is not convenient here to explore all the reasons for its existence and usages but Simon Critchley highlights a political dimension when he states: '[t]he higher the slavery, the more exquisite the buffoonery' (2002, p.82). Mikhail Bakhtin makes many references to the instances of permissible foolishness, buffoonery and jesting in the medieval period (1984, pp.60–143). The fool is a recurring character for Shakespeare and the phenomenon is certainly not confined to The West as the existence of the Kyogen tradition proves.

Now Man can also be viewed as symbolising the idiocy of human deference to media, technology, as well as to vanity and the rules of others. This is pertinent especially in the age of new media, with a very literal deflation in the costs of equipment and resources available to many. In fact, *Now Man*'s careless use of a camcorder, in keeping with the Lowtech attitude (cf. supra, p.38), is also an indication of how disposable the hardware has become. The sheer quantity of forms masks the pernicious qualities of new technologies, including their capacity to dupe, which results in a probable 'dumbing down'. Sadie Plant infers this with respect to software: 'even relatively simple programs can fool the unsuspecting humans with whom it [the host machine] interacts' (1998, p.90). During runs of *Now Man*, participants other than the clown (when they do get into the spirit of the game), because it is physically demanding and fast-paced, lose their self-consciousness and are unsuspectingly seduced into role. The effect is to complicate Marshall McLuhan's defining of a 'hot medium [as one which] allows of less participation than a cool one, as a lecture makes for less participation than a seminar, and a book for less than

dialogue'[35]. Gaming indicates that McLuhan's model is challengeable. Could hot not change to cool during a process, dependent on how readers, players or participants interact? Gaming of any sort only superficially permits more degrees of freedom and because of the strict confines probably ought to be characterised as hot media. *Now Man*, in that it is highly interactive is hot, but hot pretending to be cool. Most, even those who wittily resist to begin with, are spellbound by the inert kit, the camera/pendulum bob, except for the clown, who at least knows that he is acting.

Now Man's camcorder can be imagined as prey of a sort, being chased by the performer, as if simulating the protean strategies present in nature. According to evolutionary psychologist Geoffrey Miller, 'concealment, deception and randomness… [are] three defences an animal might use against having its actions predicted' (2000, p.403). The third of these, 'random' behaviour, is important for avoiding capture and also used by predators in the wild. Rabbits, when being chased, run in a random or zigzag fashion instead of taking the most direct route to their burrows. Zebra stripes create visual confusion for hunters. Soldiers adopt this tactic when trying to escape sniper fire. Aborigines did 'wild dances to mesmerize the kangaroos they hunted' (2000, p.398) and Miller goes on to describe a malevolent 'mad dog strategy' deployed by despots to intimidate subjects (2000, pp.403–404). These predator versus prey examples demonstrate also that control of outcome does not always belong to the former and that the hunted party should not necessarily be judged inferior. Clichés such as the 'cunning fox' mask a more complicated state of affairs. It takes a special kind of intelligence to evade capture[36]. Miller argues

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[35] A definition of 'hot' and 'cool' media is given in Appendix I (p.243), while analysing Samuel Beckett's minimalist novel.

[36] Now the metaphor could be extended to include avoiding capture by camera or attempts at obfuscation online.

that such random behaviour may underlie the human capacity for creativity (2000, p.404).

A comment at a symposium on puppetry in 2013, after the game had been presented, is pertinent here. Presenter Nenagh Watson challenged the default presumption that the clown corresponded to 'puppet' proposing instead that the camera fulfilled this role (see e-mail from her, appendix G). In fact, my relationship with the camera had included anthropomorphising it. So it is possible to switch conceptions of who, or what, is playing which role in these scenarios, as opposed to assuming a straightforward hegemonic structure. At least three characters are involved in *Now Man*: the performer, the camera and I. All three have agency. Any one could be reckoned dominant or submissive and the situation is unfixed. If attributing agency to the swinging camera grates, then a mathematical account may help. The spinning device, hanging via its own stiff cable, possesses some of the characteristics of the 'double pendulum' which, theory and modelling shows, goes chaotic intermittently during its cycles (MIT, 2016). Margaret Boden referred to this too in *The Creative Mind*: 'a pendulum mounted on another pendulum would normally be regarded as a very simple system, but under certain initial conditions its behaviour is [what she calls] B-unpredictable, or 'chaotic'' (1992, p.235). Emergent phenomena are very noticeable in practice, during runs of *Now Man*. The camera shoots off in unexpected directions occasionally, appearing to possess a life of its own.

Feedback loop arrangements are very tangibly present in *Now Man* and so cybernetics is blatantly applicable in discussing the work. Firstly, the swinging camera's movements are pendulum-like as has been said. Simple Periodic Motion, the sine-wave pattern connected with the idealised pendulum, is also a special case of the dynamics associated with feedback loop calculus (Figure 31, appendix F, p.225). The performer's attempting to look at the live reflected image on screen is another very palpable example of feedback. The

intense bond between technology and human participant, the overshooting and occasional failure to interlock, are exactly what would be expected in cybernetic systems. The scheme fits with Paul Carter's suggestion of a 'cybernetic kind of theatre…, any kind of performance that materializes the actuality of the performance' (2014, p.1). Systems are wrapped around each other concentrically. A third level in the arrangement of nested loops is the relationship between director/creator and performer/device. My interference, instructions and actions amount to an overarching control loop.

There is something ridiculous, once described by the performer, interviewed after a run of the game, about working so hard to get in frame and when, finally it becomes possible, having nothing to say. 'Very Beckettian' he added. Recordings had also been made of another adaptation in which the performer was instructed to attempt to escape being captured on camera while being followed (*No Man*, 2008)[37].

These arrangements say something critical about our relationship to a mediated self, touched upon already (cf. supra, p.79). They challenge the conventional wisdom which suggests that feedback (in the most general sense) is always a good thing. The existence of aphorisms such as 'know thyself' and Socrates stating that 'the unexamined life is not worth living' (Crane, 2016) are proof of how embedded the importance of self-reflection is in Western culture. Now self-reflection is recommended in education, in workplaces, and for mental health reasons. Feedback has become an almost compulsory feature of consumerism. The arena of Quality Assurance takes the concept up an order by advocating the evaluation of systems of evaluation. It is difficult to argue against the benefits, but are there not dangers? Narcissism, attention-seeking

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[37] This scheme, I noticed later, bears significant resemblance to the scenario in Beckett's film with Buster Keaton (*Film*, 1966).

and similar are considered faults. Giving feedback is certainly time consuming. The wrong kind of feedback or too much feedback can destabilise a cybernetic system (once again consider Figure 31, appendix F, p.225). Even Grey Walter's electromechanical tortoises (Pickering, 2011, pp.41–54) went into crisis on occasion: 'flickering, twittering and jigging' (2011, p.43). Should we worry about an 'online feedback form' which '[a]t the end… conducts a survey about whether the first survey was satisfactory' (O'Connell, 2011)? Is it advisable that a person suffering from an eating disorder weigh themselves? The informal term 'loopy', as in to go 'loopy' or to be 'loopy' embodies tacit understanding perhaps of this association between excessive self-analysis and dysfunction, 'craziness, insanity' (OED, 2015e). The problem is perhaps not so much about reflection as how reflections are interpreted. Andrew Pickering, is critical of 'command and control' culture (The Showroom, 2013). He advocates feedback loop type interaction, talks of the 'dance of agency' as a route to 'decentred performative becomings', and so, must have been referring to the problem of interpreting representations, when he railed against reflection in introducing a discussion at The Showroom, London:

> We seem to be compelled to leap into a hall of mirrors and talk about distorted reflections, rather than the thing itself. And the mirrors here are sciences, philosophies, religion, art forms, politics, whatever… It's like we are dazzled by these mirrors... this metaphor cries out for the sound of breaking glass. Smash a few mirrors… [that is not the moral though] The mirrors will never go away. We just need to recognise the mirrors for what they are and resist the temptation to be continually diving into them, like Alice in Wonderland. If we could resist that temptation (and art, I think, should be able to help us do it), maybe we could build a different world (The Showroom, 2013).

Another piece of received wisdom suggests that more communication is always better. Edwin Hutchins confronts the fallacy squarely (1996, p.xvii). His

Cognition in the Wild reflects on the complexities of communication in groups and highlights the problem of 'confirmation bias' which can in fact be avoided by reducing the capacity for conversation; 'by breaking up continuous high-bandwidth communication' (1996, p.262).

In *Now Man* the camcorder and performer are intensely connected so that the players seem almost hypnotised. Fear of close contact with things or others would appear superstitious but maybe it has some logical basis. Flann O'Brien's fiction inadvertently draws attention to such anxieties. His fictional idiot/savant 'de Selby, a physicist, ballistician, philosopher and psychologist' (Shephard, 2007, p.8) may have obsessed over the significance of atoms being exchanged between bicycles and humans[38] but psychologists and therapists frequently deal with real problems of attachment and transference. Osmosis of any sort leads to a merging; it is an entropic process. The possibility of cloning or perfect duplication is a source of angst (Baudrillard, 1994, p.95). Bodies connected through feedback mimic each other and begin to represent each other[39]. One could say that the performer becomes a model of *Now Man*'s spinning camcorder: the camera sucks intelligence from him or her.

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[38] '[P]eople who spent most of their natural lives riding iron bicycles… get their personalities mixed up with the personalities of their bicycle as a result of the interchanging of the atoms of each of them and you would be surprised at the number of people in these parts who are nearly half people and half bicycles' (O'Brien, 2007, p.88) and 'when a man lets things go so far that he is more than half a bicycle, you will not see him so much because he spends a lot of his time leaning with one elbow on walls or standing propped by one foot at kerbstones' (O'Brien, 2007, pp.89–90).

[39] If the bodies and devices in communication with each other are to be seen in system terms, then surely Luhmann's point, about systems being unable to influence each other (2000, p.3), is contradicted. The problem is dealt with later (cf. infra, pp.134-135). Here the suggestion is that a kind of merging can take place when two systems bond via intense or high bandwidth feedback.

2.2.2. *Rearing* (2006-2014)

Before my practice evolved to its current position performance pieces were invented which, at first sight, had nothing to do with computerisation or technology. I am interested, however, in an important analogy. Written procedures which existed long before computing, and those existing essentially outside it now, are, in many ways, similar to computer code. Indeed, terms such as procedure, instruction, routine and script are used interchangeably with words like program and code. Fears about AI are increasingly voiced (Cellan-Jones, 2014; Future of Life Institute, 2015, Director of The Future of Humanity Institute - Nick Bostrom) but does the problem not predate computing? What started, for reasons of convenience, easily becomes oppressive. The coding, being referred to, includes methods, processes and bureaucracy. The definition could be stretched to include law, etiquette, convention, tradition, ritual, or the rules of combat, banking and employment regulations. That is not to dismiss the necessity, usefulness and role of codification[40][41][42] but its artificiality can be forgotten. Invented systems develop auras. People are stupefied by the procedures instead of recognising the potential for the latter to become 'stupid'. These points will be returned to in the concluding chapter 4, and elsewhere in the thesis (cf. infra, p.107). It is valid to interpret certain performances I

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[40] One could digress and explore further. Scripting describes not only operating system level computer coding but actors read from scripts, scripture dictates moral behaviour for some, 'script' apparently is slang for prescription in drugs and alcohol treatment.

[41] See Margaret Boden's discussion on '[s]cripts and frames'(1992, pp.97–99) which at one point draws upon Jean-Paul Sartre's use of the term 'bad faith' to describe a waiter unthinkingly working in role. She reminds us that 'we could not dispense with scripts entirely' (1992, p.98).

[42] At the opening event to Going Digital, the doctoral programme run by CHASE partnership (Lawrence and Black, 2013) I posed the question of too much bureaucracy to speaker Professor Edward Higgs, a former archivist and government advisor. Interestingly he defended the need for the right kinds of administrative procedure, suggesting that with increased digitisation there was too little of this (see e-mail from Edward J Higgs, appendix G).

engineered in a similar vein to the work of others such as *Pil and Galia Kollectiv* (Kollectiv and Kollectiv, 2009): as parodying the authority of 'real life' routines.

One such performative routine *Rearing*, involving eggs, children's potties and a clown (O'Connell, 2006), like *Now Man*, firstly appears senseless. As with *Now Man*, that is not to say that the action was not meticulously designed or does not function on some self-contained level.

Figure 09 *Rearing* at Matt's Gallery, London, 2014. Photo: Daniel Pryde-Jarman

In runs of *Rearing* three pots are placed on the ground parallel to the performer (the clown) lying alongside behind them. The performer's left hand is able to reach all three potties. From left to right, when facing the scene, the pots are green, white and ochre in colour respectively. At the beginning the first pot, the green one, is loaded with approximately eighteen eggs. Then, when given the go-ahead, the clown takes an egg from the first potty, breaks it on the edge of the second, discharges the contents into that, and places the partially reassembled shell in the third. When the first potty is empty it is replaced with a

waiting green one filled with eggs. In other words, two of these green containers are needed so that one can be filled while the other is in use. The sequence continues thus until a total of twelve dozen eggs have been processed through the system. As time passes the second potty begins to overflow so that raw egg pours onto the floor and also shells pile up and topple out of the third container.

Rearing Timing Calculations			
		1 person	2 person
Time to pick up egg from Green Potty	sec	5	5
Time to empty contents into White Potty	sec	5	5
Time to position empty shell in 'Orange' Potty	sec	5	5
Time to process one egg	sec	15	15
No' of Eggs to be processed	no.	144	144
Eggs per Green Potty	no.	18	
Number of refill pots required	no.	8	
Time to collect new Green Potty, return and swap	min	1	
Time to take empty Green Potty back, refill and return	min	2.5	
Processing duration for 144 eggs	min	36	36
Refill duration for 8 pots	min	28	
Rearing total duration	min	64	36
Rearing total duration		1h 4m	0h 36m

Table 01 Timing calculations for *Rearing*

Initially the routine was executed by the usual professional clown, with me directing (*Rearing at Whitechapel Art Gallery*, 2006). During performances I would pre-fill and supply newly loaded green pots and feed the process. Increasingly though *Rearing* has been executed alone (see Figure 09, p.86 and Figure 12, p.96), ostensibly due to 'cutbacks', a reflection of the austere times we

live in. Figure 10 (p.90) is a flow chart outlining the sequence for such a solo run, including the intended timings. Table 01 summarises duration calculations for both solo performances and when director and clown participate. If carried out by one person the process typically takes just over an hour and with two people, about thirty-five minutes. Note that when executed alone, the performer fills a new green pot, brings it to the process and swaps it with the empty one, which is removed from the scene before egg-processing can recommence. Though inefficient from an imagined Taylorism (Mayhew, 2009) standpoint, the decision makes sense in the context of the world created here. The extra journeys are a waste of time but for a durational piece of live art, that may be of no consequence or even desirable. We are not dealing here with aesthetic reason. Formal considerations and the implications of how the scene looks take precedence[43]. The maintaining of three potties at the scene plays a basic semiotic role too: it communicates that the usual concerns are not paramount. The temporary loss of one container would distract focus, and increase chances of unwanted readings.

Other than wasting time, the most glaring characteristic of the process is that it wastes food. The use of eggs was controversial when the activity was about to be performed during an event at a well-known anarchist bookshop, venue and vegan restaurant, in 2007 (Doogan, 2007). In the end the organisers permitted the run to go ahead on the basis that it is possible to read *Rearing* as a critique of overproduction and the food supply chain, and by implication the dubious ways in which poultry are treated.

It is not my conscious aspiration to make work which functions as activism, nor edifying commentary (see Table 02, Factor 10), but it would take

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[43] Retaining connection with modernist, and possibly even romantic concerns, was already defended (cf. supra, p.63).

special effort to ignore a world around in which waste is the ordinary thing. As discussed with respect to Glenn Ligon's work (appendix A, pp.199-201), evading the real backdrop would be the odd thing to do and likely produce outcomes which are even more loaded with denotation. *Rearing* is undeniably redolent of the everyday contradictions observable in industry. Despite terms such as efficiency and productivity being frequently bandied about and 'optimal utilisation of resources' being a priority for industrial engineers, there remains much inherent downtime and overproduction in the world at large[44]. Production is no longer only concentrated in factories and mills. 'A reversal of the historical process is apparent now. With the advent of computing and the network technology is once again distributed, used at home, in other locations and even while travelling' (O'Connell, 2014b). Digressing briefly to help counter concerns about the decadence of wasting eggs in *Rearing*: the curiously unnoticed fact of our time is the egregious underutilisation of its two dominant machines. '[T]he typical UK car is parked 96.5% [sic] of the time' (Barter, 2013) and though computer manufacture is hugely environmentally costly (Hirsch, 2004) CPUs lie idle or underused most of the time[45] (cf. supra, pp.26, 47). Consider food. In the United States alone 'an astonishing 40 percent [sic] of the food bought is thrown away' according to Levitt and Dubner (2014, p.67). That is a figure from the consumption end of the supply chain but at the point of production the situation can be even worse. Anti-food waste organisation Feedback, 'reveals that on average a staggering 44.5% [sic] of food grown within Kenya's horticultural export industry is rejected before it has left the

[44] The basis for this statement is professional experience: I worked with industrial engineers for a period and later my specialism was supply chain simulation.
[45] The existence of initiatives to promote 'grid computing' (Brown, 2009) are evidence of this significant unused capacity.

country' (Neilson, 2015). From an ethical perspective then, the cost, and use of, twelve dozen eggs is a trivial matter: *Rearing* is harmless by the standards of

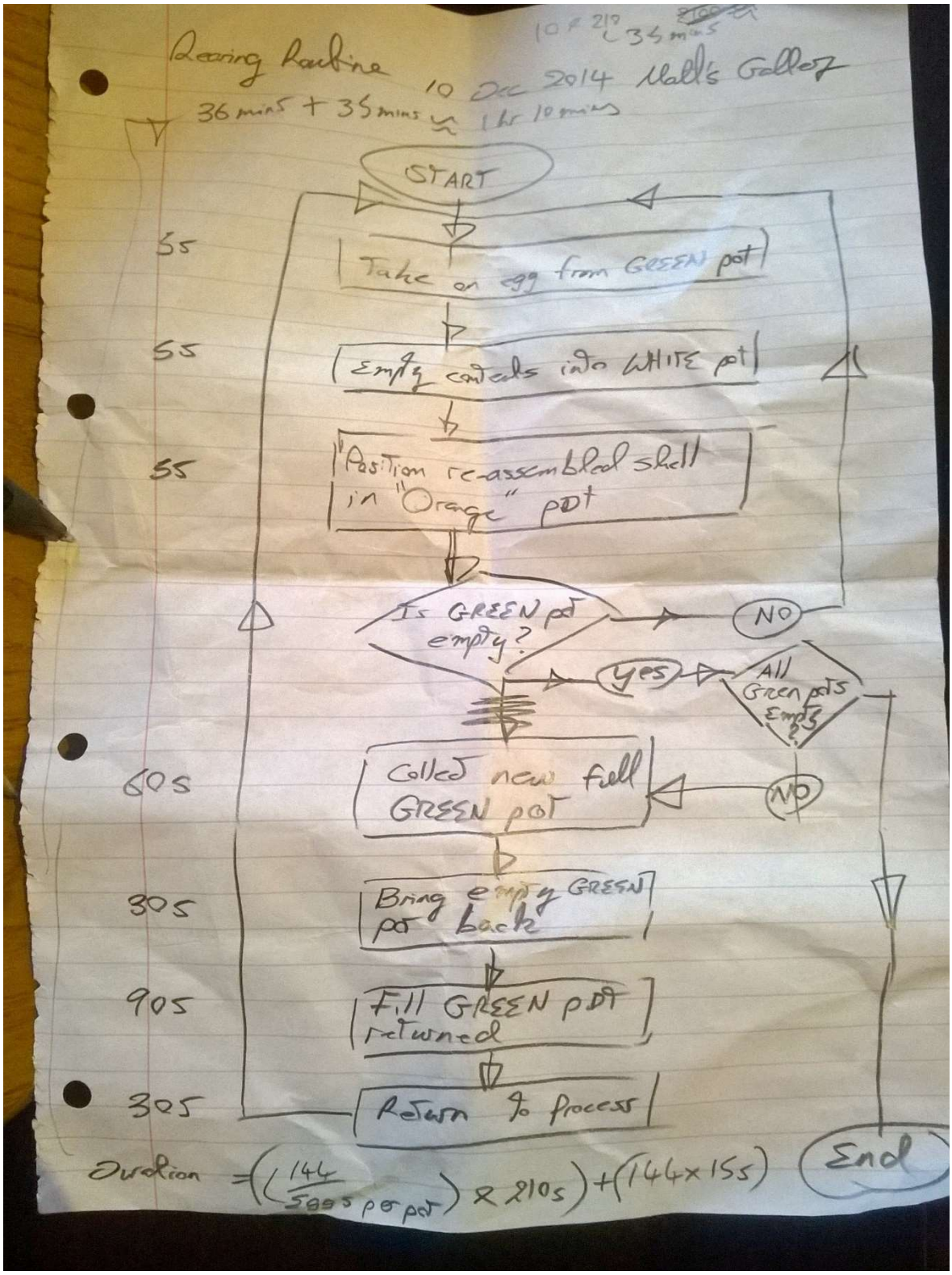

Figure 10 Timings/flow diagram for *Rearing* for *Matts Gallery* performance, London, 2014

much artistic activity and certainly in comparison with other functional and social systems, the extravagances normal in business practice, and in the pursuit of leisure.

The food waste in *Rearing* worries observers, event organisers and the performer most frequently worked with, though not to the extent that they would ban it or refuse to act in it. *Rearing,* when not executed in a gallery or formal art space, becomes an intervention into its surroundings, one which inevitably grates in other ways, but it would appear that just enough has been done to make it tolerable. The tension resulting from this degree of moral dilemma is in line with my desire to prod and tinker with rather than incite. Performativity of the more excessive variety has become almost a formula. Viennese Actionism, if repeated now, would lack its original potency. The periodic re-embracing of punk means that it has, for the most part, become an instrumentalised version of its former self, exemplified in a review of Jennifer Egan's *A Visit from the Goon Squad* (2012):

> The characters are hip and young and would fit in with the tattooed masses pushing baby strollers on their way to a farmer's market in Brooklyn. The cover of the paperback borrows the trailing style of punk rock photography so ubiquitous in the pages of *Flipside* [a US fanzine produced from 1977-2000] and repackages in the colors [sic] and design of contemporary iPod advertisements (Carswell, 2015, p.5)

Arguably the destructive power and nihilistic mindset which at first appeared so genuinely liberating can be made to fit with neo-liberal or even neo-con agendas. The typically right-wing phenomenon of the 'shock-jock' and perhaps even US presidential hopeful Donald Trump's outbursts (at the time of writing) can be linked contrarily to what was once an essential and deeply ironic rebellious attitude. Luhmann's view that art 'seeks a different kind of relationship between perception and communication - one that is irritating and

defies normality' (2000, p.23) suggests a need to disregard, not only anodyne interjections, but, in a context where extravagant gesture has been the norm, bold ones too.

At any rate the lighter touch may reveal more about how psychologies and systems interact and provide satisfaction of another sort. Digressing further: it is possible to analogise with PID control system (cf. supra, p.51) tuning in chemical plants, where the introduction of smaller disturbances is advised in order to achieve the best results. An article in *Chemical Engineering Progress* recommends introducing step changes to 'output by a small percentage. The size of the output step should be large enough to allow you to observe the process variable response (above any noise that may be present), yet small enough to minimise process upsets' (Tim Olsen and Norman Ito, 2013, p.44). Likewise 'dither', which has its origins in the discovery that mechanical devices sometimes work more accurately when subjected to small amounts of vibration, is frequently applied in audio-visual post production.

Meaning, in the socio-political sense, was not a primary aim in the design of *Rearing* but, permitted to remain, partly as a ploy to mock the almost compulsory requirement to embed concepts into artworks[46]. There are nods to art history: egg-tempera painting pre-dates the invention of oils, and to nationalist politics in that the potty colours available happened to be analogous with the Irish tricolour. There are obvious associations between eggs and fertility and the work was given a title intended to keep imagined analysts busy. Is the routine about societal or family failure and abusive upbringing for

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[46] Lawrence Preece, the course leader for a Fine Art MA I completed, was fond of inferring that meaning had become decoration. To say that 'meaning is decoration' is easily read as provocative given the low status of 'decoration' during late modernism but Preece would simultaneously address the significance of ideas by posing the rhetorical question: 'all art is conceptual, isn't it?'

example? The answer to these questions is a confident 'no' but without denying the inference that both destructive and constructive pattern passing is inevitable. The inclination to tap into the spirit and irony of Philip Larkin's *This be the Verse*[47] is not being avoided. *Rearing* is ritualistic: repetitive, meditative, yet potentially disgusting or, alternatively, evocative of religious ceremony and sacrifice. The use of a professional clown simultaneously undermines any portentous tragic sentiment.

By stressing the superficiality of any meaning in *Rearing,* the hope is that attention can be given to what remains: the abstract and formal qualities, the dynamics, visual effects and properties of materials. The non-Newtonian flow and ways in which vessels hold their mixtures or fail to do so are observable. *Rearing* is firstly a repetitive process in which loops are nested within loops, where ellipsoidal forms are moved around and positioned in radial and linear arrangements, where what goes in at one end comes out the other, just as feeding, excretion and childbirth are bound together in equally meaningless biological routines and literal feedback loops. For Gustave Flaubert apparently 'the word [stupid] does not so much pose the question of voluntariness, consciousness, or intelligence, but [precisely] of repetition' (Colebrook, 2013, p.50)… Even as this paragraph proceeds the inclination to imbue the work with previously unthought-of meanings is difficult to resist. The significance of repetition, looping, and its connection to the cycles of life and definitions of intelligence, creeps in.

In Appendix I, this question, of being able or unable, to cast off connotative and denotative engagement with a work, is explored with reference to Samuel Beckett's *Imagination Dead Imagine* (Beckett and Seaver, 1992, pp.551–

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[47] The poem which begins with 'They fuck you up, your mum and dad…' (1974, p.30) is rhythmed by the inevitability of negative intergenerational repetition but appears tongue-in-cheek too.

554). A situation is described in the 1100word novel which could be simulated via film or through creating a theatre performance. And the inclination to create other renderings is tempting given the descriptive exactness of much of the text. In fact, Brian Finney included a diagram in his treatment of the work (1971, p.66) and animated versions can be found online. To render the scenario in another form however, while feasible, surely misses the point. It is unlikely that Beckett - given his dedication to equivalence of form and content - was only writing 'about' something.

The problem being underlined here was discussed elsewhere with respect to cybernetics ideals (cf. supra, p.34) and *Now Man* (cf. supra, p.83). Meaning and substance cannot be disentangled. The tension between these adds to the otherworldliness evoked in Beckett's text for sure. The conundrum of having to admit to duality or triality in such constructions appears to be what he was getting at, and likewise, Valie Export in her querying of live art's professed fundamental objectives (Appendix I, p.244). Deliberately limiting both satisfactory analytical and imaginative treatment, as *Imagination Dead Imagine* does and *Rearing* seeks to do, is no guarantee of what witnesses or participants will experience. The struggle to position a work is undoubtedly connected with the current state of knowledge. In the light of these epistemological questions, a comment by Beckett seems apt in attempting to define what an art work can be:

> when the object is perceived as particular and unique and not merely the member of a family, when it appears independent of any general notion and detached from the sanity of a cause, isolated and inexplicable in the light of ignorance, then and then only may it be a source of enchantment (cited in Abbott and Beckett, 1970, p.38).

This chapter section on *Rearing* is a suitable location to explicate another common feature of my practice. Inclusion of performers and bringing in of

Figure 11 *Taking the Proverbial* at Hundred Years Gallery, London, 2014

organic materials was firstly intended as corporeal antidote to the presence of digital artefacts and factory-produced objects. The work of artist Paul McCarthy, as described in *The Mirror Stage* (Cameron, 2000), has been a source of inspiration. Instead of shattering harmony, as McCarthy does, I prefer to poke at it though and questions of identity are seldom ruminated upon. It appeared contrived at first to look for linkages between my work and pre-Renaissance practices, but I have become increasingly interested in the significance of the carnivalesque. Mingling something of the grotesque, food, excreta and associated utensils into anti-rituals such as *You May not Drink From the Holy Cup* (O'Connell, 2014d), *Rearing*, and when exhibiting, at the very least complicates the common aspiration for sterile minimalist environments. Just as medieval laughter was 'directed not at one part only, but at the whole' (Bakhtin, 1984, p.88) the implicit criticism here is a generalised one, given the ubiquity of

a clean aesthetic. The use of bodily fluids by artists is not new. Only in the 1980s was it discovered that Duchamp's *Paysage fautif,* created in 1946, contained his own semen (Powell, 2010). Though she always juxtaposed references to bodily drives with stable sculptural forms, lately much attention is being given to the messier dimension in Sarah Lucas' work, including her use of eggs (Lucas and Riley, 2015, pp.38–64). Perhaps the fascination with paint, discussed in chapter 1 (cf. supra, pp.44-46), is linked (actually and metaphorically) to the significances being addressed here.

In inventing rituals, that is not only, nor always, to attack established customs and formalities. The situation was more complicated historically too: evidence of this is that inverted medieval religious ceremonies and anti-feasts, despite their outward subversiveness, were simultaneously sanctioned by power (Bakhtin, 1984, pp.74–75, 77, 78, 81, 83). The Paris School of Theology, in

Figure 12 *Rearing* at Disruption2, Swansea, 2012. Photo: Joshua Uvieghara

1444, defended the long-standing *Feast of Fools* which, says Bakhtin, included, 'grotesque degradation of various church rituals… gluttony and drunken orgies on the altar table, indecent gestures and disrobing' (1984, pp.74–75), by pointing out that, 'foolishness and folly… are… 'man's second nature'' (1984, p.75). In the Middle Ages, '[t]he very material bodily lower stratum of the grotesque image (food, wine, the genital force, the organs of the body) bears a deeply positive character' (1984, p.62). I will argue in chapter 4 that artists today benefit from the echoes of such beliefs and consent giving. I do not want to overstate the degree to which the scenarios engineered are equivalent. My works are not linked with spiritual beliefs, nor rites of passage, but section 2.3 will describe everyday routines, found in the world, as if they held similar significance. Alternative modes of exchange can be divined from the merely transactional. Canetti suggests that for 'feast crowds', '[n]othing and no-one threatens and there is nothing to flee from; for the time being, life and pleasure are secure' (1973, p.62). Security was offered in the crowd. In the absence of feasts and feast crowds, comparable, if fleeting, opportunities may be on offer. As a substitute I enter the crowd – and thanks to technological proximity the crowd is now everywhere - and upturn the mini-rituals associated with purchasing groceries (cf. infra, p.128), issuing and receiving parking fines (cf. infra, pp.115-127), delivering packages by courier (cf. infra, p.127) and so on. When displaying work obtained from exercises such as these, forcible reminders of our fleshier biology are occasionally provided too. A print was submerged in a urine-filled plastic sledge (Figure 11, p.95) for instance (Greslé, 2014). Photographs have been 'displayed' by throwing them across the floor. These actions run in the opposite direction to the much talked about 'expansion of information technologies into the body' (Bassett, 2014, p.70) and, 'the increasingly intimate connection between embodied users and the information systems in which they are embedded' (2014, p.71).

2.2.3. *Worn Outing* (2011-2012)

Worn Outing was a performative intervention, envisaged and developed in 2011, and executed in March 2012 (O'Connell, 2012). This, along with the other performative actions discussed in section 2.2, laid the basis for the kind of work done now (section 2.3), and there are no plans to run it again. The concept was simply to wear photographs of other peoples' clothes as if they were garments. Quality images of outfits are not difficult to find online but the challenge of capturing what people wore as they walked about appeared liable to be more fruitful, even if the reasons why were not clear at first.

The involving of real people concurred with my stated interest, 'in the mediation of human relationships through technology, the curious dynamics, feedback loops and ritualistic aspects…' (O'Connell, 2015b). It seems obvious to point out that cameras and photography are media but, a McLuhanesque stance (2001), would include the clothes people wear and the photo-outfits eventually created for *Worn Outing*. All of these elements act as both barriers and conduits to information flow. Added to these layers is the fact of the performers being directed. Acting, the adoption of a role and playing a 'character', is itself an act of translation and can be thought of as mediation. Karen Barad disapproves of '[t]he notion of mediation [which she says] has for too long stood in the way of a more thoroughgoing accounting of the empirical world' (2003, p.823). Ascribing performative agency to the intermediary strata in the manner of Barad (2003), Latour (2005) and proponents of cybernetics like Andrew Pickering (2003, p.807), does not contradict my use of the term 'mediation' though, because I am not necessarily seeing media as something inert. In my conception another human being in role could constitute medium. Or objects might be perceived of as communicating with each other via people.

Raw material was gathered then, in and around shopping centres, by capturing photos of individuals, from the front and from behind simultaneously. The technique eventually adopted was to use two cameras and try to synchronise the process. One person would walk adjacent to the chosen subject and give an agreed signal, indicating to two photographers, positioned on either side of the subject, when to release shutters. A more elegant and precise solution would have been to set up a pair of tripods and employ remote triggering but this would have offered less flexibility. For convenience my children were involved, and (with permission) their friends. Integrating my day to day activities, in this case parenting, with artistic practice instead of compartmentalising in a fundamentalist way is not just a matter of convenience (see Table 02, Factor 31). As it happened their participation brought with it plusses, other than them enjoying the experience, being fed pizza, and learning something about camera use. Subjects were less intimidated and, also, the naturally lower point-of-view centred them in the composition. Critic Jack Hutchinson, during a formal feedback discussion in 2011 (Murton, 2013), suggested that these factors are subtly present in the final photographs: a child's perspective gives the resulting images an uncanny feel.

Problems comparable with those faced by street photographers in the past were encountered. Regardless of the legal situation (which does permit photography in public places in the UK) there exist other ethical and conceptual questions, about voyeurism for instance. I did not want to expose individuals in the way that street photography does. As if influenced by Google Street View's method of protecting identity, faces were cut from the resulting images. Also sections from different images were montaged together to create final photo-outfits. The original wearers would not be traceable. In addition, stripping away the identity markings, and turning the process of capturing photographs into a game of sorts, generates questions about authorial rights.

