

**The Practice of Posthumanism:
Five Paradigmatic Figures for Human Mutation**

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Declaration of Authorship

I, *Daniel Rourke*, hereby declare that this thesis and the work presented in it is entirely my own. Where I have consulted the work of others, this is always clearly stated.

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Abstract

Post-humanism is best understood as several overlapping and interrelated fields coming out of the traditions of anti-humanism, post-colonialism, and feminist discourse. But the term remains contested, both by those who wish to overturn, or even destroy, the 'humanism' after that decisive hyphen (post-humanists), and those engaged in the project of maximising their chance of merging with technologies, and reaching a supposed point of transition, when the current 'human' has been augmented, upgraded, and surpassed (transhumanists). For both those who wish to move beyond 'humanism', and those who wish to transcend 'the human', there remains a significant, shared, problem: the supposed originary separations, between information and matter, culture and nature, mankind and machine, singular and plural, that post-humanism seeks to problematise, and transhumanism often problematically ignores, lead to the delineation of 'the human' as a single, universalised figure. This universalism erases the pattern of difference, which post-humanists see as both the solution to, and the problem of, the human paradigm. This thesis recognises this problem as an ongoing one, and one which – for those who seek to establish posthumanism as a *critical* field of enquiry – can never be claimed to be finally overcome, lest the same problem of universalism rear its head again.

To tackle this problem, this thesis also enters into the complex liminal space where the terms 'human' and 'humanism' confuse and interrupt one another, but rather than delineate the same boundaries (as transhumanists have done), or lay claim over certain territories of the discourse (as post-humanists have done), this thesis implicates itself, myself, and yourself in the relational *becoming* posthuman of which we, and it, are co-constituted. My claim being, that critical posthumanism must be the action it infers onto the world of which it is not only part, but in mutual co-constitution with.

The Practice of Posthumanism claims that critical posthumanism must be enacted *in practice*, and stages itself as an example of that process, through a hybrid theoretical and practice-based becoming. It argues that posthumanism is necessarily a vibrant, lively process being undergone, and as such, that it cannot be narrativized or referred

to discursively without collapsing that process back into a static, universalised delineation once again. It must *remain* in practice, and as such, this thesis enacts the process of which it itself is a principle paradigm.

After establishing the critical field termed 'posthumanism' through analyses of associated discourses such as humanism and transhumanism, each of the four written chapters and hybrid conclusion/portfolio of work is enacted through a 'figure' which speaks to certain monstrous dilemmas posed by thinkers of the posthuman. These five figures are: *The Phantom Zone*, *Crusoe's Island*, *The Thing*, *The Collapse of The Hoard*, and *The 3D Printer (#Additivism)*. Each figure – echoing Donna Haraway – 'resets the stage for possible pasts and futures' by calling into question the fictional/theoretical ground upon which it is predicated. Considered together, the dissertation and conclusion/portfolio of work, position critical posthumanism as a hybrid 'other', my claim being that only through representing the human as and through an *ongoing* process (ontogenesis rather than ontology) can posthumanism re-conceptualise the 'norms' deeply embedded within the fields it confronts.

The practice of critical posthumanism this thesis undertakes is inherently a political project, displacing and disrupting the power dynamics which are co-opted in the hierarchical structuring of individuals within 'society', of categories within 'nature', of differences which are universalised in the name of the 'human', as well as the ways in which theory delineates itself into rigid fields of study. By confounding articulations of the human in fiction, theory, science, media, and art, this practice *in practice* enacts its own ongoing, ontogenetic becoming; the continual changing of itself, necessary to avoid a collapse into new absolutes and universals.

This is no fantasy... no careless product of wild imagination.
No, my good friends.

The opening lines of *Superman*, 1978 ¹

¹ Richard Donner, *Superman*, Film (Warner Bros., 1978).

Introduction

Those who theorise the posthuman, post/human, or post-humanism – to name but three of its designations – enter into a complicated relationship with the concept they confront. Post-humanism is best understood as several overlapping and interrelated fields coming out of the traditions of anti-humanism, post-colonialism, and feminist discourse. But the term remains contested, both by those who wish to overturn, or even destroy, the ‘humanism’ after that decisive hyphen, and those who are too busy engaging in maximising their chance of merging with technologies, and becoming ‘post’, to spend time questioning how the ‘human’ of humanism is constituted in the first place. This thesis also enters into the complex liminal space where the terms ‘human’ and ‘humanism’ confuse and interrupt one another, but rather than delineate the same boundaries, or lay claim over certain territories of the discourse, I intend for this text to implicate itself, myself, and yourself (the reader) in the relational *becoming* post-human of which we, and it, are co-constituted.

This thesis stages itself as an example of posthumanism in practice. It argues that posthumanism is necessarily a vibrant, lively process being undergone, and as such, that it cannot be narrativized or referred to without collapsing that process back into a static, universalised delineation once again. It *must* remain in practice, and as such, this thesis enacts the process of which it itself is the primary paradigm. But here I am getting ahead of myself. In order to understand the territories this thesis will cross into, I must first lay out a series of terms, and more importantly, *ways of relating* those terms in order for the critical stance I take towards posthumanism and its precursors to become clear. This introduction retains a more discursive mode of address than the proceeding chapters, relying on referring to key concepts, thinkers, and questions of which the remaining thesis will approach more intimately. There are contradictions at play in this approach, which I argue are also inherent in many of the posthumanist texts I converse with. It is important once again to re-iterate the key research question of this thesis as situated somewhat between the ‘vibrant’ process I argue posthumanism must be, and the detached, epistemologically normative critical mode the writing this introduction takes. For my argument is that critical posthumanism ‘in

practice' must be the action it infers onto the world of which it is not only part, but in mutual co-constitution with. I work from the basis of R.L. Rutsky's claim that posthumanism is 'a kind of permanent cultural revolution, a performative process that continually re-conceptualizes, or changes, itself.'² This thesis proposes itself as a principle example of the mode of practice by which posthumanism must be, not only understood, but acted, entered into, and self-reflective of. This practice *in practice* enacts the ongoing, ontogenetic becoming; the changing of itself, necessary to avoid a collapse into new absolutes and universals.

Firstly, I will map the critical territory of posthumanism as I approach it, engaging along the way with the practice of posthumanism undertaken by some of its associates. I will segue into a discussion on what is *not* posthumanism, dragging the figure of 'the human' across the divides as I write and begin to blur them. Finally, for this introduction, I will give an overview of the following chapters as well as the figures they contend with.

Human(ism) Remains

In her influential book *How We Became Posthuman* (1999), N. Katherine Hayles lays out a course from a 'nightmare... culture inhabited by posthumans who regard their bodies as fashion accessories,' to her ideal version of the posthuman, 'that recognizes and celebrates finitude as a condition of human being, and that understands human life is embedded in a material world of great complexity.'³ Hayles begins by aligning the term 'posthuman' with what I would call 'transhumanism' or what was not so long ago more commonly referred to as 'extropianism', defined by Eugene Thacker as 'theoretical-technical inquir[y] into the next phase of the human condition through advances in science and technology.'⁴ The 'extropy' of extropianism refers to the human capacity for improvement, and the 'trans' of transhumanism to the transition

² R.L. Rutsky, 'Mutation, History, and Fantasy in the Posthuman.', *Subject Matters: A Journal of Communications and the Self* 3.2/4.1 (2007): 101.

³ N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago, Ill.: University of Chicago Press, 1999), 5.

⁴ Eugene Thacker, 'Data Made Flesh: Biotechnology and the Discourse of the Posthuman', *Cultural Critique* 53, no. 1 (2003): 73.

those who ascribe to these ideologies believe humans currently find ourselves in, towards a final goal of self-perfection. 'The overall goal,' a 1994 *Wired* article on the extropian movement explains, 'is to become more than human... possessed of drastically augmented intellects, memories, and physical powers.'⁵ Since human beings have always already augmented themselves with technology – a humble length of knotted string arguably extends our intellects and memories; the slingshot and the unicycle increase our physical powers – the transhuman imperative must separate what it considers the essential features of the human, from those that they believe merely frame/scaffold/bolster our being. An example of this line of reasoning can clearly be seen in an article penned by outspoken transhumanist Zoltan Istvan following a 2015 legal ruling. The 'non-human' is not asserted or denied in Istvan's argument, but appears obliquely once the doctrines of transhumanism – and as I will argue its proxy, humanism – are invoked.

Described as 'a landmark' case⁶ in support of the disabled community, a lawsuit was settled in March 2015 ordering Los Angeles council to spend over \$1.3 billion repairing the city's 'dilapidated network of sidewalks and access ways.'⁷ Shortly after the ruling Zoltan Istvan penned a comment piece for website *Motherboard* indicating the further billions of dollars this precedent might cost other American cities forced to respond to it. Rather than fixing sidewalks and redesigning the city streets for better access, Istvan argues, the money would be better spent on exoskeleton suits for wheelchair users, the obese, elderly and infirm, 'that [would] allow them to run, jump, and play active sports.'⁸ The image Istvan conjures up, of augmented human bodies 'running over' crumbling sidewalks 'at 15 miles per hour while jogging'⁹ would be comical, were it not padded with so many other harmful caricatures. Istvan begins by critiquing the

⁵ Ed Regis, 'Meet the Extropians', WIRE, 10 January 1994, <http://www.wired.com/1994/10/extropians/>.

⁶ Alpert Reyes Emily, 'L.A. Agrees to Spend \$1.3 Billion to Fix Sidewalks in ADA Case', *latimes.com*, 1 April 2015, <http://www.latimes.com/local/lanow/la-me-ln-lawsuit-broken-sidewalks-20150331-story.html>.

⁷ Zoltan Istvan, 'In the Transhumanist Age, We Should Be Repairing Disabilities, Not Sidewalks', *Motherboard*, 3 April 2015, <http://motherboard.vice.com/read/in-the-transhumanist-age-we-should-be-repairing-disabilities-not-sidewalks>.

⁸ Istvan.

⁹ Istvan.

role of the *Americans with Disability Act*, 'It's great to have a law that protects against discrimination, but in the transhumanist age we also need a law that insists on eliminating disability via technology and modern medicine.' And rounds off his argument by appealing to the reader's economic sensibilities:

With millions of people in the US suffering from mobility issues, it would be far more lucrative for the country to have its people with disabilities employed, rather than giving them level sidewalks.¹⁰

The backlash to the article was swift, and uncompromising. In a piece for *Huffington Post* entitled *I Don't Need Fixing...* Lauren West asserted the need for 'inclusive' design and legislation, reminding Istvan that accessibility and usability are standards of city planning that encompass 'all members of society,'¹¹ whatever their embodied status. In another *Motherboard* piece, disabled rights activist Emily Ladau attacked Istvan's discriminatory ignorance arguing that, 'no legislative action truly eradicates or fixes the stigmatizing attitudes that are the real barriers for disabled people.'¹² Zoltan Istvan's response to these criticisms exhibits an apparent inclusivity, predicated on what he deems to be common: 'Transhumanists believe everyone can be improved and should be improved if they want.'¹³ Here he makes an appeal to human universality, founded on the notion that 'everyone' not only has the capacity, but the *right* to treat each of our 'faulty' bodies as substrates to be augmented and upgraded. Furthermore, since we already have access to these technologies of improvement it would be morally wrong to delay using them right away: 'The transhumanist believes we should

¹⁰ Istvan.

¹¹ Lauren West, 'I Don't Need Fixing...', The Huffington Post UK, 21 April 2015, http://www.huffingtonpost.co.uk/laurenwest1/i-dont-need-fixing_b_7086086.html.

¹² Ladau Emily, 'Fix Discriminatory Attitudes and Broken Sidewalks, Not Humans', *Motherboard*, 8 April 2015, <http://motherboard.vice.com/read/fix-discriminatory-attitudes-and-broken-sidewalks-not-humans>.

¹³ Anthony Cuthbertson, 'Exoskeletons v Wheelchairs: Disability Advocates Clash with Futurists over "offensive" Solution', *International Business Times UK*, 14 April 2015, <http://www.ibtimes.co.uk/exoskeletons-vs-wheel-chairs-disability-advocates-clash-futurists-over-offensive-solution-1496178>.

immediately work to improve ourselves via enhancing the human body and eliminating its weak points.’¹⁴

Human autonomy is invoked as an absolute and a right, but it is only wielded here once a canon has been asserted, marking out ‘otherness’ not only in the bodies of the infirm, obese, or less able, but also in any individual who does not *demand* the human right to raise ourselves through a series of technologically mediated steps towards perfection. By appealing to a ‘universal rationality, and self-regulating ethical behaviour’¹⁵ in his proclamations, Istvan reduces those he denounces to what Rosi Braidotti has called ‘the less than human status of disposable bodies.’¹⁶ The appeal to *inclusivity* – in virtue of human autonomy and (self-)regulation – therefore instates those of ‘normal’ body, race, sex, or genome as *exclusive* harbingers of that-which-is-to-inevitably-come. A process that Braidotti refers to as a ‘dialectics of otherness’ which ‘assigns difference on a hierarchical scale as a tool of governance.’¹⁷

The universal human subject is an unquestioned feature of many transhumanist proclamations, the most prominent of which may be the myth of the Technological Singularity, espoused by futurist and inventor Ray Kurzweil.¹⁸ As technological change accelerates, according to Kurzweil, so it pulls us upwards in its wake. Kurzweil argues that as the curve of change reaches an infinite gradient, reality itself will be brought into question. Like a Black Hole in space-time, subjects travelling toward this spike will find it impossible to turn around, to escape its pull. A transformed posthuman reality awaits us on the other side of the Technological Singularity. A reality Kurzweil and his ilk believe ‘we’ will inevitably pass into in the coming decades. The transhumanist exonerates a type of futurism which demands that the complexities of human life, ‘the varied and contradictory impulses and appetites of most humans and the historically

¹⁴ Zoltan Istvan, ‘Transhumanism and Our Outdated Biology’, The Huffington Post, 21 April 2016, http://www.huffingtonpost.com/zoltan-istvan/transhumanism-and-our-out_b_9749138.html.

¹⁵ Rosi Braidotti, *The Posthuman*, 2013, 15.

¹⁶ Braidotti, 15.

¹⁷ Braidotti, 66.

¹⁸ The term ‘Technological Singularity’ has a long history, but most link it back to science fiction writer Vernor Vinge, whose coinage in a 1993 essay (‘Vernor Vinge on the Singularity’, accessed 23 March 2017, <http://mindstalk.net/vinge/vinge-sing.html>.) was later taken up by futurist Ray Kurzweil, most prominently in his book *The Singularity Is Near* (London: Duckworth, 2005).

diverse and tenacious character of institutions are simply dissolved into the imaginary.’¹⁹ Their predictions and solutions necessarily posit an ideal – calm and flattened – landscape, outside of history. A place beyond real political factors of class, status and power; where difference is presumed not to exist – and this or that technology will get ‘us’ there – without ever really defining who ‘us’ might or might not include – beyond the close by, and tantalizing, event horizon.

In a 2007 paper entitled *Droppin’ Science Fiction*, Darryl A. Smith explores the singularity through African American and Afrofuturist science fiction. He notes that the promise of runaway change positions those subject to it in the place of Sisyphus, the figure of Greek myth condemned to push a stone up a hill forever. For Sisyphus to progress he has to fight gravity as it conspires with the stone to pull him back to the bottom of the slope. The singularity in science fiction from black authors such as W. E. B. Du Bois, Derrick Bell, and Amiri Baraka focusses on this potential fall, rather than the ascent:

Here, in the geometrics of spacetime, the Spike lies not at the highest point on an infinite curve but at the lowest. The entelechy defined by the slope of that curve and transcending humanity at its absolute apex becomes, rather, the slope slipping into the Spike's domain of collapsed rational reality... Far from being the shift into a posthumanity, the Negative Spike is understood... as an infinite collapsing and, thus, negation of reality. Escape from such a region thus requires an opposing infinite movement.²⁰

The image of a collective ‘push’ of the stone of progress up the slope necessarily posits a universal human subject, resisting the pull of gravity back down the slope. A universal human subject who passes victorious to the other side of the event horizon. It is no coincidence that ‘singularity’ is often used as a term to indicate human finitude. Self-same subjects existing at particular points in time, embedded within particular contexts, told through a singular history or single potential future. The metaphor of

¹⁹ James W. Carey, *Communication as Culture, Revised Edition: Essays on Media and Society* (Routledge, 2008), 153.

²⁰ Darryl A. Smith, ‘Droppin’ Science Fiction: Signification and Singularity in the Metapocalypse of Du Bois, Baraka, and Bell’, *Science Fiction Studies* 34, no. 2 (2007): 207–8.

the transformative singularity signals not one reality ‘to come’, nor even two realities – one moved from and one towards – but of many, all dependant on who the subject of the singularity is and how much autonomy they are ascribed.

The implication of the supposed technological singularity – that our technologies are the primary ‘writer’ of the now, inscribing our subjectivities as ‘we’ march with them to the posthuman future – exposes a common tendency to espouse transhumanist ways of thinking. As Stefan Herbrechter and Ivan Callus make clear:

[T]he proper medium of the transhuman is the human itself as that which must be written upon, worked upon, in its status as incomplete state or intermediate stage to something more “finished” in its “seamless articulation” with technology as prosthesis. ²¹

Transhumanism is the ‘seamless’ successor to humanism not only because of its insistence on a set of common, essential features that define the human, but also in the belief that human agency can be accelerated through technologies in order to enhance or at least maintain those essential features as ‘we’ – apparently liberated from our weak biological bodies – move forward. This is not to say that humanism has not also continually renewed and revised *its* boundaries. Indeed, people once considered too wretched to warrant humane treatment, such as the enslaved and colonised, women, people of colour, the disabled and less able, and those people identifying as lesbian/gay/bi/trans/queer, have been incorporated into the sphere of humanity and human rights in an ongoing project of collective redefinition. For anti-humanists such as Rosi Braidotti, the human of humanism continually ‘spells out a systematized standard of recognisability – of Sameness.’ ²² These systems of normativity do not necessarily depend on direct comparisons of ‘better’ and ‘worse’ for their power. As the case of Zoltan Istvan shows, humanism can sneak ‘otherness’ into ethical proclamations by appealing to a universal humanity, bound by a shared desire to exert ‘our’ autonomy in pursuit of improving our selves. These arguments often contain the hidden premise that disagreeing with this universality would, in

²¹ Stefan Herbrechter and Ivan Callus, ‘What’s Wrong With Posthumanism?’, *Rhizomes*, no. 7 (Fall 2003), <http://www.rhizomes.net/issue7/callus.htm>.

²² Braidotti, *The Posthuman*, 26.

itself, be an admission of one's disregard for the suffering that is part of the human condition, a suffering transhumanists believe technological augmentation will alleviate, avoid, or cure entirely.

Just as an understanding of the *human* of each particular *humanism* can only come from assessing the 'outside' or 'others' of that field, so it pays to contrast posthumanism with the transhumanist ideology which appears to share many of its tenets, but which under closer examination actually reintroduces the non-human 'other' in its appeal to human universality and transcendence. Returning to N. Katherine Hayles' assertions on what she calls posthumanism, transhumanists think of 'the body as the original prosthesis we all learn to manipulate.'²³ Yet the image this conveys, of cyborg adaptations jutting out of our flesh at obtuse angles belies the deeper distinction transhumanists must make between the 'informational patterns' that they believe encode and constitute the central, privileged homunculus of human being, and the substrate of our bodies, a biological 'accident of history rather than an inevitability of life.'²⁴ What is important to note is the reintroduction transhumanism makes of a categorical, ontological boundary between human 'being' and our biologically constituted bodies. Hayles treats the term 'posthuman' as a catch-all category for a wide set of techno-derivative reappraisals of the human, but throws praise on those discourses and figurations that, as Elaine L. Graham puts it, confound 'but also [hold] up to scrutiny the terms on which the quintessentially human will be conceived.'²⁵ I will call these practices and expositions what Jill Didur has termed, *critical* posthumanism.²⁶ Indeed, this is the very brand of discourse Hayles herself introduces in her endeavour to 'show what has been elided, suppressed, and forgotten [in transhumanism] to make information lose its body.'²⁷ It is these originary separations, between information and matter, culture and nature, mankind and

²³ Hayles, *How We Became Posthuman*, 2.

²⁴ Hayles, 3.

²⁵ Elaine Graham, *Representations of the Post Human : Monsters, Aliens, and Others in Popular Culture* (New Brunswick N.J.: Rutgers University Press, 2002), 11.

²⁶ Jill Didur, 'Re-Embodying Technoscientific Fantasies: Posthumanism, Genetically Modified Foods, and the Colonization of Life', *Cultural Critique* 53, no. 1 (2003): 98–115.

²⁷ Hayles, *How We Became Posthuman*, 13.

machine, singular and plural that both humanism and posthumanism seek out in their delineation of the human. But whereas humanism – and its seamless successor, transhumanism – then suppress, or attempt to undermine these distinctions in pursuit of some fundamental, universal principle of humanity, critical posthumanism as Didur defines it, ‘questions the view that there was ever an originary divide between these things in the first place.’²⁸ Posthumanism may then better reassess the human and humanism not through a ‘description of essences, but via the delineation of boundaries.’²⁹

Boundary Claims

In fictions, and through figures, boundaries are sought by writers and theorists who seek to encapsulate the ‘post’ of the posthuman as it reveals the ‘human’ that is (apparently) under threat of being replaced. In her 2002 book *Representations of the Post/Human*, Elaine L. Graham turns to the first film in the *Terminator* franchise, after a close reading of Donna Haraway’s *Manifesto for Cyborgs* (1984), in order to stage the terrifying Hollywood cyborg as such a liminal entity. For Graham, the hypermasculinity of Arnold Schwarzenegger, the actor who plays the Terminator, is itself a kind of artifice that aligns with that of the machinic cyborg. Schwarzenegger is already a superhuman creature, she suggests, ‘pure body... artificially enhanced in a way that puts him on a different plane to ordinary organic humanity.’³⁰ His steroid-augmented muscles and cold exterior betray a tension between his human and technological features, for both Schwarzenegger and the cyborg Terminator he plays exhibit machinelike bodies which originate in corporeal flesh and blood.³¹

In the *Terminator* films, machines pursue humans in lieu of their extinction, but it is perhaps the figure of the machine which is most threatened as the fiction unfolds. Inevitably it is always humans whose essences remain intact – or are even enhanced – at the end of such fantasies, whilst the non-human hybrid creatures they confront are

²⁸ Didur, ‘Re-Embodying Technoscientific Fantasies’, 101–2.

²⁹ Graham, *Representations of the Post Human : Monsters, Aliens, and Others in Popular Culture*, 11.

³⁰ Graham, 208.

³¹ Graham, 208.

ultimately defeated by their inability to match up to the adaptable, variant humanity of their precursors. In the same text that espouses the blur of boundaries, from machine-like humans to human-like machines, scientific through to mythical discourses, and holds up hybridity itself as the most 'post' of posthuman traits, Graham's *Representations of the Post/Human* grapples with the acerbic, techno-macho frame of the Terminator at multiple levels, from the fiction itself to the cultural accumulations which enable that fiction to do the critical work through her writing. The Terminator is mobilised as a 'figure' by Graham, building on work undertaken by Donna Haraway to depict the 'florid machinic, organic, and textual entities with which we share the earth and our flesh.'³² The Terminator is an example of a feminist figuration in its capacity to highlight the different power dynamics associated with its masculine embodied and machinic qualities, whilst at the same time mobilising a further critical posthumanist turn, which seeks to undermine and overturn those dualisms in themselves.

In her work on figuration, philosopher Rosi Braidotti recognises this dynamism of the figural not only as an aspect of rational enquiry, but as a bodily and emotional one as well:

A figuration renders our image in terms of a decentred and multi-layered vision of the subject as a dynamic and changing entity... We live in permanent processes of transition, hybridization and nomadization, and these in-between states and stages defy the established modes of theoretical representation.³³

To recognise the embodied – or material – aspects of our own situation is, for Braidotti, Haraway, and other feminists who deal in figurations, a relational mode of thinking theoretically, which maintains its shape-shifting characteristics as a fundamental part of its process. Once refigured, the cyborg does not express some totalizing 'truth' about male power and female subjugation, or the machinic efficiencies of war perpetuated through that simulacra, but flows dynamically into a

³² Donna Haraway, *The Haraway Reader* (Psychology Press, 2004), 1.

³³ Rosi Braidotti, *Metamorphoses: Towards a Materialist Theory of Becoming* (Cambridge, UK ; Malden, MA: Polity Press in association with Blackwell Publishers, 2002), 2.

whole host of social, political, and material questions about the human situation shown to be interrelational.

As Rosi Braidotti suggests, 'the human' is itself a figural construction, left over from the cartographies of Enlightenment thought, 'the Cartesian subject of the cogito, the Kantian "community of reasonable beings", or, in more sociological terms, the subject as citizen, rights-holder, property-owner, and so on.'³⁴ As I showed in relation to Transhumanism, 'humanism' tends to universalise this problematic construction, presupposing 'human' subjects as autonomous agents, capable of rational control over a world of which they themselves are the only benefactors. In the introduction to *What is Posthumanism?* (2010), Cary Wolfe expands on this, turning to Michel Foucault to mark 'the difference between humanism and Enlightenment thought.'³⁵ For Foucault, humanism was defined by its appeal to anthropological universality, a dogma for which the Enlightenment 'should have no patience,'³⁶ since the spirit of rational inquiry 'stops short of applying its own protocols and commitments to *itself*.'³⁷ Having evacuated God from the centre of their ethical and ontological traditions humanists have continued to establish their particular definitions of the human as the central pivot of a whole series of philosophical solar systems, around which non-human things are forced to revolve. Accordingly humanism, 'posits the power of transcendence as its distinctive characteristic and humanistic universalism as its particularity.'³⁸ In other words: there are many humanisms, but each must appeal to the same doctrine of universality to lift its particular brand above its others.

Philosopher David Roden defines the humanist as one who 'believes that humans are importantly distinct from non-humans and supports this distinctiveness claim with a philosophical anthropology.'³⁹ What is left over from these definitions is an understanding of what constitutes the so-called 'non-human', for to trace the outline

³⁴ Braidotti, *The Posthuman*, 1.

³⁵ Cary Wolfe, *What Is Posthumanism?*, Posthumanities Series, v. 8 (Minneapolis: University of Minnesota Press, 2010), xvi.

³⁶ Wolfe, xvi.

³⁷ Wolfe, xx.

³⁸ Braidotti, *The Posthuman*, 15.