Figure 13 *Worn Outing*, London, 2012

Through continued experimentation, a final design was produced, an outfit consisting of two linked A0 sheets, one for the front, and the other for the back. Each A0 image combined a top body cut from one source with legs taken from another. After a trial run involving two outfits (Slide 7 O'Connell, 2012), enough copies were made to dress seven participants for the eventual procession. The actors were asked to imagine themselves as sheep being herded by an eighth participant, 'my clown', who would play the role of stock dog and go-between, responding to directions given by me. Participants were instructed not to smile but to assume deadpan expressions. The nature of the photo-outfits was such that participants would need to use their hands to hold the two A0 sheets together most of the time, an unexpected built-in restriction (and example of self-regulating mechanism). These limitations of the participants' freedoms were compounded by the brisk pace adopted. The seven actors, clown and two photographers walked from Warren Street Underground station

in London, through Fitzrovia, down Oxford Street (Figure 13), ending up in the Cork Street area, a distance of about 1.5 miles, visiting shops, public houses and an art exhibition on route.

The concept of 'turbulence' is given dramaturgical meaning by Paul Carter (2014; Freie Universität Berlin, 2014). Movement of human traffic, on less congested and busier paths, is analogous, respectively, to the laminar and turbulent flow patterns associated with fluid flow in channels. And the actors, in voluntarily 'dumbing down' to some degree mimic inert subdivisions of liquid, or particles, being forced through conduits and pipelines. Their presence in the mix highlighted the kind of ignorance inherent in 'going with the flow', 'following the crowd' or even going shopping. Seven, all wearing the same image, was enough to stand out but too few to constitute a 'flash mob' say. A more likely evocation was with the pack of playing cards from the fictional world of *Alice in Wonderland* (Carroll, 1865). The nature of the worn image, in that it lacked any readable text or obvious communicative content, and the material qualities of the paper, meant distinction from both sandwich-board wearers and the common kinds of urban signage. Design had been aimed at reducing differences between the performance and the urban visual landscape it passed through, but not to the extent of going unnoticed.

Originally actor participants were sought from the least exotic and apparently dominant demographic: older middle-aged men. The run was to be carried out during London Fashion Week, or if funding allowed, the Paris, Milan or New York counterparts. A troop of stereotypically fashionless older males clad in montaged images, cross-dressed[48] so to speak, would mingle with

[48] In naming the intervention *Worn Outing*, no allusion was intended to the practice of 'outing' by press or gay-rights groups. In hindsight, however, the connection may be weakly pertinent.

the glitterati. For practical reasons these plans were abandoned but there were other justifications too. I did not want to push the work into prankster territory. Secondly, transvestite tendencies, noticeable in digital form when working on projects in Second Life (SL)[49], though considered transgressive and even

Figure 14 Avatar Mocksim Zapotocky, Second Life, 2008

progressive[50], in that gender typecasting is being undermined, can be read also as mockery. Thirdly, surrendering to the real situation, namely a lack of

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The work is not about sexual-orientation, nor its concealment, but perhaps poses questions about gender and category stability generally.

[49] It's not been possible to substantiate the claim but an attendee at the 'blended reality' event, *Feed Lack Loop* (O'Connell, 2014d) stated that seventy per cent of Second Life users were male while seventy per cent of the constructed avatars were female.

[50] 'Men in women's clothing… [are] both making fun of and celebrating women (as one should)' according to a poster by artist Karl Holmqvist (Sismógrafo, 2016).

response to the call for older participants, and accepting the seven willing actors, was in tune with the principle of 'truth to materials' which I am fond of. The presence of the clown, a middle-aged everyman of sorts, adequately stood-in for the initially sought-after demographic.

Participants were instructed to wear their usual casual clothing underneath, and not don performance garb. Their choices should not compete with the photo-outfits. A proposition that actors wear nothing, except the paper costumes, was dismissed but not for prudish reasons. In fact, nudity might tie in conceptually: photography had, in a sense, stripped the original wearers of their clothing. To take this course would have complicated the situation however and turned something uncanny[51] into a spectacle. I wanted the former effect. During the 2012 run, frequently, onlookers who had not at first noticed took a second glance. Comments overheard such as 'they're having a day out from the mental home' and 'this must be some sort of protest' (see e-mail from Joanna Parker, appendix G) reflected the desperation to categorise and/or ridicule. It disturbed the manager in one lingerie store (Figure 15). On two occasions the group were asked to leave a shop they had entered. The seven characters, wearing duplicate A0 images, depicting parts of an outfit and body, clashed with the customary fashion shots on display in clothing retailers. Rather than uncanny the walking images appeared grotesque at times. The situation felt analogous with the experience investigating Second Life (SL), during an online residency in 2007/08 (cf. supra, p.102). An avatar I had created by extending all of the design parameters to their maximums, so that 'he' was as

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[51] I was interested in the almost mathematical principle 'uncanny valley' defined as follows: 'anthropomorphic forms are appealing when they are dissimilar or identical to humans, but unappealing when they are very similar to humans… a reference to the large valley or dip in the now classic graph presented by Masahiro Mori in 1970' (Lidwell, Holden and Butler, 2010, pp.242–243).

tall and wide as possible with a huge nose, enormous feet, and sporting a double denim outfit, was often asked to leave virtual events. Mocksim Zapotocky (Figure 14) was not welcome in SL, with its shopping-mall architectural aesthetic and fetish-club dress code.

Figure 15 *Worn Outing*, London, 2012

There may be other reasons why the performers were ejected. It is true that the *Worn Outing* avatars were not going to purchase anything. There had been recent terrorist alerts in London and, during the year before, wide-scale rioting and looting. Anything unusual would be viewed with suspicion. The comment by an onlooker inferring that the activity might be a protest is also worth noting, though it'd have been an obscure demonstration, like Daniel Buren's 1975 *Seven Ballets in Manhattan* (Whitechapel Gallery, 2015), lacking the

customary slogans, demands and the political clarity[52]. In the spirit of avoiding confrontation, we simply obeyed the demands to leave, and moved on.

Figure 16 *Worn Outing*, London, 2012

Later, coaxed by the clown, still in herding dog mode, the troupe entered an exhibition of work by iconic photographer Eve Arnold, who had died in the months before. The journey was being documented using two DSLRs. In the small commercial gallery then, photographs were being captured of actors wearing photographs, but also observing photographs. Feedback loops abounded. The celebrity subject-matter of Arnold's work contrasted starkly with the image-wrapped actors and gave the impression of sneering back. Having spent enough time in the gallery, and without being requested to leave

[52] Russian collective Chto Delat's *Angry Sandwich People or In Praise of Dialectics* (Vilensky, 2006), bore similarities in look, but was linked explicitly with notions of protest and political ideology.

on this occasion, the procession continued. Expulsion from a commercial art outlet would have appeared censorious. The proprietor accepted the juxtapositions and appreciated, no doubt, the unexpected increased in footfall the commotion had caused. The outing ended a little later on the steps of another commercial gallery, the kind of contemporary, moneyed art space, typical of London's Cork Street. The venue itself was closed (Figure 16) so operations ceased and the performers were paid.

A factor in the organisation of *Worn Outing* was impatience with systems of endorsement and the need to wait for offers from galleries, arts organisations and other bodies. In the same spirit, later in 2014, a high-top van was used as projection and display space (Good, 2014; O'Connell, 2014a). Lowtech and DIY approaches have always been of interest (cf. supra, pp.39, 79). *Hunt and Darton's Pop-up Café* (Hunt and Darton, 2015) was envisioned as a project which, likewise, would avoid the usually drawn-out and frequently disappointing process of having to negotiate with, and impress local organisations, cultural bureaucracies and even the 'bottom-up' artist-run spaces and groupings. Jenny Hunt and Holly Darton take their practice on tour with the aim of engaging people not normally aligned to metropolitan or provincial art scenes. But their position is not only an antagonism with galleries: work like theirs demands embedding in an everyday situation.

The café shares some of the characteristics of *Worn Outing*, in that differences with what is commonplace go unnoticed at first. In attempting to determine what their action *is*, it is useful to identify what it is not. *Hunt and Darton's Café* is not political in the Brechtian sense. It is hardly an example of *Forum Theatre* (Boal, 2008). No message is being overtly communicated but a visit does highlight the peculiarity of common routines, everyday rituals and the associated objects. The relationship with visitors is not Artaudian or hostile in the manner of Jean- Jacques Lebel's work (Bishop, 2012a, pp.99–100). For this

to be so, 'audience' would be designated enemy. The café atmosphere appears convivial if confused. It is as if each side misunderstands the other; customers inhabit a different system to those serving. Hunt and Darton's clownishness separates them from artist Rirkrit Tiravanija's earnest cooking and serving of food (Tiravanija, 2016). The functioning of the café, and concomitant performative digressions, are far too structured, systematised and self-contained to be regarded as an example of Nichola Bourriaud's relational art (1998; Bishop, 2004). Claire Bishop is famously critical of the fashion for 'open-endedness' (2004, pp.53, 60, 68–69, 72) 'over aesthetic resolution [which she asserts] is often ultimately to enhance the status of the curator, who gains credit for stage-managing the overall laboratory experience' (2004, p.53). Of course the prospects for surprise are not ruled out in any interactive situation, and definitions vary as to what it means to say 'a performance is scripted or improvised, since "open-endedness" is based on cultural expectations' (Norman, 2015, p.348), but Hunt and Darton's use of a catering industry style Standard Operating Procedure (SOP) provides armour against it going free-form. In addition, such a document supports the navigating of geographies outside of galleries and usual art world settings. If the café were described as a system then, around the edges, carefully honed interchanges function cybernetically.

The invention of procedures is a reminder of how, given the ubiquity of 'customer facing' roles in workplaces, people are expected to 'perform'[53] and follow scripts. The café project serves to highlight the strangeness or eeriness of seemingly unquestioning robotic behaviour[54]. So in that sense the activity *is* political but the SOP's overt function is to provide a solution to the boundary

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[53] Pay can even be 'performance related.'

[54] This phenomenon was highlighted already (cf. supra, p.85), is referred to in the appendix D interview (p.219), and will be raised again in the concluding chapter 4.

problem by codifying relations at the interface i.e. between the artists and others. In addition, data collection of the kind required by funding bodies is integrated neatly into the duo's processes (see Figure 17). As John Roberts puts it (not necessarily pejoratively) about practice which 'openly defies the mediations of Art': 'this work, for all its refusal to define itself as art (or solely as art), is always invariably being recalled to the 'art world', so to speak, in order to make its meanings visible' (2015, p.71).

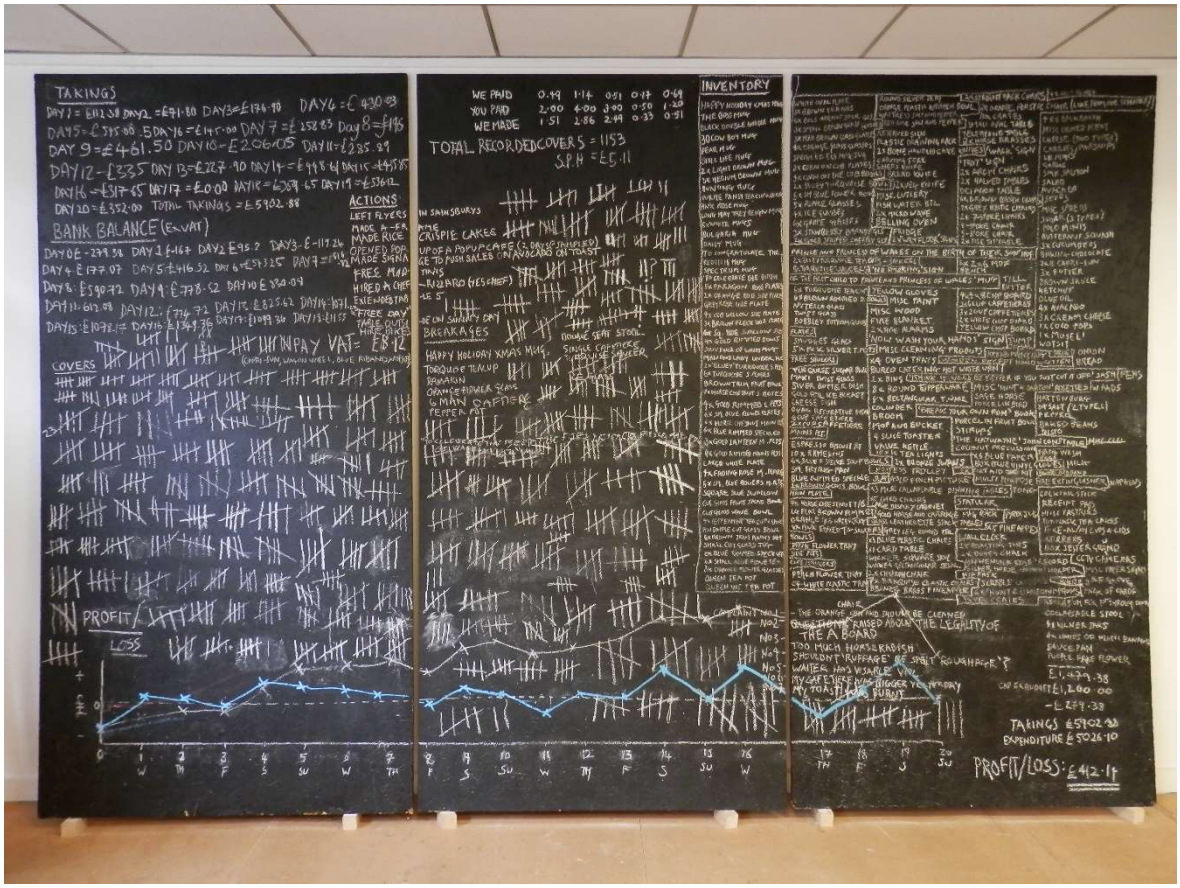

Figure 17 *Hunt and Darton's Pop-up Café* 'footfall' data collection, 2012. Photo: Jenny Hunt.

Codifying and rule-making was important for *Worn Outing* too. E-mail exchanges took place in advance. On the morning of the run in 2012 instructions were given to participants verbally. The fact of paying the actors, as opposed to finding volunteers, apart from being ethical, also served to clarify

that *Worn Outing* was not an equal collaboration. Temporary hegemony was built-in. No service was being provided by *Worn Outing*, interaction was of a very different variety to *Hunt and Darton's Café* and consequently no weighty manual was necessary. A second reason for minimising the scripting was my uneasiness with bureaucracy. Documentation of any sort, whether to program or to record action, constitutes representation, and, as stated, I sympathise with the cybernetician's 'suspicion of representational knowledge' (Pickering, 2011, p.271).

Questions of representation were at the fore in *Worn Outing*. Real participants adopting personas as instructed, dressed in collaged photographs of other people, were led by a clown, who was himself in role. Flat pictures covering three dimensional bodies, even though the technique of production was rudimentary, brought the virtual bodies to life. As it happens, glossy A0 paper sheets do function weakly as clothing, alluding to the 'built-in obsolescence' of modern manufactured garments and the importance to consumers of semiotic features.

Worn Outing has been discussed primarily in terms of performance and its existence as a piece of live art. Is it possible to attempt to deal with the particular duplicated photo-outfit and elude referential meanings? Quadrilateral garment shapes occupy perhaps two thirds of the height of both the front and back rectangles; a pair of denim-clad legs from another photograph has been pasted-in below those. The legs, cropped because they will be completed by the wearer's legs, are taken from a skinnier character and have been collaged-in rudimentarily so as to be in keeping with the style of the upper components. Images of a subject's outfit, both front and back, had been cut around quickly via 'magnetic lasso' to create the two images eventually used. The top edges of the rectangles correspond approximately with the neck

line, because editing took place in the knowledge that actor participants would be lending their real limbs and heads to the montages later.

It is difficult to say more. As highlighted in discussing *Rearing* (cf. supra, p.93) and Beckett's *Imagination Dead Imagine* (Appendix I) it is not easy to confine treatment to formal considerations alone. The *Worn Outing* prints need to be understood in the context of the 'bigger picture', which includes the final intervention in London, but also the background story.

Inevitably, given the kind of outfit the original subject was wearing, in which faux-lace made up a proportion of the back area, and, because her uncovered arm crossed in front, bare skin is visible in the images (Figure 18). It seemed unnecessary to cut all these elements out and remove the strap from another bag that rested on her shoulder. In the spirit of the approach, perfect editing would not have been something to fixate upon. The resulting combination of flesh and outfit was intentional. In a bizarre retort to the original designers of the skimpy dress, the wearer's bra-strap is completely visible through the lace too. In addition, the outfit was not the correct size for her body and so the material had stretched. The dress was not new either. Its original whiteness had faded and a tear was noticeable on the top right of the back. The unquestionable femaleness was not reduced by this evidence of wear and body size, a reminder that the unique ways in which men and women 'put on' weight can emphasise their gender. In another world fat might be considered enhancement, fashionable, an inside-out cosmetic surgery equivalent. If assumptions linking body type and clothing to 'social class' or the presumption of poverty, a lack of culture, poor education or worse, low intelligence, are made, alternative readings are being overlooked. This is not to romanticise the figure in discussion but does her 'look' not embody rebellion? Is the image not transgressive in its non-compliance with cosmopolitan diktats and therefore erotically charged? The attention being given here constitutes a kind of

voyeurism and ‘male gaze’, but it is also interesting to note how slightly distorted ordinariness can disrupt. In retrospect, the ‘quick and dirty’ capturing and editing methods employed had matched the original character’s under-the-radar, but still insubordinate, stance.

Figure 18 *Worn Outing* photo-outfit, 2012

2.3. Hacks: poetic misuse of the supply chain[55]

By the 1990s it had become unimpressive to point out that 'art' could be produced using computers too. The suggestion that hardware and software amounted to an additional tool in the box like a set of brushes or musical instrument revealed naivety on two fronts. Firstly, new media and the emerging network represented not just a change in degree but one in kind. Secondly, the fact that a self-critiquing and at times self-destructive 'art system'[56] had evolved during the twentieth century was overlooked. In this undermining of itself in fact, art had voluntarily embraced, if not predicted, what would become inevitable across many arenas with the emergence of computing.

Nowadays a well-informed, questioning and truly interdisciplinary class of practitioners exists. 'We are all computer people now' pointed out Sherry Turkle (2004, p.B26) and there is no escaping the influence of computerisation on the, already highly challenged, concept of art. Claire Bishop asserted that 'the digital revolution opens up a new dematerialized, deauthored, and unmarketable reality of collective culture' which potentially 'signals the impending obsolescence of visual art itself' (2012b, p.441). The need to embrace the gist of what Bishop is saying feels compulsory though the end of art, like many other 'end of's, never seems to quite arrive. Given this lingering on of something which should apparently have disappeared I have become interested in the possibility of finding poetic meaning amidst the technological flux. Operating in this way amounts to something odd, a defence of the singular in a world which expects networking, collaboration, teamwork and generous

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[55] An earlier footnote (cf. supra, p.9) already highlighted that section 2.3 is an adapted version of a paper delivered at the 30th conference of *Computers and the History of Art* (O'Connell, 2015c)
[56] As Niklas Luhmann would describe it (2000)

participation. Kenneth Goldsmith's radical usages of the new situation, his extreme appropriation, combined with a refusal to throw the art baby out with the bathwater, appears in tune with the spirit being referred to (2011).

Figure 19 From Sophie Calle's *The Shadow,* 1981. Courtesy of Paula Cooper Gallery, NY

The projects I do now and am interested in have precedents, although an incredibly rich new source of raw material has become available which changes the situation. Embedded within the highly networked techno-industrial infrastructure are assets, artefacts, data and experiences which call to be extracted and played with. In recent years, I have engaged in three interventions which, in retrospect, have something in common with Sophie Calle's early work. Her *The Shadow*, 1981 (Figure 19) for example, in which an unwitting detective was hired to follow her and then report back with notes and photographs (Calle and Auster, 2007, pp.101–112), was a decade or two

ahead of its time. It is no longer necessary to hire a specialist to play these kinds of games. The ubiquity of surveillance and feedback loops is such that even material which has been incidentally recorded is superior to what Calle's human detective produced. What follows is a description of the first of these three initiatives and an attempt to consider its implications, along with briefer references to two more recent interventions.

2.3.1. *Contra-Invention* (2009-2012)

Photography has had a relationship with traffic-law enforcement systems for some time. Speed cameras have been a common feature for decades: in the 1990s automatic number plate recognition (ANPR) was rolled out across the UK, and now cameras and intelligent systems police London's congestion zone without even requiring human intervention. An

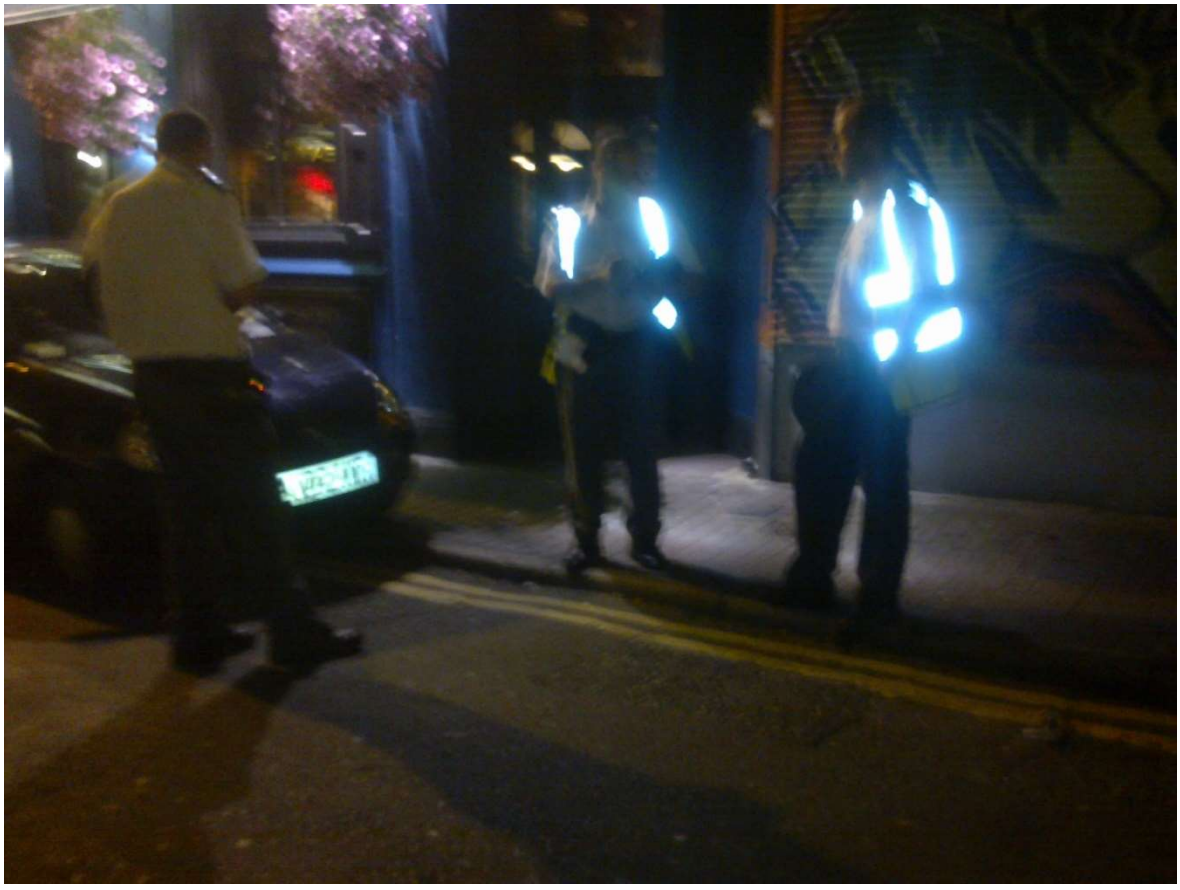

Figure 20 Parking Civil Enforcement Officers (CEOs) in action, 2010

incident in the mid-noughties, when an acquaintance to whom I had loaned my car, was captured by bus-lane enforcement camera, highlighted the fact that this kind of sophisticated surveillance was increasingly in use. Apart from the unpleasant fact of a fine having to be paid and a degree of schadenfreude being

inevitable the episode did make me wonder. Why should this story and the resulting documentation be of interest? The small black and white photograph, which arrived by post in the weeks after the incident, depicting my Volkswagen Polo in blatant contravention, driving along a London bus lane, was certainly a source of entertainment. The reasons the image triggered laughter were not obvious. I was not aware of the offence until the letter was opened so perhaps the surprise acted as a punch-line of sorts. The comedy value was amplified by anthropomorphic connotations, the thought that a camera had of its own accord shown interest in my modest vehicle, or sent a holiday snap from the car's day out in London. Despite its cleverness artificial intelligence always seems funny or stupid to begin with.

Moving forward in time, in 2010 I created an exhibition of photographs selected from hundreds of images obtained from Brighton and Hove City Council's parking contravention system (O'Connell, 2013b; c; Sheerin, 2011). Three 'night shots' from this collection, representing the same incident of poor parking, had appeared commendable on aesthetic grounds, rich according to concepts of interest to me and useful in that, at a stretch, analogies could be made with Renaissance painting or other aspects of art history. Initially for practical reasons the three images were dissected vertically and the results printed on six 1.2m x 1.8m sheets of corrugated plastic (Figure 21), so that each pair corresponded roughly to the size of the car in question (a Ford Ka). The painterly qualities of these low resolution jpegs became particularly apparent when they were enlarged. Secondly, the darkness does not just obscure but provides contrast with other highlights in the image and creates challenge fitting with my desire to inject interactivity but of the less blatant variety. Bird dropping, on the bonnet of the car, stands out, arguably functioning as 'punctum', in Roland Barthes' famous usage (1993). Characters in the background are rendered more interesting not less, in being so concealed so

that the image entices the viewer. While unusual subject matter and methods, were being worked with, the associations with the night-shot tradition in art photography and other clichés of composition were not something I wished to avoid. Certain modernist principles were being abided by such as 'truth to materials', the desire to expose the workings and to undermine illusion. Though easily mistaken for tongue-in-cheek, formal considerations were a primary concern in creating this work and in setting up the exhibition. The perceived elitism of the 'white cube' was not shunned either: the results could simply have been posted online, but were not. It has become unfashionable to defend art for its own sake but *Contra-Invention* permitted a simultaneous play with tradition along with highlighting both process and factors of conceptual interest.

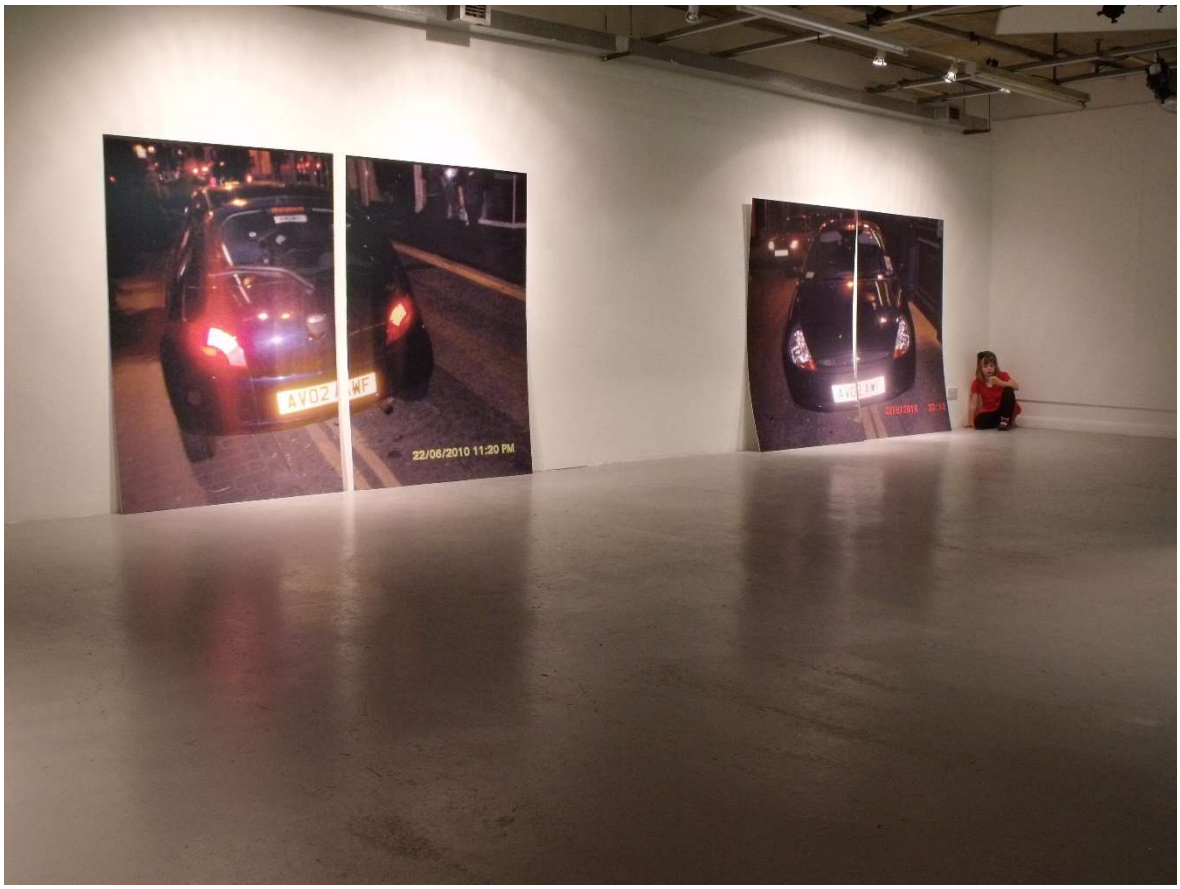

Figure 21 *Contra-Invention* at Friese-Greene Gallery, Brighton, 2010

Brighton had led the way with the use of cameras by Traffic Wardens (correctly termed Civil Enforcement Officers, abbreviated to CEOs as if to emphasise their status). Though it is close to the busy port of Shoreham and had recently achieved 'city status', Brighton and Hove lacks key characteristics of a typical industrial city. It is an amalgamation of a number of urban areas running along the coast; there never was a big polluted river nor many factories and warehouses. The place is seen as a playground of sorts in fact and a location for entertainment (no pejorative intended). The parking fine system with its uniformed staff, technologies and processes (Figure 20, p.115) compensates for this unconscious deficiency and also confounds the other association of Brighton with the libertarian mind-set. Certainly the scale and intensity of parking enforcement in the city has often been referred to. The suggestion was, and still is, frequently made that the primary aims are not traffic-related at all but to generate revenue and on this front, for example, according to a 2013 report, only 'Brighton and Hove and Cornwall councils broke into a top 10 dominated by London authorities' (Association, 2013). So in the interest of sidestepping the visual stereotypes usually associated with the city but also with a view to honest observation of the curiously overlooked set of activities it seemed reasonable, L. S. Lowry style, to seek inspiration precisely in this industry.

I had speculated as to how easy it would be to obtain the 'contravention images' which CEOs collect as part of their duties. One possibility was to intentionally park badly in order to access the photographs afterwards but that would have meant hiring a car, paying fines on top and been preventatively slow. Doubtless when one wants a fine, the wardens are nowhere to be found. The ethical implications and possible legal ones of such an approach were not challenges I wanted face. Then I chanced upon a ticket, discarded in anger most likely because it was torn in half (Figure 23, p.122). It turned out that by

entering just two items of information from the found fine, the car registration mark and a Penalty Charge Notice (PCN) number, onto the council's online payment system, the contravention images could be accessed, viewed and even downloaded in jpeg format! The next eureka moment was in realising that of

Figure 22 *Contra-Invention* at Arts Santa Mònica, Barcelona, 2013. Photo: Pavel Maria Smejkal

course the PCN number was visible on the tickets because in Brighton (unlike elsewhere) the outer packaging was composed of transparent film[57]. It would be possible to simply record the registration and PCN number from ticketed cars

[57] Since then the system in Brighton has changed. At the time of writing the fines are sealed in opaque packaging as had previously been the case in most boroughs. In addition a warning against tampering is printed on front. Presumably the change in Brighton was influenced by the publicity *Contra-Invention* received. Local newspapers reported on it (Elliott, 2010a; b), the catalogue was included in Martin Parr's Best Book List (Photo-eye, 2010), the exhibition toured Europe (Figure 22) as part of a prominent group show called *From Here On* (Chéroux et al., 2011; Fontcuberta, 2013; O'Hagan, 2013) and it was nominated for the *Deutsche Börse Photography Prize*, 2012.

on passing without dubious interference. And what better device to record this information with than mobile phone camera and/or built-in voice recorder? It would be possible to mimic the wardens and go about capturing contravention images and data.

So in more ways than one the activity was photography-related. *Contra-Invention* was meta-photography but also a comment on the contemporary situation in which cameras are employed for surveillance, and secondly, the phenomenon of 'sousveillance', which is increasingly discussed. The use of camera as defence-weapon and means of monitoring power is less often referred to, nor is the more complex point that mechanisms, employed by bureaucracies, feedback on themselves occasionally, exposing and even limiting the very authority which is purportedly in control[58]. *Contra-Invention* represented partial engagement with these concerns, albeit acted out in the realm of not so glamorous, municipal policing. Edward Snowden or WikiLeaks type spectacle this was not. Rather than over-emphasise the confrontational, the aim here was to remain below the radar politically. Instead the CEOs and their procedures were treated lightly and intentionally misunderstood, not least as a means of bypassing the usual complaint-filled anecdotes which surround parking law enforcement. The investigation, if it can be called that, revealed a more complex set of behaviours than the common crude portrayals. However, I wanted to believe that these discoveries and amateur anthropology represented a secondary feature of the project. Little attempt was being made to be comprehensive or scientific. The process dynamics, relationships, procedures,

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[58] Apocalyptic fears of a one-directional Orwellian scenario unfolding have been undermined somewhat by the spread of hand-held devices. The ubiquity of recording technology means monitoring back of the state is possible via 'citizen journalism' but even incidental footage acts as a check on hegemonic excess. The case of Rodney King in Los Angeles in 1991 was an early example. Ian Tomlinson in London 2009 and pro-democracy protestor Ken Tsang in Hong Kong 2014 are two other illustrations of this point.

communications were of interest at the time because it was thought that these factors would somehow work their way visibly into the resulting photographs. The emphasis on photography turned out to be convenient because in the process of accumulating material I realised that the increasingly globally-significant Brighton Photo Biennial was approaching. Not only that but the key theme in 2010 would be vernacular photography. Historically controversial photographer Martin Parr would be curating and giving the 'found image' special status. The idea that a show of this work could be presented during the Biennial, so that it would be intentionally considered as critical or conceptual photography, became increasingly appealing. At this point further links with photography were actively sought. On inspection it was discovered that the EXIF information and metadata often embedded in digital images had not been stripped off the downloaded jpegs. Each image contained information about camera type, shutter speed, aperture and lens angle the wardens had used: the kinds of records classic photography-geeks are keenly interested in. Secondly, it was discovered that the three-digit code visible on the fronts of issued fines coincided with the figure on CEOs' shoulder straps. In other words, if desired, photographers could be matched with their photographs. It was enough, instead of choosing such an obsessive route, to indicate that this cross-referencing was possible by presenting the data as part of the exhibition.

The photography link does not prevent other kinds of framing or musing on the significance of these actions. As well as being credited as the inventor of photography, Nicéphore Niépce created the first internal combustion engine. The tool which would allow far away scenes to be viewed without having to move, originated from the same brain that revolutionised transportation. A similar contrary development can be noticed in recent history. The advent of the internet appeared to coincide with the arrival of low cost airlines. Just as travel became more unnecessary the cost of it dropped dramatically. Cars and

cameras have a long and multifaceted relationship which continues today but in the form of a tense stand-off. Or seeing that motorcars were status symbols and still are to a point, at least our CEOs are paying attention and respectful of that vanity.

Figure 23 Torn parking fine, *Contra-Invention,* Friese-Greene Gallery, Brighton, 2010

Another way of thinking about the process is through the lens of media theory. A line of communication exists between CEO and driver, mediated through the car itself, an online system, the law, various procedures and cameras. Even though the two key human players rarely meet they are joined in a feedforward/feedback loop. When they do actually come into physical contact a familiar performance unfolds. The stage has been set. Driver and warden have clear roles. Verbal abuse, expressions of indignation and outrage are the trained

responses. The system includes other mini-rituals. In issuing tickets strict guidelines are followed. A CEO waits for five minutes, puts on his or her official cap, generates the documentation using a specialised device, places that ticket behind the wiper so that it is visible, and then moves around the vehicle capturing six, eight or more images as evidence, before removing the cap and moving on.

The aporia of being able to 'intentionally misunderstand' is one interpretation of the term I've coined, artificial stupidity, and represents an important dimension to the theme in this thesis. The downside of intelligence is being explored because of my hunch that being able to dip into these states and 'dumb down' might well reap rewards. By adopting an innocent or stupid mindset, just as the comedic actor does when exercising that peculiar ability to 'fool themselves' on stage (cf. supra, p.78), new breakthroughs and discoveries are made. Of course a person needs to be able to revert back so as to be able to recognise the worth of these.

The photography references and usages increased as the project progressed. Just as CEOs made records of offending vehicles, they could be captured in the act of issuing fines, on my mobile device (a Nokia 6500c and then Nokia 6700c-1). Also I began deliberately manoeuvring my way into their field of view in an attempt to appear in their photographs. The phone handset played a part in these ruses. It was better to appear to be in conversation, making a call, distracted and not loitering. And the knack of capturing CEOs in action while the device was held to my ear in pretend-dialogue amounted to another new craft skill, comparable with the methods used by street-photographers in the past, not wanting to be noticed by their subjects. The process of waiting for images to appear online, which took a day or so from point of capture, was evocative of when one had to wait for a film to be developed. A degree of trepidation and excitement was inevitable. Had the

attempt to get into frame succeeded? Would the images even be available? (When fines were paid quickly then access was denied so there was always the possibility of disappointment.)

Further adventures followed and more discoveries were made. Officers sometimes captured themselves in reflection. One of the resulting images (Figure 24) was particularly revealing in this respect, and later used by conceptual photographer Joan Fontcuberta with students as part of 'a class about what [he] calls 'reflectograms' (selfies taken in front of a mirroring surface)' (see e-mail from him, appendix G).

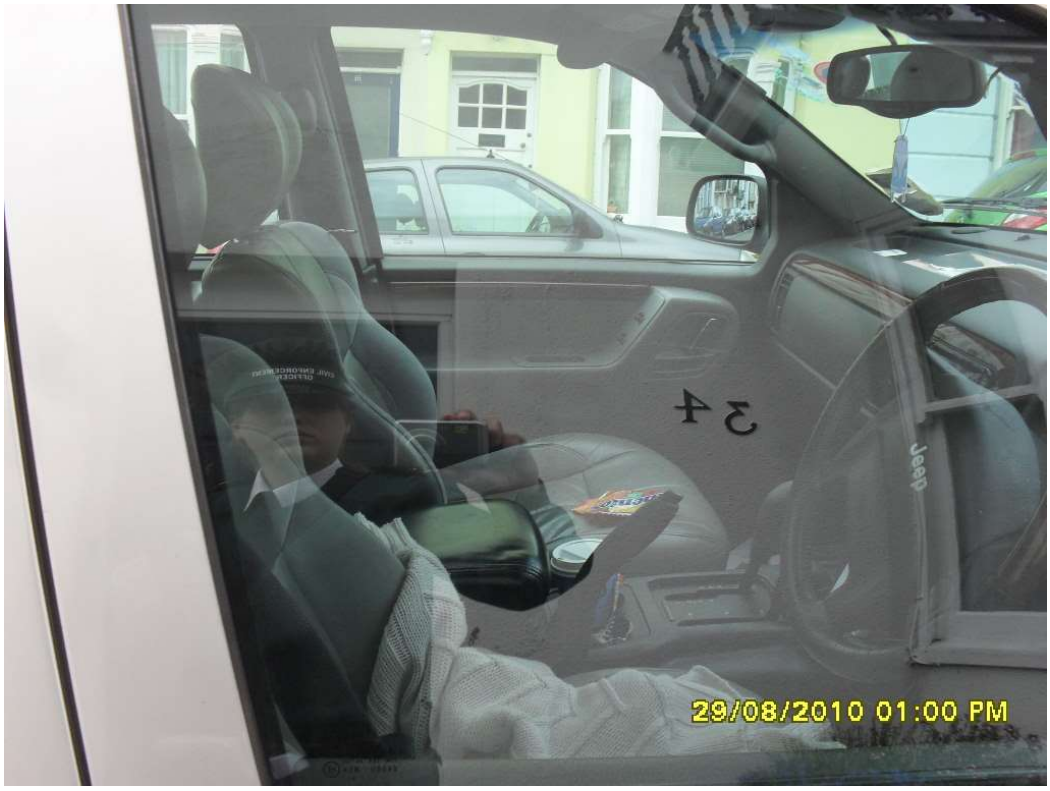

Figure 24 *Contra-Invention* 'reflectogram', 2010

The way teams of CEOs work together became apparent, many incidents and potential confrontations were witnessed and documented but most of it never found its way into the final exhibition. In the end the catalogue containing images I had captured on my phone-camera, of traffic wardens in action, was

withdrawn, not because of any quality problems but to avoid distracting from the key materials of interest. The images of them did not fit with a desire to avoid voyeurism and objectifying, and it would have played too simple an entertainment game in emphasising the conflictual.

The images were found in compressed jpeg format, at low resolution by comparison with the standards of professional photography; the pixelation and compression artefacts[59] became more noticeable when enlarged, automatic camera settings meant that less than ideal combinations of shutter speed and aperture were in use but despite all these faults and others, far more information than necessary for the job in hand was being captured by the wardens. The contravention images still represent what Marshall McLuhan would have described as hot media (cf. supra, p.80). Contradictions are apparent in this combination of poor quality which nevertheless exceeds requirements. Compression algorithms – and jpeg is being used as shorthand here - were introduced as a temporary measure in the 1990s. Compressed photography is looked down upon as a poor relation in the world of images. The palpable hostility of many visitors in the first few days of the *Contra-Invention* exhibition reflected that disdain (and it was amusing to see the situation change once its status had been conferred). These formats and approaches have not only survived but are the norm[60]. As it happens compression is a sophisticated and efficient set of mechanisms which permits image quality to be retained despite dramatic reduction in file size. Jpeg was precisely what the new landscape, the digital network, required. The impact is

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[59] 'artefacts', the term of choice used to describe the fuzzy edges and blurriness which is characteristic of 'lossy compression', is interesting here considering the points made later in the paragraph.

[60] In his provocative first published essay Lev Manovich pointed out that 'lossy compression' was becoming the norm as far back as the mid-nineties (1995)

analogous to the Renaissance innovation of painting on canvas which permitted pictures to be rolled up and made mobile. Artists could work in studios and escape the restrictions of fresco. The fact of mounting the *Contra-Invention* large prints on lightweight support, normally used for commercial signage purposes, and leaning them against the gallery walls instead of hanging them, was also a reference to this idea of mobility. In an essay which was, with permission, included in the *Contra-Invention* exhibition catalogue, Hito Steyerl waxed lyrical about the worth of 'poor images' (2009). In the old world 'resolution was fetishised as if its lack amounted to castration of the author'; poor images on the other hand are 'heavily compressed and travel quickly. They lose matter and gain speed.' Steyerl likens the proliferation of imagery online to a proletariat, a potentially underestimated revolutionary class. Painting pre-empts this development in other ways too; Matisse more than once repeated Delacroix's adage that 'exactitude is not truth'. The Impressionists' use of dabs and dashes was proof that there were less pedantic ways to connect with original experience. So in selecting three night-shots from the hundreds of mundane contravention images and blowing them up to the actual size of the car depicted an attempt was being made to engage with these factors relating to art history and aesthetics. It is not necessarily ridiculous, nor inflammatory, to hypothesise, as I did during artist talks, that 'Caravaggio would have been impressed' with these corrugated-plastic-mounted monuments to the jpeg.

2.3.2. *Missing You* (2013-2014) and *Less* (2014-2015)

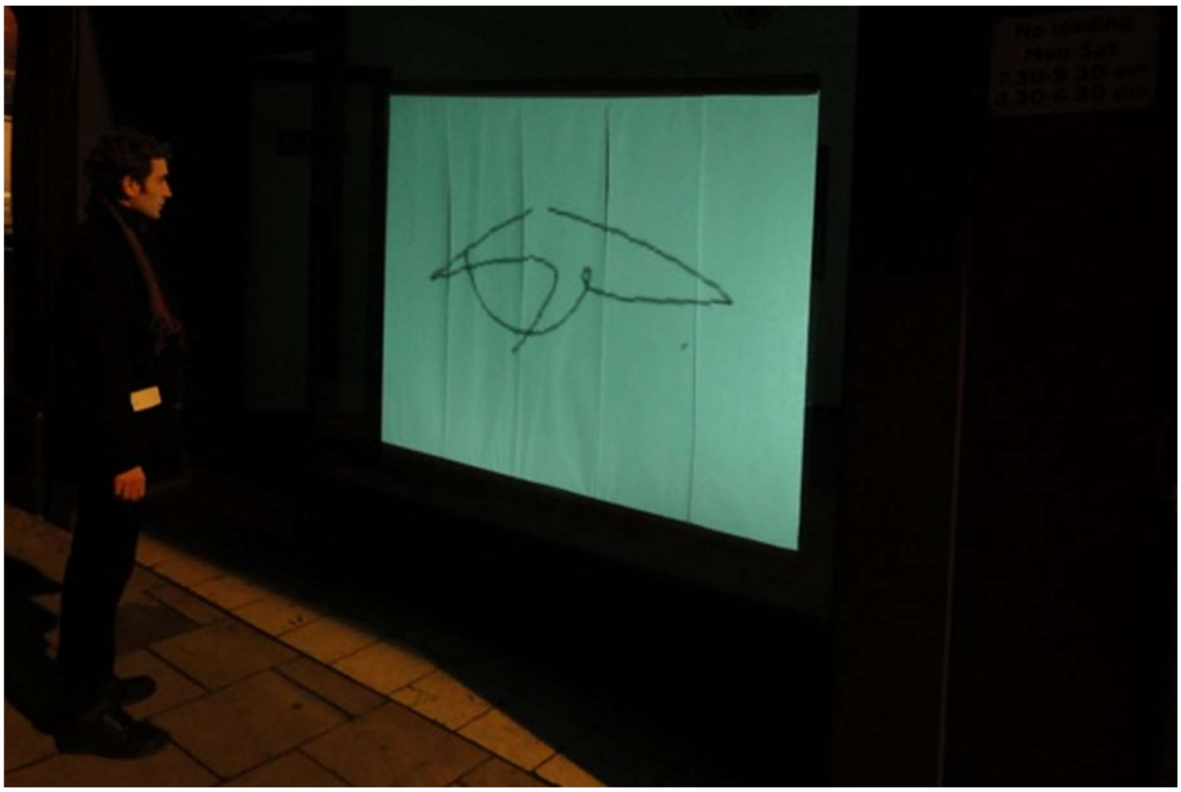

Figure 25 *PODS* (point of delivery signatures) Norwich 2013 - Photo: Tony George

Since *Contra-Invention* other ways of gently hacking the supply chain have been uncovered. Arts Council England was happy to support an initiative which used the familiar point of delivery signatures (PODS) required by couriers when they hand over packages to receivers. I discovered that, not only was it possible to track the movement of one's own package, but that afterwards a low resolution jpeg version of the final signature was stored online (Figure 28, p.172) and what is more all of the files remained available long after the physical exchange. Surprisingly, by simply inventing consignment numbers, it was easy to access others' information including their point of delivery signatures! The exhibition of this work was called *Missing You* (Greslé, 2014), a reference to the Sorry We Missed You cards left by couriers when delivery (frequently) fails, included large prints of signatures, moving-image

pieces (Figure 25 shows signatures being back projected onto a window) and a book of these signatures (O'Connell, 2014f). POD happens also to be the abbreviation for my chosen technique and channel of publication: 'print-on-demand'.

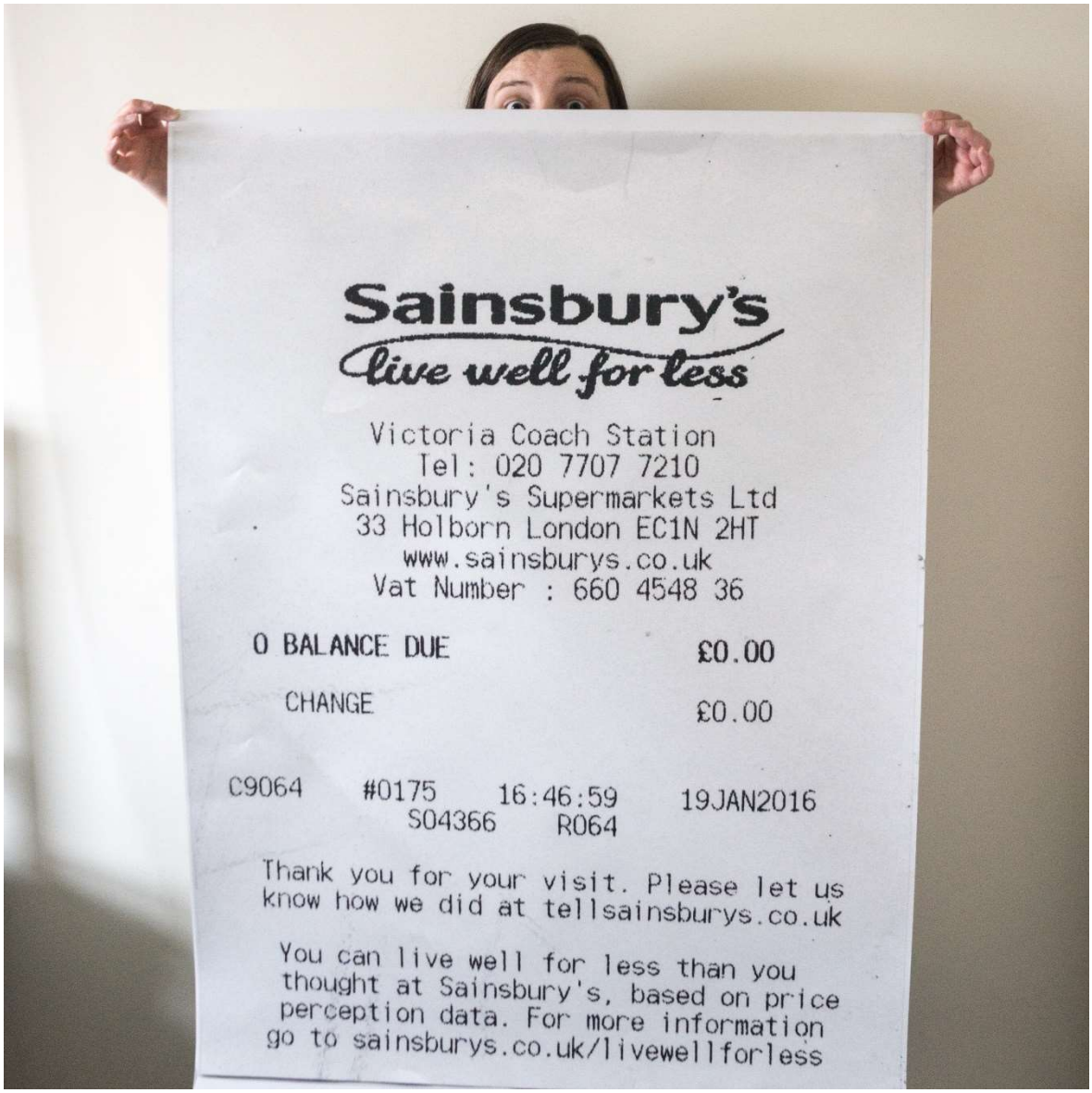

Figure 26 A0 print of a receipt obtained from buying nothing, 2016. Photo: Mel Ede

More recently I discovered that it is possible to use the increasingly ubiquitous supermarket self-checkout machines to buy nothing. During two periods, hundreds of receipts were collected as evidence of these non-

transactions, and compiled into books entitled *Less* (O'Connell, 2014c) and *More Less* (O'Connell, 2016a). A0 poster versions of the receipts have been distributed (Figure 26). Sound recordings of the encounters with the friendly technology - shoppers are thanked regardless of whether a purchase is made – were interrogated and combined with visual material to create another simupoem (*Exchanging*, 2015). In addition instructions on how to interact and obtain zero transaction receipts have been shared (*How to buy nothing*, 2016).

My attention to the bodily and the pinpointing of genuine human interaction amidst the artificiality has been stated (cf. supra, pp.93, 98). While pathos may be the first upshot of acquiescing to consumerist morality and to transactional relationships, the heated clashes between traffic wardens and car owners, the images I captured of those wardens or they, unwittingly, of me, and the collection of couriers' point of delivery signatures, plus the records of exchanges with staff while buying nothing in supermarkets, still correspond to instances of real connection between individuals.

Final work of two types emerges from these clownish research projects. Firstly, artefacts which do justice to the nature of the readymade data are presented. By enlarging or using suitable support, for example, the qualities of the original digital or visual material are only amplified. Secondly, an attempt is made to move away from the origins but not to the extent of losing touch completely. I continue to produce short looping films. As highlighted in section 2.1 they employ contemporary 3D modelling, simulation and 3D scanning techniques and combine influences from collections of objects, data and ideas being worked with. Though unusual or incorrect use of the software is still important in the final development phase, these films are less obviously connected with the intelligence or wit of the original process. They are more abstract and distinct from hacktivism, consciously polemical or 'post-art art' (cf. infra, p.134). In fact, the simupoems, notwithstanding use of cutting-edge tools

and concepts, arguably hark back to a time before the 'end of art'. An ambition in creating them is to achieve unexpected shifts in understanding or to prompt an aesthetic experience (Leder, Belke, Oeberst and Augustin, 2004). The outcomes ought to embody the process and in that sense the art 'speaks for itself'[61], which does not in any way prevent other kinds of evaluation and reflection.

[61] A somewhat hackneyed phrase but an important one, which can be handled critically (Danto, Horowitz and Huhn, 1998, p.19).

3. 'Unweaving the rainbow'[62]

3.1. Art theories of relevance

The process of discovering the relationship between mental models of importance for me and practical actions taken is an iterative one. Through reflection on my activities, interventions and works produced, the conceptions and paradigms of relevance begin to reveal themselves. Before listing the strategies what are these theories currently? Many concepts of interest have been discussed in chapters 1 and 2, and are considered in appendices A and L. These mainly concerned themselves with what an artwork can be. Bakhtin, Beckett and Bishop's thinking featured but what other philosophies and ideas may be useful in looking at the whole system of art?

One way to begin is by asking the apparently unanswerable question: 'what is art?' Whether they admit it or not, whether they are clearly conscious of it or not every artist must, on some level, be aware of what they mean by art. 'The artist should know what, and why, things happen in his pictures' proclaimed Kazimir Malevich in 1915 (1988, p.129), the year he exhibited his first *Black Square*. 'Wittgenstein's philosophy' states Niklas Luhmann, 'denies only the possibility for a definition that corresponds to the 'essence' of art' (2000, p.244). Luhmann exploits this loophole by proposing a theory which 'no longer raises issues of essence or of the consensus of all observers but instead leaves the decision of what counts as art to the art system itself' (2000, p.244).

According to Luhmann's system theory, art 'evolved' and, therefore, is an example of 'the paradoxical probability of the improbable' (2000, p.214). Put

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[62] From Richard Dawkins' book in defence of scientific inquiry (2000). The origins of the phrase are John Keats' 1818 narrative poem *Lamia*.

brusquely this would mean that art is an unlikely accident which happens to have survived. Controversially then the arena and associated practices would not amount to something vital but simply possible. The future would not be guaranteed either but for now there exists an 'art system'. Such assertions naturally disappoint those who can only imagine cave painters as the heroic Picassos of their day rather than the first producers of PowerPoint slides[63]. The fact that history is regularly 'retro-fitted' in the light of later developments does not make the preceding era any less real though.

Theories of stages are dangerous on two fronts. Firstly, they may mechanically limit the seeing of commonality between different periods. Secondly, tenuous ownership is asserted at a later stage over previous practices. Occasionally a movement will be described by those participating in it but backdated period-naming is the norm. Renaissance artists were not to know they would appear in Vasari's *Lives* (1897), a key reference for later scholars. Bruno Latour's *We have Never been Modern* (1993) critiques modernism's separating of nature from society but in doing so also undermines the habit of lumping practices together according to era. Presumably certain human propensities find avenues into action given the right conditions and regardless of the nomenclature applied. The significance of medieval carnival, for example, is discussed in section 2.2.2 and elsewhere in the thesis. However, chronological modelling, the idea of narrative, the acceptance of cause and effect and the assigning of terms to movements, are unavoidable too, and very

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[63] Werner Herzog's compelling statements about the 'oldest known pictorial creations of humanity' at the Chauvet caves, Southern France – e.g. 'The artist painted this bison with eight legs, suggesting movement: [it is] almost a form of proto-cinema' (*Cave of Forgotten Dreams*, 2011) - exclude mundane readings. Distinct dots are visible on the images and there are piles of stones beneath. Could the depictions not have served purposes of planning before a hunt; been used in group discussions to allocate tasks; or provided something for children to practice on; as well as helping prepare psychologically and fulfilling 'spiritual' needs?

human. When Luhmann states that, '[a]rt mobilised… a memory of its own to orient itself in its own history' (2000, p.233), that is not to trivialise the earlier endeavours then. Evolutionary theory does not deny the individual and social varieties of creative engagement that went before; nor the aesthetic principles at play; nor the spiritual and philosophical construals allied with historical practices. Our specialists in the caves may well have stood back astonished at the surplus of effects produced, felt themselves to be 'playing god', or considered the more profound implications of their drawings.

In terms of a future for art, the lack of guarantee implicit in this accident-of-history hypothesis can be overstated too. Joseph Beuys in his famous insinuation that 'everyone is an artist' (1993, p.22) did encourage the idea of art being somehow immanent. He could not, as many presume, only have meant to belittle the specialist thinking and knowledge involved, nor to deny the importance of art schools say. Otherwise Beuys would not have devoted much of his life to art education. What about art's longevity? 'Autopoiesis' (Luhmann, 2000, pp.49–50), as a feature of evolved systems, means that they not only maintain themselves but also reproduce (appendix A, p.203). Seen through system theory spectacles then, art would not so humbly vacate the scene. Nigel Thrift's phrase 'remembering forwards' (2008, p.98) seems apt here. If the art system appeared through chance then it was surely an accident waiting to happen, born sufficiently robust to survive into its future. Avant-garde willingness to be self-destructive and denying of art's place in the past century is too easily taken at face value perhaps. Self-deprecating behaviour in individuals after all often indicates the opposite, confidence. Radical self-destructive statements are potentially a kind of show, or test, of strength. John Roberts argues that art's 'ironization, belittlement, adulteration' is inspired by the 'deflationary logic' triggered by 1917, the year which brought with it both the Russian Revolution and Duchamp's *Fountain* (2015, pp.66–67). What we

have now he describes as 'post-art art' (*John Roberts NCCA Recording*, 2014) but even these practices are 'recalled to the 'art world'' (cf. supra, p.108). Irrespective of how transformations are accounted for, it would appear that sets of practices are linked, but dialectically so, to pasts which extolled other sets of practices, and that the process continues. Autopoiesis for art as a system permits one ideal to be deservedly killed off as new forms are born.

If one chooses to, it is possible to see value in artistic practice from a basic survivalist perspective. Such an approach ignores the now-accepted complexities of evolutionary theory which describes not just natural selection but many forms of 'artificial selection' and 'sexual selection' (Miller, 2000). Thinking on 'adaptationism' (Varela, Thompson and Rosch, 1991, pp.185–206) also challenges a one dimensional viewing of evolution. Nevertheless art can be imagined as a means of resisting the normalising influences Max Horkheimer wrote about in his post-war *Critique of Instrumental Reason* (2012). Sophisticated questioning practices of a certain variety presumably help inoculate a society against surface expressions of freedom, or individualism masked by a 'pseudo-individualism' (Adorno and Bernstein, 1991). Tangibly also, the generating of alternative viewpoints and approval of unorthodox behaviours is in line with the imperative that, for the good of humanity, diversity be prioritised. In fact stupidity, for Adorno, according to David Jenemann, is defined as precisely the opposite of critical or creative thinking, as 'a failure of courage in the face of thought's suppression' (2013, p.36). Adorno 'recognizes that stupidity can be as actively cultivated as intelligence' (Jenemann, 2013, p.35), which, in the parlance of this thesis, represents another instance of artificial stupidity, but in this case an ominous one.

According to Luhmann 'functional systems are incapable of directly influencing one another… [but at] the same time, their coexistence increases their mutual irritability' (2000, p.4). This sense of irritability, mentioned so

frequently by Luhmann[64] is not meant as a negative. From a cybernetics viewpoint the tensions and upsets between systems and their environments, and with other systems, are exactly what feedback loops arbitrate. Cybernetic systems are capable of coping with, let us say adjacent, systems and they learn through this rubbing up against them. Such adaptation surely contradicts Luhmann's argument about systems not influencing each other though. The problem was raised in a previous footnote (cf. supra, p.84). A way out of the dilemma is to presume that Luhmann is referring to high level functional systems like the art system, the economy, science and law (all four of which he had written books about). His point must be that these exist as if in different planes, almost unaware of each other. '[T]he art system organized itself on the basis of communication' Luhmann states (2000, p.80), meaning that the lowest order building blocks are not whole human beings. People could experience different realms. It should not be controversial to state, as Martin Kippenberger did, that, '[y]ou can't cause anything by art' (1998, p.76), partly because art is not dealing with conventional reason or straightforward communication. Kippenberger's point also reflects the degree to which art is self-governing; by 'anything' he surely means anything outside itself. An alternate means of coping with the quandary is to note that Luhmann speaks of 'direct' influence but the relationships between cybernetic systems are subtle and elastic. This situation brings to mind Karen Barad's 'intra-actions [between bodies which] are constraining but not determining…. intra-activity is neither a matter of strict determinism nor unconstrained freedom' (2003, p.826).

Questions about 'art's [presumed] benevolence' are rarely posed. As David Beech and John Roberts point out, 'there is a tendency to treat art as

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[64] Niklas Luhmann's *Art as a Social System* contains thirty-seven instances of 'irritate' and its derivatives.

inestimably worthy, noble or even as being among the greatest preoccupations of humanity, rather than a series of ruminations or troublespots' (2002, p.14). Analogising with psychoanalysis, value may materialise contradictorily and through resisting the urge to problem-solve. In *The Necessity of Errors* (2011), Roberts draws out such points, making comparisons between the nature of error in psychoanalytical, political and artistic practice. He states that '"error" in psychoanalysis is always testimony to other causal chains' (2011, p.25). This sounds like Joyce's mistakes as 'portals of discovery' (cf. supra, p.69) and represents a far more nuanced proposal than the overused recommendation that we learn from our mistakes. The notion of art as panacea or as serving some social function is debatable then.

For practical purposes, in an open attempt to escape the precincts of commitment to belief, I am sympathetic to the thought of art being unnecessary (in its relationships with other functional systems). That is not to rule out the potential for unlikely and even measurable benefits (appendix A, p.205); nor is it to outlaw the possibility of art's overlapping with other spheres such as politics, commerce, academia, the entertainment industry or museum-culture. When art performs for others it may appear 'stupid' (cf. infra, p.175) but by participating in these arenas the considered nature of that stupidity can be distilled out.

Institutional theory (Danto, 1964; Dickie, 1969, 1974) gives weight to an extended art world to the degree of that being what defines it. In trying to determine my position I have attempted to acknowledge the various forces at play and simultaneously extricate what an artist can be. Sally-Jane Norman's remarks (cf. supra, p.61) about the 'so-called creative industries' and 'hegemonic attempts to engulf art that otherwise hovers awkwardly beyond definitional reach' are relatable to this discussion too. In my quickly sketched out Venn diagram (Figure 27), all the boundaries need to be interpreted with

caution. The actual character defined as artist could also be critic, academic, activist, collector, curator or gallerist. The system is not simply equal to the sum of its (human) parts. Paradoxically it has been fashionable to deny the existence

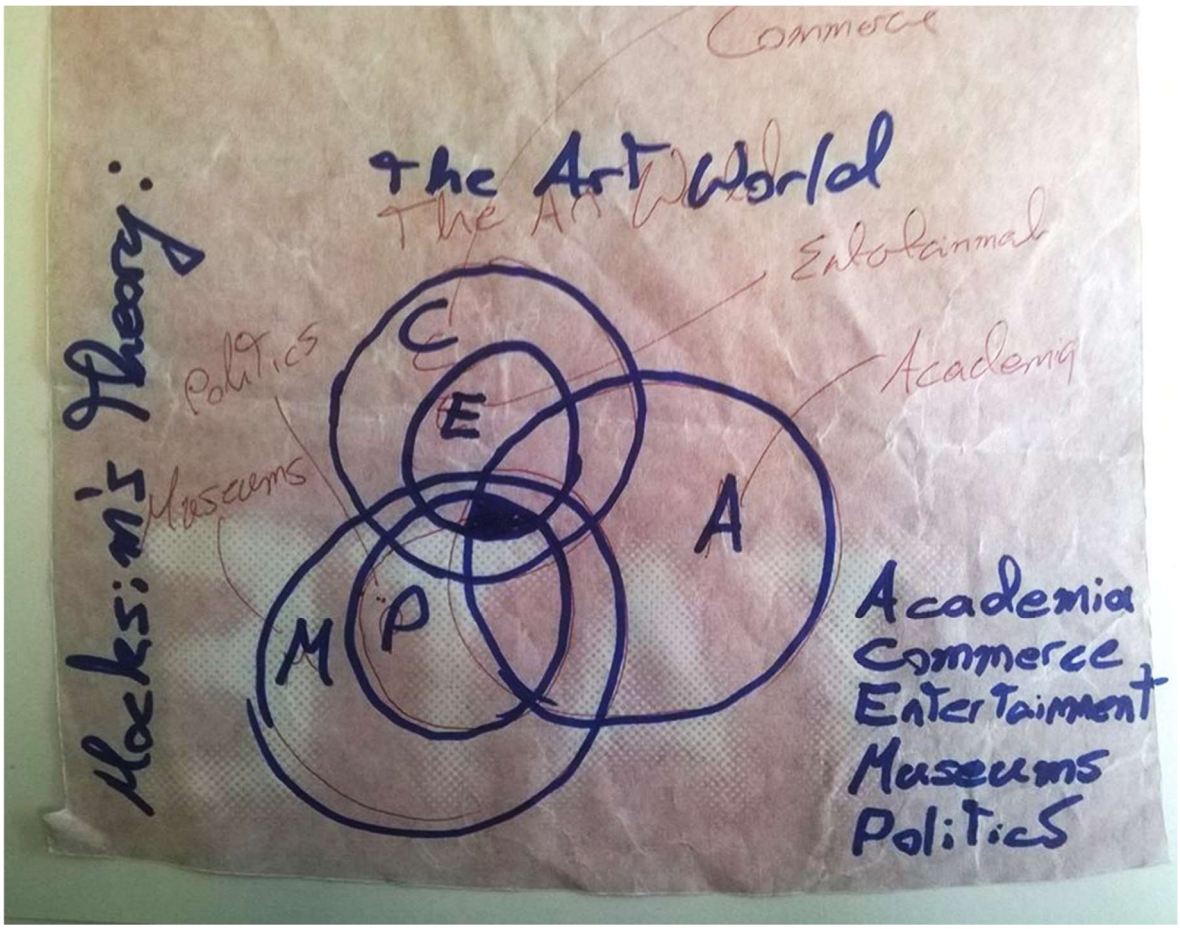

Figure 27 The Art World, 2015

of the category 'artist' while complaining about its opposite: extreme dilution of the term. Perhaps the difficulty delineating explains why, '[t]he low rate of participation in art is astonishing. Only a fraction of the population participates in art' (Luhmann, 2000, p.242). In addition Luhmann gives attention to an increasing autonomy of roles stating that in the past 'writing and art were much closer together than they are today' (2000, p.17). In other words while an overlapping of disciplines is discernible, so is the contrary process of

divergence. Roberts, in a recent talk at the ICA in London (Santos-Pedro, 2015), suggested that one of the few privileges accorded to artists now is permission to be 'adisciplinary', to almost lazily delve into arenas in which they have little or no expertise. Regardless of the contemporary flux and kinds of role-play possible though, the existence of art and artists (linked to the critical and avant-garde trajectories) can still be acknowledged.