³⁹ David Roden, 'Kevin LaGrandeur on Posthumanism and Transhumanism', *Enemyindustry* (blog), 29 July 2014, <http://enemyindustry.net/blog/?p=5282>.

of this eclectic category, in its many shifts, is often also to follow the trail of cruelties that have been perpetuated against those entities which have fallen outside the demarcated space of the human or humane. As part of his lucid account of humanism, Tony Davies expounds a similar point:

All Humanisms, until now, have been imperial. They speak of the human in the accents and the interests of a class, a sex, a race, a genome. Their embrace suffocates those whom it does not ignore... It is almost impossible to think of a crime that has not been committed in the name of humanity.⁴⁰

Haraway argues that privileged 'us' versus 'them' dichotomies are harmful even when they are wielded from within a philosophy that appeals to their erasure. She extends her critique across a range of other humanisms, including certain schools of feminism driven by the 'ironic dream of a common language'⁴¹ which it was hoped would unite all women under the rubric of shared, universal experience. As Haraway succinctly reminds her readers, 'figures help us avoid the fantasy of "the one true meaning,"'⁴² in their capacity to remain dynamic and, like Elaine L. Graham's operation on the Terminator, expose the 'fabricated character of all things, by virtue of the boundaries they cross and the limits they unsettle.'⁴³

This process of exposing, or bringing forth is related to the etymology of the monstrous, or monstrum, in its 'simultaneous demonstration and destabilization of the demarcations by which cultures have separated nature from artifice, human from non-human, normal from pathology.'⁴⁴ In an interview on the use of the horror genre in speculative thought Eugene Thacker builds on this definition:

A monster is never just a monster, never just a physical or biological anomaly. It is always accompanied by an interpretive framework within which the monster

⁴⁰ Tony Davies, *Humanism*, The New Critical Idiom (London ; New York: Routledge, 1997), 131.

⁴¹ A phrase taken from the first subtitle of *A Manifesto for Cyborgs*, i.e. 'An Ironic Dream of a Common Language for Women in The Integrated Circuit.'

⁴² Donna Haraway and Martha Kenney, 'Anthropocene, Capitalocene, Chthulucene', in *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies*, ed. Heather Davis and Etienne Turpin (London: anexact, 2015), 257.

⁴³ Graham, *Representations of the Post Human : Monsters, Aliens, and Others in Popular Culture*, 37.

⁴⁴ Graham, 12.

is able to be *monstrum*, literally “to show” or “to warn.” Monsters are always a matter of interpretation. ⁴⁵

The *monstrum* can be thought of as revealing how a norm is constituted in the first place. According to Colin N. Milburn, Jacques Derrida employed ‘the figure of the monster [to embody] a means of thinking otherwise – a means of passing ‘beyond man and humanism’ and reaching for other posthuman futures’. ⁴⁶ So figures of the human and its (monstrous) ‘others’ are sought out and taken advantage of in writing on the posthuman. In critical posthumanist writings, cyborgs are adjoined by a zoo of hybrid figures: from the monsters of myth and cheap B-movies, to Artificial Intelligence, alien slimes, and toxic oozes, or chimeras like GM crops and synthetic organs plucked from the headlines of popular science magazines. These representations are what Rosi Braidotti refers to as ‘processes without a stable object’, ⁴⁷ staging ontological instabilities that Elaine L. Graham suggests ‘straddl[le] the boundaries of fiction and scientific taxonomy.’ ⁴⁸ Here is a telling appeal to another important threshold for posthumanist practice, this time between the frontiers of theory and fiction, ‘the one space... invad[ing] the other.’ ⁴⁹

As Graham attests, ‘we can no longer rely [on categorical] distinctions to demarcate the normatively “human” as an enclave against the non-human.’ ⁵⁰ The non-human is already always imbricated with the human and its apparent others, or, to hijack the terms under which Alan Bourassa examines this relation:

[T]he three great figures of the non-human: the animal, the machine and the divinity... are not, of course, *essentially* non-human. They are, at best, *accidentally* non-human. The non-human, as something that can be spoken of,

⁴⁵ Eugene Thacker, ‘The Sight of a Mangled Corpse—An Interview With’, *Scapegoat Journal*, no. 05: Excess (2013): 380.

⁴⁶ Colin Milburn, ‘Monsters in Eden: Darwin and Derrida’, *MLN* 118, no. 3 (2003): 603.

⁴⁷ Rosi Braidotti, ‘Signs of Wonder and Traces of Doubt: On Teratology and Embodies Differences - in - Between Monsters, Goddesses and Cyborgs: Feminist Confrontations with Science, Medicine and Cyberspace’, in *Between Monsters, Goddesses and Cyborgs: Feminist Confrontations with Science, Medicine and Cyberspace*, ed. Nina Lykke and Rosi Braidotti (London: Zed Books, 1996), 150.

⁴⁸ Graham, *Representations of the Post Human : Monsters, Aliens, and Others in Popular Culture*, 12.

⁴⁹ Neil Badmington, ed., *Posthumanism*, Readers in Cultural Criticism (Houndmills, Basingstoke, Hampshire ; New York: Palgrave, 2000), 8.

⁵⁰ Graham, *Representations of the Post Human : Monsters, Aliens, and Others in Popular Culture*, 33.

that can act and appear, is caught within the disjunction of the three, the empty space created and enclosed (but not occupied) by their imperfect overlap.⁵¹

Thus posthumanism turns to monstrous, hybrid figures because they problematize the category of 'the human' whilst simultaneously staging the type of vibrant, transitory displacements new forms of theory must undertake if they are to retain their capacity to confound. The 'post' prefix – given also to terms such as structuralism, modernity, colonialism, and even internet once the desire to define their transition arose – is significant here: a shifting and mutating from a future anterior. For the *will have been* undergone of the term 'human' has always remained in flux with the non-human world it contaminates/which contaminates it. Posthumanism registers boundary-confusions that are material, categorical and temporal, probing through the complex social, political, and technological shifts which stimulate the 'empty space' into which the non-human 'accidentally' falls to continually change its shape. This shape-shifting is a significant quality of posthumanism: being sought out and prized as a characteristic of fictional creatures and figures; being exposed in the rhetoric imposed on cultural and scientific events and entities; being made manifest in the kind of writing critical posthumanist thinkers argue must now be undertaken in the pursuit of 'new ways of relating.'⁵²

This pursuit of a writerly mode which undergoes the very changes it seeks, partly emerges from the principle of situating knowledge in the material. Haraway herself refers to this as the 'belly of the monster',⁵³ of which we are always inside. There is no outside from which to comfortably survey our situation. The god-trick of an all-pervading vision, attached to a 'faceless, bodiless and contextless knower, who can detach her/himself from the world and the objects of study' is an illusion, given to us by Enlightenment, positivist epistemologies,⁵⁴ and continued in moralistic,

⁵¹ Alan Bourassa, 'Literature, Language and the Non-Human', in *A Shock to Thought: Expression After Deleuze and Guattari*, ed. Brian Massumi (Routledge, 2002), 61.

⁵² Braidotti, *Metamorphoses*, 173.

⁵³ Haraway, *The Haraway Reader*, 49.

⁵⁴ Nina Lykke, *Feminist Studies: A Guide to Intersectional Theory, Methodology and Writing*, Routledge Advances in Feminist Studies and Intersectionality 1 (New York: Routledge, 2010), 5.

Transhumanist thought experiments. Since writing has long been a tool of control, aligned with the rational, detached perspective Haraway moves against, then 'releasing the play of writing is [a] deadly serious,' refiguring mode for feminist, posthumanist practitioners, 'seizing the tools to mark the world that marked them as other.'⁵⁵

Breakdown

In seeking to explore the field of posthumanism, I stage a shape-shifting theoretical enquiry through the enactment of what I term a posthumanist (writing) practice. If posthumanist practice seeks to distort the perspectival limits it turns to fictions and figures to register, then posthumanist theory itself must rely on what Braidotti calls the 'transit' between and across such boundaries:

Theory today happens 'in transit', moving on, passing through, creating connections where things were previously disconnected or seemed unrelated, where there seemed to be 'nothing to see'. In transit, moving, displacing also implies the effort to move on to the invention of new ways of relating, of building footbridges between notions.⁵⁶

The practice of critical posthumanism I undertake is inherently a political project, displacing and disrupting the power dynamics which are co-opted in the hierarchical structuring of individuals within society, of categories within nature, of differences which are universalised in the name of the 'human', as well as the ways in which theory delineates itself into rigid fields of study. As R.L. Rutsky suggests, posthumanism is 'a kind of permanent cultural revolution, a performative process that continually re-conceptualizes, or changes, itself.'⁵⁷ Critical posthumanism can be envisaged as a monstrous hybrid other, threatening at all times to rise up and expose the 'norms' embedded deep within the critical and cultural fields it confronts. But just

⁵⁵ Donna Haraway, 'A Manifesto For Cyborgs: Science, Technology, And Socialist Feminism In The 1980s', in *The Haraway Reader* (Psychology Press, 2004), 33.

⁵⁶ Braidotti, *Metamorphoses*, 173.

⁵⁷ Rutsky, 'Mutation, History, and Fantasy in the Posthuman.', 101.

as Michel Foucault poured scorn on humanism as a form of Enlightenment thinking because it 'stop[ped] short of applying its own protocols and commitments to itself,'⁵⁸ so it is crucial that the monster of posthumanism continually expose and threaten its *own* boundaries.

In their text *Posthuman Bodies* (1995) Judith Halberstam and Ira Livingston allude to other demarcations posthumanism must constantly hold to account:

The posthuman does not necessitate the obsolescence of the human; it does not represent an evolution or devolution of the human. Rather it participates in re-distributions of difference and identity. The human functions to domesticate and hierarchize difference within the human (whether according to race, class, gender) and to absolutize difference between the human and nonhuman. The posthuman does not reduce difference-from-others to difference-from-self, but rather emerges in the pattern of resonance and interference between the two.

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For Rosi Braidotti difference 'is both the problem and the solution' of posthumanism.⁶⁰ Pejorative differences between 'sexualized and racialized human "others"'⁶¹ have been, and still are being, confronted and confounded through critical and social movements such as intersectional feminism and decolonialism. But this does not mean the 'crisis' of humanism is over. It passes through feminist and decolonialist theory, its outsides resituated in a host of 'naturalized others' such as 'animals, insects, plants and the environment, in fact the planet and the cosmos as a whole.'⁶² The monsters of technological, naturalised, and cosmic 'others' are joined in more recent posthumanist theory by the haunting spectre of 'the Anthropocene': a monstrous form of geological inscription at deep temporal scales no human has a chance of witnessing. Just as N. Katherine Hayles argues for new ways of relating information with materiality in order to counter the transcendental teleology of transhumanism, so Rosi

⁵⁸ Wolfe, *What Is Posthumanism?*, xx.

⁵⁹ Judith M. Halberstam and Ira Livingston, *Posthuman Bodies* (Indiana University Press, 1995), 10.

⁶⁰ Braidotti, *Metamorphoses*, 174.

⁶¹ Braidotti, *The Posthuman*, 66.

⁶² Braidotti, 66.

Braidotti affirms being 'part of nature' as an inherently embodied and materially embedded pragmatism. Posthumanism seeks to reconcile this materialist awareness with the task of critical thought by striking 'an alliance with the productive and immanent force of *zoe*, or life in its non-human aspects. This requires a mutation of our shared understanding of what it means to think at all, let alone think critically.'⁶³ As according to Jean Baudrillard, 'It is not enough for theory to describe and analyse, it must be itself an event in the universe it describes,'⁶⁴ I maintain critical posthumanism should not be considered as merely a field of study, or a set of answers to epistemological questions about the world, but as a monstrous event only conceivable *in practice*.

In his 1999 study of techno-cultural aesthetics, R.L. Rutsky unpacks the figure of 'the other' with reference to Donna Haraway's cyborg, and further bio-machinic, fictional and mythical entities. Unlike Haraway and writers like Braidotti, who segue through technologically constituted figures such as the cyborg in search of a widened discourse for feminism and its derivative (post)humanisms, Rutsky's focus is partly reversed, leading a path through the feminism of Haraway and her critical peers towards a conception of the human under constant renewal through techno-cultural and aesthetic interventions. Both approaches are concerned with registering the position from which the human subject looks out upon a set of 'different differences' that change and unfurl the human as a figure, and thus also, constantly remap the position from which the figure perceives those changes taking place. Rutsky's account is useful because of his concentration on the 'mutation' of becoming posthuman. The term flickers between inside and outside; between natural and technological; between the sovereign subject and its perceived 'other'. To address this flickering:

[a] posthuman subject position would... acknowledge the otherness that is part of us. It would involve opening the boundaries of individual and collective identity, changing the relations that have distinguished between subject and object, self and other, us and them. This change is itself a mutational process

⁶³ Braidotti, 66.

⁶⁴ Jean Baudrillard and Sylvère Lotringer, *The Ecstasy of Communication* (Autonomedia, 1988), 99.

that cannot be rationally predicted or controlled; it can only be imagined, figured...⁶⁵

Rather than merely turning to fictions and figures that contain and perform mutations to express the anxieties bound up with these posthuman times, this thesis stages *itself* as a shape-shifting body undergoing mutation. At one time the word 'contagion' was understood as a touching, the point at which two distinct surfaces or types met. In time, contagion came to mean the thing being transferred, the seed of an invasion, and ultimately contamination, moving between entities; bodies; organs. This thesis stages a third mode of understanding for the human contagion, where the transitional meeting between essentialised mankind and machine, nature and culture, theory and fiction, gives way to the assemblage of these apparently opposed categories into a shape-shifting body, through which the figure of the posthuman is incessantly (re)articulated. To rely on this shape-shifting metaphor,; to make of posthumanist theory a phantasmagorical, mutating and ill-defined conglomerate body is already to perform one of the central claims of this thesis, a claim predicated on defining and redefining a set of boundaries which, as this introduction makes clear, also themselves must always remain *in process*.

This thesis poses the practice of critical posthumanism through four central figures in the following chapters, each of which establishes itself in and through a vibrant displacement of its own boundaries. It is my claim that these chapters do this in a writerly mode which continually threatens the more established discursive writing of a PhD thesis, in favour of embedding the reader inside the figure which is undergoing transformation. As a practice-based undertaking, this thesis considers the work of each chapter to be both an explication of the historical and critical background to the field of posthumanism, whilst also performing, working through, and confronting the claims it makes about how the field is to be understood now, and taken onward, as a function of its own re-conceptualisation. The thesis is composed of four chapters and a portfolio of work that I claim as the conclusion to the main body of the thesis. The portfolio of work explicates the claims of this thesis beyond mere reference to itself

⁶⁵ R.L. Rutsky, *High Technē: Art and Technology from the Machine Aesthetic to the Posthuman* (Minneapolis, MN: University of Minnesota Press, 1999), 21–22.

and, I argue, fulfils the requirements I set in place on deriving critical posthumanist forms of practice, in practice. The combination of the thesis and my practice position critical posthumanism as a hybrid 'other', my claim being that only through representing the human as and through an *ongoing* process (ontogenesis rather than ontology) can posthumanism re-conceptualise the 'norms' deeply embedded within the fields it confronts. I maintain that, although the results of this mutation are a consequence of error, those errors are necessarily distinct from humanist conceptions of autonomy.

To understand how each chapter operates it pays at this point to partly de-hybridise my methodology, pointing out some of the working principles inherent across the chapters, and re-establishing at least some of the theoretical, cultural and thematic boundaries I spend the majority of the thesis attempting to blur and mutate. Across and throughout each of the chapters a number of themes relating to posthumanism are regularly explored, including the concept of 'the other', 'the outside', error, autonomy, life or the living, Man, as well as a certain degree of overlap across chapters of the fields, principles and terms outlined in this introduction. The recurrence of these themes is performed as part of the ongoing 'mutation' the thesis makes of itself, and in the following breakdown of each chapter I have tried to make more explicit the function each of these themes has on each underlying figure.

Chapter One: The Phantom Zone

What is it to relate to the world through technologies which co-constitute us, becoming the very means of remaking the world of which we are mutually part? Introducing the The Phantom Zone, taken from the mythos of the Superman franchise, this chapter figures this fictional account of a place beyond and outside space-time through the various media technologies which have depicted it in comic books, television, and film over the decades. To do this, the chapter introduces a key methodology of the thesis, realised through what I term, after Giorgio Agamben, a series of *paradigmatic* operations; conjoining fabulated and critical elements into a hybrid ensemble. This chapter introduces the paradigmatic method as a function of the very argument it sets in place, becoming the principle example of the methodology

it introduces for the remainder of the thesis. In order that The Phantom Zone retain its figural power as a space 'beyond' the confines of human reality, the fictional account of The Phantom Zone has chased and conjured up new 'outsides' just beyond the scope of human sensorial, physiological experience as a function of a media materiality 'to-come'. The Phantom Zone is then paradigmatic of the capacity of media technologies – and arguably all technologies in general – to enter into mutual reconstitution of the humans that look upon them for new means of representing themselves and their supposed posthuman antecedents. The account this chapter makes is rooted in a material understanding of media, and as such, a phenomenological account of the human bodies co-constituted by, and through, the material world of which the media and the human are both part. The chapter functions as a non-teleological media history concerned with how and where the 'post', the to-come, of the posthuman is expressed. It sets up the paradigmatic relationship as a non-hierarchical form of mutual relationality, neither privileging human nor machinic autonomy.

Chapter Two: Crusoe's Island

Is it possible for the figure of the 'other' – whether a colonised subject, or a person subjugated because of their gender, sexuality, ethnicity or otherwise – to be invited into/included within the definition of 'the human', without further subjugating or fetishizing their difference to a new universal? This chapter assesses Robinson Crusoe as one of the central figures of Enlightenment humanism, problematizing both the fictional account of Crusoe, and the critical, theoretical paradigms concerned with his story over the centuries. The chapter makes of Crusoe's isolation on the island a series of paradigmatic operations, establishing a working definition of 'Man' through, and against, the power differentials established by the imperialist regimes of Enlightenment humanism, Western colonialist practices, as well as scientific principles emerging out of the development of the theory of thermodynamics. The chapter is concerned with the imperialising mechanism of an established position from which both the colonial subject and the principles of thermodynamics have been, and most importantly, *continue* to be, established. The chapter introduces a key reconceptualization of the term 'mutation', arguing how it needs to be understood in

critical posthumanist discourse and practice, which do not depend on a singular 'human' perspective to be conceived. As with other chapters, this chapter undergoes these operations paradigmatically, through a critical writing which hybridises accounts of fiction with post-colonialist and feminist theory to refigure the entire ensemble. This chapter asks how posthumanism can be expressed so as not to repeat the tendency of humanism – and other imperialisms – to recast 'the other' as a mere explication of the subject position predetermined by the 'norm' it sits in opposition to.

Chapter Three: The Thing

How can theory be understood as a practice, one which *continually* mutates, countering itself as a monstrous event in the 'world' of which it is part? This chapter introduces the alien creature 'the Thing' as a figure of embodied heteropatriarchal monstrosity. Playing out various conceits of the Thing's transformation of male flesh, the chapter is concerned with what a world completely reconstituted as 'other' might look and *act* like, and reflects the process of 'othering' back onto the men who fight to retain their individuality. The Thing is both a process that exposes the unthinkability of (human) life 'in' the world, whilst also addressing Rosi Braidotti's call for forms of, what I term, *Thingly* theory that 'learn to think about processes and not only concepts... [that] represent in-between zones and areas of experience or perception.'⁶⁶ The ability to perform self-effacement and subsequent renewal at every moment is the Thingly's most enduring quality, a quality this chapter argues critical posthumanism must embrace if it is to out-manoeuvre the constant desire to remain individuated; to 'become' the monstrum of Man under refreshed circumstances. Building on the work of chapter two, the Thing performs how a critical posthumanist practice should function, one in which the 'other' is not merely explicated from an inside or outside, but is imminent with the mutation posthumanism undergoes.

Chapter Four: The Collapse of the Hoard & Portfolio of Work / Conclusion

⁶⁶ Braidotti, *Metamorphoses*, 173–74.

This chapter introduces Philip K. Dick's concept of 'kipple' to establish a material relationality between the hoarder and their hoard at the moment of its collapse. The moment of collapse marks an apocalyptic becoming that 'weaves all beings into the interdependent context of the manifest world.'⁶⁷ Chapter four tackles the problem of a 'flat ontology' which emerges out of aligning the human with the vibrant material world. After staging the 'collapse' of the elements I paradigmatically assemble, chapter four segues into a conclusion by way of the portfolio of work: *The 3D Additivist Manifesto*. I argue that the Manifesto is a principle example of the kind of posthumanist practice I argue for in this thesis, in that it enters into the composition of its own collapse, engendering a 'Thingly' discourse as a fundamental part of a critical stance against itself. The dissertation text and portfolio of work make a whole which can be considered the thesis. The portfolio of work stands alone, but the work should also be considered as the 'conclusion' to the thesis. My portfolio of art work underscores the critical posthumanist practice my dissertation argues for, wavering on the boundary between a critical posthumanist practice and practice-based research. *The 3D Additivist Manifesto* is a critical posthumanist work in its own right, it is a call for others to submit posthumanist works to a larger collective, and it also stands as the culmination of the work of this thesis. The hybrid conclusion and portfolio of work explicates the claims of this thesis beyond mere reference to itself, setting the conditions for a range of critical posthumanist works created by a growing, mutating community of others. This outward gesture fulfils the requirements I set in place on deriving critical posthumanist forms of practice, in practice. Considered together, the dissertation and conclusion/portfolio of work position critical posthumanism as a hybrid 'other', my claim being that only through representing the human as and through an ongoing process (ontogenesis rather than ontology) can posthumanism reconceptualise the 'norms' deeply embedded within the fields it confronts.

⁶⁷ Greg Kennedy, *An Ontology of Trash: The Disposable and Its Problematic Nature* (Albany, NY: State University of New York Press, 2007), 162.

Chapter One: The Phantom Zone

“the world of visual objects can point to the invisible domain of pure being only by obsessively pointing to itself”

Paraspace

In a 1950 film serial entitled *Atom Man vs Superman*, television executive and evil genius Lex Luthor transmits Superman into a ghostly limbo he calls ‘The Empty Doom.’⁶⁸ Trapped in this Twilight Dimension⁶⁹ Superman's boundless powers are rendered useless, for although he can still see and hear the ‘real’ world his ability to interact with it has all but disappeared. Over the following decades The Empty Doom reappeared in the Superman mythos in various forms. Eventually dubbed ‘The Phantom Zone’ its back story was reworked substantially, until by the mid-1960s it had become a parallel dimension discovered by Superman's father, Jor El. In a comic book from 1982 Jor El demonstrates the potential of The Phantom Zone to the elders of Planet Krypton by temporarily using it on Lara, his partner and mother of their son, Superman:

Lara is with us in this room, at this moment she hears every word we speak, sees everything we do. She is a *wraith*, unable to affect the *material* world in any manner. Nor can it affect her. In The Phantom Zone, she feels no hunger, requires no sleep – does not *age*. She can neither touch nor *be* touched. She can only *think* – as our criminals will be forced to contemplate the folly of their crimes.⁷⁰

In comic after comic The Phantom Zone was used by Jor El to incarcerate Krypton's most unsavoury characters, sealing them off from the eventual destruction of their home world. In tales told across the mythos, the Super-evil inhabitants of The Phantom Zone would eventually find a way to escape, raining down their revenge onto

⁶⁸ Spencer Gordon Bennet, *Atom Man vs. Superman*, Film Serial (Columbia Pictures, 1950).

⁶⁹ Steve Gerber, *Superman: Phantom Zone* (New York: DC Comics, 2013), 7.

⁷⁰ Gerber, 12–13.

Superman's adopted home: Earth. Beginning its life as an *empty* doom, The Phantom Zone was soon filled with terrors prolific enough to make even The Man of Steel fear its existence.

Overseen by story editor Mortimer Weisinger and the unfortunately named artist Wayne Boring, the late 50s and early 60s were a strange time in the Superman universe. The comics suddenly became filled with mutated variants of kryptonite that gave Superman the head of an ant or the ability to read thoughts; with miniature Supermen arriving seconds before their namesake to save the day and steal his thunder; with vast universes of time caught fast in single comic book panels. It was an era of narrative excess wrapped by a tight, meticulous yet repressed aesthetic. In the words of Grant Morrison:

Centuries of epic time could pass in a single caption. Synasties fell between balloons, and the sun could grow old and die on the turn of a page. It was a toy world, too, observed through the wrong end of a telescope. Boring made eternity tiny, capable of being held in two small hands. He reduced the infinite to fit in a cameo.⁷¹

The Phantom Zone is one of the less bizarre of the narrative concepts which emerged during what is now known as The Silver Age of D.C. Comics. It could be readily understood on a narrative level, and it had a figural potential as well, one that made conceivable the depths contained in Superman's vast, but ultimately manipulable universe. The Phantom Zone was usually portrayed on a television screen kept safe in one of the many rooms of the League of Justice headquarters. Staring into the screen, Superman and his Super companions observed past terrors it was their duty to protect the future from. The image on the League of Justice television inscribed back onto the material universe those bodies which had been banished from it. As this narrative expediency developed, The Phantom Zone was also wielded as a weapon and fired from a portable projection device – the cold, harsh infinity of The Empty Doom blazing into Superman's world long enough to ensnare any body caught in its rays.

⁷¹ Grant Morrison, *Supergods: Our World in the Age of the Superhero* (London: Vintage Books, 2012), 62.

The Phantom Zone was a device of containment, and in turn was itself contained. When it was portrayed as a surface, bodies were marked onto it. When it was used as a projection weapon The Phantom Zone enfolded the surface of the focal figure, transposing any bodily presence into an immediate absence. Exhibited via an image medium, The Phantom Zone also emphasised whatever image medium carried, sheltered and simultaneously exposed it to the reader or viewer.⁷² Whether rendered as faux moving image or via projection, The Phantom Zone was offered up as a contradictory unity of a universe and its beyond. A gesture that made demonstrable the indeterminate membranes of the page and the screen, heightening the sense that every 'outside' is merely part of a larger heterarchy of worlds.

In order to narrate an invisible, absent, *other* space, each medium must first produce in the viewer an awareness of a visible *given* space: both that which *can* be seen and that which makes possible the conditions *of* being seen. In comic books, the panel or frame can be considered as a constituent element of both kinds of space. Each page of a comic book is a frame which itself frames a series of frames, so that by altering each panel's size, bleed or aesthetic variety, narrative time and space can be made elastic. Weisinger and Boring's Phantom Zone took this mechanism further, behaving like a weaponised frame free to roam *within* the comic book universe. The Phantom Zone opened out onto the existence of invisible dimensions that language and comic book stills found difficult to express. It was a device that bled beyond the edge of the page, out into a world in which comic book space-times were experienced not in isolation, but in parallel with the onscreen space-times of the cinema and the television. As Scott Bukatman notes:

Umberto Eco finds 'a kind of oneiric climate' in the way each Superman story existed utterly apart from all the others; nothing that happened in one had any effect on another. Scratch the surface even a little bit, and superhero comics

⁷² For instance, comic book or film.

can be seen to exemplify Bachelard's irreality function, the creative imagination that liberates us from the strictures and logics of the real.⁷³

As the oneiric 'dream-space'⁷⁴ of The Phantom Zone developed, it sustained this 'irreal' logic across the entire Superman mythos, providing the world some cohesion as it mutated from film serial to comic and back again, via radio drama, television and big-budget cinema. It was a parallel space that had its own origin story, a story that was used to patch up and make somewhat sensible a universe written and re-written over many decades by a myriad of authors. The planet Krypton was destroyed not once, but countless times, in numerous ways over the decades. But always 'before' its destruction, the same stock of evil Super-villains were cast into The Phantom Zone, only to re-emerge later as a supernatural reminder of the failures of Superman's home world. Banishment to The Phantom Zone did not mean bodily destruction. On the contrary. Characters that were merely a nuisance on Superman's home world, Krypton, before it was destroyed, flickered and shimmered on the technologized surface as an intensified impression of mediated dread.