Luhmann's point (cf. supra, p.45) is that the need for one functional system to submit to another is overstressed. He plays down the likelihood of indisputable acquiescence in the face of commerce, but political power too can be overestimated in this regard. Roberts denounces the blunt suggestion that Abstract Expressionism's prominence was only due to the CIA's *Hidden Hands* (1996a). I concur with these sentiments, as Figure 27 perhaps illustrates. In place of economic, political, technological or any other kind of determinism, I see tense relationships, involving feedback loops and alternative framings in a situation which is dynamic, but where it is still possible to make distinctions and judgements.

Norbert Wiener's writings in the 1940s recommended theories of cybernetics as an antidote to entropy as defined by the Second Law of Thermodynamics. Cybernetics was an attempt 'to hold back nature's tendency toward disorder by adjusting its parts to various purposive ends' (1954, p.285/2765). In Sadie Plant's words, he was 'undermining distinctions between human, animal, and machine', and, 'challenging orthodox conceptions of life' (1998, p.160). Though such talk seems familiar now, it was pioneering then.[65]

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[65] Is there a contradiction in Wiener's description of the situation as an encounter between equilibrium and disorder? The likely result of losing this battle against entropy, he says, would be 'a drab uniformity out of which we can expect only minor and insignificant local fluctuations' (Wiener, 1954, p.330/2765). So this slide towards apparent 'chaos' (1954, p.108/2765, 1202/2765, 1210/2765, 1369/2765) ends up with what could equally be described as

The positive alternative Wiener suggested (if cybernetic thinking were put into action) amounts to order too but of another kind: equilibrium. Gordon Pask pointed out that '[u]nity is not uniformity, but is coherence and diversity admixed in collusion' (Frazer, 1995, p.7). The concept of 'integration' perhaps, which consists of linked but differentiated elements, is a useful way of describing the ideals implied. Integration means not uniformity but a kind of harmony or dynamic equilibrium (cf. supra, p.54). As in the case of a choir, individual singers do not strive to be identical. The differences do matter, but members are tuned-into each other. What have these arguments got to do with art or my practice? Firstly, the problem of categorising emerges frequently in this thesis. What to call the simupoems and questions of genre have been ongoing bugbears. Whether to accept art as a distinct arena at all is in question. When dealing with the key theme there are obstacles to defining what intelligence is. System theory in action (including cybernetics) could amount to a defence against a kind of information or language entropy because the special feature of systems is that they are both distinct from each other and fuzzy at the boundaries. In addition, systems change over time and reproduce. Systems are less fundamentally separated from each other than objects, things or words. Barad - in stating that '[b]odies are not objects with inherent boundaries and properties; they are material-discursive phenomena' (2003, p.826) and in her repeated use of the term 'agential intra-action' (cf. supra, p.135) - is alluding to similar formations. In conceiving of art itself as a system and works of art as sub-systems in communication networks, certain conundrums and difficulties about the autonomy and independence (versus context and relationships with the wider environment) diminish. What is more, the thinking is flexible enough

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the ultimate in order; complete homogeneity; a sort of white noise. 'Chaos' must either be a misnomer or shorthand for what he terms 'de-differentiation' (1954, p.95).

to account for artefacts, and artists, playing roles which extend beyond their perceived cultural remit such as guarding against instrumentalisation, offering new terminologies, interpretations and intelligent remixings of knowledge. The struggle against creeping entropic disorder highlighted by Wiener can be treated as a quasi-epistemological issue. If the opposing forces are recognised as 'distinction-making' versus 'distinction dilution', then artistic action demonstrably and concurrently undercuts existing understanding and invents new categories.

Returning to the question of art's usefulness (or lack of it) in relation to human survival, brief mention was made earlier (cf. supra, p.134) of the alternatives to 'natural selection' espoused by evolutionary psychology (Miller, 2000). Sadie Plant too highlights this, stating that natural selection is 'certainly not the only factor in the evolutionary game' (1998, p.224). Though seemingly guilty at times of falling foul of his own insistence that a person's conditioning should not get in the way of evidence-based objectivity, Geoffrey Miller's *The Mating Mind* (2000) is intriguing. His representing of Darwin's second theory has important implications for systems thinkers. The potential for 'sexual selection' (Miller, 2000)[66], 'cultural selection' (Changizi, 2011b; a) and other evolutionary schemes - which do not fit easily with the 'survival of the fittest' cliché - indicates in fact exactly how new systems, with their own evolutionary trajectories, can be spawned from older ones. 'Unnecessary' characteristics (the peacock's feathers being a classic example) evolve during the periods in history when there are no serious threats to basic survival and reproduction. The human brain and our capacity for elaborate language use, Miller argues, are just

[66] Geoffrey Miller goes as far as to say that '[w]ithout sexual selection, evolution seems limited to the very small, the transient, the parasitic, the bacterial, and the brainless.' (2000, p.176).

such examples of excess[67]. 'We do not have to pretend that everything interesting and enjoyable about human behaviour is a side-effect of some utilitarian survival ability or general learning capacity…. [t]he human mind and the peacock's tail may serve similar biological functions' he says (2000, p.3). Later Miller indicates that seemingly extraneous characteristics can function as indicators of general gene quality (2000, pp.104–106) but that is not the same as believing that every trait must serve a blatant survivalist purpose. The proposal that art too is a chance occurrence, unconnected with survival in the evolutionary sense, does not demean it. What constitutes a 'need' anyway can change to take into account cultural transformations and paradigm shifts. Once evolved could the brain not be reckoned crucial or exploitable for purposes which again relate back to survival, but to survival of a different order? Cultural activity grows into a requisite. Also it is easy to see how, differences that were at first unnecessary (namely superior cognitive capacity, consciousness and foresight) could take the species into a domain beyond potential biological traps. The invention of birth control is an example of something which disturbs the usual animal 'instinct', in this case to procreate, but may be vital for our longer term survival within a complex ecosystem.

Alternatively, and negatively, one could see these excess characteristics as parasitical growths which emerge dialectically to operate as if separate species - systems with evolutionary trajectories of their own. These are hypothetical framings of the situation but intuitively the thought of two species in one, not quite unlatched, goes a way to explaining why questions of 'mind

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[67] Echoing Miller's ideas (2000), Mark Changzi in Harnessed: How Language and Music Mimicked Nature and Transformed Ape to Man (2011b) 'make[s] the case that language is a technology, not part of our nature at all... Instead, language is a result of cultural selection, a kind of evolutionary process capable of 'design' that occurs at lightning speed' (Changizi, 2011a).

and body' fascinate. Extrapolating further, the desire to create AI can be interpreted as a quest to find alternative spaces, alternative bodies in fact, for our minds. Books, libraries, artefacts and all sorts of other media already acted in this way to some degree. Culture now might be defined as the sum-total of this exteriorisation of memory (cf. supra p.56). It is not uncommon for embodiments of information to be attributed agency. David J Chalmers and Andy Clarke put it plainly: '[w]ithin the lifetime of an organism, too, individual learning may have moulded the brain in ways that rely on cognitive extensions that surrounded us as we learned' (1998, p.12). In other words, the delving outwards feeds back in a way which dilutes the importance of the body and its fleshy brain. (It is not so much the difference between the physicality of the brain and the rest of the body that is of interest here, though that is notable.) Intelligence feels not to belong to a body. The inquiry here posits a tentative defence of the Cartesian split. Our animal bodies with biological brain can feel like the least suitable place for a mind; hence the yearning for distraction and escapism. In this model human intelligence is a curse: no wonder people would want to 'dumb down' or make themselves stupid. For Avital Ronell in fact 'idiocy has something to do with the nearly existential fact of being stuck with a body' (2002, p.180).

3.2. Analysis paralysis

This section is an attempt to categorise my strategies and methods of working from the 'bottom up'. Distilling out what these approaches, heuristics, techniques, processes, themes, intentions, desired outcomes, stratagems, and even why media were chosen, for the most part, becomes apparent after work has been resolved, but are occasionally anticipated in advance. My conduct, the understanding of that, and my notions of what it is to be an artist have been informed by periods as a student, by increased familiarity with art history and theory, but, firstly through practical engagement. Discussions, artist talks (cf. supra, p.49) and interviews have fed the process. Points from the interview in appendix D find their way into the lists produced in this section for instance. The analysis is not conducted with a view to changing or 'improving' the art. It is difficult to imagine however that the discovery of patterns of behaviour would not impact on the nature and direction of my practice. So the process of intense self-reflection is analogous to how art is created, in that having no definable objective does not rule out the possibility of making game-changing breakthroughs. Moreover, recognition of the nature of what one has got, in this case artworks, can be interpreted as change. Reorganising understanding already modifies the work.

3.2.1. Workaday themes, methods, principles and intentions

Before considering what is happening at the higher level, a concerted effort has been made to discover and list day-to-day factors of importance. Table 02 is an attempt to capture and quantify the connectivity between these factors: The table also illustrates whether each factor is a thematic influence, practical method, overriding principle, desired effect, or more than one of these four. Each factor is summarily described in the index on the sheets which follow the table.

This exercise was carried out in the belief that the list cannot be exhaustive. Nevertheless, the table and index do constitute an earnest endeavour to be as openly demystifying as possible. Table 02 was the basis for slicing the work up in other ways. The lists contained in sections 3.2.2 to 3.2.5 constitute four other means of describing my output and activities as an artist during the past decade.

In places the Table 02 index is cross-referenced with chapter 2 writing but precise explanation of all the linkages seemed laborious and not useful in providing extra illumination. Certain of the index descriptions go into more depth because of the factor's importance or frequent applicability to my practice. Other factors are presented merely as observations. Not all receive significant attention elsewhere in the thesis.

Since we are interested in artificiality, especially in connection with intelligence, it is worth noting that in biological systems of taxonomy 'artificial' can mean:

> [d]esignating a classification scheme based on characteristics selected primarily for pragmatic reasons, to enable identification and categorization of the things classified, rather than for any

> correspondence to natural affinities or essential characteristics; relating to such a system (OED, 2016a).

The inventory of techniques, strategies and methods is not arbitrary but alternatives could be conceived to replace it. Separate factors have not been included for the question of illusion, avoidance of self-expression, profanity, my critical interest in book production and print-on-demand, and questions of voyeurism and surveillance, though some of these are dealt with under other headings. Secondly, though a point of diminishing returns has been reached, it is clear that such a list could 'go on forever'. If a perfect description (or again, representation) will never be possible, and if another structure might just as well do, is the attempt to be thorough here not another exercise in artificial stupidity? Similar arguments hold for the examination carried out in appendix H. There is a madness in not recognising the limitations of rigour when dealing with what Stafford Beer called 'exceedingly complex systems' (Pickering, 2011, pp.23–24). The effort put into detailed self-scrutinising here is, anecdotally at least, very untypical of what artists do, perhaps because most know better than to be so obsessively diagnostic.

TABLE 02 (A3) INSERT HERE

TABLE 02 (A3) INDEX PAGE 1 of 3 INSERT HERE

TABLE 02 (A3) INDEX PAGE 2 of 3 INSERT HERE

TABLE 02 (A3) INDEX PAGE 3 of 3 INSERT HERE

3.2.2. High level strategies

Four categories account for my practices at, what might be called, the strategic level namely:

a) Investigation of everyday functional processes, systems and tools, the techno-industrial infrastructure so as to locate anomalies and make alternative interpretations.

b) Intervention, misuse and misunderstanding of functional processes, systems and tools.

c) Invention of new 'pointless' processes, systems and rituals utilising everyday found materials, and inspired by experience or activities witnessed.

d) The presentation and use of appropriated data and materials, i.e. contemporary readymades.

These types overlap. Tinkering and misuse can reveal faults in a system. The invention of an outwardly absurd process can, as well as mocking systematisation, reveal truths, uncover 'bugs' or lead to unwelcome discoveries about purposeful processes. These investigations and interventions, on their own, satisfy my experimental curiosity and have attracted attention, critical and otherwise, especially when a degree of mischief or wit was involved. The strategies are employed as means of distraction, to escape aesthetic platitude and in the hope of surprising myself. Selected findings, items of data, imagery, records and objects are either presented as readymades or become raw material for simupoems or similar constructions. These two categories of outcome, for me, do constitute 'works of art'.

Others might not be so interested in the 'supply chain' but given my experience in industry it seems reasonable to bring this knowledge to the table as craft skill. Traffic jams, queues, ordering systems, call centres, online parcel tracking tools, supermarket transactions and parked cars lack exoticism perhaps but, for me, these processes are revealing and make legitimate subject matter. Ron Mueck's knowledge of model-making, gained while working in television production, led directly to the uncanny creations he was later celebrated for. It is easy to see how Mueck's output suited the Saatchi aesthetic because it was spectacle-oriented, but less immediately impacting kinds of model-making exist - and in my opinion these are no less interesting. My professional experience creating computer simulations which used mathematical principles, calculus, physics and queuing theory dealt with the dynamics of processes and the often invisible workings. Art, if it means anything, thrives precisely on the possibility of idiosyncratic experiences being anchored in the singular.

3.2.3. Process stages

My working method is described next in terms of step-by-step thinking. Already in the writing, concerns about theories of stages have been raised (cf. supra, p.132). The sequence 1 to 6 below would rarely be carried out in strict succession, the process is more often iterative.

1) Collection of ideas, objects, data, equations, recordings and images during my day-to-day activities: working, parenting, socialising, travelling, waiting, attending events, leisure activity, political activity, exhibition visits, presentations and so on.

2) Investigation or interaction with specific constituents of the techno-industrial infrastructure, also involving collection of found materials and gathering documentation.

3) Compilation and sequencing of accumulated materials from stages 1 and/or 2 into diaries, workbooks, digitally and by other means.

4) Selection and editing of material from these interventions and collections.

5) Production of final work of two types[68] (cf. supra, p.129, mentioned in 3.2.2 above and Table 02, Factor 39):

Type 1) Works which do justice to the nature of the found materials, amplifying the characteristics of interest but without overly embellishing. Concretely outcomes include selected objects,

[68] Increasingly the instructions and explanatory material are being treated as 'works' too (Table 02, Factor 38 & cf. infra, p.159)

printed images, information compiled into self-published books[69] or made available online or for exhibition. Documentation or instructional videos may be considered outcomes too.

Type 2) Works which retain their ties with original found material and appropriation procedures but are consciously abstracted. The most frequent category of work here is the looping films, the simupoems, produced using 3D modelling and simulation techniques (discussed many times but extensively in section 2.1). Other outcomes include performances, object arrangements and usages of recordings inspired through collection or simply documenting the process.

6) Exhibition, presentation, event and publication. No diktat preventing works of different types being exhibited together is abided by. The tensions and linkages between mutually exclusive entities, shown simultaneously, adds texture and can emphasise the authority of individual works.

Work is eventually presented in suitable ways, but flagrantly as art or fine art, instead of research outcome or for activist purposes (Table 02, factors 10 and 45 are relevant). Allusions are made to modernist principles, formal considerations; attention is paid to factors such as composition, colour, structure, sometimes by deliberately breaking the associated rules or inventing criteria (cf. supra, p.63 and Table 02, Factor 45). An eye is kept on conceptual relevance too. I am conscious of the deflationary logic (cf. supra, p.133), the self-destructive compulsions in art, and 'institutional critique' (Tate, 2016a). If this

[69] In 2014 I was invited by appropriationist artist Mishka Henner, and later joined, ABC (Henner, 2016a) which advocates the use of print-on-demand approaches as well as querying the status of publishing and book production.

playing of the art game needs justification, then part of the rationale lies in the fact of certain privileges and freedoms being afforded to artists. John Roberts' comment in section 3.1 (cf. supra, p.138) suggests open-ended investigations can be conducted without the same requirement for academic rigour. Perhaps wider ethical leeway is granted to artists too[70]. 'Artistic license' is a commonly used phrase. Though it usually means risk relative to the norms within The Arts, Arts Council England allows for, and, at times, encourages 'artistic risk' (Gardner, 2008). The other side of this equation is an expectation that the complexities of tradition are somehow respected. For artist-activists, amenability to convention would not necessarily be made explicit but the degree to which formal considerations and the rules of presentation can be challenged is often implicitly understood. Individuals are 'recalled to the "art world"' as Roberts puts it (cf. supra, pp.108, 134). Similar thinking explains why it was possible, in the era of happenings and new kinds of avant-garde performance, for Samuel Beckett, though he was also interested in media such as film and radio, to continue to write conventional stage productions. Even Dadaism was aware of what went before it. Now, 'in keeping postmodernism's rejection of its ideological pre-eminence, the very notion of innovation or invention is debatable' (Norman, 2013, p.276). Curiously, after the trauma of modernist and post-modernist attacks, implosions and breakdowns, facets of the established cultural infrastructure can be more easily accepted. That is not to defend conformance. Kenneth Goldsmith's asserting that creativity has become boring (2000) is itself creative. In fact, there is an irony in Goldsmith's

[70] Paramilitary Michael Stone's claiming that his intrusion, with explosives, at Northern Ireland's Stormont parliament was 'performance art' (BBC, 2006) is further evidence that wider – though not unlimited - scope is allowed to artists. The recent case of Pyotr Pavlensky, who had set fire to the entrance of a Federal Security Service building in Russia, also illustrates the point (Morton, 2016).

activities because he does accept boundaries, use traditional media too (books), and he fundamentally defends poetry and art. Polish art group *Azorro*'s *Everything Has Been Done:*

> confronts the paradigm of originality in art [too]. The absurd exchange of innovative ideas for a work of art, each of which turns out to have already been used, undermines the requirement of uniqueness imposed on artists (Dawicki et al., 2003).

Azorro have created an art work about the impossibility of making art, but one which is screened in galleries and museums.

There are pragmatic reasons for accepting both the physical architectures and organisational arrangements which have evolved. The white cube format permits work to be appreciated without visual interference. Plinths are suitable devices for similar reasons but also because of their connotation now thanks to a history of use. On the digital front similar reasoning can be applied. Despite episodic challenges to its pre-eminence, and hostility to its lack of design elegance, PowerPoint so far proves unbeatable as a way of containing and presenting ideas, via images, text and links. Acceptance of certain aspects of cultural infrastructure is what allows those structures to be played with, subverted or even ingeniously mocked. Technological change has had a dramatic effect in expanding the means of presentation but interestingly has given new life to dying formats. Print-on-demand services threaten to eliminate the power of publishers, but increase physical book production and so obstruct the path to purely digital reading. Likewise, freeware for creating stop-frame animations regenerates interest in that set of craft skills. New formats exist in parallel with seemingly obsolete constituents of the cultural landscape. The technological mix reflects itself inside galleries, art spaces and governmental

funding bodies which simultaneously deal with digital, a variety of new practices, and traditional expertise.

3.2.4. Media and materials

Though art long ago 'liberated itself from craft specificity' (*John Roberts NCCA Recording*, 2014) and medium-specificity there still exist both pressures and justifications for recognising distinct categories. As it happens practitioners rarely function in complete state of flux media-wise. This list provides a summary of resources, materials and media I have used in the past decade:

a) Live performance, typically using a professional actor, but at times involving other participants and I.

b) The simupoems: short looping films using virtual modelling techniques, physics-engines, mathematical principles, simulation and incorporating imported imagery and sounds.

c) Video recordings of live performances and interventions.

d) 2D imagery or photography usually mounted in a way which alludes to the overlap of form with content. Included here would be the production of artists' books (footnote cf. supra, p.153).

e) Selected physical ready-mades - for a period this specifically meant containers and vessels. Beakers, mugs and potties were embedded into live art and worked with in the creation of moving-image work.

f) Playback hardware, television sets, DVD players, and other equipment used to present media from b and c above.

g) Selected digital ready-mades, files and data, obtained through interventions with functional systems, transport mechanisms and legalistic elements of the supply chain.

h) Food stuffs and organic material, liquids or mixtures such as coffee, milk, eggs or urine.

3.2.5. Genres and disciplines

For similar reasons to the previous list, of media and materials, the works have been positioned according to genre, often for convenience, not always choice; to suit funding applications; to facilitate my finding suitable critical communities and because hosting organisations, spaces and galleries are often medium, discipline or genre specific. The primary disciplines of relevance are:

a) Fine Art/Contemporary Art
b) Photography
c) Moving-image/Film/Animation
d) Live Art
e) Digital Media/Technology Art.

4. **Conclusions and arguments**

4.1. Practice trajectory

The categorisation process and lists produced in section 3.2 do not fully specify the trajectory against time and the broader changes in my approach in recent years. One key development is that I have moved from a position of employing a clown to participate in scenarios directed by me, to one where I intervene in the world as a fool of sorts (cf. supra, p.59). These abilities at expert idiocy, so to speak, were picked up through observing the professional. In the spirit of appropriation, I stole his skillset.

Secondly, previously I was less inclined to elaborate on the background activities involved in obtaining raw materials and creating simupoems. The thinking was that the particularities and effort involved in the collecting phase would be palpable somehow in the final work. Nor did I want to narrow the scope for how work could be experienced by imposing a single narrative. There is a danger that any inherent pranksterism becomes the only talking point. While defending the idea that art 'speaks for itself' (Table 02, point 44 and cf. supra, p.130) I have come, now, to see the investigative activity as legitimate to communicate about (Table 02, Factor 38). The tension between, being open to sharing background stories, and creating work which does not require them to be told, may be important in achieving resolution.

The points made about compartmentalisation in (Table 02, Factor 31) hint at another possible course of action. Through being forced to dilute the sanctity of designated time periods I became sceptical of the model which required complete devotion to a one-dimensional notion of artistic practice. It would be interesting to investigate whether a new avant-gardism, or challenging modus operandi, might be possible, especially given the

relationship between labour and technology now. The opportunity presented appears in line what John Roberts was noticing with certain tendencies in art in the 1990s: 'The net effect of this is the further discrediting of the idea of the Great Artist; this is the culture of the committed but occasional artist' (1996b). Roberts more recently describes the 'increasingly reflexive awareness of representation and artistic content outside of the professional institutions of art… [which] provide an informal culture of artistic production that 'nonartistic' producers participate in and learn from' (2014, p.1750/6041). What if one were to take this process as fact but attempt to invert or misunderstand its meaning? Instead of dwelling on the challenges to art institutions, it is possible to imagine some difficulty for the world outside when confronted by this leakage from those institutional frameworks. It is doubtful whether *ABC Artists' Books Cooperative* (cf. supra, p.153), would be open to this idea, given its orientation towards book fairs and focus on institutional critique, but perhaps the subject could be raised there. Or another grouping could be organised, which admits to the more radical possibilities inherent in the current conditions of art and life. Could participants deny that their 'day job', ostensibly mundane tasks carried out at home or other ordinary activities, were anything less than studio practice? Misinterpretation and deluded readings would be encouraged. The strategy differs from those associated with *BAVO* and other activist artists, such as 'over-identification' (Boie and Pauwels, 2007), in that here the ambitions are not consciously political. No extra production would be necessary: individuals would conceptually reappropriate what they already do. Any such initiative would need to bear in mind the risks of romanticising labour and overvaluing the everyday, in the way that popular culture does by comparison with allegedly elitist cultural forms.

Another directional change is being investigated. By definition appropriated data and 'found' digital materials, i.e. contemporary readymades,

provide a link with the past, but usually the very recent past. Increasingly digital archives and less organised sources referring to more distant periods are becoming available. Table 02, Factor 15 refers to use of historically significant found assets. I supported lead artist Peter Seddon and curator Barry Barker in the production of two moving-image works, which appeared in the Musée des Beaux Arts, Nîmes in 2007/08 adjacent to Paul Delaroche's painting *Cromwell looking at the corpse of Charles 1st in his coffin* (Seddon, 2008). By injecting assets, relating to historical events and persons of significance (in art, politics or technological fields), into a work, and in conflating meaning from different periods, untreated linkings between old and new are sometimes discovered. In 2014 I organised an event at the Silk Museum in Macclesfield to coincide with an exhibition of mine entitled *From Jacquard to jpeg* (cf. supra, p.38) which drew attention to the connection between compressed digital image formats and old weaving technologies (O'Connell, 2014b). More effort may be put into history-oriented projects. The notion of artificial stupidity gives permission to pay less attention to the usual agendas when revisiting emotionally and politically loaded archive materials.

It was felt necessary in this thesis to defend the right to produce simupoems and the reasons why have been given (cf. supra, pp.62-63, 129-130). I continue to create these films, which by design are a number of steps removed from the search and research activity. Just because some formal limitations have been set, does not mean that the works are somehow made to match. One challenge, in fact, in creating simupoems is precisely to avoid the complacency of succumbing to a style. Raw material for these might come from any 'project' but appropriation activities of the variety described in section 2.3 (which have replaced my interest in designing performances of the type discussed in section 2.2) are the key source. A number of new initiatives are being worked upon: one to do with speed cameras, another which would use satnav and maps apps,

and another connected with money flow between bank accounts. From these investigations, simupoems, readymades and blatantly descriptive outcomes may materialise.

4.2. Artificial stupidity's application to art and the socio-technical

As if to confirm the cogency of the thesis theme, an exhibition of work by notable artists, called *duh? Art and Stupidity* (Bramich, 2015) appeared during the final stages of writing. Paul Clinton, who co-curated the show with Anna Glitz, had already been guest editor of a special issue of *Parallax* journal devoted to stupidity (2013)[71]. Coincidently I had noticed *No Bra*, the electropop duo Clinton was one of (Berman, 2007), before knowing of his curatorial and academic interests. Their somewhat transgressive act may have lost its import for Clinton but queer mixing of other sorts remains evident in his curatorial, editorial and research work. The show at Focal Point (Focal Point Gallery, 2016), in its extolling of apparently stupid practices, and in its layout – one room, for instance, presented visitors with five different moving-image works screening simultaneously, all facing in the same direction – provided encounters of an unusual order but linked to convention. If fault needed to be found with *duh?* it is that much of this lampooning of the sanctity and aloofness of the art world has been done before. *BANK* collective's *Faxbak* (Bedwell, Thompson and Russell, 1998; Russell, 2016), an innovativly aggressive reaction to typical descriptive and critical commentary or art-speak, which featured in the exhibition, is two decades old. It'd be a mistake though to see Clinton's activity only in terms of an antagonism to perceived elitism, because examining stupidity - in the way that he, Glitz, the curated artists and *Parallax* writers have done - is contradictory. People can become quite intellectual in their anti-intellectualism. The collection at Focal Point Gallery and the content of the

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[71] Articles from the issue of *Parallax* in question have been referred to elsewhere in the thesis.

journal represent an exclusive cultural commitment to the subject[72]. Their stupidity is knowing and artificial.

A difference with *duh?*'s emphasis, is that I wish to take account of propensities for earnestness and not just irony, comedy, deprecation (Table 02, Factor 13). A spectrum of possibilities between the extreme poles of belief and cynicism can be imagined. Or one can countenance the simultaneous existence of both.

Secondly, in contrast to *duh?* and the associated texts, this thesis has not been so concerned with identity politics, nor the psychology and social science of stupidity. Appendix H interrogates the term 'artificial stupidity' more comprehensively but the thesis has focused on art practice and the links with my interest in the technological landscape, including AI. The writing has been informed considerably by past employment which illustrated the uses, but also the inadequacies, of scientific modelling and simulation. Anecdotes connected with the stupidity of AI occupy me first. The pancake robot fiasco was described in chapter 1 (cf. supra, p.43). One does not have to look hard to find further amusing or worrying case studies. While participating in *Going Digital*, a doctoral programme run by CHASE, Consortium for Humanities and the Arts South-East England (CHASE Going Digital, 2013a), a workshop at the East Anglia Film Archive (CHASE Going Digital, 2013b) was illuminating in this respect. A senior technician there explained how '[i]n digital restoration [of film] it is common to use a dust-busting algorithm to remove dirt and dust' but that this occasionally had unexpected effects' (see e-mail from Peter White, appendix G). The technique had removed the rain drops from the movie *Singing in the Rain*! On a more serious note, already referenced, was the air

[72] It will surprise few that, compared with the amusements and mini ice rink just outside Focal Point Gallery on the day I visited, the free exhibition was poorly attended. Attempting to connect with the vernacular does not stop art appearing elitist.

traffic emergency caused by bugs, camouflaged due to the sheer quantity of code (Appendix I, p.243). In his introduction to AI, Blay Whitby describes a potentially disastrous scenario when military specialists were 'training a neural net to recognize pictures containing tanks' (c2003, pp.57–58). Lastly, at the time of concluding this PhD, an article headed 'Artificial Intelligence fails to beat real stupidity' about a Twitter chatbot which had quickly learned to become misogynist and racist, appeared in one of the broadsheets (Whipple, 2016)[73].

An unusual mix of engineering science and artistic impulse informs my thinking about intelligence, AI and philosophy. Looked at sequentially, I had left technology and industrial systems, for art, but returned to them again, armed with alternative modes of reasoning. It would have been natural to align with new media practitioners, hackers, net artists, digital activists and technology artists, appearing at the likes of *Transmediale* (Transmediale, 2016), *Ars Electronica* (Ars Electronica, 2016), and championed by groups and venues such as Furtherfield in London (Furtherfield, 2016) and Lighthouse in Brighton (Lighthouse, 2016). And, to an extent I have done. However, I am uneasy when media-oriented criticism appears merely as content (highlighted in Table 02, point 10), and that is characteristic of a proportion of the associated work. Secondly, at the opposite pole, the frequent unquestioning emphasis on solely aesthetic effects is surprising. Thirdly, occasionally, exuberance about new technical functionality overwhelms critical thinking (cf. supra, p.46). I was attempting to navigate a route which was neither oblivious to these worlds, nor seduced by them. Some of my activity resembles institutional critique (cf. supra, p.153) though it appears that much of what can be done on that front, has been

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[73] As well as being due to error, there is the suspicion that ideology and prejudice are somehow embedded. It seems that the initial default conditions in the game *Sim City* are such that taxation is applied at the same rate across businesses and all sections of the simulated population, reflecting the common real-world media simplification.

done. What is more, pragmatic arguments in defence of institutional formalities are easy to list (cf. supra, pp.153-156). A significant difference in approach, compared with most digital artists, it my accent on the corporeal. Unlike Mishka Henner and Erica Scorti, both of whom I have shared exhibition space with, and in contrast with the work of James Bridle and others, who deal with the influence of the digital network, visceral elements, mess and bodily references are regularly included or inferred (cf. supra, p.93 and Table 02, factors 19, 20 & 40). I appreciate Sarah Lucas' use of eggs, certain work by Martin Creed and Paul McCarthy, the references to materiality inherent in Hito Steyerl's montaged films, the fact that Kenneth Goldsmith performs his poems and the unpretentious robotic creations of Simon Penny (Penny, 2010) and Paul Granjon (Granjon, 2016) which are far removed from sterile clichés of what a robot can be.

The presence of physical mess can be read bluntly as metaphor for an intellectual muddying of boundaries, acceptance of fluctuations in understanding – as seemingly advocated by the 'metamodernists' (Turner, 2011) - and a corrective for the human propensity to be categorical. Whilst reviewing work in this thesis, the approach in confronting key questions has been to expand and undermine definitions while remaining conscious of the value of the narrow meanings. The necessity of categories but also their shortcomings are revealed. Engaging with functional tools, processes and bodies of knowledge as though they represented a playground of sorts, serves to broaden thinking before sense can be made of probable nonsense. What appeared stupid in one circumstance was found to be intelligent for another. Feedback loops could be crucial or destructive. Likewise, for feedforward. These two concepts are not simply inversely related: feedforward facilitates feedback and vice versa. The relationship between platforms, bodies, forms and their content revealed itself as not being straightforward either. Form and

content can be considered one, or they can be thought of as separate. Similarly, code or intelligence can appear inherent to an agent, or as if mapped onto it. Representation is problematic and at the same time unavoidable. Performativity is advocated against the tendency to model, understand and predict, but - as in the feedback-feedforward discussion - both sides of the argument are defensible. A conundrum emerges too when memory, history, storage and tradition are set up as opposites to action, doing and adapting. And note that history can be envisaged as information stored or considered to be intrinsically present and evident in current behaviours. Attention was given to the significance of distinction-making and the creative acts of systems such as autopoiesis. Reproduction can imply giving birth to something identical, i.e. duplication, or it can be viewed dialectically: the process of art history is filled with new emergences which distinguish themselves as severe reactions to what went before. Creative activity can mean undoing existing distinctions and act as a remedy to the prospective horrors of entropy, eradication through merging, osmosis and their political relatives, complacency and instrumentalisation. The possibility of systems which integrate differentiated elements was discussed. For harmony it is necessary to evade both the risks of sub-systems merging and too-conflictual antagonisms. All of these binary tensions have been teased out during the course of discussing practice. Lastly, particular ideas about systems thinking and complex systems were proposed which will be returned to in the final paragraphs.

Returning to the social and political usages of ‘stupid’, which have not been the main focus of the writing. It is useful to cursorily inquire into them, in order to advance an argument which has direct relevance to the thesis. Firstly, it is worth saying, that there exists a logical basis for why the word ‘stupid’ is problematic. See appendix E which discusses ‘denying the antecedent’. It is unlikely that such rationalising explains why careful vocabulary is expected

nowadays when commenting on people's mental aptitudes (though narrow-minded comprehension of the meaning of exam results is still common). The response of my daughter, at the age of eight, to a question on the meaning of stupid (appendix C) confirms how the term has become unacceptable. She also made a contrary point about it being stupid to call someone stupid, referring to the risk of objurgation. And the prospect of schadenfreude is hinted at. Her comments reflect a mix, perhaps, of inherent understanding of the illogicality of the term and a sense of social pressure not to use it. Given the many objections though, what role can, or did, a term like stupid ever play?

Measurement of intelligence has been, and still ought to be, controversial. Avital Ronell, in her weighty discourse on the subject (2002), employs the exact phrase 'artificial stupidity' (2002, pp.59–60) as exposure of what she terms the 'dreary and terrifying history' (2002, p.59). Measuring intelligence, she asserts, can be a way of 'undermining an entire class of students' (2002, p.59), of labelling immigrants, and making acceptable terms like *moron* and *imbecile* (2002, pp.59–60). William Stern's presumably well-intended attempt to be objective by inventing the Intelligence Quotient (IQ) in 1912 (Colman, 2008b) had been adopted by Lewis Terman, an education psychologist and prominent eugenicist. Terman's influence in the US led to programmes of forcible sterilisation particularly in California (Larson, 1995, pp.32–39). 'African Americans and foreign immigrants were sterilised at nearly twice the rate, per capita, as the general population' (Larson, 1995, p.38). Ronell in turn refers to Stephen Jay Gould's *The Mismeasure of Man* (Ronell, 2002, pp.323–324; Gould, 1981). Gould, had, amongst other things, highlighted the case of Cyril Burt, a strong advocate of IQ testing in Britain. It is accepted by many, that Burt, who influenced the introduction of the Eleven Plus exam in the 1940s, and was knighted for his contributions in the field of education, had falsified his key data (Gould, 1981, p.264).

'"The other is stupid": this phrasing would characterise one dimension of the assertion', Ronell reminds us (2002, p.39). From 'stereotyping the Irish as wild and uncivilised' (Judd, 1996) the focus changed in the mid-nineteenth century to matters of intellect. It is perhaps no coincidence that the 'thick paddy' portrayals which persisted until the 1990s[74] were instigated by *Punch* magazine in the nineteenth century (Cathcart, 1994) during the infamous famine period. Apart from the convenience of jokes as a means of avoiding admitting culpability, there may be significance in the caricaturing having followed the first wave of emancipatory mass movements[75]. Women and Chartists[76] were mocked similarly. Speculatively, the attention shift had something to do with the move from physical to mental labour, inevitable with the growth of industry. Divisive humour 'is applied to rhetorically push away the "other" and to show that they or their opinions are beyond the pale, of common values being invoked'[77] (Meyer, 2000, p.327).

'Stupid' may be shorthand for describing alien and potentially threatening intelligences then. At the risk of being crass, having touched upon the serious human consequences of historical fixations on quantifying intelligence: 'othering' has certainly been prevalent within the art context. Those who laud 'craft' and 'making' are inclined to ridicule practitioners who take and reassemble. Appropriation artists see it as ridiculous to construct

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[74] The word Irish in fact is still occasionally used to describe 'a statement or action [which is]: paradoxical; illogical or apparently so' (OED, 2015d).

[75] From the French revolution onwards British power in Ireland was threatened. Various acts, attitudes and actions (or in a case of the mid-century famine: inactions) can feasibly be interpreted as responses to that rebelliousness.

[76] The period coincided with the rise of Chartism in Britain. Apart from their weight within the British working class (Engles, 1845) the Irish were prominent as leaders of the movement, exemplified in the political figure Fergus O'Connor. It should be noted that female involvement in Chartism was especially scorned in *Punch*.

[77] Coincidentally with the theme in this paragraph, the phrase 'beyond the pale' has its main origin as a descriptor for the area outside English and English-Norman rule in Ireland from the middle ages onwards.

something new in a world already full of stuff. Stuckists confront conceptualists (Tate, 2016b) and so on. Returning to technology questions: if there exist good reasons for the unacceptability of 'stupid' when applied to other human groupings, might it be reasonable, or even useful, to be disparaging about the apparent intellectual capacities of AI? My practice, after all, is often about poking fun at the faultiness of AI, technologies and processes.

According to Sadie Plant, Ada Lovelace, the prophetess of computing, chastised those who too quickly dismissed the possibility that calculating machines could acquire independent intelligence:

> Research into artificial intelligence (A.I.) has been governed by the overriding conviction that any sign of intelligence shown by a machine "is to be regarded as nothing more than a reflection of the intelligence of its creator," and developed as a program which might just as well have been called artificial slavery or stupidity (1998, p.89).

Lovelace's thinking was brave and profound for the early nineteenth century. Now however it is becoming unorthodox not to join in with apocalyptic predictions relating to the power of technology. Fiction prefigured it, but contemporary science too presents images of the Frankenstein's monster variety. It would have been ignorant indeed though, not to read Shelley's masterpiece as allegory. Lovelace and Shelley had a loose connection in the shape of the, evidently monstrous, Lord Byron, but the appropriate interpretations relate to the revolutions of that time: French, industrial, social and environmental. Similarly, in addressing the subject of AI, the automatic, technological or robotic elements can be thought of as signifiers for overriding more nebulous processes. Already, at the beginning of the thesis, licence was taken to expand on the definition of intelligence and little was done there to distinguish between the human biological and artificial varieties (cf. supra, p.35). The potential for technology to programme people was touched upon in

response to a question about *Contra-Invention* in the interview in appendix D (p.218). Similar points were made elsewhere in the thesis as wider definings emerged (cf. supra, pp.84, 85, 107). 'Artificial intelligence' can be stretched to include not just '[t]he capacity of computers or other machines to exhibit or simulate intelligent behaviour…' (OED, 2016b) but systems and processes of all sorts: architectures, customs, rituals and even invented understandings of the situation, belief and theory. In one of the *Parallax* issue articles, Claire Colebrook paraphrases arguments of Edmund Husserl and Henri Bergson as follows: humans 'extend their thought into sophisticated technologies, and yet allow that same process of extension to deaden and stupefy the very life it initially aimed to preserve' (2013, p.24). But 'sophisticated technologies' do not need to be thought of only as tangible. If a wide-ranging conception is accepted, then it becomes possible to see the visible interactive elements, almost as symbols, for the equally significant bureaucracies and processes which have evolved over time.

The interventions described in section 2.3 reflect my interest in exploring the potential for human reaction to these kinds of broadly technological concerns. Overlooking social stratification and existing human-human conflict is naïve from a political economy standpoint, but, can be a ground for play with ideas. Instead of dwelling on the possibility of murderous futuristic robots, 'cognitive computing' destroying jobs (Rotman, 2013) or, worse still, robots playing caring roles, it might be useful to recognise what there is now. Highlighting the inadequacies, glitches and oversights built into municipal processes, supply and delivery systems - illustrated by the mundane information which lingers online (Figure 28) - serves to illustrate instead the fragility and inherent stupidity of technology.

Apart from noticing the inevitable imperfections, an aspect of stupidity's etymology includes: '[e]motionally or morally dull or insensible; apathetic,

indifferent… the characteristic of inanimate things: [d]estitute of sensation, consciousness, thought, or feeling' (OED, 2015f). This definition arose when

41636860 Details

Reference	28259
Pick up date	20 Nov 2012
Delivery service	EXPRESS
Destination	BRIGHTON
Delivery date	14:38, 29 Nov 2012
Items delivered	1 - click here for full list of items
Items left at	HOUSEHOLD DELIVERY
Signatory	o connell

Date	Time	Location	Status
29 Nov 2012	14:38:00	CRAWLEY	Shipment delivered in good condition.
29 Nov 2012	09:51:37	CRAWLEY	Out for delivery.
29 Nov 2012	09:25:59	CRAWLEY	Shipment received at destination depot.
29 Nov 2012	08:11:46	CRAWLEY	Please call
28 Nov 2012	08:10:51	CRAWLEY	Delivery date changed as requested by sender or receiver.
27 Nov 2012	17:49:48	CRAWLEY	Delivery date changed as requested by sender or receiver.
27 Nov 2012	08:05:14	CRAWLEY	Shipment received at destination depot.
26 Nov 2012	21:49:13	CRAWLEY	Shipment received at destination depot.
23 Nov 2012	19:27:08	CRAWLEY	Delivery date changed as requested by sender or receiver.
23 Nov 2012	14:36:05	CRAWLEY	Receiver not home. Follow up action underway.
22 Nov 2012	23:38:55	CRAWLEY	Shipment received at destination depot.
22 Nov 2012	17:35:50	CRAWLEY	Shipment received at destination depot.
22 Nov 2012	01:46:36	CRAWLEY	Shipment received at destination depot.
21 Nov 2012	02:45:22	CRAWLEY	Shipment received at destination depot.
20 Nov 2012	17:15:38	MILTON	Shipment received at origin depot.

back to summary / input screen / Click to view POD image

Signed by: o connell

Figure 28 Parcel tracking data for repeated delivery attempts and POD signature, 2012

discussing the meaning of silence (cf. supra, p.71) and is referred to in appendix H (p. 237). Is intelligent machinery not stupid in precisely this sense? All the attempts to convince of authenticity - from vehicles being attributed names and imbued with human qualities, to ATM machines which thank their users, to technological simulation of affect and even Boston Dynamics' robots (*Atlas, The Next Generation*, 2016) – are, so far, hearteningly pathetic. The infrastructure, sometimes visible, sometimes not, exerts control, but it is, one could say, pathologically lacking in empathy. Anxiety about the simulation of affect has been touched upon (cf. supra, pp.32, 85) but perhaps there is a fundamental reason why the 'emotional intelligence' (Goleman, 2004; Chapman, 2005), it has

become fashionable to encourage, remains impossible to model[78]. Referring specifically to care-bots recently, 'Prof [Margaret] Boden said it was unlikely that technology would ever succeed in matching the complexity of the human brain' (Knapton, 2016).

A more obscure point about the stupidity of AI connects with *No Bra*'s scorn for one-upmanship expressed in their *Munchausen* (No Bra, 2006). Exaggerating about experience, 'name dropping' or claiming to know what one does not, are behaviours characterised as 'pretentious'. And is artificial intelligence not almost a synonym for pretentiousness? AI pretends to know. People, found guilty of such, are usually identified, not as being worldly wise, nor articulate, but stupid.

Appreciation of the significance of other agents within a network has been advocated (cf. supra, p.98) and the cybernetics philosophy certainly aligns with such thinking. It would be a worrying situation though, if the ethics applied in human relations, were soon to be extended to machine intelligence[79]. A degree of condescension still identifies the significance of technology (by comparison with inert matter) though. Is there not a new case for exploring human exceptionalism within this network? Donna Haraway issued the reminder that '[w]e can be responsible for machines; they do not dominate or threaten us'? 'We are responsible for boundaries…' she said (2007, p.315)?

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[78] Nick Flynn for instance writes of 'the immensity of the task' of building emotional intelligence into the justice system which he asserts would require 'nothing less than a complete reconfiguration of emotional and intelligent life' (2014, p.365).

[79] Though science fiction continues to pose exactly these kinds of questions, most recently in a chilling episode of *Black Mirror* (*White Christmas*, 2014).

4.3. Artificial stupidity and the art system

According to the text on Focal Point's website, 'artists have repeatedly drawn upon stupidity, or playing stupid, as a form of dissidence, irreverence or as a means to cast off received thinking' (Focal Point Gallery, 2016). This proposal gels with my philosophy of what artistic action is: the key phrase being 'playing stupid'. With reference to *BANK* (cf. supra, p.242) and similar John Roberts had already written of a 'thinking stupidity' (1996b):

> there is the unthinking stupidity of the philistine who sees his or her rejection of the dominant discourses of modern art as univocally true, and the thinking stupidity of the philistine who sees the rejection of the dominant discourses of art as a matter of ethical positioning.

Towards the end of his book on errors he states: 'I am not advocating passivity or stupidity as modes of enlightenment – although acting stupid… has its occasional diagnostic and corrective moments of lucidity' (2011, p.248). Artists, he elaborates 'may spout nonsense, or make fools of themselves with impunity and in good faith *across aesthetic reason and non-aesthetic reason*' (2011, p.249).

Artists clearly exploit artificial stupidity then. Is the concept useful in describing the things, performances and appropriations which are still labelled art though? Appendix A discusses Glenn Ligon's installation as a system of sorts. In section 2.3.3, a cybernetics of *Hunt and Darton's Café* (cf. supra, p.107) and my work *Worn Outing* was posited. Both these performative interventions appear robust and capable of navigating through geographies of space and time. Other works, some physical, some not, were referred to similarly. When discussing Richard Pryor's influence, it was proposed that anything or any coherent set of connected data could be considered a system (appendix A, p.204). Whether something is art or not, is a purely epistemological question.

Given what we have said then, artworks, can be characterised as systems. They are, by definition, artificial but are artworks stupid? To be reckoned so, they would need to be seen, but, for the most part, contemporary and post-conceptual artworks are not discernible, except within the art system. About her sculptures, Sarah Lucas says that 'other people don't pay a lot of attention' to 'formally what kind of object it is' (Freedman, 2007, p.142) though she believes 'the public does like art', adding crucially: 'they enjoy having a go at it" (Freedman, 2007, p.143). In reviewing a particular work by *Goat Island Performance Group* (Goat Island, 2009), Jane Blocker states that '[t]he contemporary is, by nature, stupid' (2013, p.10). On those occasions when attention is focused on contemporary artefacts, such as the annual ritualistic outcry surrounding Britain's Turner Prize, the lampooning can be substantial. The works are made to appear stupid.

With reference to 'the idea of Richard Pryor' as a system just mentioned, the citing of complexity theory (appendix A, p.204), the potential for 'imagined feedback loops' (appendix A, p.205), Caroline Bassett's remarks about fuzzy cybernetics (cf. supra, p.27), her highlighting the possibility of definitions being too hygienic (cf. supra, p.55), and the empirical nature of SD modelling (cf. supra, pp.54-56): I am advocating flexible, open, less stable, and even speculative applications of system theory. Niklas Luhmann's treatment of *Art as a Social System* (2000) has been a major influence. However, as implied in the discussion on in section 3.1 (cf. supra, pp.135-136), his seeming insistence on functional systems' lack of interference with each other, does not sit completely comfortably with the proposal above.

Luhmann was not dealing with questions of intelligence either but motives have been hinted at for why art (as a system) would benefit from appearing stupid (from the point of view of other systems). In being seen as

harmless[80], it profits from the kind of mystique which surrounded the idiot savant or court fool of old (cf. supra, pp.79, 96) and the deep affection which existed for Rabelais' 'clowning wisely (en folastrant sagement)' (Bakhtin, 1984, p.60). Special freedoms may be granted artists (cf. supra, p.153), and just as self-induced stupidity can lead to individual discoveries, the system benefits from being able to creatively transform itself. Even though a social system is not simply the sum of its human parts (cf. supra, p.137), art can achieve these ends just as individual artists would: by refusing to reveal all its secrets, through silence, obfuscation and codes, misusing elements from other functional systems and wasting time on apparently meaningless production.

Stupidity alone would not be enough because stupidity is dangerous and the system would be putting itself at risk. Art hands over a proportion of its output, in the form of objects or ideas of value, to other functional systems[81]. Andrew Pickering intimates that art may be a force for good (cf. supra, p.83), it is often considered vital, while others question that (cf. supra, p.135). Ideas generated through artistic production are now accepted as academic research. It is feasible that, along with the links to critical thinking and activism, artistic output influences entrepreneurialism and feeds capitalistic innovation. Undoubtedly, especially endorsed artefacts are used to store wealth in the manner of gold, giving rise to an art market. In addition, exhibitions, performances and artistic practices are commandeered for governmental objectives or as part of regeneration exercises. Art is valued for therapeutic

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[80] It might be argued that art is only tolerated when it is politically unchallenging. A more convincing source of the need to play the fool, already highlighted (cf. supra, p.133) – which inspired art's 'ironization, belittlement, adulteration' and triggered the 'deflationary logic' - is 1917. That year brought with it Duchamp's *Fountain* and also the Russian Revolution (Roberts, 2015, pp.66–67).

[81] Lewis Hyde's dealings with the notions of *Trickster* (2008) and *The Gift* (1988) would appear to map, respectively, onto the two characteristics being attributed to the art system here: artificial stupidity and gift giving.

purposes or it can entertain. Its infrastructure is often shared with other functional systems. No cynicism is intended in these sentences. As Luhmann puts it: ‘a self-oriented art system searches for "supporting contexts" that leave enough room for its own autonomy and its own choices’ (2000, p.159). The proposal here is that art survives by cannily alternating between pretend idiocy and gift-giving to other functional systems such as academia, commerce and politics. That is not to say that every artist operates in this way, though in the past century and with the influence of popular culture, they often have.

4.4. Conclusions: contribution to knowledge

What has the 'contribution to knowledge' been? The period of PhD research provided an opportunity for the relationship between my artistic activities and the techo-industrial landscape to be articulated. The invention and application of the term artificial stupidity is the first contribution to knowledge. I use the notion in three ways: i) as an expression of the dysfunctional aspects of AI, ii) as a description of something fundamental to the creative process and, iii) as a portrayal of how art as a system operates in relation to other functional systems. Additional applications of the term are touched upon in the dissertation and listed in appendix H. Secondly, the body of practice outcomes itself constitutes a contribution to knowledge. The art works, though precedents exist, are original and have been endorsed as such by a wider community. Undoubtedly, a reason for the originality, is that the link between systems and engineering concepts, and performance-oriented artistic practice, is an unusual one. In addition, I have been able to draw conclusions which are pertinent to technological spheres, and systems thinking, as well as art. The argument that processes of all sorts, which extend outside computational hardwares, and whose origins precede computing, are analogous to the frequently discussed algorithms, and warrant equivalent critical attention, is a third contribution to knowledge. I imply that there isn't something *more* to worry about with AI, and that warnings about futuristic genocidal robots and so on are a distraction from the more urgent matter of complacency about less perceptible codes, processes and systems. Fourthly – and this is connected with the third use of the term artificial stupidity, point iii above - a position is adopted which is somewhere between Niklas Luhmann's insistence that systems do not control each other and John Roberts' promotion of the continuing relevance of an avant-garde. The latter's arguments must

imply a radical political role for art whereas Luhmann would almost deny that possibility. In my scheme, systems can and do influence each other but they are robust enough to maintain their sovereignty. A cautious defence of art's separation from other systems is made then, but not to the extent that Luhmann argues. I speculate that art is a system which maintains its autonomy because it appears 'stupid' from the perspective of other systems but that it is, inadvertently, occasionally functionally useful to these systems. In addition, and fifthly, I advocate for flexible and pragmatic applications of systems theory rather than seeing ontological truth as their underlying basis. Complexity theory calls for such an approach and the empirical usages, frequently made for industrial and commercial purposes, amount to additional evidences in support of this argument. Along with these five areas, new ground is broken on other fronts, either by default, or as side effect. A practice-led research methodology, which partially defends an act-first-think-later approach, is established. In other words, artificial stupidity is made use of as research technique. Art practice is shown firstly to be a valuable means of producing concepts but then practice can be woven into the development stages of a research project too. A way of interrogating dichotomies and concepts of importance, such as intelligence versus stupidity, representation and embodiment, feedback and feedforward, the contemporary emphases on performative ontology, distinction making in opposition to entropic processes and so on, evolved in the course of the writing. Definitions and oppositions are undermined and expanded upon but reembraced again, in order to assert their true usefulness while remaining aware of potential limitations. The problematics of representation, realism and the significance of photography in this regard is something I intend to investigate further in the future.

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Appendices

Appendix A Glenn Ligon's *Live* (2014)

Live, an installation by New York artist Glenn Ligon (*Anon*, 2014), acted as a guinea pig to test my assertion that feedback loop theories, and the concept of 'artificial stupidity', were useful frames for discussing art. Interrogating one piece of work by an established contemporary artist, and drawing on other knowledge, provided a method for treating my set of post-conceptual practices. Ligon's piece connects with my past research into the import of comedic performance, and the significance of the joke. An interview with comedian Stephen Carlin (Burgess, 2010) who had been asked to visit the installation, which informed the writing, is contained in appendix B.

Ligon had worked with original footage of iconic stand-up, Richard Pryor in action. Aspects of a video recording of the comedian's 1982 performance, *Live on Sunset Strip*, were presented via multi-screen installation. A total of seven screens and projections, of varying size, positioned or hung at different heights, facing inwards or flush with the walls, (Figure 29, p.200) replayed moments from the famous one-hour performance. At any point a number of screens remained blank while others were active, showing either cropped or full frame sections of the same segment of raw material. Crucially the installation was silent. Removal of the soundtrack, i.e. joke content and responding laughter, intensified the focus on Pryor's dissected body in action, his gestures, hand and arm movements, the lips, face, teeth and crotch area, and also his shadow on stage, while he delivered the legendary routine. Stephen Carlin describes the room in his words in appendix B (p.207).

The impact of having groups of screens switch off at unpredictable intervals (no pattern was immediately apparent) while others remain active

was: a) to deny the possibility of meditating for too long in any one position; b) to reduce the emotional impact and the scope for typically empathetic, perhaps even pitying or tearful responses; and c) to prevent over-analysis of the performer's methods. In reality all three possibilities for meditation, emotion and analysis were inevitable to a degree, they were surely intended in fact, but the timings and configuration were such that complacency or the possibility of being stupefied by the experience, were ruled out. Instead of spectacularity and seductiveness, associations easily made with installations by Bill Viola and Pipilotti Rist respectively; *Live* evoked a feeling of unease, not unlike the awkwardness experienced when a comedian falters in their mission to incite laughter and 'dies' on stage. This skewed link with the stand-up comedy format supplemented others, not least the evocation of 'comic timing' interpretable in the switching on and off of screens. Participant-spectators entering *Live* were kept on their toes, compelled to act, move or turn around. Noticeably some left the room and returned again (see appendix B, p.207). Ligon's creation is Brechtian in that awareness of the reality of the situation is heightened at the expense of easy escapism. *Live* is loaded in terms of intertextual references. The layout of screens defied usual expectations, though that is not uncommon with media art and there are other precedents. Not long before, I had seen a major Kazimir Malevich retrospective at London's Tate Modern, which included a reconstruction of his 1915 *Last Futurist Exhibition of Paintings* (Shatskikh, 2014). Though the historical situation was radically different, the arrangement was analogous. The focused intimacy generated by Samuel Beckett in *Not I* (1973) is brought to mind too, but Ligon's subject matter and the significance of colour, including skin colour, activates other levels of poignancy.

While race questions, the issue of bigotry and the recent historical condition and experience of African Americans, are not uncommon subject matter for Glenn Ligon, the reasons are firstly simply because that is his milieu,

Figure 29 Glenn Ligon installation: *Call and Response* Camden Arts Centre, 2014-15. Photo: Valerie Bennett

the ordinary backdrop for someone born in 1960 in The Bronx. With reference to the arguments of Richard Dyer (1996, pp.1–14), attention would not be given to a white artist's dealing solely with 'white' topics. So ideally it would be possible to escape the cliché of focusing on questions of race when considering this work. Interestingly however Ligon does not allow that line to be taken here either. The exhibition as a whole, *Call and Response*, encouraged engagement with questions of ethnicity, culture (and gender) if only as a means of permitting the viewer/participant to get that over with and appreciate what else had been created. There was no discernible message nor overtly political objective. *Live* and the other pieces in this exhibition did not 'preach' and clearly not out of fear of being explicit. Nor did the results appear pretentious in the way that deliberate vagueness or conscious attempts to avoid didacticism can. The reductive processes of subtraction and dissection permitted new kinds of

meaning to surface. A similar technique was developed with respect to the looping animations I call 'simupoems' (O'Connell, 2016b). Efficacious combining of something which is loaded both emotionally and politically with what might be called aesthetic concerns, is Ligon's great achievement. One of composer Steve Reich's scores was incorporated directly into another work at the exhibition, *Blues*, and the minimalist's material was the basis for the content of a third room at the exhibition also. The links are no surprise when Reich's *Different Trains* (Metheny, 1990) is considered, a composition which responded to the darkest episode in human history[82]. Poetry was possible after Auschwitz[83] and Ligon positions himself squarely as one of those who can and should be able to face this kind of intensity.

Taking Richard Pryor out of context, selecting elements of the prior recording and eliminating the comedian's 'material' freed-up other forces, which is not to say that the thing was 'open-ended' in Nicholas Bourriaud's designation, and as critiqued by Claire Bishop (2004, pp.53, 60, 68–69, 72). Rather than providing satisfying, but one-dimensional, moments of comedic entertainment *Live* felt like something that 'approaches the status of humour' (Dennett, Adams and Hurley, 2011, p.280). English professor Stephen Booth argues that the 'ideation pun' or 'almost-pun' was crucial in Shakespeare's writing (ibid.). Or sensations associated with being tickled or amused may be experienced simultaneously with opposing effects, so that they fuse together or repel each other and produce a more complex result. Pryor himself, a twentieth century clown, was entertaining but provocative, political yet nihilistic,

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[82] Reich's work mixes materials from experiences of his own boyhood travels by rail across the USA between the households of divorced parents with references to the trains carrying Jewish people and others to the concentration camps during the Nazi regime.

[83] It should be remembered that Theodore Adorno who is credited with the famous phrase 'no poetry after Auschwitz' later corrected and partially retracted his statement (Adorno, 1973, pp.362–363).

represented simultaneously underdog and high-status figure and embodied other inconsistencies connected with the hegemonic structure of his time including those related to sanity and intelligence.

A word might be said about comedy here. At first sight it would appear that to entertain others and make them laugh requires a 'theory of mind'. The mentally unwell, those deemed 'simple' or unintelligent were laughed at though. Bigotry can be a factor. Through simply making a mistake or behaving unusually a person may inadvertently amuse others and unwittingly become the butt of jokes. Infants are often on the receiving end of an endearing version of this 'laughter at'. Through trial and error, a person may discover how to make others laugh, without presupposing how they think. Stephen Carlin alludes to the skills involved (appendix B). Presumably though, learning through feedback would lead the joke-teller to refine empirical models over time. To be consistent, a comedian like Richard Pryor would surely have had to develop more profound insights while perfecting his craft. This is the enigma with comedic performance. Incongruously, appearing the fool can be judged brilliant. For many Pryor was a genius, and that reputation is amplified by the knowledge of his having come from poverty, succeeded against the odds and not overtly resorted to undignified 'Uncle Tom' strategies. As noted, Ligon switched off the sound; all that was left were the performer's silent movements. The content, Pryor's acute observations formed into jokes, the evidence of his intelligence, were not available and thus he appeared vulnerable. Passers through the installation were denied the possibility of being able to attribute either of the extreme categories, genius or idiot, and instead were worked upon by formal and knowingly aesthetic arrangements: the repeated dynamics, the fabulous colour of Pryor's suit in contrast to the surround, rectangular compositions, the low resolutions and painterly effects, the oddly seductive and yet dissonant musical qualities of the work. Not only that but ironically we

were left wondering, or trying to remember, or paying more attention to the words that would have been and realising the significance of 'content'.

The original Richard Pryor performance was not documented in 1982 with the expectation that it would be treated like an archaeological specimen or utilised as Ligon has. Understanding of that event now has been modified by subsequent related events. We can only hypothesize as to whether Pryor himself unconsciously wondered about how he would be seen by posterity. Even if he had been concerned, any attempt to foresee would have been highly tentative. Feedforward, the utilisation of prior knowledge, models, representations, memory and 'intuition' in forecasting, despite centuries of scientific endeavour, is a poor mechanism in complicated situations and for determining long-term perspectives. This insuperability in looking ahead does not mean that there is no future for whatever entity or system is under consideration though. And why should an agglomeration of knowledge not be seen as system, robust enough to survive and not be altered to the point of destruction through feedback? Feedback allows systems - and here Richard Pryor and also a particular event in 1982 are being treated as such - to navigate into the future. Feedback, to cite Andrew Pickering, is 'a mode of performative engagement with the world' (2011, p.19), a means of 'getting along with… systems that can always surprise us' (2011, p.23). Feedforward and feedback play off each other so that bodies of knowledge which are generated and changed through navigation in space and time - systems or entities in their own right - not only steer a course of their own but spawn offspring in a process called 'autopoiesis' (Luhmann, 2000, pp.49–50). The suggestion here is a kind of hierarchical and overlapping cybernetics where systems contain systems and systems give birth to systems. For this several kinds of memory are necessary, and these too will be dynamic in nature. Richard Pryor can be seen as still living then, giving even more significance to the title of Ligon's work; the performer

emits signals from beyond the grave as it were and is transmuted by information flowing back. Ligon is part of the interference. He has taken Pryor, filtered, dissected and reworked him so that the world has an updated version of the system, object, concept, or (controversially perhaps) brand, to deal with. The argument here is in tune with the advanced system thinking and cybernetics, proposed in the light of complexity theory (Walby, 2003), though I am advocating purely epistemological applications. The title of the show, *Call and Response*, can be interpreted perhaps literally as referring to meta-level feedback circuits operating over historical timescales. Looked at in this way, what is called art then, is very much involved in the making of history, and not just its own.

Removing the soundtrack meant that the original joke output was silenced but, so also was the responding audience laughter. Laughter is contagious apparently. People laugh simply because others are doing so (Provine, 1996, 2000, p.45) and that second trigger was not present in *Live* either. Ligon's exercise in deletion, segmentation, and reconfiguration allowed for concentration on other facets of, and for new responses to, the performance. Richard Pryor though silent in more ways than one - he'd died in 2005 - was able to speak to visitors here. These passers-through though constituted an active live audience for the dead comedian.

Also in 2005, I supported the collective *Common Culture* (Durden and Campbell, 2015) with a project of theirs entitled *Local Comic*. Stand-up comedians were hired to perform, but sadistically perhaps in an empty venue; empty that is except for the presence of two video cameras which recorded them. A variety of experiences were disclosed by the comedians afterwards. They'd been asked to complete their 'set' and then carry on for as long as possible. Despite the lack of tangible feedback, in the shape of laughter or boos, some felt they'd done well, others were dissatisfied and a few commented that

they'd 'died on stage'. Most were fatigued by their efforts as if after a real show. The practised professionals had been able to imagine an audience, or seen the cameras as portals to one, and thus overcome the invented obstacles. Most felt they'd learnt from the ordeal. One or two were angry afterwards. The initiative raised questions, as did *Live*, about the comparability of imagined feedback loops with 'real' ones. The implication is that things can change endogenously and that even a 'closed system' is not a stagnant one. Our knowledge of Richard Pryor changes with time irrespective of what Richard Pryor had done before and regardless of Glenn Ligon's more recent re-presenting.

The apparently stupid act of deliberately eliminating elements in active circuits or tinkering with processes like Ligon and *Common Culture* do, can bring unintended benefits or increase understanding, much in the way stress-testing or HAZOP studies (Kletz, 1992) are used to improve industrial systems. Andrew Pickering used Flann O'Brien's fictional magic mangle (O'Brien, 2007, pp.109–113) which was able to stretch light (2007, p.112) as metaphor in his book on 'the nature of scientific, mathematical, and engineering practice and the production of scientific knowledge' (University of Chicago, 2016; Pickering, 1995, p.21,23). In other ordinary ways an installation like *Live* can have practical value. By coincidence Stephen Carlin had become interested in the importance of non-verbal communication so the experience with Ligon's work appeared of direct relevance. 'I wish I'd seen that when I started stand-up actually. I found it very interesting from a technical point of view' (appendix B, p.207). *Common Culture* however were not evaluating features of popular culture with a view to improving the entertainment experience or helping professional entertainers. To state that errors are 'portals of discovery' (Ratcliffe, 2015a) is quite different to the usual adage about learning from mistakes. It is not normally the aim of artists who mess with systems and tamper or hack existing designs, to improve their functionality, ameliorate problems, generate academic research papers or

make propaganda about the amount of surveillance. Ultimately, meaning is revealed or a discovery is made in relation to the art order, its history and references.

I have employed similar methods of subtraction often, notably in the creation of two works (simupoems) *Dying* and *Sinking* in 2006 (2014d). *Dying* is a looping animation which uses a found recording of Winston Churchill telling a joke about his own mortality. The responding laughter was edited out. For *Sinking* segments from an audio track, and other components of an installation, were removed until all that remained was 'canned laughter being played back in a darkish theatre-like space containing rows of seats organised diagonally' (O'Connell, 2014d). A key link between my work of this type, Glenn Ligon's *Live* and *Common Culture*'s *Local Comic,* is that the subject matter relates to comedians, joke telling and laughter. Jokes are extreme examples of pared down language: the craft of comedy writing has everything to do with subtraction too. If the comedy entertainment situation itself can be modelled as a feedback loop then *Live*, *Local Comic*, *Sinking* and *Dying* are dysfunctional versions, but all four of the works are consistent with criteria of concern to the art system. Jokes are devices of interruption just as new artworks are with respect to previous: they seem to fit with what Niklas Luhmann says about artworks in that the 'viewer can follow the directives for adequate observation embedded in the work's own formal decisions' (2000, p.76).

Appendix B Interview with Stephen Carlin about *Live*

The following is an edited version of an interview conducted with professional stand-up comedian Stephen Carlin (2014), just after he had spent some time in Glenn Ligon's installation *Live* (Camden Arts Centre, 2014):

MOC: Describe what you saw. How would you describe the experience?

SC: Basically there were various screens showing a comedy performance, a stand-up comedy performance by Richard Pryor. There was no sound so it was just visual. Each of the screens seemed to be zoomed in on a different part of it. For example, one screen showed a close-up of his mouth and one showed his left hand, a close-up on that one, and his right hand. Others showed his body without his head.

They seemed to be coordinated, i.e. that it was showing the same moment in time from different angles. Some of them had a jerky effect. I was curious about how they achieved that. I don't know if that had been imposed upon the film later on.

Basically the screens came on, I was trying to work out the sequence of them as well, what sort of sequence because they weren't all on all the time. I found it interesting. I'll tell you what, I've been watching stand-up with the sound down recently because I have been focusing on body language a bit and facial expressions and that kind of thing.

MOC: Oh really? That's a coincidence.

SC: I wish I'd seen that [*Live*] when I started stand-up actually. I found it very interesting from a technical point of view but then I'm not coming at it as a layman in that sense.

MOC: I was going to ask you how you felt or how you feel about it?

SC: My attention dipped in and out a bit. I engaged with it and then I'd get distracted a bit in my own head and then I'd come back to it. I

wonder if audiences do that when they're watching a comedian anyway, that you're not with them.

MOC: Yes, I mean a one-hour show is quite a long time so presumably people-

SC: I mean there was one moment where I worked out, he [Richard Pryor in the film footage] said, 'Fuck you,' or something and I could see that very clearly but I wasn't trying to work out what he was saying at any point.

MOC: That's interesting.

SC: I was really watching the stage craft.

MOC: Was there any emotional impact?

SC: Yes, I mean it didn't feel good. I don't know. I felt in some ways a bit disconnected from it because I essentially don't know what he's saying and you couldn't always see all of him. I felt in some ways a bit left out and alienated from him.

MOC: What do you think Glenn Ligon, the artist, was trying to do? I mean you're not necessarily thinking about it from a 'contemporary art' point of view, you're thinking about it as a comedian but maybe you can speculate.