Author Samuel Delany, writing about the cyberpunk literature of the 1980s, coined the term 'paraspaces' to denote 'an alternate space, sometimes largely mental, but always materially manifested, that sits beside the real world, and within which language is raised to an extraordinarily lyric level.'⁷⁵ In the work of Weisinger and Boring, the lyricism of the described paraspaces is heightened by a range of visual denouements concerned with the problem of representing this crisis of representation. A material, technological substrate is always called upon to found the 'other' space, and so, in accordance with Delany's definition of paraspaces, the rhetorical and visual Phantom Zone allegorises technology itself.⁷⁶ The comic book medium can herald the contradictory paraspaces only by turning to the visual technologies that effectively

⁷³ Scott Bukatman, *The Poetics of Slumberland: Animated Spirits and the Animating Spirit* (Berkeley: University of California Press, 2012), 187.

⁷⁴ Bukatman, 187.

⁷⁵ Samuel R. Delany, 'Is Cyberpunk a Good Thing or a Bad Thing?', *Mississippi Review* 16, no. 2 & 3 (1988): 31.

⁷⁶ Scott Bukatman, *Terminal Identity: The Virtual Subject in Postmodern Science Fiction* (Durham: Duke University Press, 1993), 166.

signify the comic's own obsolescence; its outside; its death. In ordinary spaces 'characters are likely to forget... technological contouring, just as characters, enmeshed in ordinary language are likely to lose the sense of rhetoricity.'⁷⁷ A successful paraspace obfuscates this, foregrounding technology fundamentally as a form of estrangement.

According to Samuel Delany's definition, the science fictional 'cyberspace' depicted in William Gibson's *Neuromancer* (1984) is paraspatial because it does not become subordinated to the plot of the novel. Furthermore, many other kinds of science fictional space are *not* paraspatial because they are merely instrumental, advancing the requirements of the plot for the plot's sake. Characters need only pass *through* a *Star Wars* style hyperspace 'in order to bridge great' physical – and narrative – distances.⁷⁸ Hyperspace's *own* ontological consistency is secondary to that of the space where the action unfolds, indeed, one need not describe what goes on 'in' hyperspace in any terms other than how it impacts on the superseding narrative. Counter to a hyperspace, paraspaces do not exist in a hierarchical relation to 'real' space, instead:

the plot is shaped, as it were, to them. And inside them, the language itself undergoes changes – the language the writer uses to describe what happens in it is always shifted, is always rotated, is always aspiring toward the lyric.⁷⁹

Gibson's 'lyrically heightened' cyberspace offers its inhabitants 'the only vantage point from which the world makes sense,'⁸⁰ revealing 'important elements in [themselves] to be profoundly undecidable.'⁸¹ As Steven Shaviro remarks, when confronting radically new technologies that 'force us to redefine' the most basic notions of what it is to be embodied, mortal human beings, '[a]esthetics precedes cognition... because we are dealing with practices that can only be comprehended through the new

⁷⁷ Samuel R. Delany, *Silent Interviews: On Language, Race, Sex, Science Fiction, and Some Comics—A Collection of Written Interviews* (Wesleyan University Press, 2011), 170.

⁷⁸ Delany, 168.

⁷⁹ Delany, 168.

⁸⁰ Delany, 'Is Cyberpunk a Good Thing or a Bad Thing?', 33.

⁸¹ Delany, 34.

categories that they themselves create.’⁸² As from the Greek root *aisthanesthai* – ‘to perceive’ – the *aesthetic* conditions through which The Phantom Zone have been translated therefore frame far more than a fictional void.

Called upon to indicate an invisible, *absolute* outside – the unfathomable infinity of another, ghostly, parallel universe beside or beyond time and space – The Phantom Zone simultaneously reiterates the short-lived potency of (new) visual technologies in their capacity to mediate categories beyond human perception. On The Phantom Zone’s soon to be outmoded media surface flicker ‘ancestral ghosts haunt[ing] our machines.’⁸³ Future foundations of thinking that humans do not yet have access to must be figured from within the paraspatial as a banished, repressed, technological instability. But that does not undermine the significance of what takes place ‘within’ the paraspace on the status of the humans that gaze upon it. Indeed, it is from confronting the depicted ‘absence’ that those humans come to comprehend their own ongoing instabilities. To maintain the potent ‘shock’ of the spectral Phantom Zone, its very incommunicability *is what must be communicated* by each fictional iteration. Like any archival technology, the spectre of this incommunicability is bound to the inherent iterability and repeatability of the medium via which The Phantom Zone is expressed. “Your disappearance is already here,” The Phantom Zone calls out, “a mode of perception that will eventually constitute the human remains absent to you now. By the time you become this, the you that you are now will long since be dead, and this absence, this outside, will have to become incommunicable in some other way.”⁸⁴

Paradigm

Paraspatial relations demonstrate a mutual interchangeability – what I will refer to as ‘fungibility’⁸⁵ – that is not dependant on two hierarchically arranged spaces touching one another – or crucially *of even being capable of touching one another*. Nonetheless,

⁸² Steven Shaviro, *Without Criteria: Kant, Whitehead, Deleuze, and Aesthetics* (MIT Press, 2012), 15.

⁸³ Sean Cubitt, ‘Supernatural Futures: Theses on Digital Aesthetics’, in *FutureNatural: Nature, Science, Culture*, ed. George Robertson et al. (Psychology Press, 1996), 238.

⁸⁴ This ‘voice’ of The Phantom Zone should be considered a spectral taunt of what is yet to come in this chapter.

⁸⁵ I use fungible to mean mutually interchangeable elements with no hierarchy.

what takes place in one rewrites the other, and is in turn rewritten by that other. A truly 'parallel' space never intersects with its neighbour, as the two planes would stretch off alongside one another indefinitely.⁸⁶ For paraspatial relations it is perhaps better to consider the parallels as containing troubling, undecidable supplementary elements, or as functioning across fungible interrelations. As according to Samuel Delany:

What goes on in one subverts the other; what goes on in the other subverts the one. They change their weights all the time, throughout their stories. So calling it a subspace – with the prefix's strong suggestion of subordination – is wrong. A paraspaces, or even an alternative space, with its much weaker – and more problematic – question of position and troubling supplementarity, is more to the point.⁸⁷

Paraspaces exemplify a *paradigmatic* relation with the 'established' spaces from which they are apparently conceived, viewed or accessed. A relation which, according to Giorgio Agamben's definition of the paradigm, 'makes intelligible a new ensemble, whose homogeneity it itself constitutes'.⁸⁸ Agamben goes on to explain the paradigmatic relation:

[I]n the paradigm it is a matter not of corroborating a certain sensible likeness but of *producing it by means of an operation*. For this reason, the paradigm is never already given, but is generated and produced by 'placing alongside,' 'conjoining together,' and above all by 'showing' and 'exposing.'⁸⁹ [my emphasis]

A paradigm is generated by the placing of two or more elements alongside one another. A likeness between those elements exposes a corroborating principle that does not supersede, but rather re-constitutes the previously distinct elements within a new – homogeneous – intelligibility. The paradigmatic relations explored in this

⁸⁶ Assuming the space we are talking about is a three-dimensional Euclidean space.

⁸⁷ Delany, *Silent Interviews*, 168.

⁸⁸ Giorgio Agamben, *The Signature of All Things : On Method* (New York ;Cambridge Mass.: Zone Books ;;Distributed by the MIT Press, 2009), 18.

⁸⁹ Agamben, 23.

chapter, through The Phantom Zone, almost always exemplify gaps and supplements in the mode of representing the figure of the posthuman. As I will show, exemplifying a 'gap' in the capacity of a technological substrate to narratively or figuratively represent the human 'to-come', is precisely how the figure of the posthuman is most successfully produced.

The best way to express the paradigmatic is to perform it, or to carry out the operation as an exemplification of the method itself. The paradigmatic elements of the 1950 film serial *Atom Man vs Superman* can be highlighted by examining director Spencer Gordon Bennet's attempt to render Superman distinct from the world the film generates. Trapped in The Empty Doom, viewers see a ghostly para-Superman overlaid onto the film stock. He swoops down to save a policeman from being robbed, swiping at the air in his vain attempt to capture the assailant. The film reminds the viewer in episode after episode of Lex Luther's role as a television executive, hell bent on controlling the masses through this new – apparently unworthy – technology. Here an 'operation' carried from the film serial, through its technical limitations, to its apparent aesthetic realisation, 'exposes' the significance of The Phantom Zone (Empty Doom) as a metonym for the wider relationship between the embodied and the technological apparatus. Luther banishes Superman to a realm of images that the film serial struggles to frame as different from its own, and the infinite terror of a paraspace – a thing beyond space, time and human imaginings – is rendered at the not-too-distant 'cutting-edge' of moving image reproduction.

The Phantom Zone exemplifies a form of narrative continuity that does not result from sequences of events, leading from an ordinary instance and laid one after the other along a single, linear temporal axis. Rather, patterns of fungibility can be noted across and throughout the entire Superman mythos, across countless media forms and narrative iterations. The Phantom Zone functions to interlink these elements, just as it conjoins and conditions the parallel spaces inside and outside its frame. Significantly for this chapter, The Phantom Zone also exemplifies the paradigmatic method of which it is itself the principle example. To pursue its reiterations through the Superman mythos is *not* to trace a teleology of technological or media progress. Rather, the relation is one in which the spectral past is conjured up on the surface of fictional technologies that can only ever be *reminiscent* of the future. The wraith Super-villains

of Krypton's past remain frozen as paraspatial images, heightened in their intensity by branding an idea of radical 'newness' onto the (fictional) interfaces that disclose them. For the purposes of this chapter, I wish not only to generate this paradigm of fictional technological estrangement, but also to exemplify the method by which the paradigmatic relationship is *itself* constituted. In this sense, each explication of The Phantom Zone not only produces the paradigm of value to the claims of this chapter, but exemplifies itself paradigmatically as the very principle of the paradigmatic method. Each element I operate on on one side of a paradigm – i.e. banishment to a paraspaces; the demi-God-like facets of Superman – lead us to further operations on the 'conjoining' elements – e.g. the inherent instability of the cinematic image; the contradictory figure of 'the posthuman'. This is both the subject of this text and the means of its constellation. The Phantom Zone is paradigmatic of the task this thesis attempts to render these gaps, making them intelligible without collapsing them back to poor, parochial stand-ins. R.L. Rutsky names this as a fundamental principle of posthuman becoming, a principle he terms as a 'mutation in the conception of the human':

[!]f the concept of mutation is to be taken seriously, it cannot be reduced simply to a narrative of passage, shift, or break. Mutation implies a randomness that cannot be narrativized or, more precisely, that can be narrativized only by subordinating its unpredictability to a human perspective, as exemplified in fantasies of superhuman enhancement.⁹⁰

The paradigmatic begins to eat itself with recourse to these posthuman potentialities by always maintaining the instability between what is and what is proffered to come. To simply *refer* to the inability, or difficulty, of representing the 'post' of the human will always collapse the posthuman back into a set of merely descriptive principles which cannot – by definition – represent the posthuman. The paradigmatic relation works such that neither related element becomes subordinate to the other. In the paradigmatic example of The Phantom Zone represents a relation between human and technology which does not subordinate one to the other, but poetically enters into the

⁹⁰ Rutsky, 'Mutation, History, and Fantasy in the Posthuman.', 107.

mutual reconstitution of each by each. As Delany notes of writers such as Gibson, who heighten the lyricism of their work to describe what takes place inside a paraspace, the paradigm of the posthuman is best generated through a kind of lyrical, poetic assembling of elements alongside one another. In the following section I turn my close attention to the technology of cinema in order to address the corroborating shifts in the mode via which *The Phantom Zone* has been represented as a place beyond time and space.

The Postnatural

In a 1996 paper entitled *Supernatural Futures: Theses on Digital Aesthetics* Sean Cubitt marks the divide between what he calls the antinatural and the cybernatural – respectively, ‘the triumph of technology over nature, and the creation of artificial life’⁹¹ – with a third, prescient *supernatural* force, that marks the ‘precocious existence of the future in the present.’⁹² These ‘postnatures’, Cubitt argues, are entangled in a complex relationship that rather than superseding or subsuming one another, ‘co-exist in the ways we think about the digital domain.’⁹³ By invoking the digital as a kind of meta-order heterarchical space, Cubitt prefigures his own later work in *The Cinema Effect* (2004), a move which neatly echoes his own sentiments on the supernatural. Just as the moving-image haunts the comic book from within as the paraspatial absence that will eventually win out, so the digital domain conjures up the threat of the analogue filmic medium’s limits and inevitable death.⁹⁴ The digital is not the only ‘outside’ of film, rather, film is an image technology that relies on absences built into the medium. In its most common rendition these absences arise almost as regularly as individual still frames, for within each second of screen time are packed 24 frames separated by 23 absences:

⁹¹ Cubitt, ‘Supernatural Futures: Theses on Digital Aesthetics’, 238.

⁹² Cubitt, 238.

⁹³ Cubitt, 238.

⁹⁴ Mention of the digital here also prefigures what is yet ‘to come’ in this chapter. The digital is a ghost that lingers over, beneath and beyond this text, indeed, lingers over this whole thesis.

Nothing comes first in the beginnings of cinema: zero is the nonidentity out of which the image arises, the difference that surrounds, supports, and activates apparent motion, the instability of the unmoving still image between what it was and what it will become.⁹⁵

This zone of instability *between* unmoving stills is where cinematic images reside. A literal space out of which figural movement is maintained; where liveliness *becomes*. Cinema carries within itself its own non-identity, and banishing media bodies such as Superman's is tenable only with reference to this absence that makes possible the appearance of presence. The exposition of a paraspace from 'within' the technology of moving images acts to remind the viewer that although Superman may be Godly, his vision of the cosmos is inevitably distended and disjointed by the light speed movements his body must make through, around and (when he finds himself 'in' The Phantom Zone) above it. Superman is an ode to the *antinatural*, seeming to bend the laws of nature to his whim, but is paradigmatically a *cybernatural* being: the life force he exhibits is an extension of the technologies that make the depiction of that life possible. In that depiction Superman also attains *supernatural* status: he is a creature 'post' the natural, given a 'precocious' presence by the clattering mechanisms of the cinematic apparatus.

In the film serial *Atom Man Vs Superman* the Phantom, 'wraith' Superman appears to float free from the underlying image. Expanding Cubitt's postnatural categories, Catherine Waldby designates the cybernatural as 'any practice which uses the space of the virtual screen as a space of "second nature" through a conflation of information with vitality.'⁹⁶ At this stage in this paradigmatic operation 'information' can be thought of as relating to the unmoving, still images of cinema. The apparent indexical relationship between each film still and the event that unfolded in front of the lens; the apparent indexical relationship between the body that is banished to The Phantom

⁹⁵ Sean Cubitt, *The Cinema Effect* (Cambridge, Mass.: MIT Press, 2004), 44.

⁹⁶ Catherine Waldby, *The Visible Human Project: Informatic Bodies and Posthuman Medicine* (Routledge, 2003), 121.

Zone, and the body that was caught by the projection weapon.⁹⁷ Vitality is movement, is life; the liveliness of the cinematic image. As Giorgio Agamben suggests, making use of Walter Benjamin's conception of the 'dialectical image... the life of images consists neither of simple immobility nor of the subsequent return to motion but of a pause highly charged with tension between the two.'⁹⁸ The dialectical image is defined at the very moment of its *stillstand*, a middle zone of indifference that is 'neither A nor B,' but an immobile constellation between them 'charged with tensions.'⁹⁹ The cybernatural therefore marks a productive conflation between information and vitality, in that the tension *produces* the condition of artificiality. As on The Phantom Zone's surface Superman beholds 'an instant from the past in relation to the present,'¹⁰⁰ so viewers, through film, contemplate artificial images that emerge from similar thresholds of time, space, identity, and meaning that are made possible by the filmic stillstand.

For Walter Benjamin, rather than allowing us to attain mastery *over* nature, technologies such as cinema give us a heightened awareness of our relationship with our own nature through the processes of 'material complexification.'¹⁰¹ For Benjamin, this training is akin to the relationship between factory workers and the production line, where the ratchet of the gears and conveyors program the workers' bodies, fusing them together into a larger assemblage. The successive frames of film, made to spool through the mechanism one after the other at imperceptible speed, create an illusion of temporal and spatial fluidity that shock us into an awareness of the complex relation between our psychic and physiological realities. As R.L. Rutsky lucidly explains, 'this scattered, interrupted filmic reception becomes part of the human sensorium or body... a body that is no longer distanced from – or entirely separate from – the

⁹⁷ The use of past tense in this distended sentence should not be overlooked. Indexicality is inherently a temporal conceit, and the cybernatural also conflates past, present and future.

⁹⁸ Giorgio Agamben, 'Nymphs', in *Releasing the Image: From Literature to New Media*, ed. Jacques Khalip and Robert Mitchell (Stanford, California: Stanford University Press, 2011), 68.

⁹⁹ Agamben, 69–70.

¹⁰⁰ Agamben, 70.

¹⁰¹ Mark B. N. Hansen, *Embodying Technesis: Technology beyond Writing*, Studies in Literature and Science (Ann Arbor: University of Michigan Press, 2000), 234.

images and shocks that it comes into contact with.’¹⁰² Walter Benjamin believed the ability of the cinema screen to frame discontinuous times and spaces presented a profound ‘truth’ beyond the scope of individual experience. Delivered by cinema, Benjamin argued, mechanically disseminated images were actually fracturing the limits of perception, training ‘human beings in the apperceptions and reactions needed to deal with a vast apparatus whose role in their lives is expanding almost daily.’¹⁰³ The cinema screen offered audiences who were confined to finite bodies that had never before experienced such juxtapositions an apparently shared experience of illuminated consciousness. Via the ‘shock-character’ of montage, cinema broke through the mirage of proletarian experience, nourishing an awareness of a ‘new nature’ that included, according to Susan Buck-Morss, ‘[n]ot just industrial technology, but the entire world of matter (including human beings) as it has been transformed by that technology.’¹⁰⁴

In *The Work of Art* Benjamin argues that these changes in the mode of exhibition figured a crisis of representation. Constructed of zooms, pan shots, close-ups, slow motion and other means of spatial and temporal montage, cinema delivers an optical unconscious that allows humans to ‘step-out’ of their ordinary apperceptions. A relationship of nonidentical, self-othering that is possible perhaps *because* the medium of film is a technology of stillstands, where frames do not touch, and are not capable of touching one another, but where images nonetheless spring up out of the divide. As Sean Cubitt remarks:

The cinematic image is nonidentical in the sense that events inside the frame are not only incomplete in time but fragmentary as percepts, so that each event of projection evokes a new assemblage of focalized and marginal imagery.¹⁰⁵

¹⁰² R.L. Rutsky, ‘Allegories of Emergence: The Generative Matrix of Walter Benjamin’ (Constructions of the Future, Heidelberg, 2011), 16.

¹⁰³ Walter Benjamin, ‘The work of art in the age of its technological reproducibility (1936)’, in *The work of art in the age of its technological reproducibility, and other writings on media*, ed. Michael William Jennings et al. (Cambridge, Mass.: Belknap Press of Harvard University Press, 2008), 26.

¹⁰⁴ Susan Buck-Morss, *The Dialectics of Seeing: Walter Benjamin and the Arcades Project* (MIT Press, 1991), 70.

¹⁰⁵ Cubitt, *The Cinema Effect*, 41.

Cinema exhibits the paraspatial through the succession of frames and absences, supplementary components that create the illusion of fungibility as the film reel spools through the mechanism. Gilles Deleuze, writing in the early 1980s, cites the ontological potential of cinema in this dividual quality of the cinematographic image. For Deleuze, the montage produced an image of time itself, giving 'common standard of measurement to things which do not have one,' framing 'long shots of countryside and close-ups of the face, an astronomical system and a single drop of water'¹⁰⁶ within a single perceptual apparatus. In an interview on the subject, Deleuze proudly declared, '[w]hat I call Ideas are images that make one think... and in each case the thoughts are inseparable from the images; they are completely immanent to the images.'¹⁰⁷ For Deleuze, cinema was less a technology than an evolving mode of machinic thought, what D.N. Rodowick calls, 'a foundation of thinking in the form of time.'¹⁰⁸ Furthermore, according to Rodowick, 'what film helps us to understand is how we think in and through time in a situation where time passes in us and divides us from ourselves.'¹⁰⁹ The development of cinema can therefore be understood as a two way process between viewer acuity and technology's capacity to mediate perception. Even before viewers expect narratives to emerge from the discontinuous stills made to reel before their eyes, cinema is a philosophical 'Idea... a massive decentering of the psyche'¹¹⁰ in which subjectivity is made relative and dispersed 'across a duration not wholly its own.'¹¹¹ This emphasis on the temporal components of montage is crucial in understanding what Lev Manovich argues is the 'dominant paradigm' of filmic simulation, 'creating an effect of presence in a virtual world by joining different images of time.'¹¹²

¹⁰⁶ Gilles Deleuze, *Cinema 1: The Movement Image* (Continuum, 2005), 16.

¹⁰⁷ Gilles Deleuze and David Lapoujade, *Two Regimes of Madness: Texts and Interviews 1975-1995* (Semiotext(e), 2006), 291.

¹⁰⁸ David Norman Rodowick, *Gilles Deleuze's Time Machine* (Duke University Press, 1997), 83.

¹⁰⁹ Rodowick, 84.

¹¹⁰ Garrett Stewart, 'Cinemonics versus Digitime', in *Afterimages of Gilles Deleuze's Film Philosophy*, ed. David Norman Rodowick (Minneapolis: University of Minnesota Press, 2010), 336.

¹¹¹ Stewart, 337.

¹¹² Lev Manovich, *The Language of New Media*, 1st MIT Press pbk. ed. (Cambridge Mass.: MIT Press, 2002), 154.

The relationship between the 'virtual world' of cinema and the 'reality' of the viewer is paradigmatic, in that, the moving image stands-in *for* reality, frames the perception of it, and in some sense supersedes the audience's (mutual) comprehension *in* it. As Steven Shaviro emphasises, '[c]inema is at once a form of perception and a material perceived, a new way of encountering reality and a part of the reality thereby discovered.'¹¹³ The *Ideas* of cinema, to use Deleuze's term, or the *language* of cinema, to return to Samuel Delany's description of paraspace, is delivered at 'an extraordinarily lyric level'¹¹⁴ in relation to lived, daily experience. But once that language becomes integrated into the 'apperceptions' of the cinema viewer it supplements daily experience, and as such renders a new 'postnature' out of the ongoing, mutually supplementary recombination of human and machine perception. To return to Deleuze, it is now 'we who are internal to time, not the other way round.'

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Gilles Deleuze considered philosophy itself as intrinsically cinematic, opening 'us up to the inhuman and the superhuman durations (durations which are inferior or superior to our own), to go beyond the human condition.'¹¹⁶ The human eye is not capable of perceiving the gaps between filmic frames that create the image of time that exists in feedback with our embodied perceptions. The stillstand of cinema therefore offers us a paradigmatic condition for (re)thinking the tricky break between the human and the posthuman, without sublating the one to the other. To exhibit the absence of The Phantom Zone in cinema is to operate through the 'inhuman and superhuman' durations made possible by the technological substrate. But for our purposes The Phantom Zone is a paradigmatic mode for staging the paraspatial relation as one necessary for humans to consider the image of the posthuman at all. It is this confrontation with the human/posthuman relation that interests us here, and segues into the topics of further chapters.

¹¹³ Steven Shaviro, *The Cinematic Body* (Minneapolis: University of Minnesota Press, 1993), 41.

¹¹⁴ Delany, 'Is Cyberpunk a Good Thing or a Bad Thing?', 31.

¹¹⁵ Gilles Deleuze, *Cinema 2: The Time Image* (Minneapolis: University of Minnesota Press, 1989), 80.

¹¹⁶ Gilles Deleuze, *Bergsonism* (New York: Zone Books, 1988), 28.

In his original description of paraspace, Samuel Delany states that ‘conflicts that begin in ordinary space are resolved in [the] linguistically intensified paraspace.’¹¹⁷ The conflict staged (though perhaps not quite ‘resolved’) in this chapter is the supplementary relationship between those ‘outside’ the paraspace and the Superhuman wraiths it harbours. This supplementary, paradigmatic relation is alluded to by Geoffrey O’Brien in his book on the history of mass-market cinema, serendipitously titled *The Phantom Empire*:

Upon the motion picture – the most alluring mechanism of the age of mechanical reproduction – would devolve the task of reconstructing the imaginary worlds it had helped to dismantle.¹¹⁸

To put it another way, as consensual reality became more and more a phantom image of the cinematic, so cinema became geared with the task of representing its own perceptual status *as part of itself*. Further scrutiny of the mechanisms of these paraspatial events is, again, not a pursuit of some teleological principle of media. Rather, this chapter is concerned with the mutual constitution of a ‘second nature’ in the cinematic and human assemblage, and the ways in which the posthuman spectre conjured up in that relation consists of a *necessary* self-estrangement that must remain estranging. From the Greek *para*: ‘to be beside,’ the paraspace is also therefore a *paranoid* space, where meaningful events are constituted that estrange or alienate the human figures that gaze upon them. The more *inhuman* the technological estrangement is, the more the humans who gaze upon it are reflected back in their paranoia. There is no escaping the ‘technological contouring’ of a paraspace, because there is no escaping the alienating, impossible feeling of being human that persists in the confrontation with such expansive, posthuman imaginaries.¹¹⁹ For The Phantom Zone to continue functioning successfully as a space-time that ‘transcend[s] the descriptive’ qualities of Superman’s universe, its mode of representation has had to

¹¹⁷ Delany, ‘Is Cyberpunk a Good Thing or a Bad Thing?’, 31.

¹¹⁸ Geoffrey O’Brien, *The Phantom Empire: Movies in the Mind of the Twentieth Century* (Norton, 1995), 109.

¹¹⁹ Echoing comments made by Claire Colebrook, *Death of the PostHuman: Essays on Extinction, Vol. 1* (Open Humanities Press, 2014), 173 which will be revisited later in this chapter.

change along with – or always just ahead of – the perceived ‘leading-edge’ of the medium (or media) through which the Superman mythos has been rendered. A waltz between the human and its posthuman estrangement formed in the ‘oscillation between self-formation and self-destruction.’¹²⁰

Post Production

For his 1978 big-budget movie version of *Superman*¹²¹ director Richard Donner – consciously or otherwise – cunningly translated The Phantom Zone into something resembling a weaponised cinema screen. In the last days of the planet Krypton, disbelief in the ruling elite’s capabilities fuels an uprising of civil disorder and disobedience. As the planet enters its final stages of existence, the leaders of Krypton bicker amongst themselves, delivering quick justice to any dissidents. In the film’s opening sequence a screen-like crystal surface swoops down from the immense backdrop of space, rendering the despicable General Zod and his cronies two-dimensional as it imprisons them. Moments later, viewers watch the planet Krypton explode into fragments, and *The Phantom Zone* audio-visual crystal carried into space on the resulting cosmic wind of change.¹²²

In the documentary *The Magic Behind the Cape*,¹²³ bundled with the DVD release of *Superman* in 2001, an insight is given into the technical prowess behind this Phantom Zone produced for the cinema. The actors are made to simulate existential terror against the black void of the studio, pressed up against translucent, flesh-like membranes and physically rotated out of sync with the gaze of the camera. Rendering the *faux* two-dimensional surface of Richard Donner’s Phantom Zone believable required all manner of human dimensions to be framed out of the final production. With its reliance on post-produced visual effects, Donner’s Phantom Zone sequence represents an intermediary stage in the gradual removal of sets, locations, and any

¹²⁰ Colebrook, 229.

¹²¹ Donner, *Superman*.

¹²² The similarities here with Walter Benjamin’s *Angel of History* are many, but unlike Benjamin’s Angel, The Phantom Zone’s devilish inhabitants push helplessly at the membrane between realities, seeing *neither* the fragmented past *nor* the future towards which ‘progress’ propels them.

¹²³ Michael Thau, *The Magic Behind the Cape*, Film Documentary (Warner Bros., 2001).

'actual' spatial depths from the film production process. Today, actors address their humanity to green voids post-produced with CGI, and the indexical relationship once argued to exist between the film image and the events unfolding in front of the lens is now unquestioned in its absence. Just as *The Phantom Zone* of the comic book heralded televisual modes of attention, Richard Donner's *Phantom Zone* marked a perceptual regime in which the cinematic image was increasingly sealed off from reality by synthetic visual effects.

Cinema goes experience paraspace through special effects that continue to fracture the framing devices of the visual medium into more discrete elements. Individual film stills, that have a particular presence in the time and space of the editing suite and the projection reel, are enjoined by further abstracted, post-produced stills that are folded into place at increasing temporal distance from the moment the camera captures the image of the actor. The dispersal of frames and durations in cinema can be considered as constitutive of 'the time-image' – as Deleuze uses the term – which bleeds across and beyond the individual stills that constitute cinematic subjectivity. With post-produced special effects, this dispersion carries the psyche further, and must be considered from the moment of filming through to the acts of cutting, editing, remixing and layering each of the images 'that makes one think.'¹²⁴ It is not coincidental that the noun 'frame' and the verb 'to frame' coincide so readily in cinema. Whether manifest as a physical, material gap between frames, as post-produced, layered special effects, or as cuts, zooms, montage, sound-effects and other devices that refer to events happening 'over time' (diachrony) and/or 'off-screen' (synchrony), cinema is by definition an oneiric, paraspatial technology of framing. Framing is the language of the filmic, and framing is perhaps the largest philosophical idea that cinema has enabled in the perceptions of its audience, perceptions that Walter Benjamin argued were intimately bound up with the technologies of reproducibility.¹²⁵ The cinema frames the disparity of the individual, even as it frames the apparent collectivity of the audience. Framing brings discrete times and spaces together on the cinema screen, and in doing so makes its audience aware that they

¹²⁴ Deleuze and Lapoujade, *Two Regimes of Madness*, 291.

¹²⁵ Benjamin, 'The work of art in the age of its technological reproducibility (1936)'.

themselves – as subjects; as bodies – are constituted of similarly disparate moments and materials. According to R.L. Rutsky:

[N]ot only do the processes of technological reproduction, exemplified in cinema, enable images to be ‘torn apart,’ dispersed and exhibited in different places and times, they also seem to have a similar effect on human beings, on the mass public. ¹²⁶

And so the public begins to appreciate the phantasmagoria of itself through a paraspatial relation, such that ‘[t]he phenomenon, exposed in the medium of its knowability, shows the whole of which it is the paradigm.’ ¹²⁷ For Benjamin, configuration is regarded as the primary condition of this knowability. Correspondence can be found not only in spatial but also *temporal* similitude between patterns. ¹²⁸ As Benjamin scholar Howard Caygill argues:

Space and time which feature as the *givens* of transcendental philosophy become modes of configuration which can be understood speculatively as providing the contours of but one among many possible configurations of experience. ¹²⁹

If time, perhaps the time humans suppose themselves to inhabit, is a movement from past to future, then cinema is a linear stream of stills made to fluctuate through the present. Passing out into a timeless dimension, cinema becomes a grid, of what Sean Cubitt calls ‘pixels’, ¹³⁰ that any omniscient entity would regard simultaneously, as if on a flat plane. Because the omniscient God is co-present at all points in space-time, They could not experience the ‘nothing’ of cinema. The radical difference between frames can only be experienced by an entity whose identity is ‘incomplete and othered’ a mortal being who ‘can inhabit time rather than regard it.’ ¹³¹ The character Superman

¹²⁶ Rutsky, ‘Allegories of Emergence: The Generative Matrix of Walter Benjamin’, 11–12.

¹²⁷ Agamben, *The Signature of All Things : On Method*, 28.

¹²⁸ Walter Benjamin, ‘Doctrine of the Similar (1933)’, trans. Knut Tarnowski, *New German Critique* Spring, 1979, no. 17 (1 April 1979): 65–69.

¹²⁹ Howard Caygill, *Walter Benjamin: The Colour of Experience* (Routledge, 1997), 5.

¹³⁰ Cubitt, *The Cinema Effect*, 46.

¹³¹ Cubitt, 46.

is caught halfway between an 'incomplete and othered' being, and an omniscient, co-present God. To again take advantage of the words of Gilles Deleuze:

What is the superman? It is the formal compound of the forces within man and these new forces... As Foucault would say, the superman is much less than the disappearance of living men, and much more than a change of concept: it is the advent of a new form that is neither God nor man and which, it is hoped, will not prove worse than its two previous forms. ¹³²

Deleuze here is not talking specifically of the character of Superman, but rather the coming into being of a radically new concept of human being: 'the folding in of the outside as the constitution of a veritable inner universe.' ¹³³ As according to Agamben, this middle-point between two terms is necessarily ambiguous, 'an unresolved oscillation between estrangement and a new event of meaning... A dialectic whose mechanism is not logical... but analogical and paradigmatic.' ¹³⁴ The Phantom Zone performs this mutation of concept: the correlation between visual technologies and their capacity to render the posthuman is itself (at) a stillstand.

Image Things

Observing the relation between representation and visibility, Jens Andermann observes that:

truth, the truth of representation, crucially depends on the clear-cut separation between the visible and the invisible, the non-objectness of the latter. Truth is the effect of what we could call the catachretic nature of visuality, the way in which the world of visual objects can point to the invisible domain of pure being only by obsessively pointing to itself. ¹³⁵

¹³² Gilles Deleuze, *Foucault* (Bloomsbury Publishing, 2006), 110.

¹³³ Simon O'Sullivan, *On the Production of Subjectivity: Five Diagrams of the Finite-Infinite Relation* (Palgrave Macmillan, 2012), 87.

¹³⁴ Agamben, 'Nymphs', 69.

¹³⁵ Jens Andermann, *The Optic of the State: Visuality and Power in Argentina and Brazil* (University of Pittsburgh Press, 2007), 5.

Catachresis can be considered as a kind of 'improper metaphor'¹³⁶ which, according to Vivian Sobchack, 'functions neither as metaphor nor as figure,'¹³⁷ and furthermore, quoting Richard Shiff, 'accomplishes precisely this: it applies a figurative sense as a literal one, while yet retaining the look or feel of figurality.'¹³⁸ Sobchack marks this as a fundamental characteristic of cinema, the way in which images on screen *parallel* the qualities of the cinematic apparatus itself, without recourse to mere illustration. Long have Superhero bodies been fetishized, fantasized, mutated and manipulated in narratives that 'incorporate (incarnate) aggrandizement and anxiety, mastery, and trauma.'¹³⁹ Richard Donner's version of *Superman* can be read catachretically for the systems of image reproduction into which corporeal bodies have been increasingly cut, folded, and (re)dispersed, signalling the ongoing mutation in the material conditioning of the human. The cinema screen is a paraspatial divide onto which bodies made of light, shone through acetate or stored on silicon crystals frame oneiric visions of our all too parochial human fantasies and fetishes. Donner's cinematic Phantom Zone allegorises the endlessly transformative posthuman body evoked by each new assemblage of percepts. A body not simply 'affected by moving images, but a truly cinematic body in which, or through which, images move.'¹⁴⁰

In Walter Benjamin's era, actors performed in front of the movie camera, the microphone, and 'the glare of arc lamps', all the while attempting to 'preserve [their] humanity in the face of the apparatus.'¹⁴¹ Today, actors react to causes generated beyond the studio space, the director's commands, or the camera's gaze. They twist and recoil from transformations still to occur in post-production. In a sense, actors behave as bodies that are *already* images as they regard the green absence of each chroma key studio backdrop. In a 1995 lecture on the film work of Guy Debord, Giorgio

¹³⁶ Vivian Carol Sobchack, *Carnal Thoughts Embodiment and Moving Image Culture* (Berkeley: University of California Press, 2004), 81.

¹³⁷ Sobchack, 82.

¹³⁸ Richard Shiff, 'Cezanne's Physicality: The Politics of Touch', in *The Language of Art History*, ed. Salim Kemal and Ivan Gaskell (Cambridge University Press, 1991), 158.

¹³⁹ Scott Bukatman, *Matters of Gravity: Special Effects and Supermen in the 20th Century* (Duke University Press, 2003), 49.

¹⁴⁰ R.L. Rutsky, 'Walter Benjamin and the Dispersion of Cinema', *Symploke* 15, no. 1–2 (2008): 18.

¹⁴¹ Benjamin, 'The work of art in the age of its technological reproducibility (1936)', 31.

Agamben posited mankind as ‘an animal who is interested in images when he has recognised them as such... after he has recognised that they are not real beings.’¹⁴² Today, almost 20 years later, Agamben’s comment on the ‘real’ status of the image needs amending. Images collaged from the mediascape serve – to hijack the words of Scott Bukatman – ‘as the partial and fragmented representations *that they are.*’¹⁴³ Whereas actors’ autonomy has been increasingly called into question by oneiric technical tricks, their *images* have attained a new level of malleability in the move from production to post-production and onwards to the era of digital images copied, remixed and dispersed with vertiginous intensity. Writing in 2010 about the music video for David Bowie’s *Heroes* (1977) Hito Steyerl explores this shift through the formulation of a new kind of Hero:

[T]he clip shows Bowie singing to himself from three simultaneous angles, with layering techniques tripling his image; not only has Bowie’s hero been cloned, he has above all become an image that can be reproduced, multiplied, and copied, a riff that travels effortlessly through commercials for almost anything, a fetish that packages Bowie’s glamorous and unfazed postgender look as product. Bowie’s hero is no longer a larger-than-life human being carrying out exemplary and sensational exploits, and he is not even an icon, but a shiny product endowed with posthuman beauty: an image and nothing but an image.

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I consider the Hero becoming ‘an image and nothing but an image’¹⁴⁵ as something other than a metaphoric turn, something other, moreover, than Donna Haraway’s vision for the cyborg, identified in her *Manifesto for Cyborgs* as ‘a *fiction* mapping our social and bodily reality.’¹⁴⁶ Hito Steyerl points out the *literal* truth performed in the

¹⁴² Giorgio Agamben, ‘Difference and Repetition: On Guy Debord’s Films’, in *Art and the Moving Image: A Critical Reader*, ed. Tanya Leighton and Charles Esche (London : New York: Tate Publishing in association with Afterall, 2007), 314.

¹⁴³ Bukatman, *Terminal Identity*, 40. [my emphasis]

¹⁴⁴ Hito Steyerl, ‘Hito Steyerl, A Thing Like You and Me / e-Flux’, no. 15 (April 2010), <http://www.e-flux.com/journal/view/134>.

¹⁴⁵ Steyerl.

¹⁴⁶ Haraway, ‘A Manifesto For Cyborgs: Science, Technology, And Socialist Feminism In The 1980s’, 8. [my emphasis]

multiplication of David Bowie's body: his body is an 'improper metaphor' for the image that it *actually* is. The video for *Heroes* splices and dices contiguous images of Bowie, producing a unique paraspatial configuration of catachretic associations, rather than a continuous narrative *about* Bowie the hero. Viewers aspire no longer to the glory of popstars or actors who perform their mastery to camera, rather their *Heroes'* images are the Things that matter. Utterly freed from the shackle of apparent indexicality, disseminated and dispersed at light speed, the 'image Thing' seems considerably more liberated than the 'illusory totality'¹⁴⁷ of the (Super)hero. An image Thing, Steyerl goes on, whose 'immortality no longer originates in the strength to survive all possible ordeals, but from its ability to be xeroxed, recycled, and reincarnated.'¹⁴⁸ For as Bowie's cybernatural identity is enabled by the moving image apparatus, so that apparatus is itself exposed as a material substrate allowing the boundless malleability of the images it propagates. Totality is an illusion humans confer on their own subjectivity. Images are considerably more liberated. To contend with Agamben's definition, and using the work of Steyerl, I claim images as real beings precisely because they *can* be recognised as images.

With similar appeals to post-gender, post-icon, posthuman identities, Dara Birnbaum's celebrated video work *Technology/Transformation: Wonderwoman*, produced in the same year as Richard Donner's *Superman* (1978), and a year after the video for David Bowie's *Heroes* (1977), manipulates its protagonist at the material strata that makes possible the image of her corporeal body. Through cutting and folding videotape in physical space, Birnbaum effects a mastery over the moment Wonderwoman transforms between her mild-mannered and Superhuman forms, celebrating that moment with loops that wind meaningfully upon themselves. As Sarah Kember and Joanna Zylińska note in *Life After New Media* (2012), one of the principle ways in which humans engage with matter is through the cut:

Cutting reality into smaller pieces – with our eyes, our bodily and cognitive apparatus, our language, our memory, and our technologies – we enact

¹⁴⁷ Bukatman, *Terminal Identity*, 40.

¹⁴⁸ Steyerl, 'Hito Steyerl, A Thing Like You and Me / e-Flux'.

separation and relationality as the two dominant aspects of material locatedness in time. ¹⁴⁹

The videotape mechanism, 'cut-up' and exposed by Birnbaum in order to create the work, relinquishes the 'image of woman as spectacle' ¹⁵⁰ transforming the mythical Amazon Goddess from object of sexual desire to an image Thing; an exemplification of the process of transformation *itself*. ¹⁵¹ Kember and Zylinska, reflecting on both Deleuze and Bergson's work on cinema, mark out this relationship between 'flux and stasis, between duration and the cut' ¹⁵² as ontologically significant in regards human 'becoming-with-the-world as well as becoming-different-from-the-world'. ¹⁵³ Like the dialectic gap Kember and Zylinska indicate, Wonder Woman's transformation becomes – through Birnbaum's acts of cutting, splicing and repeating – paradigmatic of the relationship it shares with the image medium that makes that transformation possible. As with our second nature – of what Mark Hansen calls 'the mechanosphere' ¹⁵⁴ – these correspondences are material, and sensuous. Our receptivity to images is physiological, our bodies are shared, and our memories – dependent on the 'alien rhythms' ¹⁵⁵ of montage – have become intricately woven into the machine *as* images. In turn, as noted by Arthur Kroker, 'the image machine is haunted by memories of the body,' ¹⁵⁶ bodies that mutually depend on the fidelity, malleability and repeatability of the cut-up medium for their existence. In regards film and videotape it is physical, embodied space in which cuts are enacted, but other substrates, such as audiotape or the printed page, are also worth examining.

¹⁴⁹ Sarah Kember and Joanna Zylinska, *Life After New Media: Mediation as a Vital Process* (Cambridge, Mass: MIT Press, 2012), 75.

¹⁵⁰ T. J. Demos, *Dara Birnbaum: Technology/Transformation: Wonder Woman, One Work* (London : Cambridge, Mass: Afterall ; Distributed by the MIT Press, 2010), 48.

¹⁵¹ It is wise not to conflate the various mechanisms of moving image reproduction alluded to here. The rich, discrete frames of 'traditional' cinema were joined, in the 1970s, by video technologies that stored image information on magnetically charged tape. It is clear enough to consider different types as sharing the property of physical malleability – substrates able to be cut, folded, separated and relocated in order to effect changes on the images they constitute.

¹⁵² Kember and Zylinska, *Life After New Media*, 79.

¹⁵³ Kember and Zylinska, 75.

¹⁵⁴ Hansen, *Embodying Technesis*, 262.

¹⁵⁵ Hansen, 266.

¹⁵⁶ Arthur Kroker, *Body Drift: Butler, Hayles, Haraway* (U of Minnesota Press, 2012), 1.

In *The Electronic Revolution* (1970), published 25 years after he murdered his wife Joan Vollmer, William Burroughs asked his readers to ‘consider the human body and nervous system as unscrambling devices.’¹⁵⁷ Cutting into media broadcasts, newspaper headlines or snippets of audio caught fast in the magnetised tape of his reel-to-reel, Burroughs sought to expose the language virus to a dose of its own terrible potential. When Burroughs tells a parable where a man’s asshole begins to talk, all literal *and* figural possibilities of the image should be considered. To unquestioningly communicate using a language whose meaning was dictated by corporate bodies, political bodies or media conglomerates was, for Burroughs, tantamount to living as the embodiment of pure excretion. Writing on the cuts that constitute William Burrough’s text *Naked Lunch* (1959), N. Katherine Hayles argues that the textual corpus and the narrative cybernetic body are shown to be correspondent in the act of cutting, for they are each ‘as artificial, heterogeneous’¹⁵⁸ and malleable as each other. Each specific arrangement of a text on a page is but one configuration amongst many, a spatial relationship that is paradigmatic of the posthuman identities Burroughs’ writing describes. In regards a cut-up text work, reel-to-reel audio tape, film, or videotape it is physical, human space in which cuts are enacted and new constellations arranged. A space that shares the same sensuous reality of the human body, even if the timescales depicted by various media are significantly distinct in their breadth and scales. But whereas cuts and recombinations in physical media lend themselves to the spatial scale of the human body, and rely on what Sean Cubitt called the perceptions of ‘mortal’ beings who ‘can inhabit time’,¹⁵⁹ with the cuts that constitute digital images, the human body is arguably no longer a sufficient framing device. A new paradigm may be necessary when humans aspire to the freedom of Heroes constituted of ethereal waves and distributed at the speed of light as a plethora of discrete numerical abstractions.

At the end of his book, *Cinema II: The Time-Image* (1985), Giles Deleuze warned of a forthcoming ‘New Electronic Automatism’, which threatened ‘to dissolve the cinematic

¹⁵⁷ William S Burroughs, *The Electronic Revolution* (ubu.com: ubuclassics, 2005), 16.

¹⁵⁸ Hayles, *How We Became Posthuman*, 34.

¹⁵⁹ Cubitt, *The Cinema Effect*, 46.

inspiration of dreams and mystery into the neutral zone of random information bits indiscriminately traversing the wired membrane of gawkers and insomniacs.’¹⁶⁰ In this apocalypse for cinema, and the philosophical Idea it enabled, the random bits of electronic transmission and dissemination would remain as discrete fragments. Representations distributed through a thousand channels, emerging as what Deleuze calls ‘a table of information, an opaque surface on which are inscribed “data” in which ‘a new image can arise from any point whatsoever of the preceding image.’¹⁶¹ For Deleuze, the cinematographic image had always been dividual, but whereas filmic modes of practice brought a paradigmatic line of flight to the irrational cuts between incommensurate images,¹⁶² with the numerical, or digital image, there was – Deleuze argued – only the promise of more complexification, dictated by the logic of silicon chips, abstract interfaces, and network protocols. Although Deleuze warned that the numerical image may mark the death of the Time Image manifest in cinema, he also expressed hope that from that death could come transformation. A ‘will to art’ that must ascertain the fundamental qualities of the digital image, its absolute constituents, in order to build a new image of our time.

The Datamosh

The General Zod ‘warning’ trailer¹⁶³ for *Man of Steel* (2013) was distributed on YouTube as an online ‘viral’ event in the months leading up to the release of the latest addition to the Superman film franchise. The trailer begins with a static rift that breaks into a visual and audial disarrangement of the phrase, ‘You are not alone’. General Zod's masked face materializes, blended with a pixelated, glitchy digital miasma: a painterly 3D effect that highlights the inherent ‘otherness’ of where his message originates. The aesthetic is unsettling in as much as it is recognisable. Viewers of this

¹⁶⁰ Timothy Murray, ‘Time @ Cinema’s Future: New Media Art and the Thought of Temporality’, in *Afterimages of Gilles Deleuze’s Film Philosophy*, ed. David Norman Rodowick (Minneapolis: University of Minnesota Press, 2010), 366.

¹⁶¹ Deleuze, *Cinema 2*, 265.

¹⁶² Mark B. N. Hansen, ‘Cinema Beyond Cybernetics, or How to Frame the Digital Image’, *Configurations* 10, no. 1 (2002): 54.

¹⁶³ *Man of Steel Viral - General Zod’s Warning (2013) Superman Movie HD*, Film Trailer, 2013, <http://www.youtube.com/watch?v=5QkfmqsDTgY>.

'viral' dispatch have no doubt as to the *narrative* meaning of what they are witnessing, namely, a datastream compressed and distributed from a paraspace by an entity very much unlike us. The uncanny significance of the trailer stems more from how very *normal* the digital miasma feels; from how apprehensible the barrage of noise is. Indeed, it is 'other', but its otherness is also somehow routine, foreseeable. The pathogen here is not Zod's message, it is digital technology *itself*. The glitched aesthetic of the trailer expresses a habitual sensibility, heralding the passing of digital materiality into the background of viewer awareness. Its mode of dissemination, via the Trojan Horse of YouTube, just as *invisible* in the shift between 'online' and 'offline' modes of communication. The surface of this Phantom Zone very much interfaces with the material world, even if the message it impresses upon its viewers aches to be composed of an alien, postnatural substance.

In her essay, *In Defense of the Poor Image* (2009), Hito Steyerl explicitly confronts the aesthetic conditions of digital images, defining an image's value by its ease of flow and distribution. The highly compressed, deteriorated 'poor image... mocks the promises of digital technology. Not only is it often degraded to the point of being just a hurried blur, one even doubts whether it could be called an image at all.' ¹⁶⁴ As Olga Goriunova and Alexei Shulgin have suggested, 'computers do not have a recognizable or significant aesthetic that possesses some kind of authenticity and completeness,' ¹⁶⁵ but that very lack is not an absence, for the digital is anything it can be made to stand in for. The aesthetic affect of digital images thus stands in metonymically for the networks they navigate and the means by which those networks are exposed. Hito Steyerl offers the poor image as a figure of dissemination itself. The human capacity to wallow in images is bolstered by those images being dilapidated and bruised, forced through bandwidths far slighter than their display potential would seem to allow, but arriving with a clarity dictated by abundance and accessibility, rather than authority and verisimilitude. In Walter Benjamin's *The Work of Art*, mechanization and mass

¹⁶⁴ Hito Steyerl, 'In Defence of the Poor Image', in *The Wretched of the Screen*, e-flux Journal (Sternberg Press, 2012), 31–44.

¹⁶⁵ Olga Goriunova and Alexei Shulgin, 'Glitch', in *Software Studies : A Lexicon*, ed. Matthew Fuller (Cambridge Mass.: MIT Press, 2008), 110–18.

production began at the 'original' and worked to distance the commodity from the form captured by each iteration. For Benjamin, copies must be distinguished from the aura of the original, but as *poor images* propagate, not only does their aura remain intact,¹⁶⁶ that aura is actually heightened in a system of ever poorer repetitions and redisplay. The internet exemplifies its own democratic potential because every bit and byte are treated equally by the TCP / IP protocols that drive its traffic. Thus, slick HD advertisements fall short of the potential of lossy JPEG spam to be seen, and government propaganda is drowned out by the shout of viral videos. Messages from the perverted environs of culture make their way to our eyes and ears more readily as wrecked and ruined impressions, their signifiers flickering with each act of recompression, copy, and display. Digital image Things are not valuable because they act like the memory of an origin, instead it is their transience, the increased likelihood they will be copied and re-disseminated in ever-mutating forms, which marks them out as significant. Copies, being copied, forever copying, exert an unruly behaviour that exposes the material world. Coming towards viewers soars a new mode of machinic thought; a Phantom Zone of unparalleled depth and aesthetic complexity that opens onto a *new new – digital – nature*.

Much contemporary digital video does the work of representation via a series of algorithms called codecs that compress the amount of information needed to produce a moving image. Rather than store the information necessary to re-present each pixel in each frame of the video, compression codecs such as the DivX or Mp4 standard begin by establishing a set of 'key' frames throughout the length of a video. Each key frame is a more or less fully constituted and encoded image, and acts as the template for the sequence proceeding it. Compression codecs analyse each 'key' frame, and through a process of copying, moving, and repeating fractal segments determine the minimum of information necessary to transpose each of the proceeding 'reference' frames. In this way the information necessary to encode an image can be vastly reduced. Rather than the individual frames of film, each as visually rich and total as the

¹⁶⁶ Or, as Svetlana Boym eloquently suggested in 2010, every 'error has an aura' (Svetlana Boym, 'Svetlana Boym, The Off-Modern Mirror / Journal / e-Flux', *Eflux*, no. 19 (October 2010), <http://www.e-flux.com/journal/view/175>.)

last, in a codec only the *difference* between frames need be encoded, making each frame 'more like a set of movement instructions than an image.'¹⁶⁷

Using the right piece of video software, or by manipulating video codecs with a hex editor, a collapse between *key* (image) and *reference* (difference) frames can be enacted at the status of encoding. By a method of cutting, repeating or glitching of key and reference frames, visual representations can be made to blend into one another; space becomes difference and time becomes image. Present instructions for movement are co-opted by past image events, moulding a novel future presence. This process – known as 'datamoshing' – has its origins in glitch art, a form of media manipulation predicated on those minute moments when an image or sound cracks open, catachretically indicating some aspect of its coding mechanism in a flurry of aesthetic disarray. Datamoshing breaks the notion of separation between image and movement, indeed, it creates a new merging reference between the two. In the datamoshed video, image and movement are blended, even paraspatially interchanged for one another. Each unique image in the datamoshed video becomes a token of movement within a frame that extends far beyond the isolated/compressed moment. In a datamoshed video an image from frame 16 of the video can leak, corrupt and interface with an image in frame 187. What's more, the movement information exchanged between contiguous frames can jump ahead, can blend with a previous image or be removed completely. To the datamosher, time and image become a delicious paint pallet expressing in motion. To the datamosher, a series of frames, or even a series of videos, can be tempted to break their boundaries and merge, forging brand new steps in a whirling datamosh-dance.