SC: Possibly that different people take away different things from the same performance, that they see different things from the same performance, that there's different elements in the performance. I was very conscious of watching his hands. He'd be gesturing with one hand and the other hand holding the mic stand or whatever.

MOC: I mean it's peculiar in a way because that record of the performance, which you can buy on DVD - it's not on YouTube; there's bits and pieces. I mean ironically there's an album for sale which is just the

audio. It's ludicrous in a way. It wasn't intended to be used in this way. What was created for one purpose might be used in another way.

SC: Yes.

MOC: I was going to ask you, is this of any interest to comedians, and you've answered that partly already because you yourself have been looking at silent versions of other comedians.

SC: Yes, I've started doing it, particularly if it's a set or a comedian I haven't seen, watching the first five minutes with the sound down. I've no idea what they're talking about and then watching it again just to see what they're then talking about.

MOC: Because there are physical comedians, aren't there, that are really openly energetic? A fundamentalist view of stand-up comedy is that it's about very little movement though.

SC: Yes. Well I mean I did a gig on Thursday and this woman said at the end: 'You had great presence because you were very still.' I think that's just the experience of being comfortable on stage. I wouldn't even think about that or know how to go about doing that. I don't know if it's about being very still. It's probably an economy of movement, where you move, it has a certain purpose and it's not aimless.

I mean I find, he's not a comedian obviously, Mark E. Smith compelling to watch as a performer because he seems to a) not give a shit about the audience and b) have such an absence of traditional performance skills that it's actually compelling-

MOC: Apparently he's learning to sing.

SC: I don't know how that will affect his acting, taking a new direction.

MOC: I mean I've seen him go off stage and completely disappear with the mic for ages while the band continues to play. He knocks on the

drums and interferes with the keyboard playing. Ted Chippington used to perform at Fall gigs, didn't he? Have you ever seen Ted Chippington?

SC: I gigged with him once and I do have a boxset of his stuff. I must admit I haven't listened to all of it but yes.

MOC: I was going to ask you again whether it was difficult, boring or interesting in some way to visit the installation.

SC: It's definitely interesting.

MOC: Is it challenging to walk into something like that?

SC: At moments difficult I think. I didn't find it boring but funnily I didn't want to leave it. I could have stayed in there for a lot longer.

MOC: That's an interesting thing to say because I think it does suck people back in, doesn't it? It seems to seduce people in some way apparently because there seem to be puzzles to solve.

SC: I think so.

MOC: What are the patterns you noticed? What's the routine?

SC: It's when you can see something and you can't quite – I don't know if you've seen the film 'JFK' but there's a scene where it's in the Pentagon and it's a conspiracy theory about Kennedy's death. There's some high guy and his name plate on his desk is just slightly out of focus. You're squinting to see but obviously you can't because it's the way the camera is. It's actually the fact that it's almost there and I just can't quite read it.

MOC: Well I guess there's a big difference between let's say entertainment and comedy and that kind of approach [Ligon's]. Deliberately stopping short on satisfaction isn't something that is common in the stand-up comedy world. I think Ted Chippington does it actually, hence his failure commercially and all sorts of other ways.

Stuart Lee doesn't do it to the same degree. There is only so far you can take that, isn't there?

SC: You would think that having more views of it would give you a bigger picture and actually I felt the opposite: that it was getting further away from me. I couldn't keep track of it because it felt like there were various things going on at once. Of course there always is but I didn't have such a coherent view of the whole performance.

MOC: Interestingly the piece is called 'Live' and maybe part of the point is to really let you know that this is very different from live. In fact, all that footage gives you something which is precisely not close, you're not close to that individual. Maybe it's quite multi-layered

SC: Yes… Well I suppose a comedian's trick is to make them [audience members] feel that you are close to them, you've got an affinity, you do share something of their world and you understand them and they understand you.

MOC: It is a trick, right?

SC: Yes, but there [in the installation *Live*] you feel away from that.

MOC: It's potentially a reminder of the truth of the situation, that you're not actually meeting that person on a human level. I mean there's something about live performance that is not direct. Hundreds of people on one side, one person on the other, it's not as if that's intimate.

SC: Well you must have had that[84] where somebody comes up to you after a gig and immediately assumes they already know you. The way you would have that normal introduction to somebody you've never met before, they've skipped a few levels. There's a familiarity that they

[84] For a period I performed as a stand-up comedian.

have with you that you don't reciprocate at all and it feels odd. You have to learn to deal with that.

MOC: I was shocked by that actually. I mean I only did it for two and a half years but I had 10-minutes at The Comedy Store once and it didn't go very well. In fact, the example was at the opposite extreme. I was sitting at the bar, because I always liked to watch the other acts. Daniel Kitson was on as the headline act after me.

Before, it was in the interval, I heard two people saying, 'That Irish guy was shit, wasn't he?' I was right next to them. It was quite funny because they didn't recognise me. Even though I was dressed the same and, five minutes before, I'd been on stage in front of them. They just didn't see me in the same way.

Also I noticed that if you've got a low status character, people presume you're some sort of idiot, which is really embarrassing with people pitying you or, if it goes well, thinking you're some sort of genius, which is equally problematic.

SC: Yes. Well I mean Kitson I assume gets that, people-

MOC: Think he's some sort of-

SC: Genius, that he doesn't have 'feet of clay'.

MOC: Yes. I think I'll stop the recording there. It [the mobile handset with Dictaphone app] nicely ran out of steam.

Appendix C Comments by eight-year-old about the term 'stupid'

The following is Betty O'Connell-Rogers' response to the request 'Write down what you know about stupid' (O'Connell-Rogers, 2012):

> Let's say you said "you are stupid" to someone. It can be very nasty and it means you are really annoying or you're rubbish at something. It can make people very upset. I would say the person who said it, is stupid, because they get in trouble if the other person tells. Sometimes people make mistakes and someone [observing that] says you are stupid. They say that because they think it's [i.e. some task or question is] easy but it's not easy to the other person.
>
> Usually people who say to someone else that they are stupid, they sort of laugh or smile when they do it. They'd say something like "Oh that's easy: you don't know how to do that."

Appendix D Interview on UCC 98.3 FM's *Artbeat*

The following is a transcript of an interview by Don O'Mahony (*Artbeat*, 2012) broadcast during an exhibition at CIT Wandesford Quay Gallery, Cork City, Ireland (Wandesford Quay Gallery, 2012):

DOM: Currently running at the Wandesford Quay Gallery is *Boundary Work II*, a solo show by Cork-born artist Micheál O'Connell. He's based over in Brighton. I spoke to him at the opening of the show, but he will be returning next Tuesday for an artist talk followed by a Q&A session at next Tuesday, at 5.30pm.

To return to the interview we did with him last month. He operates under the name Mocksim and I first wondered; what does Mocksim mean?

MOC: Simply a moniker that I've used, initially online as a kind of user-name. It's not an attempt to create something to hide behind. I make interchanges between that and my name Micheál O'Connell. I guess you get that in the world don't you; a kind of Banksy idea, operating secretly in some way? It was more a convenient way of operating online. Also, it's got meaning for me. M-O-C are the initials of my name, Sim, I guess, stands for simulation, which is something that interests me as an idea; the idea of modelling reality. I put the K in to emphasise the mocking aspect of that.

I think simulation, itself, is a kind of mockery, so if you attempt to mimic reality, that can be seen as complimentary or critical – an attack. If I mimic your habits and your accent, you might see that as a compliment or as something offensive.

DOM: Rather than tribute.

MOC: Yes, so maybe it contains more than at first appears to be the case.

DOM: Tell me about yourself. You're based in Brighton, but where did you originally come from?

MOC: Well, I was brought up in Cork and Blarney really I guess is the place I most know. That's a suburb of Cork you could argue, now, It was really a village that had its own distinctiveness. I worked in the Woollen Mills Hotel there, growing up and stuff.

DOM: How did you get into art? Did you go to Art College or did you come to art by a totally different route?

MOC: Well, I've always… There were people at the Opening last night. A friend of mine John Halpin is a painter and teaches locally. We went to oil painting classes at La Verna [Hall] as children and did pottery classes at The Crawford. It wasn't a subject we could do in secondary school, when I was growing up unfortunately.

Shortly afterwards it became the case. I did Inter-cert Arts anyway, outside school. I just sat the test. It's something that's always been with me, but, because I was good at maths and physics in school, I ended up being drawn into engineering and mathematical modelling. And I have to say, that excites me, still and I loved that engagement too. I don't necessarily see that these divisions between, let's say maths, science and art need to be over stated. There tends to be too much separation.

I then became dissatisfied with the world I was in, really. I decided to engage properly with artistic practice, studied, did a degree and set up my practice and seemed to gain some recognition for certain activity of mine and gave myself that kind of freedom.

In the last 10 to 15 years, in particular, really I've done very little else.

DOM: We've had a walk through your work. It seems appropriation is very much the bedrock of what you do.

MOC: I'm interested, potentially, in ticking certain boxes, or, not consciously, but when I look at the world in retrospect, it has certain characteristics and appropriation is part of that. I'm interested in over-production; the fact that there is an abundance of so much.

It's a funny world, where people are potentially poor and impoverished in some way, but also there's an abundance of incredibly high quality things.

The idea of re-appropriating other peoples' work seems in keeping with, maybe, a principle of avoiding adding more to this over-production; avoiding throwing more into the world that is already full. So, it's potentially, environmentally sound in an aesthetic way.

If I take photographs that traffic wardens have taken of illegally parked cars, then at least I'm not adding more images. I'm making some sort of statement about what already exists.

Potentially, if you have 400 photographs that have been taken for some functional purpose, you can pick three or four that you deem to be of value, of interest, 'beautiful'.

DOM: Yes, I've got it. It gives an added value element as well as the recycling.

MOC: Yes, so, you steal something from someone else and add to it. Picasso advised that... What did he say? 'Good artists copy, great artists steal'. I think what he meant, and what he was saying is that there shouldn't be copyright, there shouldn't be a limitation on what you can do, it's up to you to decide what's of value. Ideally, I think, others would respect that.

If you take something you can glamorise it in some way. If I take a small, poor quality, jpeg image and blow it up to the size of a motor

car, I'm certainly changing the situation, but I'd like to think I'm not, at the same time, completely starting from scratch.

It seems stupid to start from scratch, I mean Pop Art began provoking in this way, not to recognise that an awful lot is given to us by, let's say, industry, from factories, from the world we're in. Items of great quality are already produced. By competing with that you're playing Luddite. Maybe that's healthy. Maybe it's worth questioning.

DOM: Do you put a boundary or a limit on the levels of technology you work with, or do you enjoy working with things that are, by today's technological advances, virtually obsolete. Not obviously, but have been made redundant; there are better quality things?

MOC: People do tend to discriminate. You meet individuals who are obsessed with the latest gadget and who need to use that and are excited by what's brand new and what you can achieve with that.

I think, for - okay, I'll use the term, artist - for artists, so quickly, there's a tendency to move on, if you're that way inclined, without having exhausted the possibilities of something that's just a few years old. I don't discriminate.

I'm happy to use things that are cutting edge. I quite often do, but I might, then, stick with it for three or four years, so it's no longer cutting edge to most people, but I'm still using it. I worked with the online world, Second Life, for example in a virtual reality landscape, when most people weren't. Recently I was involved in a residency where I used a ZX81 computer from the 1980s.

DOM: Is that a Spectrum?

MOC: Well, the one before: 1K of memory! I use my mobile phone a lot. I haven't moved on from that yet, but will. I think you don't need to

worry too much. People feel that they're behind the times or... I think that they're too much concerned with that.

So, some of what you see in this exhibition is fixated with what's modern. Some of it is not necessarily. The system here, that the traffic wardens use to capture images, the whole system that surrounds the legality of parking, in itself, is a technology. It's not just about something hard but software as well.

DOM: Over the course of our conversation before, I wrote two quotes from you, one was 'Exactitude is not truth'. That was Matisse, was it?

MOC: Matisse liked to use that quote a lot. I think it, potentially, originally came from Delacroix. He was making a very valid point and a philosophical point, really, which isn't just about painting, but, potentially is too. The impressionists knew this, didn't they? Dots and dashes give you a stronger sense of the situation than a meticulous and pedantic obsession with detail.

So, by being anal and obsessed with resolution, you don't necessarily give a more true representation. I'm interested in that as a fact, you know?

DOM: You also like to quote Baudrillard. What's that saying? 'The more technologically advanced we become the more like robots humans become and the more human, machines.' What is the quote, again?

MOC: Well, I use live performers quite a lot for a few reasons. One of them is I don't see why you wouldn't. Instead of creating an animated film, or capturing film, or drawing a figure, why not just hire a performer and use a real person?

Also I'm interested in the possibility that maybe - here you see animations and moving-image - you could de-animate people and restrict their movements. Often, when there are people in my work,

it's as objects. If I've got a professional performer, I'll try and create situations which restrict the possibility for them to do what they do best: to show off.

Often I think that creates an interesting tension. However, the Baudrillard quote, he said: 'as technology becomes more intelligent, people become more robotic.'[85] Ostensibly that seems true of the world. I think it's a very interesting comment. If you phone a call-centre or service-line now, you are often speaking to people who are reading from scripts and are behaving mechanically and it can be absolutely terrifying, frightening, you know?

It is something to worry about. The ability to be intelligent seems to be being stolen from us by the new technologies and the systems that are developing. I find it quite a relief when you're prepared to break rules and meet people who over-ride that kind of tendency.

Maybe it's connected with a kind of managerialism and to do with the way places operate, too.

DOM: Looking here at the levels of technological advancement you work with. [Thinking about] those two quotes, and the fact that just something less than perfect [was discovered], and [the fact that] the photos of the cars that were hacked from the traffic department: did the lack of exactitude – the pixels are like dapples of paint - or the [particular] kind of precision [which is evident], is it in some way because it's not perfect [that] it's somewhat still human?

MOC: I believe so. Isn't there an Eastern concept, is it Wabi-Sabi? I can't be certain. An idea about design, or actually beauty, being in the faults or

---

[85] This wording was not possible to verify later. Baudrillard more likely treats the Marxian notion as a mere starting point for more complex arguments. But the idea is relevant to the work being discussed.

in the error – absolutely! So, when people make mistakes and maybe when people slip and stop - the Freudian slip, the errors, the stupidity in the world - is what's most healthy and uplifting in a way, a relief, I think.

I think most of us are probably relieved when we see a lack of perfection in some character that's around us, someone we're in a relationship with, or someone in authority. It makes us feel good. Nothing does work perfectly. Science does not provide all the answers, can never and will never.

With this you also have this less arrogant approach to life.

DOM: I have to conclude because we're under some time constraint here, but, you'll be giving a talk here, towards the end of the run at the exhibition in October. What issues will you be addressing in that?

MOC: Well, I'd be interested in seeing how people respond to this work. I'm happy to be on the receiving end of criticism and questions, and also to discuss the work with other people in a location that's different to where it was born.

I would be quite interested in what students, artists or anyone thinks. It's a kind of Q&A, but I'm also prepared to talk properly about the work. By that time, I'll have had an opportunity to think about it a bit more, in this context.

Appendix E Denying the antecedent

Something similar to 'denying the antecedent', the common error in conditional reasoning (Colman, 2008a), may be at play in people's relationship with intelligence measurement. The concept[86] which has implications for any system of measurement is easily illustrated using the following example. If a sensor indicating whether an opaque tank is full of liquid, or contains liquid, is *not* triggered, then it cannot be presumed that the tank is empty. Human beings are prone to incorrectly read such situations[87] and the likelihood of drawing false conclusions is compounded by other factors. Measuring any, even basic, human potential will be far more complicated than assessing the level in a tank. If Usain Bolt takes one minute to walk a hundred metres that is not proof (nor even strong evidence) that he couldn't run the distance in 9.58 seconds. When it comes to cognition then the complexity is greater still. The implications of this line of argument are that, even if intelligence was accepted as quantifiable, a method for measuring aptitude would not be useful in determining lack of it. The thinking applies to exams. Put plainly: the reasons for someone getting a D grade in an exam are vast compared with the possible interpretations of an A* result. An A* indicates aptitude but D does not very strongly indicate lack of it.

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[86] Also known as the 'fallacy of the inverse'

[87] One of the first tasks I was given when working as a process engineer - building training and design simulators for oil and gas industry operators - was to simulate the ESD system (IADC Lexicon, 2014) to be used on one offshore platform. The job involved firstly converting the documentation into Boolean diagrams using AND, OR and NOT as the basic building blocks, before coding and testing. It was hugely important to be aware of the potential for 'fallacy of the inverse' type errors.

Appendix F Feedback loop mathematics

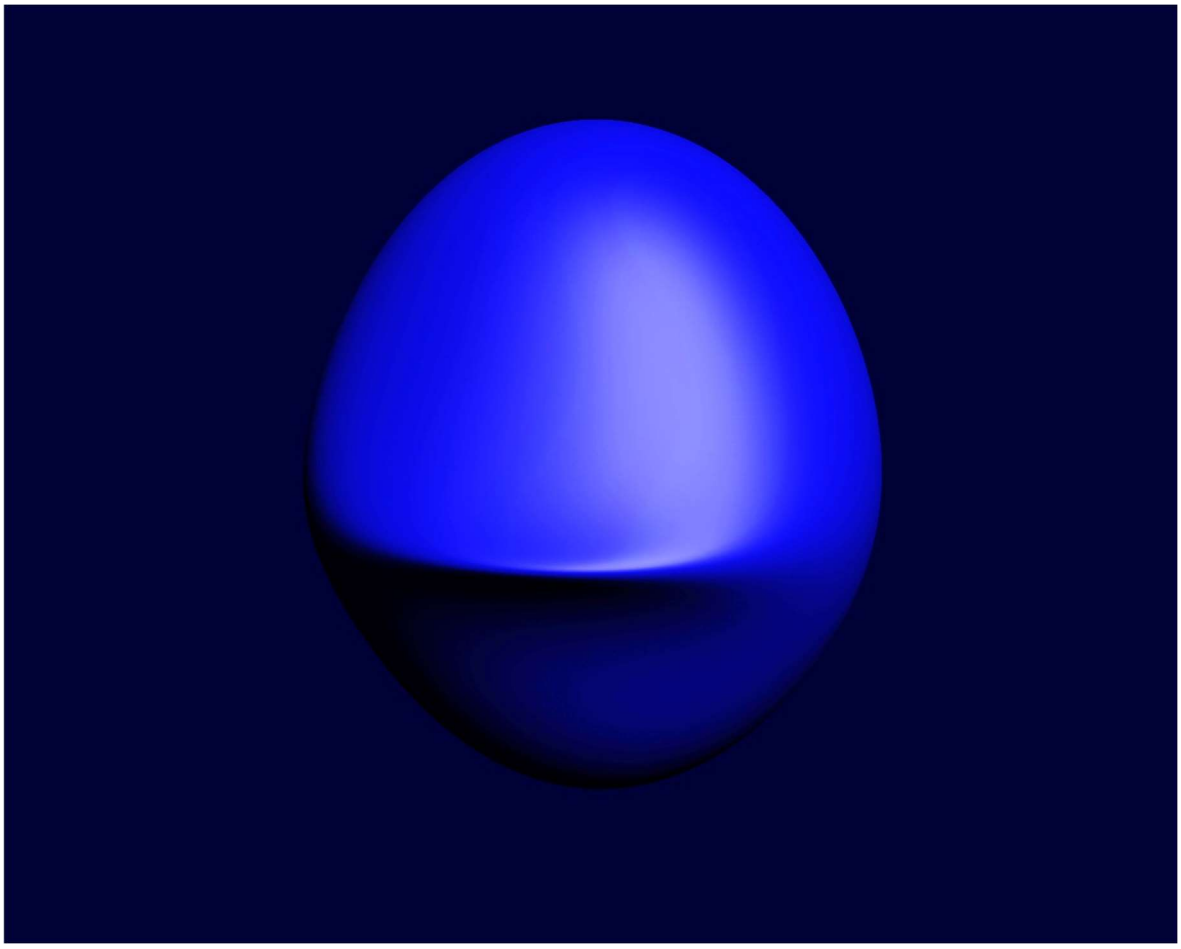

Figure 30 *Commuter* still, 2004

The basic technique in most continuous simulation approaches is to solve differential equations using numerical methods. Whilst it is not necessary to understand calculus and the mathematics of feedback to appreciate the implications, the plots produced through solution of second order 'ordinary differential equations' (ODEs) are enlightening in that they describe the variety of responses typical of self-regulating or cybernetic systems. Practically I have incorporated these equations into animations. Similar methods form the basis of the physics engines sometimes made use of. A graph produced (Figure 31, p.225) through algorithmically resolving second order ODEs, and plotting the

results, consolidates in one image the range of dynamic effects. These plots show responses to a sudden step change in input for a particular setting of the 'time constant' (τ) at different values of the other main parameter, the 'damping coefficient' (ξ). Longer τ implies increased inertia and would result in the same pattern being spread over a longer time period. The damping coefficient ξ effects the elasticity of the system. If the ξ is greater than 1 the system is characterised as being 'overdamped'. In these scenarios, new equilibriums are approached without oscillation. If the coefficient is less than 1 then the system is said to be 'underdamped'. Overshoot is a feature: values oscillate around the new value before eventually settling. When ξ is precisely 1 the system is described as 'critically damped'. This is an idealised position in which, following an upset, the system oscillates continuously (as a sine-wave in fact). The dynamics of a simple frictionless pendulum in a vacuum would correspond to this movement, also known as simple harmonic motion (SHL). If resistance were low (in the case of an actual grandfather clock for instance) then SHL would be approached, the system is very weakly underdamped. SHL is a type of 'dynamic equilibrium' (cf. supra, p.54). If ξ is below 0 then stability will not be achieved and the system escalates out of control. 'Positive feedback' and reinforcing mechanisms are simulated through values of ξ which are less than 0. Sayings such as 'success breeds success', the runaway effect in nuclear explosions and the usually undesired feedback associated with microphone-speaker circuits are all examples[88] of reinforcing feedback in action. Luyben's book on process modelling and simulation for chemical engineers is just one source of information on such second order systems (1973, pp.187–198). Ross Ashby refers to the kinds of equations involved too (1956, p.96).

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[88] In reality, runaway reactions and other examples of positive feedback would encounter limitations eventually through exhaustion of some resource or 'negative feedback'. The growth is not inexorable.

2nd Order Ordinary Differential Equations look like this:

$$\tau^2 \frac{d2y}{dt^2} + 2\tau\xi \frac{dy}{dt} + y = 0$$

where:

τ (tau)	Time Constant
ξ (xi)	Damping Coefficient
$\frac{dy}{dt}$	rate of change of value y with time
$\frac{d2y}{dt^2}$	rate of change of the rate of change of value y with time.

The plots below in Figure 31 (calculated by solving the above equation numerically) show responses to a step change in input at time 10 (with τ kept constant for a range of different ξ values as described above)

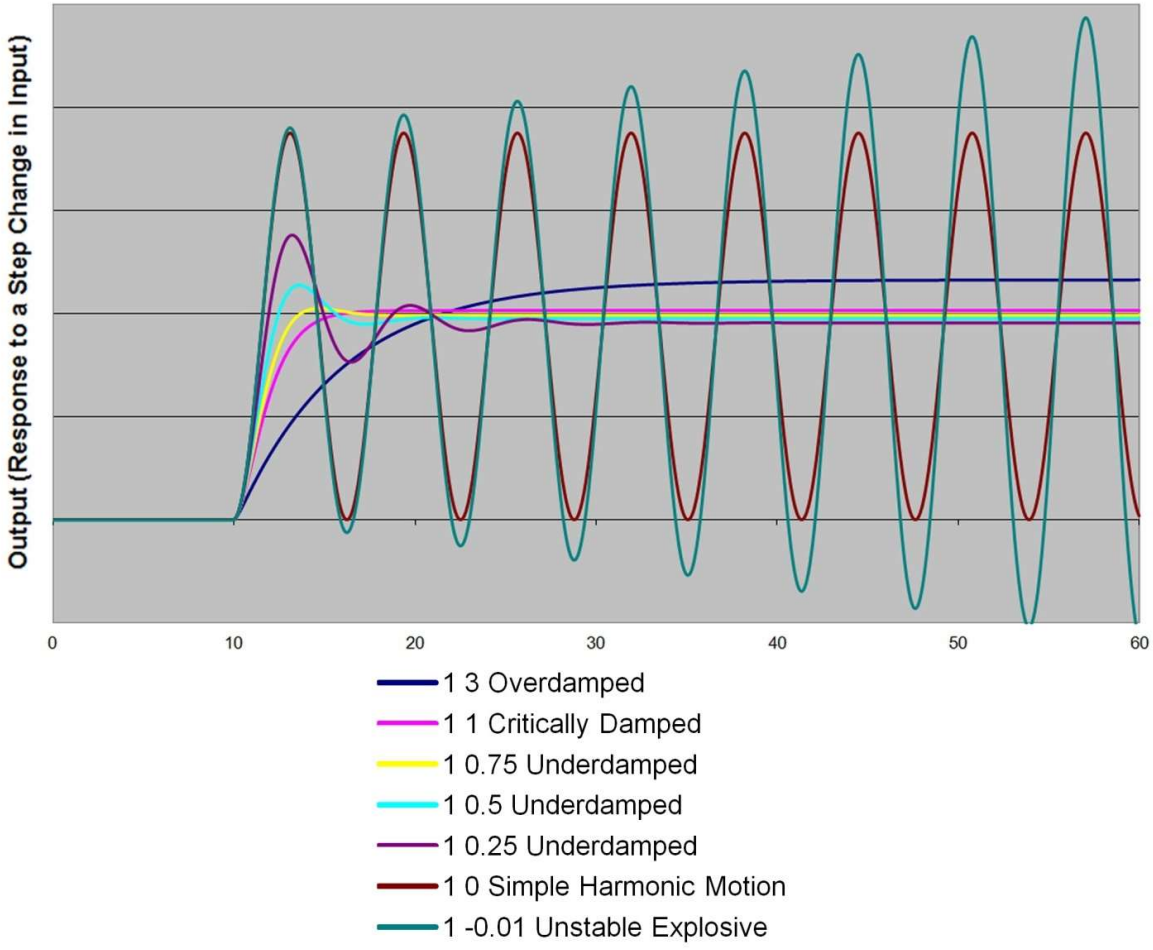

Figure 31 Second order ordinary differential equation responses

Commuter (2004), inspired by noticing slightly inebriated travellers standing and maintaining their balance on rickety London Underground train carriages, used this equation[89]. The plots in Figure 32 are the results of calculations which were then employed to drive the animation. The curves represent responses, in three dimensions, to imposed carriage jolts and

[89] This early example of a 'simupoem', (*Commuter*, 2004), demonstrates that weight is given to the dynamics before static visual effects. Just enough has been done to create an object which would illustrate movement and rotation. The result was a slightly elongated sphere, pinched once (Figure 30, p.222).

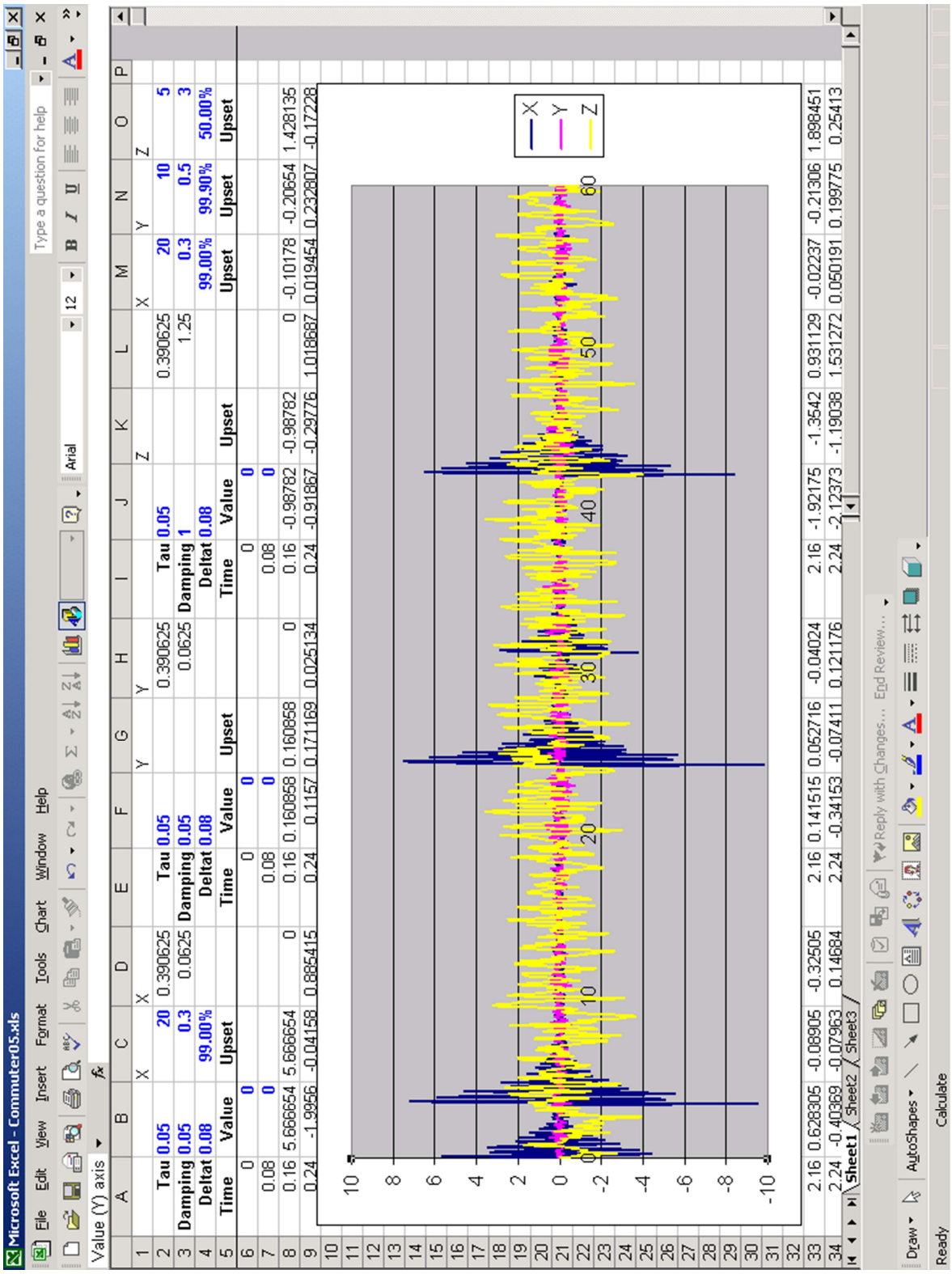

Figure 32 Plots and calculations of simulated train disturbances used for *Commuter*, 2004

bumpiness. The data would determine the position and rotation of the minimalist form (Figure 30, p.222) against time.

Note that some effects of the advances in computing, since the mid-twentieth century, are relevant to my interest in cybernetics and performativity. The technology (whether analogue or digital), firstly, greatly facilitated the construction of feedback loop control systems, such as those used in process engineering, but now increasingly in domestic settings too. Secondly, computing encourages the numerical solution of problems which would previously have been laboriously worked out (if that were possible at all). The use of trial and error methods, which converge in on a solution, became more practical and widespread. The underdamped curves in Figure 31, describe a similar process, and indicate the crucial importance of overshoot, which by definition *is* error, in discovering a final value. Performative, or cybernetic-style approaches then, have tended to replace representation-oriented means of solving many mathematical problems.

Appendix G E-mails for reference

Permission was obtained from the senders below to include the contents of these e-mails, which are referred to in the thesis:

From Huw Bartlett

Sent: Wednesday, December 30, 2015 6:52 PM
To: Mocksim (Gmail)
Subject: Re: Simupoem comment
Yes
Sent from Yahoo Mail on Android
On Wed, 30 Dec, 2015 at 12:25, Mocksim (Gmail)
<mocksim@gmail.com> wrote:
Dear Huw
Once when I asked you for a response to seeing one of those moving image pieces I create you said: “Your work seems to come from nowhere.” Are you happy to confirm that you said that?
Best
Micheál

From Joan Fontcuberta

Sent: Wednesday, October 15, 2014 7:06 PM
To: Micheál O'Connell
Subject: Re: A quick question
It was for a class about what I call "reflectograms” (selfies taken in front of a mirroring surface.

Joan

El 14/10/2014, a les 18:41, Micheál O'Connell <m@mocksim.org> vaescriure:

Hi Joan

I'm guessing you are well. A quick question. I sent you this a few years ago: http://www.mocksim.org/mocksim_images/Contra-Invention.jpg. It was from the traffic warden project I did. One of them had captured a self-reflection inadvertently. Was it to use as part of a talk or with students? I'm writing up a PhD and wanting to refer to the significance of that image you see.

Best

Micheál / Mocksim

From: Edward J Higgs

Sent: Thursday, March 31, 2016 11:10 AM

To: Micheál O'Connell

Subject: Re:

Dear Micheál

Fine by me. I hope the final stages of the thesis go well.

All the best

Eddy

Professor Edward Higgs, BA (Oxon), DPhil, FRHS

Head of Department

Department of History

University of Essex

Wivenhoe Park

Colchester

CO4 3SQ

email: **********

Tel: **********

Web: http://www.essex.ac.uk/history/staff/profile.aspx?ID=1805

From: Micheál O'Connell <*********>

Sent: 28 March 2016 09:06

To: Higgs, Edward J

Subject:

Dear Professor Higgs

I'm in the final stages of a PhD. I may include the sentence and footnote below as part of a section which questions reliance on procedures, systems and processes. I asked you a question at an event in Goldsmiths University three years ago (https://chasegoingdigital.wordpress.com/2013/01/17/going-digital-opening-conference/) and your response influenced my thinking on the subject. Just sending this to you out of courtesy and in case of inaccuracies.

My sentence in-text

That is not to dismiss the necessity, usefulness and certainly the initial role of codification* but their artificiality can be forgotten: invented systems develop auras.

Footnote:

* At the opening event to Going Digital, the doctoral programme run by CHASE partnership (Lawrence and Black, 2013) I posed the question of too much bureaucracy to Professor Edward Higgs, a former archivist and government advisor. Interestingly he defended the need for the right

kinds of administrative procedure, suggesting that with increased digitisation there was too little of this.

Micheál O'Connell

From Joanna Parker

Sent: Thursday, October 29, 2015 10:47 AM

To: Mocksim (Gmail)

Subject: Re: Query: Worn Outing

Hi

yes, i can confirm this.