In a period of work stretching between 2005 and 2007 artist Takeshi Murata made a series of high definition digital video works augmenting the datamoshing method with more 'standard' software editing techniques. In an early sequence of Murata's 2007 work *Untitled (Pink Dot)*, action hero *Rambo* fires his rocket launcher 'towards' the screen, but as the resulting explosion rips across the frames his image is datamoshed into the fire, leaving a remnant of his figure to merge with the resulting miasma.

¹⁶⁷ BackStarCreativeMedia, 'Datamoshing – the Beauty of Glitch', 9 April 2009, <http://backstar.com/blog/2009/04/09/datamoshing-the-beauty-of-glitch/>.

Murata makes extensive use of image layers in his production process to establish the pulsating pink dot at the heart of the video. As it unfolds, the pink dot exists as a layer *behind* the Rambo footage, and then it becomes datamoshed *into* the footage, and then it is a layer in *front* of it, and then the datamosh tears into it and the dot become part of the Rambo miasma, and then the dot comes back as a surface again.

Throughout this interplay, the pink dot throbs in time with an ascending pulsing soundtrack, always drawing viewer attention back to the centre of the frame. The pink dot, surely a stand-in for the viewing, perceiving subject, is blended, symbiotically, with the datamoshed miasma. The viewer still perceives the figure of Rambo, of the flash of the machine-gun pulse, but as the explosive fire tears through the pink dot it is as if their mind has been melted through too. In *Untitled (Pink Dot)* the Hero of Rambo appears infinitely flat in comparison to the depth and multidimensionality of the pulsating pink dot. Rambo is nothing but an image; an image Thing that transcends traditional figurations of time and space, achieving material equality with the digital miasma that exposes it as such. Murata's work is as much 'about' its own production process as any story it is capable of telling. It stands in catachrestically for the posthuman realm its cut-paste/moshed digital assemblage makes possible.

Marking digital video's move from convenient means of dissemination, to palpable aesthetic (i.e. *perceptual*) and cultural influence, the datamoshing technique was homaged/appropriated for the production of the General Zod trailer in 2013. In the actual movie, *Man of Steel*,¹⁶⁸ Zod's video message is transposed in its entirety to the fictional planet Earth. The viral component of its movement around the web is entirely absent: its apparent digitality, therefore, remains somewhat intact, but only as a mere surface appearance. This time around, the message shattering through The Phantom Zone is completely devoid of affective power: it frames nothing but its existence as a narrative device. The filmmakers rely on a series of 'taking over the world' tropes to set the stage for General Zod's Earth-shaking proclamation. TV sets in stereotypical, 'exotic', locales flicker into life, all broadcasting the same thing. Electronic billboards light up, loudspeakers blare, mobile phones rumble in pockets, indeed, *all* imaging

¹⁶⁸ Zack Snyder, *Man of Steel*, Film (Warner Bros., 2013).

technologies suddenly take on the role of a prostheses for a single, datamoshed stream. In one – particularly sincere and ridiculous – moment of the montage, a faceless character clutches a Nokia brand smartphone in the centre of shot and exclaims, 'It's coming through the RSS feeds!' This surface, *this* Phantom Zone, frames an apparatus far vaster than a glitchy image; an apparatus apparently impossible to represent through the medium of cinema. The surface appearance of the original viral trailer distributed on YouTube is only a small component of what constitutes the image Thing it conveys, and thus, of the image it frames of *this* time. Digital materiality shows itself via poorly compressed video clips arriving through streams of overburdened bandwidth. An understanding of what constitutes a digital image must then, according to Mark Hansen, 'be extended to encompass the entire process by which information is made perceivable.'¹⁶⁹

In its cinematic and comic book guises, The Phantom Zone was depicted as 'a kind of membrane dividing yet connecting two worlds that are alien to and also dependent upon each other'.¹⁷⁰ The success of the datamoshed trailer as a YouTube viral expression comes from the way it broke through that interface, its visual surface bubbling with a new kind of viral, digital, potential that encompasses and exposes the material engaged in its delivery. As a cinematographic subjects, I have an integral understanding of the materiality of film. Although I know that the frames of cinema are separate I still crave the illusion of movement, and the image of time, they create. The 'viral' datamoshed message corrupts this separation between image and movement, the viewer and the viewed. Not only does General Zod seem to push out, from inside the numerical image, it is as if the viewing subject, enraptured by the digital event, has been consumed by its flow. The datamoshed Phantom Zone trailer takes the one last, brave, step beyond the apparatus of image production. Not only is the studio, the actor, and even the slick appeal of CGI framed out of its mode of delivery, arriving through a network that holds its viewers complicit, this Phantom Zone frames the 'real' world *in its entirety*, making even the fictional world it appeals to devoid of affective impact.

¹⁶⁹ Hansen, 'Cinema Beyond Cybernetics, or How to Frame the Digital Image', 54.

¹⁷⁰ Mark Poster, *The Second Media Age* (Wiley, 1995), 20.

Once again, The Phantom Zone highlights the material mode of its delivery with uncanny exactness. Unlike Deleuze's 'time-image', formed by a linear stream of film frames made to flicker before our eyes, the digital event is at a stillstand in *multiple* dimensions allowing 'a new image [to] arise from any point whatsoever of the preceding image.'¹⁷¹ Humans are now surrounded by images that supersede mere visual appearance: they generate and are generated by every Thing the digital touches, including the digital, ever emerging, posthuman subject: the most important component of General Zod's 'viral' diffusion. The digital Phantom Zone extends to *both* sides of the flickering screen.

In chapter one, the representation of The Phantom Zone as a kind of future anterior for an outside 'to-come', is shown to be undermined by digitally constituted media technologies. As a singular modality with material consequences that stretch out from users, through screens, machines, and infrastructure, the separation human beings make of themselves and their technologies breaks down, framing an entire world – paradoxically – as its own outside. In chapter two, the figural Crusoe constantly self-affirms a world with no outside, or makes of any outside which creeps into his world something already always about himself. By mapping this imperialist tendency paradigmatically onto the theory of mutation which came out of the science of thermodynamics, chapter two figures the autonomy of mutation as equally problematic as Crusoe's auto appellative ordering of his island Empire. Mutation – as posthumanist theory employs it – *must* be imminent in the material processes of which 'we' are mutually co-constitutive.

¹⁷¹ Deleuze, *Cinema 2*, 265.

Chapter Two: Crusoe's Island

“what is important is not the other side of the frontier,
it is that both sides are already posited, composed in one and the same world”

Auto-Appellation

Daniel Defoe's 1719 novel *Robinson Crusoe* centres on the shipwreck and isolation of its protagonist on a deserted isle – perhaps the most famous island in all of fiction. The life Crusoe knew beyond this shore was fashioned by ships sent to conquer a New World, and a political will fostered on slavery and imperial demand. In writing about his experiences Crusoe orders his journal, not by the passing of time, but by the objects produced in the division of his own labour. A tame herd of goats bred from wild, a musket and gunpowder rescued from the skeleton of his ship, sheaves of wheat fashioned into bread, and a shelter hand carved from rock with all the trappings of a King's castle. As the objects proliferate and are organised, Crusoe shapes his own Empire. A microcosm of the domineering civilisation his island removes him from, but with a crucial difference: no potential for exchange with the outside.

Crusoe structures the tedium of island life by gathering and fabricating items that exist solely for his own use: ¹⁷²

I had never handled a tool in my life, and yet in time, by labour, application, and contrivance, I found at last that I wanted nothing but I could have made it, especially if I had had tools. ¹⁷³

The island is an unmarked paradise, and it will take a store of labour, gleaned from the ship that brought him here to inscribe it with the marks of (Western) culture and civilisation. Crusoe's appraisal of his labour, his apparent ingenuity and steadfast ability to make good any situation which faces him, lend the novel a register that

¹⁷² Susan Stewart, *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection* (Duke University Press, 1993), 15.

¹⁷³ Daniel Defoe, *The Life and Adventures of Robinson Crusoe (1808)* (Gutenberg.org, 2004), 68–69, <http://www.gutenberg.org/files/12623/12623-h/12623-h.htm>.

privileges Crusoe's cultural mastery over the 'natural', disorderly island. But as Stephen Hymer suggests, this self-appraisal thinly veils a much less noble, but much more telling imperialist truth:

The key factors in Robinson Crusoe's survival and prosperity on his island in the sun are not his ingenuity and resourcefulness but the pleasant climate and the large store of embodied labor he starts out with.¹⁷⁴

Using ink salvaged from the shipwreck, Crusoe's obsessively produced stock-books are a record of his own subjectivity. Indeed, the very instantiation of his labour in the form of writing establishes the kind of subject Crusoe becomes. As Eric Jager attests, 'in writing (considered as both act and product), [Crusoe] achieves a durable self-representation requiring him to face himself and his situation.'¹⁷⁵ Crusoe's inner narrative rebounds on pages of paper, enclosed in vellum, so that each system is transfigured by another: the island prison, surrounded by an impenetrable ocean; the apparent limit of the physical book, 'where reading takes place in time across marks which have been made in space';¹⁷⁶ the central narrative of the protagonist, mirroring a self-similar inner-narrative of the reader. Defined as what Mikhail Bakhtin called, 'the polyphonic novel,' *Robinson Crusoe* is composed of many distinct or overlapping registers, which 'could have been realised only in the capitalist epoch.'¹⁷⁷ The autobiographical 'I' of Crusoe's diary is bolstered and given form by the log book entries that are nestled inside it, speaking to 18th century readers whose own experience was rooted in the scriptural economy necessary for capitalism to function. Bakhtin's 'polyphonic' is therefore not a particularly diverse array of subjectivities, experiences and different modes of being, for every voice is bound to a universalised scriptural subject produced by the creation and assimilation of writing:

¹⁷⁴ Stephen Hymer, 'Robinson Crusoe and the Secret of Primitive Accumulation', *Monthly Review* 63, no. 4 (23 September 2011).

¹⁷⁵ Eric Jager, 'The Parrot's Voice: Language and the Self in Robinson Crusoe', *Eighteenth-Century Studies* 21, no. 3 (1988): 323.

¹⁷⁶ Stewart, *On Longing*, 22.

¹⁷⁷ Quoted by Katerina Clark and Michael Holquist, *Mikhail Bakhtin* (Harvard University Press, 1984), 154.

These novelistic or iconic fictions tell us that there is no entry or exit for writing, but only the endless play of its fabrications... Writing has become an “inscription island”... a laborious dream, occupied by this “impossible” to which or about which it thinks it “speaks.”¹⁷⁸

According to Michel Certeau, writing is, ‘the concrete activity that consists in constructing, on its own blank space (*un espace propre*) – the page – a text that has power over the exteriority from which it has first been isolated.’¹⁷⁹ This exteriority is predetermined by the goods Crusoe salvages from the shipwreck, including a Bible, blank stock-book and ink through which he converses with his religious and imperial heritage,¹⁸⁰ and – as this chapter will show – begins to inscribe the origin myth of his own sovereignty. The scriptural enterprise utilises the accumulated past in order to mould the ‘alterity of the universe’¹⁸¹ into a new world – a ‘scriptural island’ that one ‘can edit, revise, interpret, and reinterpret’.¹⁸² Jacques Derrida refers to ‘the book entitled Robinson Crusoe’¹⁸³ itself as an object which affects an erasure of its origins. The book ‘speaks of [Crusoe] without him, according to a trick that constructs and leaves in the world an artefact that speaks all alone and calls the author by his name, renames him in his renown without the author needing to do anything else, not even be alive.’¹⁸⁴ In this way Crusoe fabricates artefacts throughout the book, the grandest of which may be the island itself, bearing the inscriptions and products of his labour and as such becoming indistinguishable from its imperial master throughout time and space.

For Michel Certeau, the island of the blank page is the definitive metaphor of capitalism, both at the level of the subject in relation to the given world, and also ‘at

¹⁷⁸ Michel De Certeau, *The Practice of Everyday Life*, 3rd Revised edition (Berkeley: University of California Press, 1984), 150 & 152.

¹⁷⁹ Certeau, 134.

¹⁸⁰ Karl Marx poured not so subtle scorn on Robinson Crusoe’s capitalist heritage in his reference to his writing himself, ‘like a true-born Briton’ into his stock books. (Karl Marx and Friedrich Engels, ‘Das Kapital Volume One’, 1867, https://en.wikisource.org/wiki/Das_Kapital_Volume_One. Chapter 1.)

¹⁸¹ Certeau, *The Practice of Everyday Life*, 135.

¹⁸² Jager, ‘The Parrot’s Voice’, 324.

¹⁸³ Jacques Derrida, Michel Lisse, and Geoffrey Bennington, *The Beast and the Sovereign. 2: [...]*, Seminars of Jacques Derrida (Chicago: The University of Chicago Press, 2011), 154.

¹⁸⁴ Derrida, Lisse, and Bennington, 87.

the level of an entire society seeking to constitute itself as a blank page with respect to the past.’¹⁸⁵ Science and industry ‘are governed by the same schema,’ as is the modern city:¹⁸⁶ apparently closed systems which master their outside in a kind of self-naming, or auto-appellation. What Karl Marx called ‘Ursprüngliche Akkumulation,’ the ‘original’ or ‘primary’ accumulation of labour expropriated from agricultural, enslaved, and colonised people, became the given of a blank page upon which capitalism wrote its own origin myth.¹⁸⁷ This auto-appellation is intimate to an understanding of how imperialism functions: a mastering of (often distant) territories not just through the expropriation of labour, property, and land, but also of social, sacred, and embodied realities. With knowing irony, Marx called the era of primary accumulation ‘the rosy dawn of the era of capitalist production,’¹⁸⁸ referring to the division of labour instigated by capitalism being hidden by its own historical myth. To overcome the division of the world intrinsic to capitalism, Marx argued, labour itself must be made whole again, a situation he played out by retelling the tale of Crusoe’s shipwreck and isolation on the island. Marx’s capitalist subject finds origin and can only be maintained through material activity, but ‘without someone else’s labour to control, the capitalist’s value system vanished.’¹⁸⁹ Unable to exchange the products of his labour with others, Marx argues, Crusoe’s individuality as a producer is the self-same individuality he exhibits; a perfect metaphor for a new kind of subject which could only emerge, Marx believed, once the frenzy of capitalism had dissipated.

For Karl Marx, the intimacy Crusoe achieves with his own labour – the material conditions of his being in the world – determines the type of consciousness he has. Daniel Defoe constituted Crusoe allegorically, figuring through him a fable of objectification and ‘exploitation... by the bourgeoisie’ in the protocapitalist Britain of which Defoe was a subject.¹⁹⁰ According to Marx’s reading, the eventual imposition of ‘others’ on Crusoe’s island marks the coming back into being of the capitalist subject,

¹⁸⁵ Certeau, *The Practice of Everyday Life*, 135.

¹⁸⁶ Certeau, 134.

¹⁸⁷ Hymer, ‘Robinson Crusoe and the Secret of Primitive Accumulation’.

¹⁸⁸ Marx and Engels, ‘Das Kapital Volume One’. Chapter 31.

¹⁸⁹ Hymer, ‘Robinson Crusoe and the Secret of Primitive Accumulation’.

¹⁹⁰ ‘The Aleph: Robinson Crusoe: The First Marxist?’, accessed 3 July 2015, <http://blazinghog.blogspot.co.uk/2005/10/robinson-crusoe-first-marxist.html>.

played out most distinctly through the paradigmatic arrival of Friday, the ‘noble savage’ who Crusoe ‘saves’ from cannibalisation and eventually tutors to become the subject of his Empire. Before any such ‘other’ is written into Crusoe’s pristine isle, the signs of auto appellation – of the rendering blank of the page of Crusoe as subject, and island as Empire – are already apparent. To take an example of this that cuts through the entire novel, Crusoe considers the tobacco he cultivates and smokes on the island as one of the most significant indications of his enlightened status. But tobacco is a product of what Walter Mignolo refers to as ‘colonial semiosis,’ in which a particular – often exterior – cultural sign is dissolved into a ‘wider’ imperial sphere.¹⁹¹ Tobacco is a New World resource, fashioned into a mark of Old World enlightenment. Tobacco, along with resources like coffee from Ethiopia, and tea from China, were considered ‘stimulants of the senses as well as the spirits’ by those Westerners who ingested them.¹⁹² Whilst Europeans considered tobacco a symbol of a deviant, or ungodly behaviour for the ‘savages’ who originally cultivated it, once it had been subjugated, tobacco came to symbolise the increasingly enlightened status of its European consumers. The imperialist is ambivalent in relation to the exterior – whether it is geographic, cultural, temporal, embodied or otherwise – so long as what is received is contrived into a product and named as an artefact of self-mastery. Daniel Defoe *wrote* tobacco *into* Crusoe’s island paradise, and Crusoe cultivates and smokes it. This mastering of the sign of tobacco effectively erases its origin, having already always been integrated into the imperial sphere as product and indication of (Western) civilisation. Being but a small token of the impact of colonisation on the native peoples from whom it was expropriated, tobacco – and other ‘stimulants’ like it – nonetheless gesture to the complex social, material and spiritual web which imperialist intercourse infects.

¹⁹¹ Walter D. Mignolo, *Local Histories/Global Designs: Coloniality, Subaltern Knowledges, and Border Thinking: Coloniality, Subaltern Knowledges, and Border Thinking* (Princeton University Press, 2012), 14–15.

¹⁹² Fernando Ortiz as referenced by Mignolo, 15.

In his critical text *Summa Technologiae* (1964)¹⁹³ science fiction writer Stanislaw Lem makes an analogy of Robinson Crusoe in his examination of the negative ‘aspects of progress.’¹⁹⁴ Lem argues that Robinson’s ability to maintain a relative stasis to his island life comes from ‘his having been “preprogrammed” on the level of information by his civilization, before he became an “isolated element” on a desert island.’¹⁹⁵ As I have shown, Crusoe’s island exists in a relatively homeostatic state, and the exterior needed to maintain this apparent stasis is a temporal and temporary one, and can always be traced back to the tools and labour that came with Robinson on his ship, were deposited there by previous colonists – unnamed and unknown – were appropriated from others, by Crusoe, during his time on the island, or ambivalently written into being by Daniel Defoe.¹⁹⁶ Accordingly, homeostasis – whether of any singularity from the size of an Empire down to that of a microorganism – is defined by Stanislaw Lem as ‘an increase in insensitivity to an external perturbation,’ as well as, ‘an increase in sensitivity to an inner perturbation, that is, one caused by a disturbance within the system (organism) itself.’¹⁹⁷ For Lem, Crusoe’s island homeostasis is a perfect analogy for the runaway capacities of technological civilisation. Crusoe’s shipwreck caused his isolation, but brought with it the seeds of his survival. Neither one of these should be considered more implicated in his predicament. Crusoe’s ship smashed its hull to pieces on the rocks of this deserted isle, but its cargo was plentiful, and its sole survivor driven enough, to carry that violence onto its shores. As long as the cycles of his labour managed to maintain the momentum of the shipwreck Robinson will survive, but in turn, his destiny is entangled with that store of civilisation so closely, that should any one of his labours fail the outcome will be his end.

¹⁹³ A text originally published in 1964, but only published in English in 2013 (translation by Joanna Zylińska).

¹⁹⁴ Stanisław Lem, *Summa Technologiae*, trans. Joanna Zylińska, *Electronic Mediations* 40 (Minneapolis: University of Minnesota Press, 2013), 150.

¹⁹⁵ Lem, 150.

¹⁹⁶ Another case which is worth noting, are the goats that inhabit the island – an animal originally domesticated from wild bezoar ibex in western Asia. If we take Defoe’s account of the island as being off the coast of South America, this fact indicates only one of two things: either the goats were previously brought there by earlier voyagers, or Defoe was ignorant of the domestic descent of goats. In either case, Crusoe’s homeostasis is dependent on an outside absent from the character’s own (fictional) depiction of his endeavours.

¹⁹⁷ Lem, *Summa Technologiae*, 150.

In Luis Buñuel's 1954 film version of Defoe's tale ¹⁹⁸ Robinson Crusoe's assertion of his sovereignty, through his constant battle with the processes of entropy, is given comic expression. Swathed in gentlemanly attire, made exclusively from the hide of his goats, Crusoe spends entire scenes flâneuring along the island's outer perimeter. With his goat-skin hat and goat-skin umbrella held aloft, Robinson may very well be marking the circumference of imperial Great Britain. Repeating his efforts over many years, Crusoe's catalogue of objects tends to oblivion. Goat-skin umbrellas and hats bleach in the sun and need to be replaced; cycles of spring and winter demand that Crusoe set aside a portion of his crop for replanting each year. In one frantic section of the novel, Crusoe's hand-carved fortress crumbles inwards upon its single inhabitant. In another, Crusoe's ink begins to run out, 'the last of which he "eek'd out with water a little and a little, till it was so pale it scarce left any appearance of black upon the paper.'" ¹⁹⁹ Entropy constantly nips at Crusoe's heels, however resourceful and intense a state his labour reaches. Only two outcomes appear available for Crusoe's continued existence on the island: retain the homeostasis of his Empire through the continual subjugation of peoples, animals, or resources from 'outside' the system, or accept that a fundamental change in the nature of the system – and therefore of Crusoe himself – must take place.

The Shipwreck of Enlightenment

Daniel Defoe's novel offers us a rich catalogue of boundary moments in which Robinson Crusoe is forced to confront the principles which define him and, as is the imperialist way, thus rewrite the conditions of his self-same world. In each, Crusoe's own homeostasis is perturbed. In each, Crusoe redresses the balance of an 'inside' and an 'outside' through a new act of ambivalence. The first of these events I will address is Crusoe's 'shipwreck', a common paradigmatic figure which Hans Blumenberg studies at length in his book *Shipwreck with Spectator: Paradigm of a Metaphor for Existence* (1997). Describing the 'cosmic exoticism' of writers such as Fontenelle, for whom

¹⁹⁸ Luis Buñuel, *Robinson Crusoe*, Film (Producciones Tepeyac, 1954).

¹⁹⁹ Jager, 'The Parrot's Voice', 325.

shipwreck was a metaphor of perspective, Blumenberg compounds the event of shipwreck with the Enlightenment principle:

that reason might be better represented on the moon or in another alien world than it is on earth and by men. The imagination was then bound to be continually stimulated to picture how the earth would be seen from the point of view of such a higher rationality.²⁰⁰

In this paradigm, Crusoe's shipwreck and isolation stands in for the apparently God-like perspective of rational man. As Susan Stewart suggests in her reading of *Robinson Crusoe*, 'in allegory the vision of the reader is larger than the vision of the text; the reader dreams to an excess, to an overabundance.'²⁰¹ Stewart's use of the metaphor of vision is not insignificant when reading and interpreting the shipwreck Crusoe suffers. The master of the island may take control of his own passions, whilst able to view from afar the 'unenlightened' as if they were objects to be studied, contemplated, and ultimately subjugated in lieu of his reason. But so too is the scriptural subject – the reader and purveyor of Crusoe's island – determined to entertain their vision as if of a Godly nature. One may think of this 'separation' as referred to by Donna Haraway as 'the god-trick': 'a faceless, bodiless and contextless knower,' conjured by scientific epistemology, 'who can detach her/himself from the world and the objects of study, and then from an aloof and elevated position of surveillance can produce objective knowledge.'²⁰² The 'blank slate' of Crusoe's island and its subsequent 'conquering' by its single, shipwrecked subject, has often been considered as *the* myth of origins for the modern, enlightened man.²⁰³ As Michel Certeau suggests in his examination of Crusoe:

A new king comes into being: the individual subject, an imperceptible master.

The privilege of being himself the god that was formerly "separated" from his

²⁰⁰ Hans Blumenberg, *Shipwreck with Spectator: Paradigm of a Metaphor for Existence*, Studies in Contemporary German Social Thought (Cambridge, Mass: MIT Press, 1997), 32.

²⁰¹ Stewart, *On Longing*, 3.

²⁰² Lykke, *Feminist Studies*, 4.

²⁰³ The designation 'man' is specifically used here, rather than 'subject'.

creation and defined by a genesis is transferred to the man shaped by enlightened culture. ²⁰⁴

Crusoe's shipwreck performs the separation not only between the deity previously considered to hold that 'privilege' and the activities of the new master – Man – but also another separation that enlightened man must go through *every time* his mastery is applied. As Karen Armstrong remarks, a myth 'is an event that – in some sense – happened once, but which also happens all the time.' ²⁰⁵ The myth of enlightenment is that of separation between the chaotic ocean and the Man that sails his boat aloft it; between the 'natural' island and the Man contriving tools to 'world' it:

Like Crusoe cast adrift upon an indifferent nature by an oppressive society and an absentee Creator, enlightened Man, the only subject in a universe of objects, contemplates himself in the majestic solitude of his sovereign rationality, and broods upon the new world that awaits its creation. ²⁰⁶

The myth of the enlightened man is separated from history, from heritage, from nature and God alike through the very act of exerting mastery over those 'exterior' forces. In a sense, enlightened man conjures his own myth as the wonder that justifies, and acts as, the pivot of his own existence. Like God Himself, before whom there was no time, nor space, enlightened Man looks only to Himself as his own singularity, emerging from a point which will forever be considered His beginning. As with Crusoe's 'rebirth' on the lonely island, the myth can be traced through another of Hans Blumenberg's shipwreck paradigms, back to when seafaring was considered a transgressive act likely to result in the admonishment of those who undertook it:

What drives man to cross the high seas is at the same time the crossing of the boundary of his natural needs... it will be one of the fundamental ideas of the Enlightenment that shipwreck is the price that must be paid in order to avoid that complete calming of the sea winds that would make all worldly commerce impossible. ²⁰⁷

²⁰⁴ Certeau, *The Practice of Everyday Life*, 157.

²⁰⁵ Karen Armstrong, *A Short History Of Myth* (Canongate Books, 2004), 111.

²⁰⁶ Davies, *Humanism*, 124.

²⁰⁷ Blumenberg, *Shipwreck with Spectator*, 28–29.

Here the boundary of human knowledge is surrounded by a perilous ocean that is at one and the same time a metonym for nature and a metaphor for the capacity to sail beyond it. The logic of imperialism is determined at the meeting point of these shipwreck paradigms. The appeal, above all, to a rationality exercised by masters of their own perspective; men (as, according to the myth, it is always men) able to take advantage of the wild riches of nature because their own passions have been envisaged and ordered, *but not tamed entirely*. Exteriority becomes the means for further growth of the enlightened, since from the exterior is derived the disorder which enlightened Man is in the process of fashioning into order. This myth of self-mastery is a form of knowledge that begins and ends with the subject at its perceived centre. Those subjects who lie outside become objects of fascination, disgust, dehumanisation, ambivalence and – ultimately – subjugation. *Their* passions are raw, and primal: *their* exteriority must be maintained in order for the enlightened Man to grow and progress. But as another infamous sequence in Robinson Crusoe suggests, for the enlightened, exteriority itself is always also transfigured into something about the subject who perceives it as such:

It happened one day about noon, going towards my boat, I was exceedingly surprised with the print of a man's naked foot on the shore, which was very plain to be seen in the sand: I stood like one thunder-struck, or as if I had seen an apparition; I listened, I looked round me, I could hear nothing, nor see any thing; I went up to a rising ground to look farther: I went up the shore, and down the shore, but it was all one, I could see no other impression but that one; I went to it again to see if there were any more, and to observe if it might not be my fancy; but there was no room for that, for there was exactly the very print of a foot, toes, heel, and every part of a foot; how it came thither I knew not, nor could in the least imagine. ²⁰⁸

The events which follow the appearance, and discovery, of the footprint on Crusoe's island are allegorically rich. In Luis Buñuel's 1954 film adaptation, Robinson Crusoe's regular flâneurie of the island perimeter is interrupted by the exceptional appearance

²⁰⁸ Defoe, *The Life and Adventures of Robinson Crusoe (1808)*, 156–57.

of a footprint in the sand. Robinson's feet are at first framed in time with his pace along the beach. Suddenly Robinson ceases, yet the frame quickens, moving off on his predicted path, it passes over a footprint marked in the sand and stops. The abstract frame of pristine, crystal sand is figuratively and aesthetically marked by a dark impression, which passes into the centre of the frame as it passes into the perception of the viewer and, as the rising musical score signifies, Robinson's awareness as well. *Mise en scene* obfuscates Robinson and the viewers' revelations into a single jolt of the improbable. Sequence has been broken. A boundary breached once is a boundary breached forever: someone *other* than Robinson has imprinted the island. The non-repeatability of the footprint as event, its isolation and the collapse of the closure it indicates all constituent its improbability. A long boundary between wet and dry sand snakes along the beach, indicating another closure. Buñuel shows the single footprint facing outwards, towards the impenetrable ocean. The interrupted flow of cinematic sequence highlights, what is for the novel, its hapax legomenon.²⁰⁹

Metaphoric thunder strikes Crusoe; the ground beneath his feet loses all feeling. Having become attuned to, what Susan Stewart calls, 'the signature of change'²¹⁰ on the island, Crusoe and his self-same Empire now splinter. For Crusoe, a true 'overabundance' would be an outside to his Kingdom, would be a figure entering and exiting his Empire without leaving a proper vestige of that sequence of events. Like Robinson, the reader must traipse to a higher vantage point in order to comprehend the consequence of that mark. As Crusoe narrates the excess he flees to the mountain top, and traipses wither and thither along the shore, seeing 'no other impression but that one.'²¹¹

What Buñuel chooses to show in a breach of cinematic sequence, the novel plays out in Crusoe's inner narrative. The footprint is alone, none before it and certainly none after it. A human being would be indicated by a sequential lineage of footsteps, leading from the past (from the island's interior), to the future (and the harsh ocean

²⁰⁹ A hapax legomenon is a word which occurs only once within a context, either in the written record of an entire language, in the works of an author, or in a single text.

²¹⁰ Susan Stewart, *Poetry and the Fate of the Senses* (University of Chicago Press, 2002), 209.

²¹¹ Defoe, *The Life and Adventures of Robinson Crusoe* (1808), 156–57.

beyond). Crusoe, the sovereign subject of all he purveys, ponders on that mark over the space of the island, and also through time. In the novel it is only on the third day that he re-visits the site to compare his own foot with the print. The footprint is an inscription in a substrate which is heterogeneous²¹² and unable to sustain the marks it bears for long. The liquid, entropic flow of sand should be at odds with the marks inscribed in Robinson's log books, for instance. Ink evokes the surface of the page, but it is *within* the tempered fibres of the paper that it remains. 'To inscribe is,' Marcos Novak suggests, 'to write in, to place the mark of one thing within the fabric of another.'²¹³ But against all odds the footprint *is* still there on the beach after three days and nights, a footprint Crusoe now admits is definitely not his own. At first, the footprint terrifies him as the mark of the outsider. Soon though, realising what this outsider might mean for the totality of his Empire, Robinson begins the process of pulling the mark inside his conceptions:

Sometimes I fancied it must be the devil; and reason joined in with me upon this supposition. For how should any other thing in human shape come into the place? Where was the vessel that brought them? What marks were there of any other footsteps? And how was it possible a man should come there?²¹⁴

Crusoe's distancing of the mark from the human 'others' necessary to make it has allegorical significance. The narrative performs Haraway's 'god-trick', an inherently imperialistic act, centring the entire island, and even the possibility of its outside, back onto Crusoe himself. Crusoe's sovereignty indicates a demon, for how should such a single mark of the human come to stand alone? A demon must have chosen to play tricks on him. It is, Robinson exclaims, the only *reasonable* explanation. In his short study of demonology, Eugene Thacker recognises that the figure of the demon should be contemplated as inseparable from the process of demonization:

²¹² The technical term for the surface of a planetary body, whether urbanised, earth covered or extra-terrestrial, is *regolith*.

²¹³ Marcos Novak, 'Trans Terra Form: Liquid Architectures And The Loss of Inscription', 1999, <http://www.krcf.org/krcfhome/PRINT/nonlocated/nlonline/nonMarcos.html>.

²¹⁴ Defoe, *The Life and Adventures of Robinson Crusoe (1808)*, 158.

Here the political aspects of the demon, as the stand-in for a threatening Other, come to the fore. The demon becomes a name, a placeholder, a designation that signifies at once that which is outside and, because of this, that which is a threat.²¹⁵

Although conjured from supernatural lore, the demon is more of ‘an anthropological motif,’²¹⁶ demonstrating how Crusoe relates – ontologically – to the world he inhabits. Even as Crusoe moves on from his supposition, the figure of the demon remains allegorically significant for a long swathe of the novel. For in the years following the discovery of that footprint, Robinson concentrates solely on activities designed to avoid the invasion, possession, and metamorphosis of his island – all happenings associated with demonic influence. The first indication of an ‘outside’ to Crusoe’s Kingdom marks the beginning of the novel’s fortress phase. ‘Possessed by fear,’ Robinson first decides to ‘turn all my tame cattle into the woods, that the enemy might not find them... to [dig] up my two corn fields... [and] demolish my bower and tent,’²¹⁷ so that no vestige of his labour nor habitation remain. But instead of casting his efforts to the wind, Robinson doubles down, building stronger fortifications, planting muskets in defensive position in readiness for attack, and secreting his flock of goats deeper in a wooden glade to protect them from observation. The sovereign Crusoe constitutes himself by continually recomposing the island. Crusoe’s fear comes from the realisation that the outsiders may have been here all along, that in all the 20 years of his isolation those ‘savages of the main land’²¹⁸ may have visited his island time and again. It is not an outside ‘other’ that disturbs and reorganises Crusoe’s Kingdom. A more perverse logic is at work here, and once again the way Crusoe restructures his imperial order from the inside out is paradigmatically suggestive.

An outsider must have caused the footprint, but Crusoe is only capable of reading in the mark something about himself. The evocation of a demon, then, is Crusoe’s way of re-totalising his Empire, of removing the ‘other’ from his self-subjective identification

²¹⁵ Eugene Thacker, *In the Dust of This Planet* (Ropley: Zero, 2011), 24.

²¹⁶ Thacker, 26.

²¹⁷ Defoe, *The Life and Adventures of Robinson Crusoe* (1808), 162.

²¹⁸ Defoe, 158.

with the island; of converting 'other' equivocally into a condition of same. According to Crusoe, the demon of his imagination fully *intended* to confuse and terrify *him*. To be 'rationally' possible, the footprint without sequence cannot be a mere haptic trace. In this proclamation, not only does Crusoe solve the problem of a singular footprint, he also returns his island to its absolute state of closure. The membrane has not been breached, just as long as Crusoe believes the footprint was placed there deliberately by a creature whose very existence revolves around the island's single inhabitant.

The shipwreck and footprint are significant events in the constitution of Crusoe, providing resting points from which to assess the allegorical composition of this chapter. They mark points at which Crusoe's subject is reset; the making blank of the island page onto which Crusoe apparently writes himself anew. To return to a canonical text such as *Robinson Crusoe* is to reflect on what the text meant in its original context, whilst also grappling with the many contexts and critical frameworks in which it has been located since. In the case of Defoe's novel, it is the figure of 'enlightened Man' which interests me, and provides this chapter with its paradigmatic backbone. Defoe's account of Crusoe's shipwreck, isolation, and eventual ascension to master of his island provides a framework, not only for considering the historical-critical inauguration of '*the*' figure of enlightened Man, but also of the myth of Man as it continues to be inaugurated and critiqued. That is, to re-present *Robinson Crusoe* through what Susan Stewart calls an allegorical excess and overabundance ²¹⁹ is to reconsider the mythic event of enlightened Man – to repeat Karen Armstrong's insight – in its happening once, *but also in its happening at all times.* ²²⁰

Whether this text explicitly references Crusoe the novel, Crusoe the character, Crusoe the figure of enlightened Man, or Crusoe as imperialist figure, the questions raised are intended to operate paradigmatically across the entire ensemble. As with other chapters in this thesis, the 'work' of this chapter is intentionally distributed across several sites of disposal. I am interested not *only* in each particular case I address, but more significantly – and, returning briefly to Giorgio Agamben's definition of the

²¹⁹ Stewart, *On Longing*, 3.

²²⁰ Armstrong, *A Short History Of Myth*, 111.

paradigm – in the general rule which each case makes intelligible.²²¹ Crusoe is therefore both the particular and general case of enlightened Man, and the work undertaken to expose how Crusoe’s imperialistic logic plays out in his island Empire is intended to affect an understanding of both the particular case and the general case of which Crusoe is the principle example. This general/particular practice, as Rosi Braidotti argues in her book *The Posthuman*, is inherent to what constitutes ‘the human of Humanism’ in the first place, ‘transposing a specific mode of being human into a generalized standard.’²²² The figure of Crusoe is therefore also paradigmatic of the process of normalcy and normativity which has comprised, and continues to comprise, the human of Humanism, at least since the era of peak imperialist rule and Euro-centric Enlightenment in the midst of which Daniel Defoe wrote the eponymous novel *Robinson Crusoe*. If other chapters in this thesis deal more explicitly with the trouble of understanding or representing the transformation of ‘human’ into ‘posthuman’ in an ongoing deferral of the (post)human-*to-come*, then this chapter deals in Crusoe’s maintenance of his own singularity, even and especially when its outside is transformed by Crusoe and his exploits into the singularity of which he is constitutive.

To pause and unpack the relation Crusoe exhibits to his own imperialist sovereignty is, therefore, of wider significance to the figure of ‘Man’ I wish to examine. Since the majority of this chapter deals in allusions to various modes of imperialism, it is now necessary to reflect on the rich swathe of discourse on colonialism, post-colonialism and the ongoing necessity of decolonisation. This may seem to allow a momentary ‘stepping out’ of the discourse, but, as I wish to show further, and in line with Haraway’s insistence of ‘situated’ knowledge,²²³ I also want to maintain and return to my *own* position and pivot as writer and thinker of these thoughts; as a subject grappling with, and engaged in co-producing, the perturbed and perturbing space of a critical posthumanist writing.

²²¹ Agamben, *The Signature of All Things : On Method*, 23.

²²² Braidotti, *The Posthuman*, 26.

²²³ Donna Haraway, ‘Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective’, *Feminist Studies*, 1988, 575–599.

Colonial Equivocation

In her 1999 book *Decolonizing Methodologies*, Linda Tuhiwai Smith separates imperialism into four strands before emphasising that these strands are tightly interwoven. They are:

- (1) imperialism as economic expansion; (2) imperialism as the subjugation of 'others'; (3) imperialism as an idea or spirit with many forms of realization; and (4) imperialism as a discursive field of knowledge. ²²⁴

Whereas Smith's first three forms of imperialism, related to the promotion of 'science, economic expansion and political practices... have reflected a view from the imperial centre of Europe' ²²⁵ the fourth use of the term Smith outlines was generated by writers who themselves experienced colonisation from 'within'. As 'a discursive field of knowledge,' imperialism recognises that dehumanisation has often been disguised by the ideologies of humanism and liberalism, enterprises founded on an appeal to a universal human subject that – as I showed earlier – is itself merely a product of auto appellative, imperialist ordering. Smith argues that the stance towards the universal subject should itself be considered a form of colonialist oppression, compelling colonised people to 'define what it means to be human' through 'the language, the economy, social relations and the cultural life' imposed on them by imperialist systems of control and order. ²²⁶ Smith argues, after Ashis Nandy, that the 'code' or 'grammar' of imperialism is the very principle of *order*:

The principles of order provides the underlying connection between such things as the nature of imperial social relations, the activities of Western science, the establishment of trade; the appropriation of sovereignty; the establishment of law.

To return to the example of colonial semiosis signified by Crusoe's tobacco, the first three levels of Smith's definition of imperialism are inherent as principles of order on

²²⁴ Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples* (London ; New York : Dunedin, N.Z. : New York: Zed Books ; University of Otago Press ; Distributed in the USA exclusively by St. Martin's Press, 1999), 21.

²²⁵ Smith, 22.

²²⁶ Smith, 26.

the part of the colonialist force. (1) To expand and conquer a New World. (2) To appropriate its resources and put its people to work maintaining those resources on behalf of the Empire. (3) To claim that not only does tobacco engender a spiritual clarity in those who smoke it, but that this kind of self-mastery was previously unavailable to the recently 'civilised' natives who now slave over its cultivation. Many such examples can thus be made to clarify the fourth definition of imperialism not as one of order, but of *disorder* on the bodies, cultures and spirits of the colonised. As Frantz Fanon expressed it, speaking of Europe's crimes against subjugated colonised and enslaved people, 'the most heinous of which have been committed at the very heart of man.'²²⁷

'Colonial domination,' according to Homi K. Bhabha, 'is achieved through a process of disavowal that denies the chaos of its intervention;'²²⁸ the authority of the colonisers being preserved through teleological narratives that reduce all difference, and even the possibility of difference, to an expression of predetermined order. Bhabha turns to the imposition of 'the book' in his exposition, a scenario he traces through various examples of colonialist literature, in which the introduction of the book upon colonised subjects, again and again, is told as a myth of an origin that transcends both the colonised *and* the colonisers:

The discovery of the book installs the signs of appropriate representation: the word of God, truth, art creates the conditions for the beginning, a practice of history and narrative. But the institution of the Word in the wilds is also an *Entstellung*, a process of displacement, distortion, dislocation, repetitions – the dazzling light of literature sheds only areas of darkness.²²⁹

Both the book and tobacco are 'signs taken for wonders.'²³⁰ Tobacco being taken and rewritten into the ongoing project of a higher order enlightenment, and the book being imposed in the name of a meta order that governs all things (for instance, God,

²²⁷ Frantz Fanon, *The Wretched of the Earth*, trans. Richard Philcox (New York: Grove Press, 2004), 238.

²²⁸ Homi K. Bhabha, *The Location of Culture*, Repr (London: Routledge, 2003), 111.

²²⁹ Bhabha, 105.

²³⁰ Bhabha, 102.

the monarch, country, capitalism etc.). The book, tobacco, and any number of imperialising surfaces or cultural signs, stabilise 'the agonistic colonial space'.²³¹

Through the work of Linda Tuhiwai Smith and Homi K. Bhabha it becomes apparent that Karl Marx's identification of capitalism's origins in *Ursprüngliche Akkumulation* is at odds with his attempt to read Robinson Crusoe as a figure of post-capitalist enlightenment. The problem of an exteriority from which capitalism plunders before resetting the myth of itself is similar in kind to the colonial semiosis through which Defoe continually renews Crusoe's status as Emperor of his isle. But this is also the logic which Marx himself undertakes, showing an ambivalence to the plethora of 'outsides' which Crusoe brought with him in the first place. Every tool Crusoe fishes out of the shipwreck, every animal he captures and domesticates, and most significantly for this chapter, any ostensible person whose footprint marks the island, becomes nothing more than a writing mechanism in the further appellation of Crusoe; in the further ordering of his imperialist principality. The island Empire has its geographic, cultural, and spiritual boundaries breached several times during Robinson's adventures, but in each of these instances a 'wonder' is conjured that – to repeat a phrase Bhabha echoes from Michel Foucault – has the effect of a finalisation, relative to the objective²³² of Crusoe's self-mastery. Bhabha establishes this mode of mastery as one that functions in spite of – and often, in league with – *ambivalence*.

Donna Haraway, along with theorists such as Rosi Braidotti, use the term 'imperialism' to refer to the way in which certain fields of knowledge and modes of representation separate themselves like colonial Empires. This mode of separation can be seen in Marx's affirmation of a particular post-capitalist subject, ambivalent to its constitution in the capitalist system he wishes to critique. It is also inherent in Michel De Certeau's annotation of the scriptural enterprise, through which capitalism formulates itself as a blank page that maintains absolute power and separation from history. It becomes apparent through what Walter Mignolo terms 'colonial semiosis', where external cultural signs are dissolved into the origin myth of the imperialist. And so too I note it in the self-affirming myth of enlightened man, underscored through both the

²³¹ Bhabha, 110.

²³² Bhabha, 109.

metonym and metaphor of shipwreck. J. K. Noyes turns to Jean-Francois Lyotard to clarify this renewed, ongoing, ambivalent separation as it relates to the inscription of enlightenment knowledge, stating that:

every limit is constantly transgressed... what is important is not the other side of the frontier, it is that both sides are already posited, composed in one and the same world. ²³³

Again, the imperialist is ambivalent in regards the relation between the two sites of semiosis. The conjured wonder, according to Bhabha, 'regulates the ambivalence between origin and displacement, discipline and desire, mimesis and repetition.' ²³⁴ In other words, the imperialist is ambivalent to historical contingencies, to the role of power as an ordering or disordering mechanism and, most importantly for this chapter, to the positioning of the colonised as 'other'. What matters to the imperialist is that there is one 'world' and that only they and their ilk have the capability to see it as objectively so. Their ambivalence should not be considered a passive undertaking. The imperialist engages in a fixing of their world; of the pivot of themselves around which that world moves. Bhabha writes of 'two sites of disposal' between the coloniser and the colonised. The frame of reference (disposal) and a mental inclination (disposition) is governed via an act of what Bhabha terms 'equivocation', allowing 'neither an equivalence of the two sites of disposal nor their division as self/other, subject/object.' ²³⁵ From the Latin '*aequivocare*', for 'called by the same name', to equivocate is to use language ambiguously to conceal a truth or avoid commitment to a single meaning. In regards the relation Bhabha outlines, equivocation is a mechanism of governance inherent in the relation between the coloniser (the addresser) and the colonised (the addressee). Equivocation maintains external energies such as 'otherness' as merely a condition of the mastery of the coloniser, rendering the 'colonised as a fixed reality which is at once an "other" and yet entirely knowable and visible.' ²³⁶ The primary operation of imperialism is the maintenance of its central figure, and in this instance,

²³³ J. K. Noyes, *Colonial Space: Spatiality in the Discourse of German South West Africa 1884-1915* (Routledge, 2012), 59.

²³⁴ Bhabha, *The Location of Culture*, 110.

²³⁵ Bhabha, 109.

²³⁶ Homi K. Bhabha, 'The Other Question...', *Screen* 24, no. 6 (1 November 1983): 23.

Robinson Crusoe exhibits the paradigmatic case of which he himself is the principle example. Robinson Crusoe embodies Linda Tuhiwai Smith's first three orders of imperialism in his manufacture, maintenance and protection of his island Empire, but so too must *all* Empires be ruled over with an imperialist sensibility. Crusoe again and again enacts a governance of the outside relative to the objective of maintaining the singularity of himself.

As with the event of the shipwreck and the footprint in the sand, the configuration of 'other' not only stands out against the particular background of the novel *Robinson Crusoe*, but has also been read as an event significant enough to mark the appearance of the Modern era; of Modern Man. In the final passages of *The Order of Things* (1966) Michel Foucault proclaimed that, 'man is an invention of recent date. And one perhaps nearing its end.'²³⁷ Treating the whole of mankind figuratively in this way, Foucault describes a human 'face drawn in sand at the edge of the sea' being erased as the ground of Modern thought finally crumbles.²³⁸ Positioning himself between the Modern 'appearance' of the figure of Man, and its proposed end, Foucault's metaphors are underpinned by material, entropic imagery that echo those which govern so many of Crusoe's island misadventures. The entropic imagery highlighted in this chapter, starting with Crusoe's shipwreck and leading to the eventual imposition of 'others' onto his pristine isle, has up until now been conjured in the abstract: the storms and rough seas of human endeavour which Robinson Crusoe in particular, and enlightened Man in general, must brave and conquer in pursuit of the higher goal of rational self-mastery. But now, being clear in outlining the paradigmatic elements of this chapter, I wish to concentrate on disorder, in and of itself, as it relates to the ongoing manufacture and persistence of the figure of Man. Just as Homi Bhabha introduces the term 'equivocation' to understand the colonial relation to (dis)order, so the term is also used by theorist N. Katherine Hayles in a text addressing (dis)order as it relates to the science of thermodynamics.²³⁹ In order to arrive at an expanded

²³⁷ Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, Repr, Routledge Classics (London: Routledge, 2007), 422.

²³⁸ Foucault, 422.

²³⁹ N. Katherine Hayles, *Chaos Bound Orderly Disorder in Contemporary Literature and Science*, 3. print (Ithaca, NY: Cornell Univ. Press, 1994).

definition of equivocation that draws both sides of these discourses together, I first need to turn explicitly to a brief history of thermodynamics.

Thermodynamic Equivocation

In a collaborative paper entitled *Heat-Death* (2000) Luciana Parisi and Tiziana Terranova trace the original grappling with, and definition of, thermodynamics to fundamental disturbances enacted on the social and human body:

Thermodynamics is a law of nature on which industrial capitalism built a technological, economic and biosocial order. The centrality of thermodynamic principles to its technological machines and its organization of the social body means that the entirety of the social order constructed by industrial capitalism was affected by its implications. It is not only the universe which one day will run towards heat-death, but also the social order which builds itself on thermodynamic principles. The threat of entropy was real to the natural and political sciences of industrial capitalism, it was a problem that needed a solution.²⁴⁰

The female body, Parisi and Terranova argue, was one site that provided industrial society a temporary respite to its inevitable – and necessary²⁴¹ – heat-death. Through the subordination of sexual reproduction to the regulations attached to marriage and family the female body became a ‘fluid Outside which in turn lends energy to the thermodynamic cycle.’²⁴² The play between entropy and negentropy / outside and inside is a fundamental principle of all complex systems, and in turn, all human societies have grappled with it at varying scales. But it is perhaps with imperialism that the development and maintenance of ‘fluid Outsides’ first became aligned so closely with the vision of the universe it sustained: a constant deferral of the exterior in lieu of maintaining the central, and uncontested, figure of enlightened, wilful Man. The store

²⁴⁰ Luciana Parisi and Tiziana Terranova, ‘Heat-Death: Emergence And Control In Genetic Engineering And Artificial Life’, *CTheory*, 5 October 2000, www.ctheory.net/articles.aspx?id=127.

²⁴¹ In the sense that, the eternal running-down of the system was now understood to be necessary to the continued renewal of power, both ‘inside’ the machines of industry, and ‘outside’ for the wider functioning of ‘civilised’ society.

²⁴² Parisi and Terranova, ‘Heat-Death: Emergence And Control In Genetic Engineering And Artificial Life’.

of civilisation Crusoe brings with him on the ship can be traced to the 'primary accumulation' of enslaved, colonised, or expropriated people. In turn, the negentropic locality of those subjugated people was itself gleaned from readily available 'cheap nature' in the form of animal labour, the annexation of land for agriculture, or the nomadic tradition of taking what is available from region after region, whilst constantly moving to other, prosperous, elsewhere. The significance of these thermodynamic processes was not known until the very beginning of the industrial revolution, at which point they became integral to the design and uptake of ever better, more efficient thermodynamic machines, capable of offsetting entropy at ever greater scales and speeds. In relation to human affairs the negentropic, 'whether idiom, tool, institution, market, desire, and so on – is always in the course of its inevitable decay.'²⁴³

As according to N. Katherine Hayles, early thermodynamicists maintained an imperialist disposition against the inevitable heat-death of the universe, because their proclivities for order and progress had never before been in need of *a recognition of* outsides. Hayles further describes this with recourse to the work of early thermodynamicist Lord Kelvin (William Thomson):

As the earth proceeds along this irreversible path, man must inevitably perish if he remains "as at present constituted." If man is to escape this dismal prediction, some unimagined transformation will have to take place.²⁴⁴

It is only with the advent of thermodynamics that the human world could be shown to be one 'characterized by fundamental disturbance.'²⁴⁵ A disturbance managed through the subordination of resources, animals, and various peoples as the rampant work of 'progress' has proceeded, but a disturbance which always offers within itself the promise of further transformations. Developed at the peak of the British Empire, thermodynamics was sometimes called 'the science of imperialism', as N. Katherine Hayles explains:

²⁴³ Bernard Stiegler, 'Escaping the Anthropocene', trans. Daniel Ross (Durham University, 2015), 6, https://www.academia.edu/12692287/Bernard_Stiegler_Escaping_the_Anthropocene_2015_.

²⁴⁴ Hayles, *Chaos Bound Orderly Disorder in Contemporary Literature and Science*, 40.

²⁴⁵ Bernard Stiegler, 'Anthropocene and Neganthropology' (November 2014), 6.

[T]o thermodynamicists, entropy represented the tendency of the universe to run down, despite the best efforts of British rectitude to prevent it from doing so... The rhetoric of imperialism confronts the inevitability of failure. In this context, entropy represents an apparently inescapable limit on the human will to control. ²⁴⁶

The second law of thermodynamics maintains that a certain amount of energy in a system undergoing change will always remain unavailable for useful work. ²⁴⁷ The electric motor will produce heat and noise as an entropic by-product of its task to whisk air into egg whites. As the egg becomes cloudy, so the universe 'outside' the egg gains a little heat, thus affirming the first law of thermodynamics: that the amount of energy in the system and its environment always remain the same. The term 'negative entropy' is often applied to living organisms because they seem to be able to 'master' the process of entropy in lieu of their homeostasis, but this is as much an illusion as the illusion of Crusoe's Empire: negative entropy occurs at small scales, over relatively small periods of time. Entropy is highly probable: the order of living beings, or island Empires, is most certainly not. ²⁴⁸

In an 1867 letter, later revised in his *Theory of Heat* (1871), James Clerk Maxwell designed a thought experiment to test the second law of Thermodynamics. Maxwell imagined an 'observant and neat-fingered [microscopic] being' able to sort molecules between two vessels 'by means of a slide without mass,' resulting in a separation between fast (hot) and slow (cool) particles. ²⁴⁹ If such a creature did exist, he argued, no 'work' would be required to decrease the entropy of a closed system. The creature in Maxwell's thought experiment comes from an old view of the universe, 'fashioned

²⁴⁶ Hayles, *Chaos Bound Orderly Disorder in Contemporary Literature and Science*.