Best regards

Jo

On Sunday, 25 October 2015, 10:19, Mocksim (Gmail)

<mocksim@gmail.com> wrote:

Can you confirm what you told me, that during your involvement with that Worn Outing intervention I organised in 2012, from warren Street to Cork Street in London that you heard onlookers say "they're having a day out from the mental home" and "this must be some sort of protest" ?

A reply to this e-mail will do it.

Thanks

Micheál

From Peter Seddon

Sent: Thursday, April 7, 2016 1:12 PM

To: Mocksim (Gmail)

Subject: Re: Jasper Johns on art and craft

Hi Micheál,

Yes I think you should be careful here. This supposed remark, when I think about it was reiterated to me and some other students on the Fine Art Course at Leeds University back in 1969-70 by a tutor called John Jones (now deceased). He had been to the States a few years before on a year long sabbatical to interview contemporary artists across America. These he recorded on old reel to reel tape and sometimes used them in teaching courses on American art. In one of them he was interviewing a sculptor called George Sugarman and I think it was he who reiterated on tape this remark and attributed it to Jasper Johns. Unfortunately these tapes were never published and I have no idea what happened to them after John's death. So it is all memory and hearsay. However the remark is interesting in itself, so a careful note about its source as a memory of supposed remark along the lines of above might do.

Hope this helps

Pete

On 07 April 2016 at 12:14 "Mocksim (Gmail)" <mocksim@gmail.com> wrote:

Hi Peter

I couldn't find any reference to this below anywhere else. I might refer to it, but with a caution, in the PhD using this e-mail below. Would that be acceptable to you?

Regards

Micheál O'Connell

mocksim.org

From: Peter Seddon

Sent: Sunday, February 15, 2015 3:47 PM

To: Mocksim (Gmail)

Hi Micheal

If my memory serves me right it was a remark made by Jasper Johns somewhere in reflections about the difference between art and craft which was that art was good but only just good enough whereas craft was also good but usually too good. (For its own good I think he meant to imply)

Best. Pete

Sent from my iPad

On 15 Feb 2015, at 11:01, Mocksim (Gmail) <********** > wrote:

Quick question. I once heard you say, during a talk, lecture or maybe conversation, something about how artists tend to do enough to resolve their work but not more than that. I've found the comment useful when trying to defend against accusations of not having done enough of the, to my mind, 'turd-polishing' when in fact I was being perfectionist about or interested in some other aspect of the structure. Was that a point of your own or did it come from somewhere else?

Micheál

From Nenagh Watson

Sent: Tuesday, September 16, 2014 7:02 PM

To: Micheál O'Connell

Subject: RE: Puppets, Cameras, Clowns

Terrific! Yep I remember you & your work. I'm up to my neck in an application - but sure yep yep do use the thought within your phd & if I have any futher thoughts I'll drop you an email. I went to a fantastic

Performing Objects event at Falmouth Art collage & check out object - oriented ontology.
Very best from NenAGHHHHHHHHHHHHHHHH

Nenagh Watson
Researcher hosted & supported by Royal Central School of Speech & Drama

_____

From: Micheál O'Connell [*********]
Sent: 16 September 2014 16:11
To: Nenagh Watson
Subject: Puppets, Cameras, Clowns
Dear Nenagh
You may or may not remember me from Puppet Talk at Sussex in 2013. Hope all goes well with you. Your commentary and work, as outlined there, was really interesting (a word which is a bit overused now but meant here) for me. I have just tweeted you about this but one comment you made about my Now Man activities (summary here http://www.mocksim.org/works/now_man.htm) was that the spinning camcorder, not the performer, was the puppet. The statement changed my thinking about the piece and I'd like to refer to it in my PhD writing. Any problem with that? And any further thoughts would be great but no pressure at all.

Regards

Micheál O'Connell / Mocksim

From Peter White (EAFA)

Sent: Wednesday, March 30, 2016 2:50 PM

To: Mocksim (Gmail)

Subject: RE: Singing in the Rain - without the rain

Hi Michael,

That would have been me. The facts are slightly different though.

There is no AI involved, nor is the tool used to speed up the digitisation process. In digital restoration it is common to use a dust-busting algorithm to remove dirt and dust. Locations of dirt and dust are usually mapped by scanning infrared, or looking at the change in pixels from one frame to another digitally. Sometimes both, and using varying levels of checks and processing.

The instance I refer to was a before and after 'high removal' based upon pixel-change only in order to see how far it would go if left unattended. It removed all the rain due to its fast motion (not remaining in on place for more than one frame) and high contrast.

Other good tests have been ripples in water disappearing (but larger waves remaining – very 'early CG'!) and the removal of a man's legs as he walks down the street (but strangely, not his shadow). These were with different software/hardware. I forget which used which – but the Snell & Willcox 'Alchemist' was involved somewhere, and was 'Diamant'.

With kind regards,

Peter White

Senior Technician

From: Mocksim (Gmail) [mailto:*********]

Sent: Tuesday, March 22, 2016 8:28 PM

To: EAFA <Eafa@uea.ac.uk>

Subject: Singing in the Rain - without the rain

I know it's three years ago but I'm trying to substantiate a story we were told during this CHASE day at East Anglia Film Archive. The AI tools being used to speed up the conversion of film to digital had over-intelligently removed the rain drops from singing in the rain. One of the experts there let us in on this story. Is there a way I can verify that this or something like it happened? Or who should I or could I contact at EAFA?

Thanks

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Appendix H Interrogation of the term 'artificial stupidity'

Attachment of the word artificial to stupidity generates an assortment of denotative and connotative meanings. In 2013 a series of three *Lunch Time Lectures* was given in an artist run space (O'Connell, 2013a) as an attempt to improvise with the idea of artificial stupidity and interrogate the term. The one-hour recordings, notes and feedback permitted me to create an initial breakdown which eventually grew into the list below. Included in the mix are interpretations, uses and implementations of the term 'artificial stupidity', which are relevant to my practice and the thesis, and others which are not.

1. Connected with artificial intelligence (AI):
    a. Sadie Plant's reference to Ada Lovelace's scoff at those who underestimated, before the quest had even begun, the scope for machine intelligence. She rhetorically proposes that their ambition would be only to create artificial stupidity (Plant, 1998, p.89).
    b. Taking Lovelace's dismissal as a true assessment of the potential for AI, with the benefit of hindsight.
    c. A description of the faults and inadequacies of AI.
    d. Stupidity also has origins in the idea of being stupefied, of stupor, to be numbed or emotionally dead…. or insensible (OED, 2015f). Every technology so far fits with this definition. Machines do not feel empathy.
    e. Stupidity may be a desire, something to intentionally design into AI:
        i. For fun and entertainment.
        ii. So that technology is more like human behaviour.
    f. Another term for artificial intelligence is pretentiousness and that characteristic is generally frowned upon, seen as dishonest or stupid.

2. In relation to individual intelligence:
    a. The obstinate lack of imagination, characteristic of those who misunderstand the potential of others could be termed artificial stupidity. The argument in 1.b could be extended to include all underestimating or overestimating of other intelligences.
    b. Ways of thinking of one sort can always appear stupid from another point of view. In its attempt to be comprehensive, this list, because it is just one construct, could be deemed stupid and it is also artificial. The idea that a representation, simulation, documentation, description, set of laws or procedures could equal whatever entity or process is being signified is either naïve or a pretence. That is not to diminish the pursuit of modelling per se. Take language as a means of representing, which Avital Ronell says, 'never scores… [but] it engages the experience of failure, opening the test site to the irresolvable conflict between cognition and performance' (2002, p.99) [and] language as contest posits such a thing in order to fall short of it, to keep itself going' (2002, p.99). The actions of artists can seem stupid to others because the criteria of importance are connected with aesthetic reason. Usual design priorities may be ignored for instance while seemingly trivial features are obsessed over.
    c. The kind of intelligence required in one situation differs from that required in another. Unusual situations may call upon characteristics which are useless in others. In that sense stupidity there is an artificiality to the term stupid.
    d. Closely connected with b above is Ronell's usage of artificial stupidity (2002, pp.59–60): she makes points about the ideological use of apparently scientific measuring techniques. People are falsely classified as stupid.

e. Through collaboration one can remain ignorant of other disciplines but nevertheless benefit from their knowledge. Division of intellectual labour is efficient though point 3.c below indicates dubious negative applications. And point 3.j refers to the use of pretend ignorance as a means of wantonly hampering collaboration.

3. In the social context:
    a. As a means of deceit in order to outwit others.
    b. As a protective strategy when it would be risky to show one's 'true colours'.
    c. In order to avoid effort or responsibility. Adorno reflected precisely this point from a position of concern: stupidity could be 'cultivated' (Jenemann, 2013, p.36).
    d. For reasons of efficiency.
    e. In diplomacy (so as not to make others feel inferior or in order to permit them to feel superior).
    f. When one believes others would not understand and therefore demonstrating knowledge, intelligence or capability would be pointless.
    g. When demonstrating what one knows would interrupt other activities or conversations.
    h. John Roberts' point: a political gesture - stupidity as a rejection of the dominant 'intelligent' discourses (1996b)
    i. As a corollary to point 2.d above and perhaps combined with 3.a, b or d: submitting, for convenience, to the presumptions based on gender, nationality, class and the dominant hegemony.
    j. To undermine collaborations with others, in order to maintain autonomy or for other reasons.
4. Fooling oneself:

a. In performance, particularly comedic acting or clowning.
b. To avoid taking responsibility for one's own moral codes or conscience. The subtle difference with point 3c is that in this case the individual somehow deludes themselves. 3c emphasises cognisant deceit.
c. Focal Point Gallery's points (2016): i.e. as a means of discovery; for creative intent. Artists for example might:
    i. Give themselves limitations
    ii. Use tools wrongly
    iii. Work quickly, on impulse
    iv. Work slowly
    v. Take drugs or alcohol
    vi. Put themselves in unusual situations
    vii. Accept mistakes
    viii. Confront art, its institutions, the art system, yesterday's habits
    ix. Do the apparent opposite to creativity
    x. Use repetition as a means of not thinking.
d. 4.c.v above deserves special attention[90]. A different order of artificiality may be achieved through the use of drugs or alcohol. Surely inebriation is a perfect specimen of the category artificial stupidity. The motivations could include any of 4.a, b and c above but pleasure itself is clearly the primary driver of recreational drug use. Addiction would imply that the individual is no longer able to regulate use so certainly the 'artificial' part disappears.
e. As a route to truth. Stupidity, idiocy and error mostly have pejorative connotation but at least there is the association with honesty and

[90] Sadie Plant devotes a book to the positive links between drug-taking and literature (1999).

truth. Interestingly cunning is often linked to the opposite: malevolence.

5. With respect to systems:
    a. As a description of how systems inevitably are dysfunctional or faulty
    b. Willingly dysfunctional systems.

Doubtless the breakdown could be further rationalised or extended but the summarising is sufficient for the purposes of unearthing what examples of artificial stupidity may be relevant to the thesis and my art practice.

The antipathy to evaluation, not uncommon amongst creative practitioners and artists, could be accounted for by some of the points under 3 above. A proportion of the objecting must be due to philistinism though or, secondly, a genuine belief that the task of trying to understand creativity is an impossible one.

Appendix I Samuel Beckett's *Imagination Dead Imagine*

Samuel Beckett's *Imagination Dead Imagine* (Beckett and Seaver, 1992, pp.551–554) presents a closed pulsating system of sorts. Precise dimensions are given of a cylindrical vault and the positioning of two bodies within it. The nature of the scene, its whiteness, is further described, as are the ways in which light intensity and temperature oscillate with time. Given that the novel is certainly novel, in its consisting of only 1100 words, making it four pages long[91], that is about it: a scene and its dynamics are described. More details about occasional pauses during the cycle of increasing and decreasing brightness and heat, are provided, and the characters' slight motions: at points, each opens and then closes one eye. Despite the plain and algebraic method of sketching out the setup and fluctuations with time, the limits of what it is possible to explain are reached quickly. Beckett confounds usual narrative expectations further through 'frequent use of paradox with the title itself and in such phrases as 'No way in, go in' or 'from this point of view, but there is no other.'' (Finney, 1971, p.65). The writing, ultimately, is about the difficulty of writing; any depicting is at least subservient to that. Lastly, *Imagination Dead Imagine* exposes the absurdity of attempting to be comprehensive through being contradictory. Having created, for example, a monotone world, the left eyes of the figures are observed to be 'piercing pale blue' (1971, p.65). Surrender to the inevitability of incompleteness is built in. As H. Porter Abbott puts it: 'the creation in this work is abandoned, too: "Leave them there, sweating and icy, there is better elsewhere"' (Abbott and Beckett, 1970, p.45). If a rigorous attempt to represent through writing is bound to fail, then imagination fills the gaps.

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[91] A source was found which stretches the text over seven pages (Abbott and Beckett, 1970, p.45)

Beckett created the novel by 'condensation of a much longer work' (Finney, 1971, p.65), 'a process of elimination' (Abbott and Beckett, 1970, p.45). With respect to Marshall McLuhan's concepts of hot and cool media[92] Beckett veered towards a temperature of absolute zero.

According to Mieke Bal, for Flaubert language is the 'culprit of generalised stupidity' (2013, p.50) and perhaps it is the simultaneous illusion of precision combined with the impossibility of achieving it, which is being alluding to. Analogising with the functional world, in other logical systems or languages, with computer code for example, a similar issue arises in that the crucial sections often amount to only a small proportion of the overall quantity produced. Exceptions need to be accounted for and numerous protections applied. Bullet proofing' is approached asymptotically. The trade-off between quantity and rigour is illustrated by a recent air traffic control emergency in which a 'particular glitch was buried in one of… four million lines of code' (BBC, 2016). One difference between documentation and software writing is that, with the former, language is employed to represent what did happen whereas the latter is an attempt to codify what will happen. Notwithstanding the 'reinvention of writing that digital technology offers' (Fuller, 2003, p.25), three types can be listed: writing can be about the past, aimed at the future or overtly fictional. Every combination and permutation of these can be envisaged too.

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[92] McLuhan's division is also a means of discussing media by comparing channels which are information-rich and so leave little to the imagination (hot media) with those which require more effort on behalf of the 'receiver' (cool media) (2001, pp.22–25). Radio then is cool by comparison with Television and immersive computer-gaming would be hotter than chess. In employing such terms as hot and cool McLuhan was not making points about whether certain technologies are superior or inferior to others. The suggestion is that pared-back approaches (cool media) leave more to the imagination and this is surely precisely the question for Beckett, given the title of his piece.

In the case of artistic writing further questions arises. Any suggestion that the task in creative writing is simply to describe an invented situation and narrative, was undermined by hostility to representation, and, secondly by the unacceptability of passive escapism. The Baudrillardian standpoint, i.e. that there exist only fictions (1994), was a provocative inversion of the first of these concerns. With poetry and music, the opportunity for work to be understood as a thing in itself, i.e. not a pointing elsewhere, was more easily acknowledged. In different arenas and with every medium, in the visual arts following the invention of the camera, and later for modernist writers, a new era dawned and the purported aims changed. So Walter Pater's often repeated nineteenth century adage that '[a]ll art constantly aspires towards the condition of music' (Ratcliffe, 2015b) was reflected in actual sequences of events.

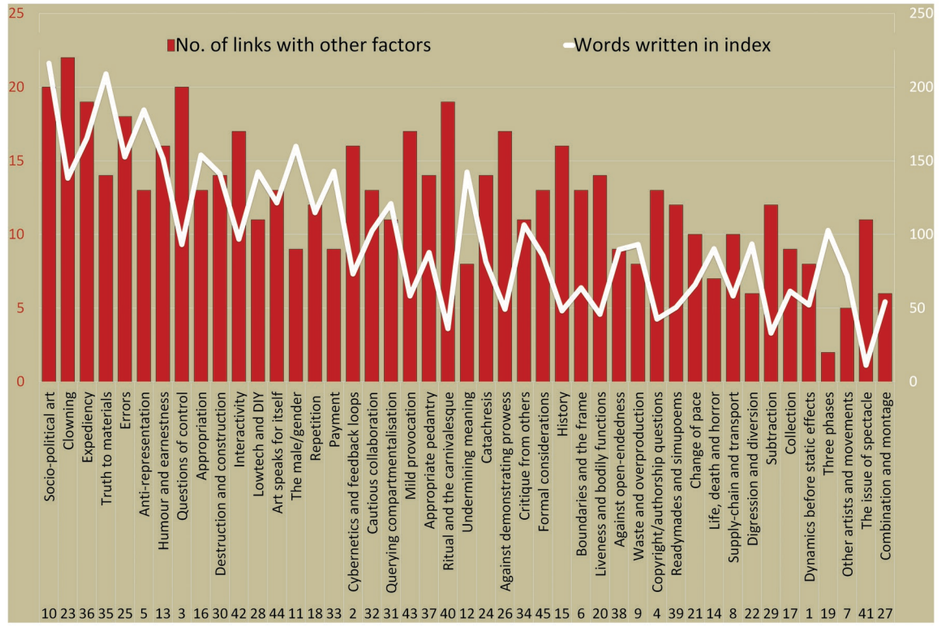
In retrospect though, despite a century or two of such orthodoxy, it is hard to imagine fundamentalist satisfaction being achieved at either end of the spectrum. There is the human biological predisposition to read meaning into anything: '[p]eople represent' (Hacking, 1983, p.144). Second, the particular qualities of a medium and the unique structuring of a work are always noticeable[93]. A question posed by artist Valie Export in 2005, referred to in Sara Jane Bailes' *The Poetics of Failure*, suggests that even live art remains, 'a symbol of something else, the sign of the thing you wish to communicate' (2011, p.10). The, once original, proposal (which has since been surpassed by appropriation culture), in Harold Rosenberg's words, that 'a work of art ought to be a thing added to the world of things rather than a reflection of things that already exist' (cited in Bailes, 2011, p.10) is therefore critiqueable. So the duality inevitable with writing is relevant to unconventional performance practices too, but from an opposite standpoint. The assumption with live art, from early happenings to

[93] The arguments must apply also to the writing here.

the present day, is that 'liveness' is immune to being semiotic, whereas writing, by default, is considered so.

The point about the 'the unacceptability passive escapism' (cf. supra, 244) is answered by curator Barry Barker: '[t]here is no such thing as a passive spectator as we all have active thoughts when looking at works of art' (2007, p.163). Lev Manovich too (2001, pp.70–74) challenged the idea that movie watching, or observing a painting, is passive by comparison with 'interactive' media, video gaming or a consciously Brechtian play. All experiences must be passive to some degree. And, the desire for escapism is easy to deride but, as the phrase 'suspension of disbelief' implies, passivity can be temporarily entered into, and voluntarily embraced. The result is a kind of active-passive experience.

Factors of importance



Significance of factors

Table 02

Workaday, themes, methods, principles and intentions

Index of Factors

1. **Dynamics before static effects:** Observations of static effects and the creation of these, i.e. the activities usually coupled with 'fine art' historically, are of less interest me than the temporal dimension. The nature of the performances directed, moving-image pieces created, investigative activities conducted and the subject matter select reflects, firstly, a fascination with dynamics.
2. **Cybernetics and feedback loops:** The concept of the feedback loop is of continuing interest. These mechanisms may be consciously embedded into works or pinpointed in existing processes. Or the associated theories are employed as devices for interpretation. Cybernetics, the science and philosophy of feedback loops, has been a key framing paradigm. I've been interested in problematizing the idealism associated with such theories historically and questioning the received wisdom that feedback, in the general usage of the term, is always a positive.
3. **Questions of control:** Critical attention is given to the question of control. Work has focused on relationships in which hegemony is intrinsic: between director and performer for example; but also between people and things and with the applications of technology, hardware and coding. Then there is the question of self-regulation which cybernetic systems embody. Self-regulation does not necessarily imply stability but the ability to survive external disturbance or setpoint changes. The contradictory tendencies within controlled systems, the variability and frequency of 'dynamic equilibrium' (cf. supra, p.54), as opposed to absolute stability, are bases for investigation and experimentation.
4. **Copyright/authorship questions:** Questions of copyright, ownership, authorship and the axiological systems whereby appropriation is given negative connotation, or is seen as equivalent to plagiarism or theft, are broached in the making and selecting of work. Simply exposing these as topical issues is not the intention.
5. **Anti-representation:** I am sceptical about the easy acceptance of representation in all its forms including figuration in art and photography; through notations and codes; documenting; attempts to model and simulate; in drama and on the political front. However, it is the paradoxes in any attempt to be fundamentalist about representation which are important in influencing production. Techniques of illusion can be linked with the question of representation. The standard tricks of perspective or dramaturgical craft have been subverted. A number of the thinkers referred to in, or studied in the course of researching for, the thesis, deliberate on problems of representation from the point of view of their subject areas and disciplines. Nigel Thrift's 'Non-representational theory' (2008) challenges the usual impulses in social science, Andrew Pickering interprets cybernetics as being about getting along with the unknowable and the unrepresentable (2011), and philosophers such as Daniel Rubinstein speak about the crisis of representation in photographic realm (2013). Connected concerns relate to objectification and self-representation. The creation of profiles and adoption of personae online has been normalised with the rise of online social networking. Instead of fully colluding with the way these platforms function I often use them half-heartedly and inconsistently.
6. **Boundaries and the frame:** Special attention is given to the question of framing and boundaries. This included foregrounding issues to do with staging and the proscenium by deliberately 'breaking frame' (Goffman, 1986, pp.345–378) by taking live-art to unlikely locations, and intervening in everyday situations. In the production of simupoems, such as *Training* (2004), this interest has been interpreted literally, by utilising the traditionally semi-redundant 'safe-frame' area.
7. **Other artists and movements:** The work of notable modernist and contemporary artists such as Martin Creed, Anthony Gormley, Bruce Nauman, Barbara Hepworth and movements such as Abstract Expressionism or Minimalism are referred to, in the production of, and in the titling of works. Also works of lesser known practitioners may be confronted as a route to discovery and in the spirit of academic and political arguments. The referentialism might be read as lampooning or iconoclastic, or accolade: I do not illuminate as to which is intended.
8. **Supply chain and transport:** Transportation, the movements of people, goods and traffic around networks and the processing of orders and queuing which is inherent in the 'supply chain' are common sources of inspiration. Imagery, digital 'readymades' and other items obtained from investigating or intervening in the these physical and electronic networks, are selected for exhibition or used as raw material in the creation of simupoems.
9. **Waste and overproduction:** The discovery of the associations with industrialised food production when discussing *Rearing* in section 2.2.2 (cf. supra, pp.88-91) makes more sense considering the trajectory my work has taken since. My practice now increasingly involves tapping into the abundance of digital material, data, and other facets of the technological landscape. Real materials no longer accumulate within the boundaries of industrial complexes thanks to contemporary manufacturing practices but digital information does. And this data often corresponds with tangible products which now amass outside the 'factory walls', often underused, in domestic settings, institutions and on our streets.
10. **Socio-political art:** Socio-political matters have rarely been a conscious influence. Nevertheless, the work has been described as political at times, perhaps because I take that for granted as the normal backdrop (this point is made about Glenn Ligon's work in Appendix A, pp.199-201). My intentions are rarely didactic. I am sympathetic to Adorno's position on *Commitment* (Jameson, 2007, pp.177–195) which he says 'often means bleating what everyone is already saying or at least secretly wants to hear. The notion of a 'message' in art, even when politically radical, already contains an accommodation to the world' (Jameson, 2007, p.193). The distinction between activism and art can be upheld, not just for art's sake but in the interests of politics too. Since the financial crashes and their repercussions in the past decade, the frequency with which work appears to be decorated with political meaning has increased. Artist and writer James Bridle's highlighting the problems of surveillance and drones for example is arguably lightweight in its political message and, simultaneously the credence his New Aesthetic (Web Directions, 2011) gives to the 'visual' seems quaint. An eloquent reminder of the rationale for 'the antagonism towards the visual in Conceptual Art' was provided by David Beech recently (2016, p.6). These opinions are not to dismiss the impact, political and otherwise, of exemplary art. Adorno gives the twist: 'Kafka's prose and Beckett's plays, or the truly monstrous novel *The Unnameable*, have an effect by comparison with which officially committed works look like pantomimes' (Jameson, 2007, p.191).
11. **The male/gender:** It was not a conscious intention to foreground issues of gender, sexuality, nor to consider the associated social or psychological questions, while producing artworks and intervening. My opinions gel with Karen Barad's referencing Judith Butler's 'notion of gender performativity… gender not as a thing or a set of free-floating attributes, not as an essence—but rather as a "doing": "gender is itself a kind of becoming or activity… gender ought not to be conceived as a noun or a substantial thing or a static cultural marker, but rather as an incessant and repeated action of some sort"' (2003, p.808). It might be said that a certain queer disposition has always been crucial to the artistic outlook. In retrospect my interest in these questions reveals itself as a concern for the contemporary condition of the 'cisgender' male. The work and interpretations of it, including *A nod to Turing and Creed, An Attempt at an Autobiography*, *Now Man*, *Worn Outing*, the Second Life references, my attention to Glenn Ligon's output, all point to that interest. My practice is also a ground for inspecting whatever prejudices, defensiveness and embracings of failure maleness might entail.
12. **Undermining meaning**: Some of the arguments about the socio-political apply here (Factor 10). More boldly though a strategy has been to consciously attempt to eradicate meaning. The desire should not to be mistaken with attempts to create ambiguity for its own sake. The intended result is not to create 'open-endedness' (see Factor 38) but to disturb equilibrium and undo understanding. In my experience the reduction of resoluteness on one front opens up latent potentialities in others. The desired effect is similar to that of the 'almost-pun' referred to in the description for Factor 13. This deliberate dampening of denotative intensity may be one of the factors which distinguishes selective cultural practices from mainstream entertainment and promotional constructs. It should be added that, given our biology, tendency to read, make assumptions, anthropomorphise (Lidwell, Holden and Butler, 2010, pp.26–27), or to see something as representative, and seek closure (Lidwell, Holden and Butler, 2010, pp.44–45), the removal of meaning is no easy undertaking.
13. **Humour and earnestness**: Comedy is of interest. It was the subject of my MA writing and I performed as a stand-up comedian for three years while completing Art Foundation. It is never my intention to achieve the usual effects of jokes, namely laughter, via artworks (and that is not to say that it is easy to write jokes or rouse laughter). A professional clown was employed but 'galgenhumour' (gallows humour) was a more common result, *An Attempt at an Autobiography* (cf. supra, pp.74-76) being a good example. English professor Stephen Booth's notion of the 'ideation pun' or something which 'approaches the status of humour' (Appendix A, p201) is of interest to me. I wish also to defend the right to engage with the opposite affect: earnestness. Much is said about the positive attributes of humour though Freud gave some attention to tendentious jokes (1989, p.183). Jokes also function as 'get out clause', a means of escaping commitment to an idea or to a piece of work. My aspiration is to traverse lines between the human propensities for seriousness, belief and zealotry on one side, and irony and cynicism on the other.
14. **Life, death and horror**: Engagement with questions of life and death, suicidal tendencies, aging and decay, the inevitability in the end of fundamental failure is a preoccupation. These issues hardly amount to original subject matter in art. Humour's sibling 'horror' though rarely deliberately sought appeared characteristic of many of the works produced for a period. The effect may be brought about in attempts to bring broken objects back to life or amplified through direct inclusion of recordings of individuals who have deceased. In providing titles such as *Ending*, *Terminus*, *Sinking* and *An Attempt at an Autobiography* (O'Connell, 2016) these negative themes are embraced.
15. **History:** As well as investigating the current infrastructure works have incorporated archive footage and assets. Such material is increasingly readily available online but personal recordings are a source too. Examples included a speech by Winston Churchill, canned laughter from the BBC and a communication I'd written, being read by iconic radio DJ John Peel.
16. **Appropriation:** Conceptualist Douglas Huebler's statement, in 1969, that, '[t]he world is full of objects, more or less interesting; I do not wish to add any more' (Goldsmith, 2011, p.1; Clover, 2014) is a source of inspiration. The concern can easily be linked to ethical matters connected with industrial waste and overproduction, but 'aesthetic reason' calls for other interpretations. Sally Jane Norman points out that '[t]he sheer act of selecting stuff may be tantamount to its conceptual and perceptual transformation' (2013, p.276). The fact that nothing about the materiality of a thing makes it an artwork, was only really made explicit during the 20th Century. Photography is the extreme case: what is the camera in fact but an appropriation machine? Data and information found online represent my key interest currently. 'Digital readymades' tend to be topical, distinguishing them from the Duchampian ideal – which recommends the deliberate choice of 'ordinary, functional – and rather dull – objects' (Tate, 2016b). To compensate information is sought which, at least at first sight, is mundane and not politically or emotionally loaded.
17. **Collection:** My habit is to accumulate raw materials which either are relevant to a particular area of investigation; or bear some formal or noticeable relationship to each other. The collecting takes place before any clear use has been decided upon. Physical objects as well as digital, and items of knowledge such as mathematical equations are collected. These items are compiled into visual diaries or accumulated digitally in folders for later consideration.
18. **Repetition:** Repetition is often deliberately injected into moving-image works, performances, presentations of objects and 2D work. Acute attention is given to the nature of the repetitive patterns; how many cycles are required; or what number of items should be accumulated or exhibited. The process of finding and collecting involves repetition too. Pragmatic and empirical, rather than deeply theoretical, considerations influence the decision making, though Gilles Deleuze's *Difference and Repetition* (1994) may be worthy of study in the future. Given the ordinariness of the materials collected, repetition can be important 'as insistence, that is, the constant pressure of something hidden but not forgotten' (Rose, 2003, p.1073). The cyclical processes and feedback loop systems (Factor 2) are, by their nature, a form of repetition (with difference) too.
19. **Three phases:** The basic scientific principle of there being three phases - solid, liquid and gas - is borne in mind as a route to increasing variety when exhibiting and generating work. Wet materials or aromas act as provocation in their contrasting with dry digital media and technological work. Reality is not so straightforward as to be reducible to the number

three so the juxtaposing generates ontological questions too. The possibility of overlap, mixing, transient effects, and sublimation (in its physical chemistry definition meaning the skipping of the liquid phase so that solid converts to vapour) are of interest. The existence of exceptions in the physical world can be read as metaphor for the limitations of theories of stages, phases and closed systems.

20. **Liveness and bodily functions:** Waste, excreted materials and foodstuffs have been presented alongside audiovisual materials and other objects, or used as part of performances. The scatological dimension, making connections between what comes out of human bodies and what goes in, literally, if perhaps absurdly, amounts to a feedback loop too.

21. **Change of pace:** In live situations changes of pace are introduced to deliberately reduce participants' ability to cope or 'perform'. Secondly, it is a means of challenging my own capacity to process what is going on. The likelihood of contrivance is reduced. The approach is also useful during the construction of works and in the search for raw materials. I may act on impulse or attempt to make decisions more quickly than I can think (or to be precise, more quickly than I think I can think).

22. **Digression and diversion:** Connected closely to Factor 21 is the permission given to digress at points when developing work. Speculatively the technique enables 'breadth-first' as opposed to 'depth-first' thinking (Norman, 2009). Unconscious or semi-conscious drivers are allowed to influence decisions. Or the practice might be framed in terms of accepting 'right brain' (Colman, 2008a) modes of thinking. There is nothing new in deliberately attempting to access enigmatic cognitive modes or in following one's intuition. Regardless of whether he cared to describe them scientifically, André Breton's pure psychic automatism (Tate, 2016a) and methods for introducing randomness achieved similar ends.

23. **Clowning:** Since 2005 a professional clown (IMDB, 2016), has regularly been employed, to perform in works. Related to this, grotesque characters were created, for instance the Second Life avatar Mocksim Zapotocky (cf. supra, pp.102-104). Now I adopt a clownish role with respect to functional systems. Bruce Nauman's comment that '[t]he traditional role of a clown is to be either funny or threatening - their position is ambiguous' (2003, p.374), aligns with the impact I hope to achieve through subtraction of meaning (Factor 12). An ominous kind of ambiguity might emerge. Artificial stupidity is patently linked to the 'clowning wisely (en folastrant sagement)' referred to in Bakhtin's book on Rabelais (1984, p.60). Lastly, I am happy to tap into the clown as symbol of brazenness in the face of power, as Otto Dix did in the era of fascism (Rancière, 2014, p.91). 'The medieval clown was also the herald of… truth [fearlessness against mystery and power]' (Bakhtin, 1984, p.93). See also Simon Critchley's comment (cf. supra, p.79).

24. **Catachresis:** In ways which now appear to fit with Rabardel's notion of catachresis (2002, p.92), functional tools, technologies or professional performers, manufactured objects and containers, 3D modelling software, spreadsheets and camcorders are used in unintended ways. The points made about Ted Chippington's anti-comedy, and band frontman Mark E. Smith's attitude, during the appendix B interview (pp.209-210), tie in with this discussion. It is not a matter of completely rejecting tradition or ignoring intended uses but of caring less about them, and being open to alternative applications and readings.

25. **Errors:** Errors occurring during investigation, production and presentation are sometimes allowed to remain rather than being corrected. This acceptance of error amounts to a kind of 'truth to materials' (Factor 35) in that faults, or lack of knowledge are surrendered to. Such a policy is expedient and permits more attention to be given to criteria of importance. Acceptance of error also fits with a wish to avoid demonstrating expertise (Factor 26). Implicit in the strategy is that faults are revealing and connected with truth, in the manner of the Freudian slip. I put it thus in the text promoting one symposium panel: '[i]f relationships with the material and between individuals have been altered due to the new media (and social networking in particular) then authenticity is perhaps revealed through the glitches, through intentional mockery or misuse of these new systems, hidden codes and artificial intelligence' (Chevalier, 2013a). John Roberts devoted a whole book to *The Necessity of Errors* (2011). Of course, as Roberts reminds us in the closing pages of that book, not all errors should be accepted as positives (2011, p.253).

26. **Against demonstrating prowess:** The temptation to demonstrate virtuosity with tools or show-off their sophistication, and the quantity of effort expended, is something I attempt to avoid. The aspiration at times runs counter to the stated wish to expose illusory techniques (Factor 5) and, secondly, to my increasing preparedness to speak about background processes.