²⁴⁷ Lynn Margulis and Dorion Sagan, *What Is Life?* (University of California Press, 1995), 15.

²⁴⁸ Recent research in the chemical and biological sciences has led to the conclusion that life, as a process, may just be a very efficient way to dissipate energy: 'Paradoxically, the most efficient way... to advance from order to disorder – is to create transient but ordered systems, akin to the whirlpool in the bathtub or a tornado in a storm.' (Tim Requarth, 'Why Life Is Not a Thing but a Restless Manner of Being', *Aeon*, 11 January 2016, <https://aeon.co/essays/why-life-is-not-a-thing-but-a-restless-manner-of-being>.)

²⁴⁹ As quoted in Evelyn Fox Keller, *Refiguring Life : Metaphors of Twentieth-Century Biology*. ([S.l.]: Columbia Univ Press, 1996), 53.

by divine intervention, created for man and responsive to his will.’²⁵⁰ By sorting a chaotic arrangement of particles into hot and cold compartments *Maxwell’s Demon*, as it would later become known, appeared to contradict the law Maxwell himself had helped to develop. One method of solving the paradox was devised by Leo Szilard, some 60 years later, who recognised that the Demon would have to perform measurements on and therefore *remember* where it placed the fast and slow particles.²⁵¹ Here the apparent order of a system comes down to how ‘information’ is defined. As the demon *decreases* the entropy, or orders, its local environment, so it *increases* the entropy of its memory. For Claude Shannon, who later redefined the relationship between information and entropy, the *more* information a system contains the more unexpected, disorderly, noisy or entropic it is.²⁵² Maxwell’s Demon would require an infinite memory to remember every state of every particle – an event of infinite escalation, which would result in the absolute heat death of the universe at large. The laws of physics had stood up under scrutiny, resulting in a new branch of science known as ‘Information Theory’.

Information Theory outlined a threshold for the growth of industrial society, a revelation that the ‘inhuman force of increasing entropy, [is] indifferent to man and uncontrollable by human will.’²⁵³ As N. Katherine Hayles points out, the connection between entropy and information (established by Shannon) also means that entropy is *the* motor of self-organising, autopoietic systems. Maxwell’s Demon shows that the law of entropy has only a statistical certainty, that nature orders only on small scales and, that despite any will to control, inertia will eventually be reached. Life, in this regard, can be considered as the continual renewal of a complex assemblage, winding down over as long a time as possible in the fight against death. In exchange for a production of further chaos in the wider universe the autopoietic system – whether a single celled protozoa, a steam train, or a churning factory of industry – is capable of retaining only a semblance of homeostasis:

²⁵⁰ Hayles, *Chaos Bound Orderly Disorder in Contemporary Literature and Science*.

²⁵¹ Keller, *Refiguring Life*, 60–61.

²⁵² Hayles, *How We Became Posthuman*, 101.

²⁵³ Hayles, *Chaos Bound Orderly Disorder in Contemporary Literature and Science*.

Consider... the chaotic effect... of a strong wind on the innumerable grains of sand that compose a beach: amid this confusion, the action of a human foot on the surface of the beach constitutes a complex interaction of events that leads to the statistically very improbable configuration of a footprint.²⁵⁴

The footprint in this example from Umberto Eco is a neg-entropic event: the system of shifting sands is lent a temporary order by the cohesive action of the foot. Every footprint is a locality that opens onto greater localities – the impression of a foot into sand, the inclement weather of an island, the infinitesimal drift of the archipelago, or the slow decay of planet Earth’s atmosphere over cosmic time. These orders within orders, what Bernard Stiegler refers to as ‘nested spirals’,²⁵⁵ are co-reliant on each other in the greater play of (neg)entropic tendencies. Given time, the noisy wind and chaotic waves will cause even the strongest footprint to fade. Consequently, negative entropy must always be ‘described in relation to *a locality that it as such produces*, and that it *differentiates* within a more or less homogeneous space’.²⁵⁶ The highly ordered state of a footprint ‘is bought at the expense of an increased disorderliness (metabolic depletion)’²⁵⁷ of the figure who made it. In other words, whether an event appears entropic or negentropic is only definable in relation to its observer.

As Evelyn Fox-Keller lucidly outlines in her book *Refiguring Life* (1995), it pays to re-examine the capacities of Maxwell’s Demon in order to understand the implications of an observer-bound (neg)entropy. To do this, Keller returns to another Being with strange attributes, this time posited by Charles Darwin in an 1844 essay:

Let us now suppose a Being with penetration sufficient to perceive difference in the outer and innermost organization quite imperceptible to man, and with forethought extending over future centuries to watch with unerring care and select for any object the offspring of an organism produced under the

²⁵⁴ Umberto Eco, *The Open Work* (Cambridge: Harvard University Press, 1989), 49.

²⁵⁵ Stiegler, ‘Escaping the Anthropocene’.

²⁵⁶ Stiegler, 6.

²⁵⁷ John Earman, ‘An Attempt to Add a Little Direction to “The Problem of the Direction of Time”’, *Philosophy of Science* Vol. 41, no. No. 1 (March 1974): 41–42.

foregoing circumstances; I can see no conceivable reason why he should not form a new race... adapted to new ends. ²⁵⁸

Although both beings are 'selecting agent[s]' the one posited by Darwin perceives from without, selecting 'from on high' as it were, via an infinite capacity; preternatural and all encompassing. Maxwell's Demon, on the other hand, exhibits a minuteness and 'worldly finitude' from inside, or perhaps alongside, the molecules it selects. ²⁵⁹ The placement of Maxwell's Demon at the same scale as 'natural' processes served to bolster a 'conception simultaneously of free will and determinism, a view of living beings as continuous with, yet distinct from, inanimate matter.' ²⁶⁰ As Keller points out, this aligns Maxwell's Demon more readily with an apparently human, rather than Godlike, conception of mastery. Both imaginary creatures exhibit a capacity to direct nature towards order through the application of will. The difference between the quality of those wills is extremely pertinent in understanding not only the theories of thermodynamics and information emerging in Maxwell and Darwin's time, but also, in tandem, the endless deferral implicit in the functions of imperialism explored earlier in this chapter. As with both Maxwell and Darwin's beings, being positioned 'inside' or 'outside' a system – whether of natural, technological, social, or epistemological organisation – does little to change the overall implication of entropic processes. The universe will run down regardless of how a will apparently capable of overcoming and channelling these forces is constituted. The collapse of thermodynamics with its imperial namesake provides a clearer ground for our paradigmatic reading. Whereas the Godlike perspective obtained by Darwin's being is easily dismissed as a 'contextless' God-trick, the internalised, and apparently self-constituted perspective of Maxwell's Demon is less obviously aligned with Haraway's figure. Yet both are equally constitutive of an idea of human will projected onto figural, imaginary, impossible beings. Man aspires to master the system at large, but can only ever project the mortal attributes he wishes to escape onto imaginary beings like himself, changing those attributes only so much as they appear to allow him to escape the system, but keeping

²⁵⁸ Quoted in Keller, *Refiguring Life*, 54.

²⁵⁹ Keller, 54–55.

²⁶⁰ Keller, 57–58.

them similar enough that he also projects onto the being the something about himself he wishes to maintain. Again, the figure of Crusoe should be paradigmatically placed alongside this insight into Man's co-constitution: both are auto-appellative figures, refiguring themselves in order to maintain the system of which they are the singular objective.

According to N. Katherine Hayles the two ways to understand the transformation of a homeostatic system are understood to be the product of 'noise'. The amount of change contributed by noise is an 'equivocation'. If noise contributes to the reorganisation of a system in a beneficial way, for instance if a genetic mutation in an organism results in the emergence of an adaptive trait, then the equivocation is said to be 'autonomy-producing'.²⁶¹ Too much noise is equivalent to too much information, a 'destructive' equivocation, leading to chaos. An 'autonomy-producing' mutation will be blindly passed on to an organism's offspring, catalysing the self-organisation of the larger system (in this case, the species). All complex, what are called 'autopoietic' systems, inhabit this fine divide between noise and inertia. Given just the right balance of noise recuperated by the system, and noise filtered out by the system, a state of productive change can be maintained, and a state of inertia can be avoided, at least, for a limited time. As according to N. Katherine Hayles, 'How an "autonomy-producing" equivocation is conceived depends on where the observer is stationed.'²⁶² In line with Homi Bhabha's use of the term equivocation in relation to the colonised subject, it is a particular, positioned, locatable subject who does the equivocating. As Hayles points out in *How We Became Posthuman* (1999), noise is only such a thing as it can be defined against a standard, or a pattern.²⁶³ Both the coloniser and the thermodynamicist are like Maxwell's Demon, creating order in their particular arena of the universe at the expense of their ability to conceive of their equivocal act in any wider schema. Both the thermodynamicist and the coloniser in working for the 'morphological standard' of which they themselves are the defining example, are inevitably, and perhaps incurably, imperialist. The coloniser makes note of 'the other'

²⁶¹ Hayles, *Chaos Bound Orderly Disorder in Contemporary Literature and Science*, 56.

²⁶² Hayles, 56.

²⁶³ Hayles, *How We Became Posthuman*, 33.

as 'other' only so much as it affirms the standard of themselves; the thermodynamicist notes the 'outside' they plunder from only to the extent that they already consider it to be part of the heat-death their system works to avoid.

As with the paradigms of shipwreck and the footprint, the ambivalence of Man is constituted at the meeting point between the metonym and metaphor of 'the outside' or 'other'. Noise, chaos, disorder, or any number of frontiers to be conquered, subjugated, and ordered are maintained in their difference only to the extent that they signal the renewal or transformation of the Man who is considered the morphological standard in the first instance. To return to the discourse around the posthuman, in which the idea of 'mutation' often plays a discursive role, this chapter recognises, in line with Neil Badmington, that, '[b]ecause every aspect of Western thought is touched in some way by the legacy of humanism, any claim to be writing the end of "Man" is bound to be written in the language of "Man".'²⁶⁴ Crusoe's shipwreck and the acts of self-maintenance which follow are told in this chapter in order to play out this imperialistic tendency. Crusoe's tale is less about outward transformation than about, as Stanislaw Lem showed us, a figure of European assemblage ceaselessly, blindly, maintaining the momentum of his heritage. A myth told of internal perturbations which Crusoe 'braves' and apparently conquers through the crafting of 'external' energies into internal mechanisms of normativity and control. I wish to be clear that I recognise this tendency in *this thesis itself*: to rage against the figure of 'Man' in an appeal to overcome it through the integration of 'outsides' and 'outsiders'. In referring to the figure Friday, of the infamous footprint in the island sand, I gesture to this outside(r) only so much as it benefits the discourse I engage in.

The mutation of the human, of the standard, not only *should* not, but *cannot* be considered as coming from an 'outside', for to do so would be to affirm the subject position from which that transformation is conceived. If mutation as critical posthumanism invokes it, 'is to be taken seriously' R.L. Rutsky warns, 'it cannot be reduced simply to a narrative of passage, shift, or break.' The randomness, the chaos,

²⁶⁴ Neil Badmington, 'Pod Almighty!; Or, Humanism, Posthumanism, and the Strange Case of Invasion of the Body Snatchers', *Textual Practice* 15, no. 1 (2001): 13.

the disorder implied by mutation, 'can be narrativized only by subordinating its unpredictability to a human perspective.'²⁶⁵ As Carey Wolfe points out in *What is Posthumanism?*²⁶⁶ R.L. Rutsky critiques N. Katherine Hayles' rendering of mutation in this regard, in which she treats it 'as a pre-existing, external force that introduces change into a stable pattern (or code), and into the material world or body as well,'²⁶⁷ noting significantly that the standards by which the human 'mutation' is measured must *also* be considered as a process being undergone. Rather mutation, Rutsky suggests, should name the 'randomness which is always already immanent in the processes by which both material bodies and cultural patterns replicate themselves.'²⁶⁸

Once a mutation is narrativised, it necessarily becomes positioned in relation to a subject. Those subjects, in turn, can be isolated in relation to an act of equivocation, whether like Maxwell's Demon, or imperialist Man – ordering a system to his own ends through an act of equivocation, or, whether an 'other' subject, a 'fluid Outside', whose material and cultural identity acts as the potential which drives the homeostasis of the imperialist who equivocates. A non-narrativised mutation – a mutation in and of itself – is perhaps better understood as *being* that equivocation in and of itself: a randomness or disorder not predicated on a pre-existing standard or pattern. Imminent posthuman mutation, in other words, is *necessarily* ambivalent to the bodies and patterns subject to it. Imminent posthuman mutation is necessarily ambivalent to the human 'we' who posit 'it' through narratives predicated on 'our' transformation. I want to register then, a third definition of equivocation as a mutation uncaptured or unsubordinated by codes of the internal/external, inside/outside.

To end then, I affirm this chapter not as a refiguring of Friday – the colonised, enslaved, and subjugated outsider yet to be fully recuperated by humanist or posthumanist theory alike – but as a refiguring of Crusoe, the Man of enlightenment in all his self-obsessed imperfections. In deferring throughout this chapter to Friday as

²⁶⁵ Rutsky, 'Mutation, History, and Fantasy in the Posthuman.', 107.

²⁶⁶ Wolfe, *What Is Posthumanism?*, xvii.

²⁶⁷ Rutsky, 'Mutation, History, and Fantasy in the Posthuman.', 107.

²⁶⁸ Rutsky, 111.

the outsider I will *eventually* contend with, I now end without making or allowing Friday to speak on my behalf. To *make* the other speak is as much a violent act as to silence the other. Both are equivocations, in that they regard the mark of the other only as an indication of a prior autonomy. The two figures which have so far been mobilised by this thesis have played out, have practiced on and through, defining principles of critical posthumanism relating to its delineation of inside and outside, the self and the other. In chapter three, I make of the next figure – The Thing – a paradigm of the kind of material imminence argued for by this chapter, affirming the figure of the ‘other’ without making of that other something about the one; the singular; the figure of ‘Man’, who fights for their self-same autonomy. Chapter three paradigmatically renders this mutational imminence – which I call ‘Thingly’ – as a fundamental feature of any critical posthumanist practice that has a chance of creatively and critically refiguring the very world of which is part, and therefore, in practice with, ontogenetically.

The desire to stand outside the paradigm I have setup here – to speak of the figure of Crusoe as ‘Man’ from an apparent posthuman outside, already positioned ‘past’ the point of the human(ist) limit it registers – inevitably reinstates the posthuman as a new *standard*. The problem of equivocation – in both Hayles’ and Bhabha’s invocations – is the need of a subject to position itself in relation to a process being undergone, and make of that process something about the particular subject which names it.

Posthumanism, rather, has to recognise its inherent inability to communicate its position, and to recognise this inability as an inevitable and affirmative consequence of its call to not totalise, or universalise itself as some new vanguard. Because, as Nina Lykke suggests, ‘we cannot position ourselves “outside” of the world we are analysing and in which we act,’²⁶⁹ within the project of establishing a posthumanism, termed by Rosi Braidotti, as a relocation of ‘the subject in the flow of relations with multiple others,’²⁷⁰ there is always the tendency for those others to become subjugated, once again, in lieu of a newly inaugurated ‘universal’ character, which can apparently regard the whole.

²⁶⁹ Lykke, *Feminist Studies*, 33.

²⁷⁰ Braidotti, *The Posthuman*, 50.

Chapter Three: The Thing

“If a cell gets out it could imitate everything on the face of the Earth...
and it’s not gonna stop!”

Becoming Alien

John Carpenter’s 1982 film, *The Thing*, is a claustrophobic science fiction thriller exhibiting many hallmarks of the horror genre. The film depicts a sinister turn for matter, where the chaos of the replicating, cancerous cell is expanded to the human scale and beyond. In *The Thing* we watch as an alien force terrorises an isolated Antarctic outpost. The creature exhibits an awesome ability to imitate, devouring any form of life it comes across, whilst simultaneously giving birth to an *exact* copy in a burst of bile and protoplasm. The Thing copies cell by cell in a process so perfect – at every level of replication – that the resultant simulacrum speaks, acts, and even thinks like the original. The Thing is so relentless and its copies so perfect that the outpost’s Doctor, Blair, is sent into a mad frenzy at the implications:

If a cell gets out it could imitate everything on the face of the Earth... and it’s not gonna stop! ²⁷¹

Based on John W. Campbell’s 1938 novella, *Who Goes There?*, Carpenter’s film revisits a gothic trope, as numerous in its incarnations as are the forms the Thing is capable of taking. In Campbell’s original novella the biological adulteration co-inhabits its host alongside another type of infection: that of the Antarctic inhabitants’ inner lives. Plucked from an icy grave, the Thing sits frozen solid in a dark corner of the outpost, drip dripping towards re-animation. Before its cells begin their interstitial jump from alien to earthly biology, it is the dreams of the men that become infected:

‘So far the only thing you have said this thing gave off that was catching was dreams. I’ll go so far as to admit that.’ An impish, slightly malignant grin crossed

²⁷¹ John Carpenter, *The Thing*, Film (Universal Pictures, 1982).

the little man's seamed face. 'I had some, too. So. It's dream-infectious. No doubt an exceedingly dangerous malady.'²⁷²

In Campbell's novella, the Thing is condensed as much from the minds of the men as from its own horrific, defrosting bulk. A slowly surfacing nightmare that transforms alien matter into earthly biology also has the effect of transferring the inner, mental lives of the men into the resultant condensation. John W. Campbell had no doubts that the Thing could become viscous human flesh, but in order to truly imitate its prey, the creature must infect and steal inner life separately, pulling ghosts kicking and screaming out of their biological – Cartesian – machines. As a gothic figure, Campbell's Thing disrupts the stable and integral vision of human being, of self-same bodies housing 'unitary and securely bounded'²⁷³ subjectivities, identical and extensive through time. John W. Campbell's characters confront their anguish at being embodied: their nightmares are literally made flesh.

According to Ernst Jentsch, the uncanny is kindled 'when there is intellectual uncertainty whether an object is alive or not, and when an inanimate object becomes too much like an animate one.'²⁷⁴ In Campbell's novella this principle is reversed: human bodies are given all the features of inanimate objects capable of being replaced wholesale by an alien will apparently inseparable from its own raw matter. Building on Martin Heidegger's definition of a thing, in which objects are brought out of the background of existence through human use, theorist Bill Brown marks the emergence of things through the encounter:

As they circulate through our lives... we look *through* objects because there are codes by which our interpretive attention makes them meaningful, because there is a discourse of objectivity that allows us to use them as facts. A *thing*, in contrast, can hardly function as a window. We begin to confront the thingness of objects when they stop working for us.²⁷⁵

²⁷² John W. Campbell, *Who Goes There?* (Rocket Ride Books, 2009), 32.

²⁷³ Kelly Hurley, *The Gothic Body: Sexuality, Materialism, and Degeneration at the Fin de Siècle* (Cambridge University Press, 2004), 3.

²⁷⁴ Bruce Grenville, ed., *The Uncanny: Experiments in Cyborg Culture* (Vancouver, B.C: Arsenal Pulp Press, 2002), 233.

²⁷⁵ Bill Brown, 'Thing Theory', *Critical Inquiry* 28, no. 1 (1 October 2001): 4.

The Thing enacts this encounter, when an apparently human figure erupts with vicious alien teeth, or the Antarctic camp's huskies sprout voluminous tentacles which writhe towards their next victim. The human body ceases to function as human being, its will having been splintered off cell by cell by the incumbent alien matter. Each resultant clone's otherness is an uncanny exposure of the abject relationship humans endure with themselves as vicarious, entropic, fragmented forms. Once the relations we expect to contribute to our being 'in the world' are interrupted, all matter appears Thingly, most especially our own.

To emphasise the 'otherness' of each individual character's flesh, Campbell inhabits his novella exclusively with male characters. The absence of women makes the conflict between each of the men feel more rudimentary, but it also centres the horror of the novel on the growing realisation that to be human is also to be alien to oneself. Differences in gender, within the single species homo sapiens, are bypassed, allowing the alien entity to exhibit the features of human non-male 'otherness' alongside a gamut of other – horrific – bodily permutations. Perhaps, as Barbara Creed,²⁷⁶ Rosi Braidotti,²⁷⁷ and others²⁷⁸ have argued, the Thing signifies the intrinsic absence of the mother figure: the capacity of a woman's body to be differentiated from itself in the form of pregnancy; to open up and usher forth into the world a creature other to itself. This Thingly quality is given credence by Julia Kristeva in a passage that could equally refer to the Thing as to the development of a foetus during pregnancy:

Cells fuse, split, and proliferate; volumes grow, tissues stretch, and the body fluids change rhythm, speeding up or slowing down. With the body, growing as a graft, indomitable, there is another. And no one is present, within that simultaneously dual and alien space, to signify what is going on.²⁷⁹

²⁷⁶ Barbara Creed, 'Horror and the Monstrous-Feminine: An Imaginary Abjection', *Screen* 27, no. 1 (1 January 1986): 44–71.

²⁷⁷ Braidotti, *Metamorphoses*, 192–94.

²⁷⁸ Ian Conrich and David Woods, eds., *The Cinema Of John Carpenter: The Technique Of Terror* (Wallflower Press, 2004), 81.

²⁷⁹ Julia Kristeva, quoted in Jackie Stacey, *Teratologies: A Cultural Study of Cancer*, International Library of Sociology (London ; New York: Routledge, 1997), 89.

The Thing does exhibit demeanours of copulation and fertility, but also of disease, fragmentation, dismemberment, and asexual fission. During a drug induced nightmare Dr. Copper suddenly sits bolt upright and blurts out:

Garry – listen. Selfish – from hell they came, and hellish shellfish – I mean self –
Do I? What do I mean?

In turn McReady²⁸⁰ turns to the other men in the cabin and says:

Selfish, and as Dr. Copper said – every part is a whole. Every piece is self-sufficient, and animal in itself.²⁸¹

Like an asexually reproducing starfish or earthworm, the Thing is aberrant at a level more fundamental than allusions to pregnancy can convey. The collapse in Dr. Copper's speech, his inability to articulate what the Thing is, indicates a categorical nightmare he and the men are suffering. As in the work of Mary Douglas,²⁸² the Thing's nightmarish transformation denies the very concept of physical and categorical purity. The metaphysical dualism of the sexes, as Kelly Hurley concludes, is an inadequate paradigm of such horrific embodiment, rather any and all 'ontological security'²⁸³ is challenged through a 'collapsing of multiple and incompatible morphic possibilities into one amorphous embodiment.'²⁸⁴ The Thing is neither male nor female, two nor one, inside nor outside, living, nor dead. If it does settle into a form that can be exclaimed, screamed or defined in mutually incompatible words, it does so only for a moment and only in the mind of its onlooker as they scrabble to deduce its next amorphous conflation. The Thing is a figure performing ontogenesis (something coming to be) rather than ontology (something that already is).²⁸⁵ But the distinction

²⁸⁰ The character McReady becomes MacReady in Carpenter's 1982 retelling of the story.

²⁸¹ Campbell, *Who Goes There?*, 107.

²⁸² Referred to at length by Noël Carroll, *The Philosophy of Horror, or, Paradoxes of the Heart* (New York: Routledge, 1990).

²⁸³ Braidotti, *Metamorphoses*, 195.

²⁸⁴ Kelly Hurley, 'Reading like an Alien: Posthuman Identity in Ridley Scott's *Aliens* and David Cronenberg's *Rabid*', in *Posthuman Bodies*, ed. Judith M. Halberstam and Ira Livingston (Bloomington: John Wiley & Sons, 1996), 219.

²⁸⁵ This distinction was plucked, out of context, from Adrian Mackenzie, *Transductions: Bodies and Machines at Speed*, Technologies (London ; New York: Continuum, 2006), 17. MacKenzie is not talking about *The Thing*, but this distinction is, nonetheless, very useful in bridging the divide between stable being and endless becoming.

between a 'real' ontogenetic act and a 'performed' one is confused once the men of the camp realise that the Thing is teleologically directed towards the goal of imitating *them*. 'The very definition of the real,' as Jean Baudrillard affirmed, has become 'that of which it is possible to give an equivalent reproduction.'²⁸⁶ The question hangs as to whether the Thing is categorically aberrant because the process of reproducing each (hu)man requires it, or whether its eccentric 'becoming' is part of an alien-ness distinct from the form it eventually takes. Does the Thing 'produce' something *other* than human life, or 'reproduce' human life in its entirety, and what, if anything, would be the difference?

In a text on bio and necro politics, Eugene Thacker undertakes an examination of the 'difference between "Life" as an ontological foundation, and "the living," or the various specific instantiations of Life.'²⁸⁷ Thacker highlights a passage in *Poetics* where Aristotle speaks of mimesis giving rise to the art of poetry in human beings:

We take delight in viewing the most accurate possible images of objects which in themselves cause distress when we see them (e.g. the shapes of the lowest species of animal, and corpses).²⁸⁸

Recognition of mimetic forms can instil a certain degree of displeasure if that form depicts a carcass or something considered equally abhorrent. But this is often tinged with what Aristotle calls the 'extremely pleasurable' dual capacities of recognising an imitation as such, whilst at the same time recognising what it is the form is imitative of. The horror of the Thing is bound to this endless ontogenetic re-forming, its apparently limitless capacity to imitate and become without necessarily settling into a final, stable and agreeable categorical – that is, *ontological* – form. The men of the Antarctic encampment grasp in their minds at the forms ushering from the Thing but can never keep up with its propensity toward the next shapeless-shape, bodiless-limb, or ontogenetic-extrudence. The Thing is a phenomenon, to take advantage of

²⁸⁶ Jean Baudrillard, *Simulations*, trans. Paul Foss, Paul Patton, and Philip Beitchman (Semiotext (e) New York, 1983), 146.

²⁸⁷ Eugene Thacker, 'Nekros; Or, The Poetics Of Biopolitics', *Incognitum Hactenus* 3, no. Living On: Zombies (2012): 35.

²⁸⁸ Thacker, 35.

Thacker's words once more, that is 'at once "above" and "below" the scale of the human being,'²⁸⁹ throwing, as Rosi Braidotti succinctly puts it, 'a terminal challenge towards a human identity that is commonly predicated on the One.'²⁹⁰ The 'other' of the Thing never settles down, always falling outside the dialectical circle. The Thing is the manifestation of 'life' divorced from 'the living'. As Helene Cixous remarks in *The Newly Born Woman*, with the 'truly "other" there is nothing to say; it cannot be theorized. The "other" escapes me.'²⁹¹

The figure of the Thing bursts into popular culture at the meeting point between dream and flesh, and has been pursued ever since by men²⁹² whose individuality is considered inseparable from their self-same embodiment. By modifying the rules through which dominant norms such as gender binaries operate, the Thing can be conceived as an incarnation of *détournement*: an intervention that hijacks and continually modifies the rules of engagement. 'The radical implication [being] that [all] meaning is connected to a relationship with power.'²⁹³ Considered through Michel Foucault's definition of bio-power, or the bio-political, the Thing is the process of sex and sexuality severed from the humans who are forced to proliferate 'through' it. For Foucault, sex itself became incorporated into the technology of power in the early 20th Century through the eugenics movement and onwards through the horrors of World War II, but also stretching back into the 19th Century, where it was 'sought out in the smallest details of individual existences'²⁹⁴:

²⁸⁹ Thacker, 29.