27. **Combination and montage:** A frequent technique is to force together assets in advance of finding any rationale for counterposing them. Mixing elements arbitrarily would appear absurd if it were not a common artistic ploy. Think of Dada, Surrealism, the practices of montaging and collage historically, and sampling culture today. Collage broadens the range of experiments possible from a given collection of assets.

28. **Lowtech and DIY**: New media is used to the extent of my being often classified as a digital artist. I lecture and have run courses in these fields, but computing, media technologies, hardware, software and code are firstly, to my mind, so ubiquitous as not to warrant separate attention. Latest innovations and technological breakthroughs, as was the case with Second Life, 3D scanning and photogrammetry, may be utilised, but not compulsorily. I do not want fondness for older formats or devices to be over-influential either (see interview in appendix D, pp.217-218). *The Lowtech Manifesto* (Wallbank, 1999) which persuasively expressed scepticism 'about the consumerist frenzy associated with information technology' is in tune with the attitude subscribed to for a period. Section 2.4.1 dealing with *Contra-Invention* and similar work outlines my position on the relationship between computing and art. Perfectionism may be important at points but so too is the principle of 'expediency' (Factor 36). The tension between these opposing forces helps produce decisions.

29. **Subtraction**: A method of subtraction is utilised. This is raised in appendix A with reference to the simupoems (p.206). Elements are removed in resolving work. More precisely the process is iterative, involving taking-away and then re-configuring.

30. **Destruction and construction**: Along with being conceptually interested in what happens when something which has been broken is reconstructed, work has been created which practically puts this routine into action. For a period, beakers, mugs and ceramic containers were deliberately smashed, then reassembled, as a performative act *(You May Not Drink From The Holy Cup*, 2005) or digitally. I had the pieces of one broken mug 3D-scanned (in 2004/5 before 3D scanning and printing was topical) and imported the data to create virtual versions of the original. The digitised fragments were used in three different simupoems (*Cormac's Cup*, 2005, *Ending*, 2006, *Dying, 2006*). These concepts of destroying, then fixing, and paying attention to how materials are acted upon incidentally through their experience in the supply chain - the real pieces of broken mug were returned by the US-based company which had done the scanning in 2004/5 (fortuitously mounted on cardboard and wrapped in cling film for easy exhibiting) - foreshadowed strategies which would become important to my practice later.

31. Querying compartmentalisation: For practical reasons, I attempt to incorporate what I am doing anyway, or have to do, into the creative practice. Likewise, to speed up dissipation, the platform for presenting and executing work is extended beyond established locations such as galleries, art venues and performance spaces. Exhibition and creative intervention is increasingly encouraged at conferences and at a recent symposium entitled *Impact* (Hignell and Bright, 2015), instead of reading a paper in the usual academic manner, I performed it, yelling the text at the top of my voice. Runs of the performative game *Now Man* (section 2.2.1) were directed at another symposium *(Now Man, Puppet Talk symposium, run 2*, 2013). Creating overlap like this risks mocking established routines and architectures but, at the same time, attention is focused on their significance, and grounds for expansion.

32. **Cautious collaboration**: Collaborations are undertaken on the basis of agreed-upon rules. Likewise, when I play a supporting role for others and when I employ others to support my work, arrangements are sought which are understood by all parties in advance. I am sceptical about the compulsoriness of collaboration, teamwork, networking and sharing (cf. supra, pp.112-113) and suspect that there is a need, also, to defend autonomy and protect difference. It should be added that integration of differences is not the same as merging (the problems of which are mentioned, cf. supra, p.84). The collaboration with Stace Constantinou, inspired by how artist Patrick Caulfield had responded to a set of poems described in section 2.1 (cf. supra p.66) is exemplary in this regard.

33. **Payment**: Unless it is agreed that the work is a collaboration then I endeavour to pay participants. Luhmann's view about commerce's effect on art (cf. supra, p.45) is directed at the art market and even there he plays down its excesses. My motivation refers to another model, one that seems close to what John Roberts' terms the 'second economy' *(John Roberts NCCA Recording*, 2014). Payment in the context of my working practices is not just a matter of employment ethics but a means of clarifying the nature of the decision-making arrangement. Payment adds a dimension to the experimentation with 'control' (Factor 3). This interest in the significance of remuneration was triggered partly while working for artist's collective *Common Culture* (mentioned appendix A, pp.204-205 and elsewhere in the thesis) who are resolute about paying individuals situated in their installations (bouncers, comedians, DJs and strippers) at the 'going rate' for their respective professions. Payment, because of its bearing on the power relationships, is central to the meaning of their work.

34. **Critique from others**: While very interested in feedback or recommendations from supervisors, critical friends, artists and others, I permit myself to respond in any of the three possible ways: 1) by absorbing what has being said, considering it and ignoring it, 2) by making adjustments as a result of a new point of view or 3) by capitulating completely on the basis of criticisms or suggestions. Even the third scenario would not guarantee that the critic or advisor is credited or acknowledged, on the basis that feedback was possible, only because they were presented with an original work in the first place. Commissioned scores and soundtracks for films are generally credited but the decision is made on a case-by-case basis. As with Factor 32 and Factor 33, agreements are sought beforehand.

35. **Truth to materials**: The concept of 'truth to materials' (Woodham, 2004) popular with the Bauhaus is a commandment of sorts. The thinking is extended to include the limitations of software or my own knowledge. Additionally, truth to materials could mean submitting to imperfections of other sorts in line with the points made about errors (Factor 25). For designers the concept of truth to materials usually entailed locating suitable materials for a particular task. But artists – if they are to be distinguished - are liable to reverse that order. Materials can determine the outcome or course of action. This principle is also connected with 'feedback' which implies a degree of adaption to external forces (Factor 2). These concerns align with Andrew Pickering's advocating 'getting along with… systems that can always surprise us' (2011, p.23) mentioned in appendix A (p.203). Sally Jane Norman's references to 'materials speaking back' in musical contexts, 'conversations with materials' in interaction design and 'backtalk' (2013, p.283) adds weight to the argument that the longstanding design principle is still relevant. Truth to materials can be broadened even further to take in practical constraints and funding available. And lastly the philosophy is applicable to working in collaborations or with assistants: the 'material' in this situation would be other human beings. It needs to be stressed that the attitude does not entail complete or unprincipled submission to materials, situations or environments: it is about recognising the balance of forces.

36. **Expediency:** Linked to my interest in *the Lowtech Manifesto* and DIY (Factor 28) is the principle of expediency. This has, firstly, to do with accomplishing a task in the easiest possible way. Being expedient ties in with the Herbert Simon's concept, in evolutionary theory, of '*satisficing*… taking a suboptimal solution that is satisfactory' (Varela, Thompson and Rosch, 1991, p.196). Analogising with the world of manufacturing and logistics where Just-in-Time (JIT) principles (cf. supra, p.68) became progressively popular: it makes no sense to provide more than is necessary, nor to provide something too early. It turns out that the human brain processes information according to JIT too (Dennett, Adams and Hurley, 2011, pp.101–104). The difference in the case of art is that concepts of efficiency, quality and timing relate back to a particular individual's invented criteria. Jasper Johns reportedly reflected that 'the difference between art and craft… was that art was good but only just good enough whereas craft was also good but usually too good. (For its own good…)' (see e-mail from Peter Seddon, appendix G). Whether and how one is expedient, in terms of time and effort expended and resources drawn, depends on many factors.

37. **Appropriate pedantry:** Decisions about what to obsess over are not necessarily in line with usual principles employed by professionals, designers or other artists in a field. With the stop-motion film *Training* (2004), the path of the wooden toy

was brought right to the edge of the camera frame (mentioned illustrating Factor 6). As with the removal of sound in the production of *Boring* (cf. infra, pp.71-72), taking objects in a scene to the frame border is simply incorrect from a video-editing perspective. Normally a 'safe-frame' area would be allocated. But with *Training* a proportion of the wooden engine's circuitous path had been determined by the extent of the camera's framing rectangle.

38. **Against open-endedness and process work:** The open-endedness advocated by some artists and critics and questioned by others (appendix A, p.201 and cf. supra, p.107) is not something I consider a positive. I am not satisfied to present unresolved experiments. Rather the aim is to create finite, self-standing artworks. That is not to impose a ban on discussion about 'process'. Increasingly the intervening, which was initially only a method of discovery, is provided as tangible outcome in its own right: as is the case with the works described in section 2.3. Consideration is given to the nature and formal qualities (see Factor 45) of this documentary material too though.

39. **Readymades and simupoems**: Two broad categories of outcome are produced. Firstly, found materials, digital or physical readymades, are worked on minimally, only so that their essence is emphasised. Scale might be increased or materials complied into a book. Secondly, simupoems or more abstracted forms are produced which may incorporate, or be influenced by, the found material.

40. **Ritual and the carnivalesque:** The interest in routine, repetition, the involving of clowns, participants and use of bodily fluids and food is driven partly by a desire to link with the significance of ritual. Section 2.2.2 reflects on these matters (cf. supra, p.94-99).

41. **The issue of spectacle:** The creation of 'spectacle' is neither aimed at nor avoided.

42. **Interactivity**: Instead of engineering in interactivity which, Lev Manovich stated is 'too broad [a term] to be truly useful' (2001, p.70), his other definition of the concept is acknowledged: '[a]ll classical, and even more so modern art, was already "interactive"' (2001, p.71). Barry Barker's comment (cf. supra, p.245) about the impossibility of a passive experience is relevant here. The degree to which human-human interaction is facilitated or substituted by things, media and other beings is of particular concern. One reason for the decision to use real people originally (in 2004) stemmed from a desire to investigate the increased relational intensity of unmediated interaction, Marina Abramović style (MoMA, 2010).

43. **Mild provocation**: For reasons outlined when discussing *Rearing* (cf. supra, pp.91-92), 'shock tactics' are consciously avoided or tempered down. Provocation in my work is intended in the spirit of investigation, of prodding. There is a risk with the use of food-stuffs, and human waste of overstepping the mark but in these cases the matter is connected with propensities for 'disgust', rather than violence say, self-harm or hostile actions.

44. **Art speaks for itself**: It would be strange not to extend to artefacts of any medium Picasso's pronouncement that 'a painting speaks for itself', and his rhetorical question '[w]hat is the use of giving explanations, when all is said and done?' (O'Brian, 1976, p.121). Michael Polanyi's stating that 'unbridled lucidity can destroy our understanding of complex matters', (2009, p.18) gives weight to the same argument. An opposite position can be defended however. If a work stimulates explanatory responses, then, therein lies its strength. David Beech, for one, strongly defends the relationship between writing and post-conceptual art (Beech, 2016). The idea was referred to when discussing the simupoems (cf. supra, p.130). Practically, the inevitability of further elucidation on work has to be accepted; I occasionally encourage it; but my belief, simultaneously, is that explanatory texts are not essential.

45. **Formal considerations**: Whilst a formalist approach (Glaves-Smith and Chilvers, 2015) is not strictly abided by, respect is paid to understood principles when deciding elements such as colour, shape, composition, and rhythm. If traditions are challenged, that is done knowingly. Additionally, factors of contemporary relevance to digital output such as fidelity and levels of compression, and considerations connected to performance interventions, such as a participant's attire, are laboured over in the execution of work. Due to the importance and complexity of these questions of form and alignment with tradition more attention will be given to them in section 3.2.3 (cf. infra, pp.153-156).

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Micheál O’Connell (a.k.a. Mocksim)

Interventions, Selected Works, Statement, Biography

2009-2012 *Contra-Invention*: car parking contravention images

The artist investigated the evidential photography of Britain's traffic wardens (Civil Enforcement Officers). Hundreds of their 'contravention images' were collected. Occasionally wardens inadvertently capture themselves in reflection. The artist manoeuvred himself into certain images by following the wardens around. The exhibition of this work, *Contra-Invention,* toured Britain and other parts of Europe between 2010 and 2013. Above installation shot: Arts Santa Mònica, Barcelona, 2013.

2013-2014 *Missing You*: courier company parcel tracking signatures

The artist discovered that courier company parcel tracking data, not just his own, but surprisingly also that of others, was easily accessible online. The information even included images of their Point of Delivery Signatures (PODS). Exhibitions of work arising from this investigation toured under the title *Missing You*, a reference to the 'Sorry We Missed You' cards left by couriers when delivery fails. Above installation shot: Macclesfield, 2014.


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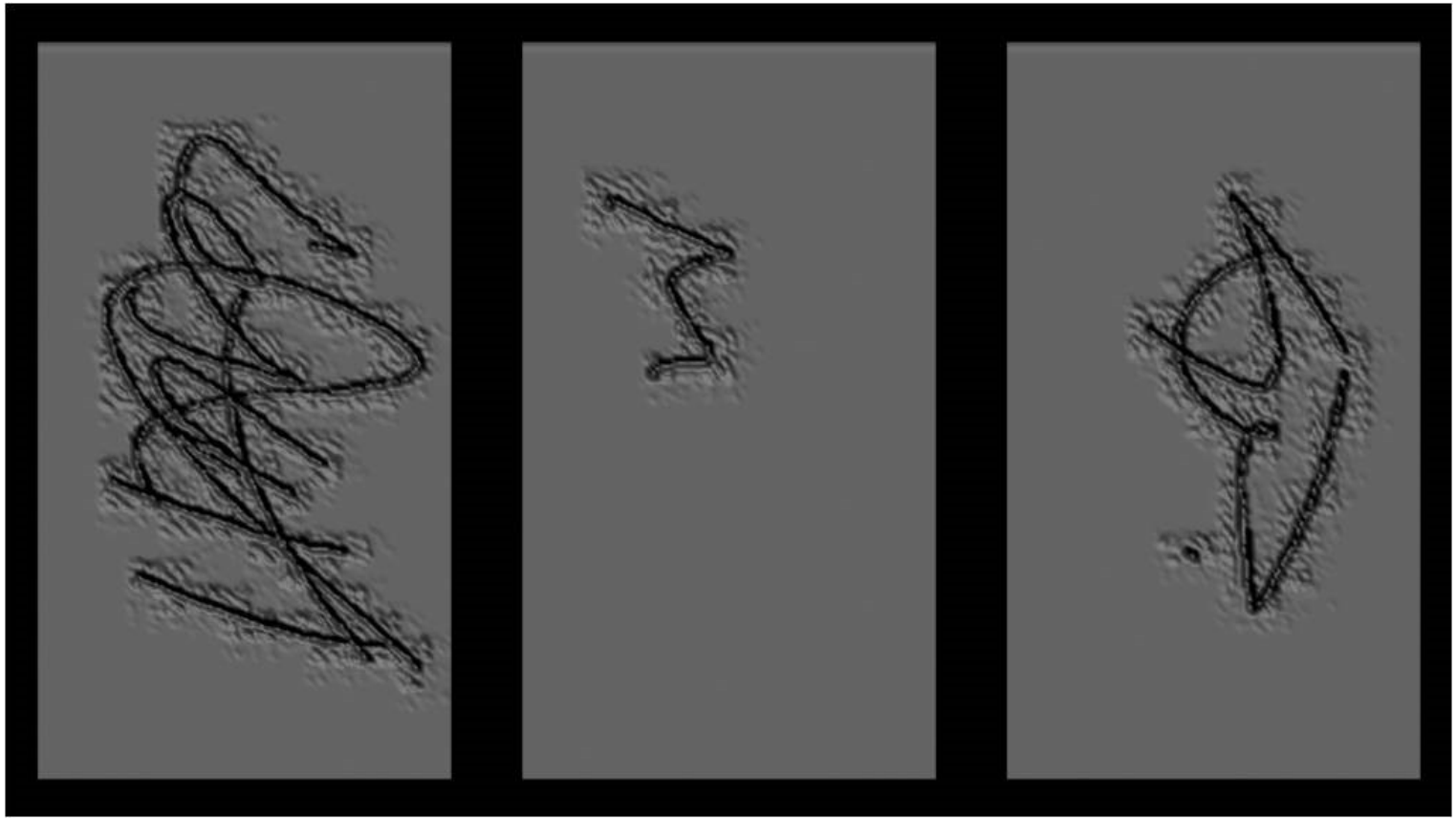
2014-2016 *Less*: supermarket self-checkout machines

It turns out that it is possible to use supermarket self-checkout machines to buy nothing. The artist frequently did so, collecting hundreds of the resulting receipts as evidence of these zero-transactions.

Boring 2012, 3min30sec silent looping film, DV PAL and other formats

Photography captured while snarled up in one of the longest traffic jams in the history of London's orbital motorway in 2011, forms the basis. The film was not directly connected with the intervention *Contra-Invention* but was created during the same period.

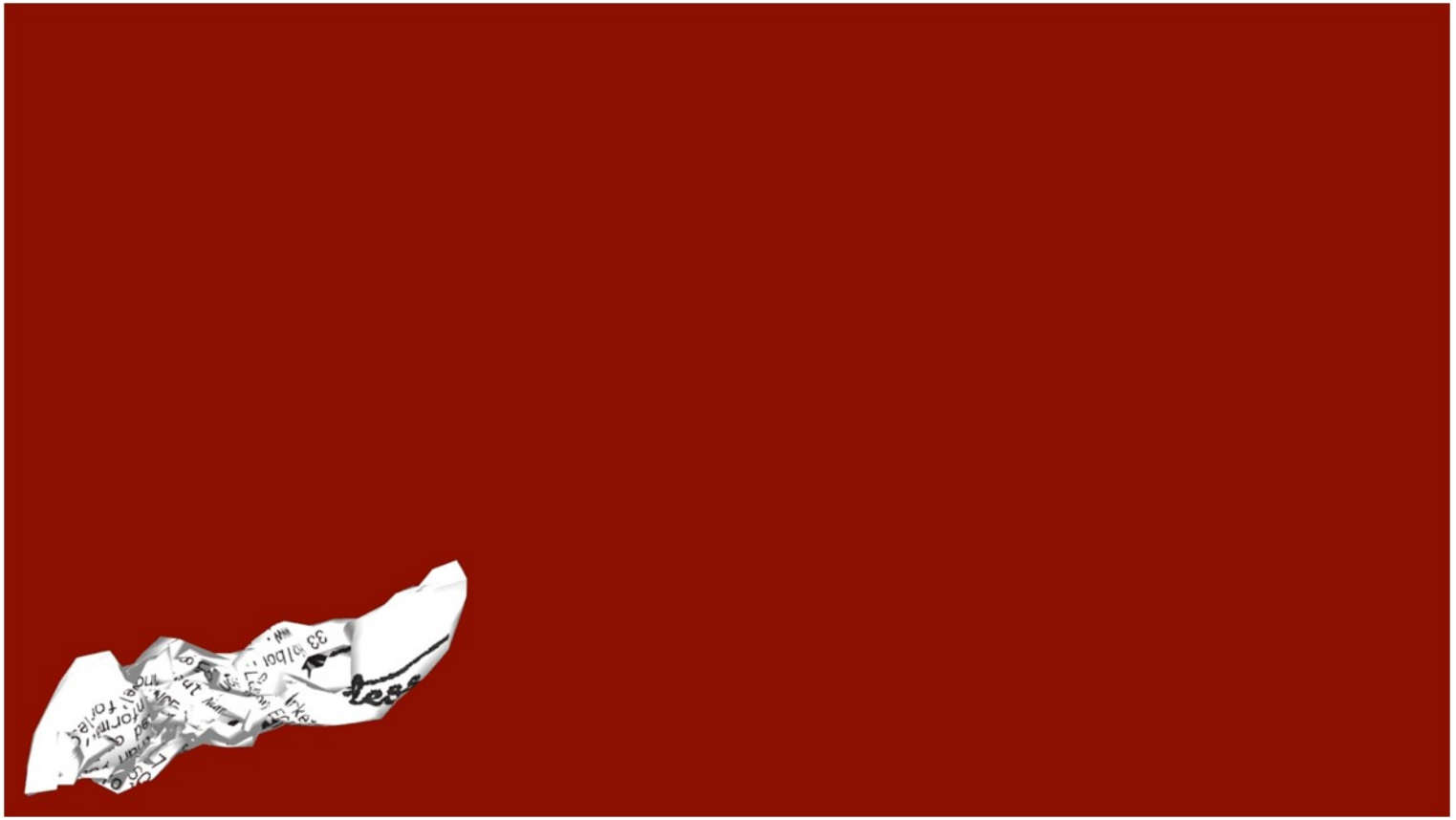
Link to video: https://vimeo.com/41018346



Delivering 2014, 18sec looping film, HD PAL and other formats

Three Point of Delivery Signatures, selected from the intervention *Missing You,* form the basis for a 6sec looping film. An 18sec score was then created, given set limitations, by composer Stace Constantinou. *Delivering* is part of the Michael Shamberg *Turtle Salon* collection.

Link to video: https://vimeo.com/112043307



Exchanging 2015, 4min15sec looping film, HD PAL and other formats

The transcription of one conversation with a member of staff, conducted while using a supermarket self-checkout machine, to buy nothing, is sung. An image of the receipt obtained is used in the film. Voice: Ruby O'Connell-Rogers. Part of the intervention *Less*.

Link to video: https://vimeo.com/126480392

Busting 2016, 3min looping film, HD PAL and other formats

Elements include a plaster bust which was 3D-scanned roughly using photogrammetry techniques, satnav recordings and words from a historical conversation. Voice Eliza Jaye. This is new work, unconnected with *Contra-Invention*, *Missing You* or *Less.*

Link to video: https://vimeo.com/164911795 (password required: **James**)

Contra-Invention Prints 1 2010, three pairs of 1.2x1.8m C-type prints mounted on corrugated plastic and one spirit level

Three 'night shots', selected from hundreds of ‘contravention images’ collected, depicting the same parking violation, were blown up to car-size. Each is split vertically so that there are six sections in total. Part of the body of work created for *Contra-Invention*.

Link to other Contra-Invention exhibition shots: http://www.mocksim.org/works/contra-invention.htm

Contra-Invention Images 2010-2012, 1) The Artist captured by Civil Enforcement Officer (CEO), 2) CEO captures herself in reflection.

Two images selected from the hundreds of contravention images collected between 2009 and 2012

Further *Contra-Invention* images and documentation: http://www.mocksim.org/works/contra-invention.htm

Delivering being screened in the back of a high-top van***,*** 2014

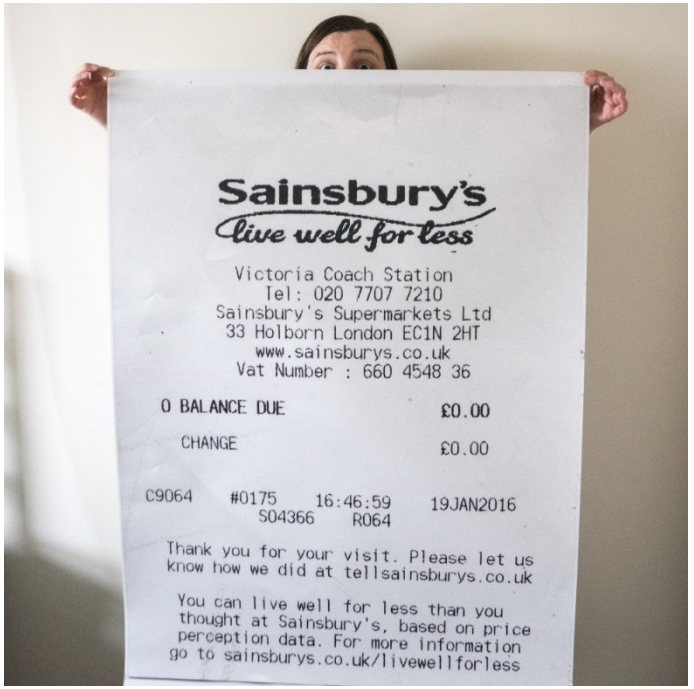
The film was screened as part of *Art Language Location*, Cambridge and *Turtle Salon*, Birmingham in 2014. *Delivering* was produced during the intervention *Missing You*.

Further *Missing You* images and documentation: http://www.mocksim.org/works/Missing_You.htm

PODS 2013, 3min silent moving image piece, DV PAL and other formats

Point of delivery signatures (PODS) from intervention *Missing You* played in sequence.

Link to video: https://vimeo.com/73614369



A0 Zero Receipt Poster 2016, B&W print on paper, ***How to buy Nothing*** 2016, 1min4sec YouTube video

High resolution scans of zero-transaction receipts printed t A0 size and Instructional video describing how to obtain zero-transaction receipts. All produced as part of intervention *Less*.

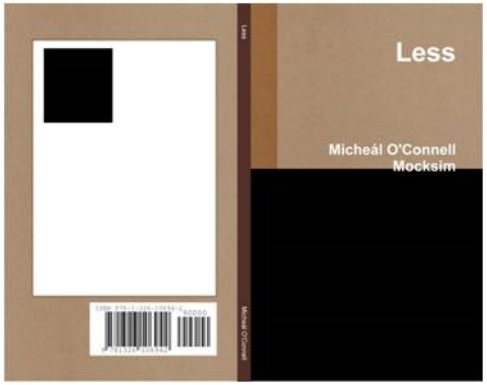
Instructional video link: https://youtu.be/6Gx_6-JfXHc

Now Man 2013, 1min39sec, DV PAL and other formats, **Worn Outing** 2012, slides

A run of *Now Man*, executed at a symposium in 2013 and stills documenting the *Worn Outing* intervention in 2012

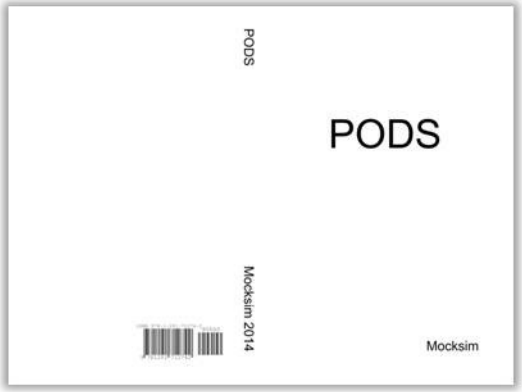
Links: https://vimeo.com/72409786 and https://1drv.ms/p/s!AuJICo08lFyD2nlW35jqdM3tO190 respectively.

Print on Demand books



Less 2014, Paperback book, 112 pages, 10.8x17.48cm

Receipts collected as evidence of buying nothing during a three month period.



Less 2014, Hardcover book, 104 pages, 15.24 x 22.86cm

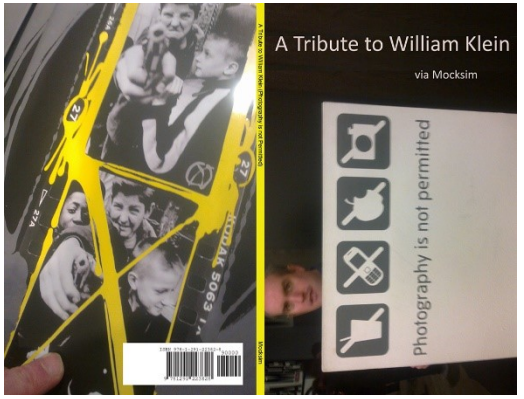
One hundred collected Point of Delivery Signatures.

Contra-Invention Catalogue 2010, Paperback book, 84 pages, 20.98x29.69cm, Full colour interior

All of the 'Contravention images' collected between 2009 and 2010, along with meta-data for camera type, shutter speed, aperture, other photo-metrics. An essay by Hito Steyerl and commissioned writing by Huw Bartlett is also included. Photos include examples in which the wardens inadvertently capture themselves in reflection .Others include the artist, who manoeuvred himself into images by following the wardens around. This catalogue was included on 'Martin Parr's Best Books' list 2010.

More Less 2016, Paperback book, 116 pages, 20.98x29.69cm

Receipts collected as evidence of buying nothing between 2015-2016, blown up to fit A4 pages.



A Tribute to William Klein 2012, Paperback book, 92 pages, 16.84x26.04cm

Images captured on phone handset at a major retrospective of the work of an iconic street photographer.

Miscellaneous clips

Now Man, 2010, (2 clips)

Execution of the game 30th October 2010 when three players competed to get in frame..

Worn Outing, 2012, 58sec (2 video clips)

From intervention Worn Outing, London 3rd March 2012. Includes expulsion from an underwear shop.

A Nod to Turing and Creed *at Occupant*, 2012, 58sec (2 clips)

From Artists Talk 27th April 2012, *Occupant* Residency, Grey Area Gallery.

Now Man at Puppet Talk Symposium 2013, 20sec clip

A run of Now Man at a symposium, 14th March 2013, University of Sussex.

Rearing *at Matt's Gallery*, London 2014, 1min35sec clip

Performed as pert of event in the proximity of Futuro House. 10th December 2014.

How to buy Nothing, 2015/16, 2min40sec (3 video clips)

Further demonstrates of how shop self-checkout machines can be used to buy nothing. Intervention: *Less*.

Delivering a Paper at Impact Symposium, 2015, 48sec clip

Instead of reading a paper in the customary academic way, this one was shouted out. 3rd July 2015.

Delivering *screening at CCA Cinema*, 2016, 3min24sec clip

On the launch date, 12th May 2016, people were asked to screen on any device and return documentation.

Click on image for link to clips. Note: much of the footage here is incidental, and of poor quality, but gives a sense of the experience.

Biographical Statement

Micheál O'Connell a.k.a. Mocksim has exhibited in locations as diverse as Whitechapel Art Gallery in London, the online world Second Life and a campsite in Venice. Typically he produces short looping films or 'simupoems'. He also designs and directs performances which involve appropriated materials and he compiles found data and imagery into books. Live art, organic materials and real objects are often presented along with digital work.

Strategies involve investigation of everyday functional processes, attempts to re-understand through tinkering with systems and inventing new routines and procedures. Subject matter includes car parking contravention, courier company delivery mechanisms and supermarket self-checkout machines. O'Connell's key interest is in the mediation of human relationships through technology, the curious dynamics, feedback loops and ritualistic aspects.

Contra-Invention (an exhibition of the photographs traffic wardens take as proof of parking violation) was invited to *Les Rencontres Internationales de la Photographie d'Arles* 2011, subsequently nominated for the *Deutsche Börse Photography Prize* 2012 and part of *From Here On* at Arts Santa Mónica, Barcelona in 2013. Thanks to Arts Council England and other funding sources the show also toured Britain and Ireland in 2012/13. The original catalogue for *Contra-Invention* was included in Martin Parr's Best Book List in 2010 and O'Connell is now part of ABC Artists' Books Cooperative which advocates the use of Print on Demand approaches as well as querying the status of publishing and book production generally.

Work from his project *Missing You* was exhibited in Macclesfield, supported again by Arts Council England, in 2014. A public event was run to coincide with the show, entitled *From Jacquard to JPEG*, at the famous Silk Heritage Centre with artists Rut Blees Luxemburg and Mishka Henner. In 2014 also the artist's film *Delivering* was screened in Birmingham as part of *Turtle Salon*, initiated by producer and director Michael Shamberg, and along with another work *Recay*, it is now formally part a that collection.

Online

Web site	www.mocksim.org
Twitter	https://twitter.com/Mocksim and https://twitter.com/Mocksim_Latest
Facebook	https://www.facebook.com/Mocksim/
Vimeo	https://vimeo.com/mocksim/ (final video and simupoems)
YouTube	https://goo.gl/vnPg0o and https://goo.gl/V1VL2V (process work, clips, research)

Education

2010-2016	Practice-led PhD (P/T), School of Media, Film and Music, University of Sussex
2004-2006	MA Fine Art (Distinction), University of Brighton

Selected Exhibitions and Events

2016	ABC Artists' Books Collective, Offprint, Tate Modern, London
	Low Tech Lab, London
2015	Delivering a Paper, Impact, Lighthouse, Brighton
2014	Rearing, Matt's Gallery, London
	ABCEUM, Offprint, Beaux-Arts de Paris, France
	Turtle Salon, Article Gallery, Birmingham
	ABCEUM, Grand Parade Gallery, Brighton Photo Biennial
	Missing You & From Jacquard to JPEG, The Silk Museum, Macclesfield
2013	Visual Urbanism, British Library, London
	Milkbar, Subterranean Art House, California
	From Here On, Arts Santa Monica, Spain
	LIPS. Ormston House, Ireland
2012	Contra-Invention Plus, Over and Out, Lincoln
	Boundary Work II, Wandesford Quay Gallery, Cork
	Disruption II, Elysium Gallery, Swansea
	Contra-Invention Plus, Marburae Gallery, Macclesfield
	Trainofthoughts, The Horse Hospital, London
	Turtle Salon, Meter Room, Coventry
	Occupant, Grey Area Gallery, Brighton
	Art of Architecture, The Public, West Bromwich
2011	Rear Window, Cinecity APEC Studios, Hove
	Artists Disguised Procession, Cecil Sharpe House, London
	Les Recontres D'Arles, Atelier de Méchanique, France
2010	Brighton Photo Biennial, Friese-Greene Gallery, Brighton
	Mockeyah, The Joinery, Dublin

Selected Exhibitions and Events contd.

2009	MakeShift, Camping Fusina, Italy
2008	Testing Grounds, Permanent Gallery, Brighton
	Digiville, Lighthouse, Brighton
2007	Vacancy, Grey Area Gallery, Brighton
	Critical Incident, Freeman Centre, East Sussex
2006	Wormhole Saloon, Whitechapel Gallery, London
	See Sea Asymptote, University of Brighton, Brighton
	Trouble With Them, Grey Area Gallery, Brighton
	Athens Video Art Festival, Various locations, Greece
2005	Giving Birth To Monsters, University of Brighton, Brighton
	Max10, Falmouth Art Centre, Cornwall
2004	Big Blip 4, Sallis Benney Theatre, Brighton
	Zeroes & Ones, Fairfields Arts Centre, Basingstoke

Awards, Funding, Press

2014	Arts Council England grant *Missing You*/*From Jacquard to JPEG*
	Studentship, PhD Creative and Critical Practice, University of Sussex
2013	Interactive, Art + Copyright special issue #50
2012	Nominated for The *Deutsche Börse Photography Prize*
	London Sinfonietta's *Blue Touch Paper* workshop 2012
	Artbeat Cork Interview Boundary Work II
	Final shortlist Eva International
	Review of *Trainofthought*s at The Horse Hospital, Criticismism
	Arts Council England grant Contra-Invention
2011	Selected for Les Recontres d'Arles
	Articles *From Here On* Photoworks, The Guardian and Criticismism 2011 From Here On
2010	West of England Academy Autumn Exhibition
	London Evening Standard and Brighton Argus
	Catalogue included in Martin Parr's Best Books 2010