²⁹⁰ Braidotti, *Metamorphoses*, 195.

²⁹¹ Hélène Cixous, *The Newly Born Woman* (University of Minnesota Press, 1986), 71.

²⁹² Though it should be noted that in a 2011 remake/prequel of *The Thing*, directed by Matthijs van Heijningen Jr. (2011), the main protagonist is a woman. For the purposes of this chapter, and the accurate portrayal of Campbell's original novella, it is perhaps enough to say it is *almost* always men who pursue the Thing. More significantly, the female protagonist in the 2011 remake manages to avoid being replaced by a Thingly imitation, something that – as this chapter goes on to note – cannot be said with any confidence about the male protagonist M(a)cReady in either the novella or 1982 film.

²⁹³ Nato Thompson et al., eds., *The Interventionists: Users' Manual for the Creative Disruption of Everyday Life* (North Adams, Mass. : Cambridge, Mass: MASS MoCA ; Distributed by the MIT Press, 2004), 151.

²⁹⁴ Michel Foucault, 'Right of Death and Power Over Life', in *Biopolitics: A Reader*, ed. Timothy C. Campbell and Adam Sitze (Durham: Duke University Press, 2013), 49.

Sex was a means of access both to the life of the body and the life of the species... it was tracked down in behaviour, pursued in dreams... it was traced back to the earliest days of childhood; it became the stamp of individuality – at the same time what enabled one to analyse the latter and what made it possible to master it.’²⁹⁵

Above all, the men set against this propagation – this mobilisation of similes of ‘other’ – scramble to protect the normative image of the human they hold most dear: the mirage of ‘Man’.

Becoming World

The filmic Thing is a fictional device enabled by animatronic augmentations coated with fleshy stand-ins, KY Jelly, and occasionally, real animal offal. As John Carpenter described his rendition of the creature in a 2014 interview, ‘It’s just a bunch of rubber on the floor.’²⁹⁶ Bringing the Thing ‘to life’ is an activity that performs the collapse ‘between “Life” as an ontological foundation, and “the living,” or the various specific instantiations of Life.’²⁹⁷ The animatronic Thing exists in the space between stable forms: it is vibrant, expressive technology realised by dead matter; human ingenuity made discernible by uncanny machinic novelty. Ontological uncertainty finds fluidity in the experience of language on a page, in its ability to poetically gesture to interstitiality. But on-screen animatronics, rubber, and KY Jelly are less fluid, more mimetically rooted by the aesthetic expectations of the audience revelling in, and reviled by, their recognition of the Thing’s many forms. Upon its 1982 release, reactions (from a cast of mainly male critics) to John Carpenter’s *The Thing* were at best muted and at worst downright vitriolic. As Anne Billson notes in her 2009 reflection on the film:

²⁹⁵ Foucault, 49.

²⁹⁶ John Carpenter, Bringing The Thing to life, *Invasion, Tomorrow’s Worlds: The Unearthly History of Science Fiction*, 14 November 2014, <http://www.bbc.co.uk/programmes/p02bwk1p>.

²⁹⁷ Thacker, ‘Nekros; Or, The Poetics Of Biopolitics’, 35.

[Critics] didn't just give it the thumbs-down; they tore into it like jackals. "This movie is more disgusting than frightening, and most of it is just boring," wrote David Denby in New York magazine... Derek Malcolm wrote in [The Guardian] that the special effects were: "let loose on us by the bucketful, and satiation rather than horror is the result."²⁹⁸

The special effects used to depict the creature were also the focus of an attack by Steve Jenkins in a critique Ian Conrich claims 'shows his misjudgement':

Steve Jenkins... accuses the effects of functioning in a "modernist fashion", existing "in and of themselves." Jenkins attacks the film essentially for its surrealist nature... he writes that, "with regard to the effects, they completely fail to 'clarify the weirdness' of the Thing", and that "because one is never sure exactly how it [the alien] functions, its eruptions from the shells of its victims seem as arbitrary as they are spectacular'."²⁹⁹

In short, the reviews lingered on two opposing readings of *The Thing's* shock/gore evocations: that they go too far and thus tend towards sensational fetishism, or that they can't go far enough, depicting kitsch sensibilities rather than alien otherness. Jenkins' concern that the special effects do not 'clarify' the Thing's 'weirdness' is contradictory, if not oxymoronic. The implication is that Things could never be so weird as to defy logical function, and that all expressions should, and eventually do, lend themselves to being read through some parochial mechanism or other, however surreal they may at first seem. That the Thing's nature could actually *defy* comprehensibility is not considered, nor how difficult – nay, impossible – the cinematic depiction of that defiance might be. Rather, the critical view was that every grisly eruption, bifurcation, and horrific permutation on screen must necessarily express an inner order temporarily hidden from, but not inaccessible to, its onlookers.

This critical desire for a 'norm' defies the same critical desire for 'true' horror. Our will to master matter and technology through imitative forms is the same will that balks at

²⁹⁸ Anne Billson, 'The Thing Set on Survival', *The Guardian*, 27 August 2009, <http://www.theguardian.com/film/2009/aug/27/the-thing-john-carpenter>.

²⁹⁹ Conrich and Woods, *The Cinema Of John Carpenter*, 96.

the idea that imitative forms could have ontologies incommensurable with our own. The Thing is 'weird': a term increasingly applied to those things defying categorisation. A conviction, according to Mark Fisher, 'that *this does not belong*, is often a sign that we are in the presence of the new... that the concepts and frameworks which we have previously employed are now obsolete.'³⁰⁰ In reflecting on the origins of the slippery 'weird' anti-category through the fiction of the misogynistic, racist, mid-20th Century sci-fi horror author H.P. Lovecraft, Eugene Thacker reminds us that within horror, 'the threat is not the monster, or that which threatens existing categories of knowledge. Rather, it is the "nameless thing," or that which presents itself as a horizon for thought... the weird is the discovery of an unhuman limit to thought, that is nevertheless foundational for thought.'³⁰¹

In *The Thing* the world rises up to meet its male inhabitants in a weird form and, by becoming them, throws into question the categorical foundations of the born and the made, of subject and object, natural and synthetic, whole and part, human and world, original and imitation. What remains is an ongoing process of animation rendered horrific by a bifurcation of ontologies: on one side the supposed human foundation of distinction, uniqueness and autonomy. On the other, a Thingly (alien and weird) propensity that dissolves differentiation, that coalesces and revels in an endless process of becoming. As in Mikhail Bakhtin's study of the grotesque, the 'human horizon' in question is that of the 'canon,'³⁰² a norm to which all aberrations are to be compared:

The grotesque body... is a body in the act of becoming. It is never finished, never completed; it is continually built, created, and builds and creates another body. Moreover, the body swallows the world and is itself swallowed by the world.³⁰³

³⁰⁰ Mark Fisher, *The Weird and the Eerie*, 2016, 13.

³⁰¹ Eugene Thacker, *After Life* (University of Chicago Press, 2010), 23.

³⁰² Mikhail Bakhtin, *Rabelais and His World* (Indiana University Press, 1984), 321.

³⁰³ Bakhtin, 317.

The Thingly is neither self-same nor enclosed unto itself. It is a plethora of openings, conjoinings and eruptions that declare ‘the world as eternally unfinished: a world dying and being born at the same time.’³⁰⁴

In *The Dust of This Planet* (2011) Eugene Thacker dwells on the power of genre horror to philosophically render worlds independent of human beings. In the introduction, he briefly outlines three concepts of ‘worlding’ that both horror and contemporary philosophy routinely engage with. They are *the world-for-us*, Thacker labels simply ‘World’, *the world-in-itself*, labelled ‘Earth,’ and *the world-without-us*, labelled ‘Planet.’³⁰⁵ The world-for-us is figured through whatever human-centric viewpoint is dominant at a particular time, recuperating the non-human world into something palatable to, and apparently predicated upon, human influence. The world-in-itself is an abstraction, because ‘the moment we think it and attempt to act on it, it ceases to be the world-in-itself and becomes the world-for-us.’³⁰⁶ In turn, the world-without-us, usually considered via fabulations of post-apocalyptic proportion, is a speculative conceit which ‘allows us to think the world-in-itself, without getting caught up in a vicious circle of logical paradox.’³⁰⁷ What Campbell created in his 1938 novella was a thought experiment in which all three of these ‘worlds’ were able to overlap without contradiction. The Thing is a categorical aberration, a vast mass of othering that proceeds, cell by cell, to become ‘everything on the face of the Earth,’ including the character, Blair, who makes this proclamation.³⁰⁸ Wielding their guns, axes, and flame-throwers, the men of the Antarctic encampment put up a fight in honour of their (biological) integrity, yet were they to fail, no living thing on Earth would be safe from the Thing’s voracious appetite. And yet, a Thingly world – a resulting world-without-us – would appear, at whatever abstract distance one cared to observe it, to be an *exact* doppelgänger of a telluric world-for-us in which the alien Thing had never crash landed, had never been frozen solid in the ice, and most importantly, had never been

³⁰⁴ Bakhtin, 166.

³⁰⁵ Thacker, *In the Dust of This Planet*, 4–7.

³⁰⁶ Thacker, 5.

³⁰⁷ Thacker, 5.

³⁰⁸ Carpenter, *The Thing*.

defrosted by a team of grizzly faced Antarctic researchers. The bodily horror performed by the Thing is an allegory of this greater interstitial violation: the conceptual boundary between the world-for-us and the world-without-us is breached not as destruction, or even invasion, but ultimately through our inability to separate ourselves from a world that is already *inherently* alien and weird.³⁰⁹ 'A monstrosity' to hijack the words of Claire Colebrook, 'that we do not feel, live, or determine, but rather witness partially and ex post facto.'³¹⁰

But to think of humanity, indeed of all Earthly biology, as destroyed, subsumed and annihilated by the Thing is to fall back on narratives of a world-for-us. The world-without-us can *appear* identical to the-world-for-us. It is only *during* the process of imitation, as bodies engorge and cells are subsumed, that any 'difference' can be perceived. A point Deleuze and Guattari, in *A Thousand Plateaus*, predicate on the affects that pass between bodies as they meet:

We know nothing about a body until we know what it can do, in other words, what its affects are, how they can or cannot enter into composition with other affects, with the affects of another body... to destroy that body or to be destroyed by it... to exchange actions and passions with it or to join with in composing.³¹¹

How these processes are comprehended, or more precisely, how the perception of these processes is *interpreted*, is more important than the so called 'difference' between the bodies which came before and which remain after. Eugene Thacker clarifies this point in his analysis of the etymology of 'monster':

A monster is never just a monster, never just a physical or biological anomaly. It is always accompanied by an interpretive framework within which the monster

³⁰⁹ This sentence is a paraphrased, altered version of a similar line from Eugene Thacker, 'Nine Disputations on Theology and Horror', *Collapse: Philosophical Research and Development* IV: 38. In its original context Thacker refers to the breakdown of bodily boundaries, as performed in body horror fictions such as those of filmmaker David Cronenberg. The allusions between a bodily canon and the worldly canon are intentional.

³¹⁰ Claire Colebrook, *Sex After Life: Essays on Extinction*, Vol. 2 (Open Humanities Press, 2014), 14.

³¹¹ Gilles Deleuze and Félix Guattari, *EPZ Thousand Plateaus* (Continuum, 2004), 257.

is able to be *monstrum*, literally “to show” or “to warn.” Monsters are always a matter of interpretation. ³¹²

With similar etymological fervour, Jacques Derrida judges the *monstrum* to be a kind of grand revealing of what constitutes a norm. Derrida calls for (deconstructive) texts that are themselves monsters; texts that threaten to rupture out of the discourses in which they gestate: ³¹³

[D]iscursive norms, philosophical norms, socio-cultural norms, they have a history – any appearance of monstrosity in this domain allows an analysis of the history of the norms. But to do that, one must conduct not only a theoretical analysis; one must produce what in fact looks like a discursive monster so that the analysis will be a practical effect, so that people will be forced to become aware of the history of normality. ³¹⁴

For both Thacker and Derrida, monstrosity offers a discursive approach to the condition of conditioning. *Weirding* becomes a mode by which the presuppositions of an inquiry are exposed; are made *monstrum*. But as Derrida goes on to warn, ‘as soon as one perceives a monster in a monster, one begins to domesticate it, one begins... to compare it to the norms, to analyze it, consequently to master whatever could be terrifying in this figure of the monster. And the movement of accustoming oneself, but also of legitimation and, consequently, of normalization, has already begun.’ ³¹⁵

To Human is Err

In the 44 years between John W. Campbell’s original novella and John Carpenter’s 1982 film there were many poor clones of the Thing depicted in cinema. Films that collapsed the Thing’s endless capacity for ontogenesis into a sequence of specific ‘others’, reflecting (perhaps only in retrospect) the fears and prejudices of each new decade. Films such as *Invasion of the Body Snatchers* (1956 and 1978), and *It Came*

³¹² Thacker, ‘The Sight of a Mangled Corpse—An Interview With’, 380.

³¹³ Norah Campbell and Mike Saren, ‘The Primitive, Technology and Horror: A Posthuman Biology’, *Ephemera: Theory and Politics in Organization* 10(2) (2010): 158–59.

³¹⁴ Jacques Derrida, ‘Passages: From Traumatism to Promise’, in *Points: Interviews, 1974-1994* (Stanford University Press, 1995), 385–86.

³¹⁵ Derrida, 386.

from *Outer Space* (1953), are replete with alien doppelgängers, abject human forms cast away very much as in the gothic tradition. Howard Hawk's film, *The Thing from Another World* (1951), the first to explicitly translate *Who Goes There?* to the screen, completely congeals the fluidity of Campbell's story. The resultant creature is nothing more than, what one character calls, 'an intellectual carrot' grown from alien cells in a laboratory. The film is worth considering for its Cold War undertones. Recast in an Arctic military base, Hawk's Thing is a wretched individual set against a small, well organised army of cooperative men.³¹⁶ Howard Hawk's 'intellectual carrot' is played by a single actor in a monster suit, a decision that completely reverses the narrative of a collective alien matter against a rag bag pack of discrete human individuals. Hawks even adds a female love interest to the tale, a character whose only purpose is to scream and lean provocatively on the edge of desks. Looking back at *The Thing from Another World* it is hard to view the film as anything other than a hateful parable of difference, in which highly trained, patriotic American soldiers gang up on a naïve creature whose only failing is in not adhering to the bodily canon. Faced with a sauntering, growling, incompetent embodiment of difference the men group together, fighting with a collective force greater than each man alone represents.

The Thing's distributed biology calls to mind Michael Hardt and Antonio Negri's vision of the early Internet (ARPANET), designed, according to them:

to withstand military attack. Since it has no center and almost any portion can operate as an autonomous whole, the network can continue to function even when part of it has been destroyed. The same design element that ensures survival, the decentralisation, is also what makes control of the network so difficult.³¹⁷

³¹⁶ The Arctic location, as opposed to the original Antarctic location, is an interesting move with historical, political ramifications relating to those lands being considered as frontiers by the military factions that inhabit them.

³¹⁷ It is worth noting that this explanation of DARPA's origins, from Michael Hardt and Antonio Negri, *Empire*, New Ed (Harvard University Press, 2001), 299. is historically inaccurate, a myth apparently started in a 1964 paper by Paul Baran, 'On Distributed Communications Networks', *IEEE Transactions on Communications Systems* 12, no. 1 (March 1964): 1–9. ARPANET was never designed explicitly to resist nuclear attack, but the survivability and robustness of distributed networks, such as ARPANET, are partly defined by a capacity to withstand the destruction of large portions of their underlying infrastructure

The image of mankind's outright destruction, via totalising narratives such as nuclear war, viral pandemic, or meteor strike is undermined by the paradigm of a Thingly technological infrastructure designed to avoid 'absolute' assault. Decentralisation is a categorical horror in its capacity to highlight our self-same, constantly threatened and weak, embodied selves. But shift the lens away from the self-same human subject, and the image of a distributed, amorphous network of autonomous cells immediately becomes a very good description of how biological life has always been constituted. The Thing performs what Ray Brassier calls 'the originary purposelessness which compels all purposefulness,' that is, death understood as the cosmic indifference of the entropic processes which make life possible, and also make its annihilation inevitable.³¹⁸

The metaphor of discrete cells coordinating into an autopoietic organism does not extend to the inhabitants of the isolated *Antarctic* outpost in the original short story, nor in Carpenter's 1982 film. Rather than unite against their foe, the men begin to turn on each other, never knowing who might be the Thing. In a series of enactments of game-theory, the characters do piece together a collective comprehension: that if the Thing is to eventually imitate 'everything on the face of the Earth' it must not show itself now, lest the remaining humans group together and destroy it. In opposing the Thing the men are forced to assemble, their individualities dissolved in the dynamic of a group, fighting for survival. But the Thing's hidden nature means that cooperation cannot be relied on. Every human appearance could hide a Thingly nature, waiting for the opportune moment to express itself, to leap across permeable physical divides. The men's inability to cooperate is paradigmatic of their instinct to remain contiguous, discrete and self-same. The features they hold dear, that they fight for, are the very features that render them weak and unreliable. Not even the viewer of the film knows from appearances alone who is human and who, at any moment, might express their

(for more on these concerns, see footnote 6, pg. 22 of Barry M. Leiner et al., 'A Brief History of the Internet', *ACM SIGCOMM Computer Communication Review* 39, no. 5 (7 October 2009): 22.). For Hardt and Negri's purposes, this myth remains useful and significant, and so for mine in the continued examination of the metaphor that has underpinned much of the conversation on distributed technological networks since the 1960s.

³¹⁸ Ray Brassier, as quoted and expanded upon by Ben Woodard, *Slime Dynamics* (John Hunt Publishing, 2012), 54.

Thingly nature in a blast of bile and tentacles. The men need to fall back on abstractions, to reduce their individual subjectivities to the constitutive elements in a Cold War of risk and chance; a theory of games. Only at this abstract level can they survive, a level that even the viewer feels inculcated into, since no-one, not even the protagonist MacReady, is reliably human down to his material core.

Becoming Imitation

In a typically unsubtle scene from the 1982 film version of *The Thing*, the outpost's Doctor, Blair, watches a crude simulation on his dusty computer. It depicts 'Thing' cells devouring 'organic' cells, leaving in place 'Thingly' imitations. This process occurs at a cellular level and is so complete throughout each organism that emergent properties are also replicated. Not only does the clone of one of the men, Norris, look, smell and act like Norris, it also thinks *it is* Norris. Out of a cellular perfect Norris brain, whatever it is made out of, emerges a thinking Norris that thinks *it is* Norris. After imitating Norris so perfectly, to such precise detail that even his faulty heart valve is replicated, that even his heart-attack and death is enacted by the Thingly Norris, only *then*, as the defibrillators are coming down to meet it on the operating table, does the Thing lash out. Whereas Campbell's 1938 vision of the Thing is rooted in the mind/body dualistic split, John Carpenter's 1982 Thing figures the possibility of an encounter between two equally abject *materialities*. The defensive reaction of Norris' Thingly cadaver is an exemplification of this. The Thing is an interstellar 3D printer, capable of imitating pretty much anything so long as its programme allows it. The novella, *Who Goes There?*, and the film, *The Thing*, sit either side of a pivotal insight from the information sciences: that what an entity is made of is often inconsequential to the behaviours it presents to an observer. *The Thing* can therefore be interpreted as a fulfilment of Alan Turing's 'Imitation Game', an ingenious thought experiment based on a popular parlour game in which participants disguise their gender and pass clues to other players underneath the door of a locked closet.³¹⁹

³¹⁹ Much has been written on the significance of this gender 'othering'. Alan Turing himself, for much of his life, was forced to disguise his homosexuality in line with expectations dictated by the society he lived in.

In her Prologue to *How We Became Posthuman* (1999), N. Katherine Hayles refers to the overlooked details of Turing's imitation game, teasing at its nuances by writing it in 2nd person narrative perspective. 'You are alone in the room, except for two computer terminals' Hayles begins, 'If you cannot tell the intelligent machine from the intelligent human, your failure proves... that machines can think.'³²⁰ Hayles' decision to presage her influential book on 'The Posthuman' with this narrative outlines the significance she places on the machine/human boundary in humanity's passage beyond itself. But Hayles' reading perpetuates a common misunderstanding of the imitation game – since Turing actually argued that it was impossible to tell whether either machine or human could think from appearances alone. In *Computing Machinery and Intelligence* (1950) Alan Turing introduced the notion that a computer is nothing more than a machine that functions by simulating other machines.³²¹ Asking the question 'can machines think?' Turing replaced the ambiguity of 'thought' and 'intelligence' with imitation, proposing a test that avoided the need to know what was going on inside the black box of the machine (or the human), in favour of merely experiencing its outward affects. In a lecture entitled *Can Digital Computers Think?*, Turing develops his point:

It is not difficult to design machines whose behaviour appears quite random to anyone who does not know the details of their construction. Naturally enough the inclusion of this random element, whichever technique is used, does not solve our main problem, how to programme a machine to imitate a brain, or as we might say more briefly, if less accurately, to think. But it gives us some indication of what the process will be like. We must not always expect to know what the computer is going to do. We should be pleased when the machine surprises us, in rather the same way as one is pleased when a pupil does something which he had not been explicitly taught to do.³²²

³²⁰ Hayles, *How We Became Posthuman*, xi.

³²¹ A. M. Turing, 'Computing Machinery and Intelligence', *Mind*, New Series, 59, no. 236 (1 October 1950): 433–60.

³²² Stuart Shieber, *The Turing Test: Verbal Behavior as the Hallmark of Intelligence* (MIT Press, 2004), 114–15.

The Thing does not exhibit errors, mutations or adaptations. What we see when the Thingly cadaver of Norris protects itself is a machine winding into action. By transforming itself into a defensive form previously programmed and stored in its protoplasm the Thing performs its limits: it can only be as creative as its programming allows. Turing's lecture hints at the unsettling conclusion that even though a behaviour may be consistent with novelty, from appearances alone it is impossible to distinguish something ontologically novel with a behaviour which has been programmed to appear as such.

There is no world-object which human subjects look upon, inhabit and assert mastery over. The mutability of Earthly life, its ability to err, to stumble upon novel strategies through random, blind chance, represents its most innate capacity. Biological life changes by mutation, passing those mutations on to the next generation, ad infinitum. The Thing, in opposition to this, can only become its other absolutely. Put more simply, in the words of protagonist John MacReady, 'Somebody in this camp ain't what he *appears to be.*'³²³

The Thing becomes Norris absolutely, taking up his likeness and construction as if copying it from one material substrate to another. In addition, the Thing's array of gnashing alien teeth is merely the memory – a computational echo – of an *earlier* becoming. Both expressions are brought together to create the appearance of novelty: two programmes, one defending the other. The Thing is a Universal Turing Machine, a post-digital plasma, encoded with the biological ticker tape of a thousand alien worlds. Is it perhaps too much of a liberty to suggest, therefore, that the Thing's most terrifying, absolute *other* quality comes from its *inability* to err? As the Thing tears through every organism in sight its eventual form is hidden behind a veil of blood, guts, and mutating body parts readily associated with *imperfection*. But these depictions of cruel, cancerous blobs and swelling sacks of gaseous, oozing human matter are actually manifestations of a perfection being perfected; a process with one outcome: *absolute* substitution. In an aside sandwiched between definitions of seduction and

³²³ Carpenter, *The Thing*. [my emphasis]

metamorphoses, Jean Baudrillard marks out cloning as a movement ‘from the same to the same without passage via the other.’³²⁴ This situation pushes to the extreme Michael Taussig’s definition of the mimetic faculty, in which ‘the copy [draws] on the character and power of the original, to the point whereby the representation may assume that character and that power.’³²⁵ The very existence of mimesis ‘in the world’, of the capacity ‘to be’ imitated, appears to dissolve any need for ontological contest. What is left when those powers have been completely transferred is not a representation, nor a simulation, but an *absolute* substitution.

The characters in *The Thing*, then, are torn between two equally horrifying worlds. In one, the alien Thing clones its hosts cell by cell until, like *The Ship of Theseus*, an entirely different, but identical world remains. In the other, human being, in all its perceived intricacy, is the result of a billion years of noisy, messy, mutation. The Thing as Universal Turing Machine, as post-digital plasma, exposes the *mutual* constitution of worlds inherent in the ‘creation of artificial life’ – what Sean Cubitt calls the ‘postnatural’:³²⁶

“...the logic of Bios is being imported into machines, the logic of Technos is being imported into life,”³²⁷ the assimilation of the future into the present, of the human into an increasingly homogeneous domain of increasingly meaningless difference, a shift from Darwinian to Lamarckian evolution in which the library of previous experience becomes the genetic code of future generations, such that no genuine mutation is any longer available.³²⁸

Confronted with the universality of the Thing – a paradigm of postnatural matter – the characters in *The Thing* stumble upon a most profound realisation. As the men of the camp and the Thing continue to interface, the materiality of the one has already been

³²⁴ Jean Baudrillard, ‘Prophylaxis and Virulence’, in *Posthumanism*, ed. Neil Badmington, Readers in Cultural Criticism (Houndmills, Basingstoke, Hampshire ; New York: Palgrave, 2000), 40.

³²⁵ Michael T. Taussig, *Mimesis and Alterity: A Particular History of the Senses* (Psychology Press, 1993), xiii.

³²⁶ Cubitt, ‘Supernatural Futures: Theses on Digital Aesthetics’, 238.

³²⁷ Kevin Kelly, *Out Of Control: The New Biology of Machines, Social Systems, and the Economic World*, Reprint edition (Reading, Mass.: Basic Books, 1995), 2.

³²⁸ Cubitt, ‘Supernatural Futures: Theses on Digital Aesthetics’, 247.

consummated as the monstrosity of the other. It is *humans* who are condensed from contradictory categorical elements. It is *this* world which has always already been Thingly, full of spatio-temporally continuous monstrosities; of interchangeable imitations. The figure of the Thing exposes what Kelly Hurley calls the 'gothic' of all matter.³²⁹ Its parts remain undifferentiated even as they are exchanged, piece-by-piece, for our own. As Marie Mulvey-Roberts notes in her essay *A Spook Ride on Film*:

As a manifestation of both the uncanny and the abject, the monstrous body represents a horror of the indifferenciation of the now defamiliarised human. Monstrosity is also a fear of oneself, particularly of the alienation within the self.³³⁰

Pondering on the destruction of Earth, life and human consciousness in the inevitable death of the sun, Jean Francois Lyotard expounds a similar fear of the annihilation of worlds:

Annihilation in any case is too subjective. It will involve a change in the condition of matter: that is, in the form that energies take. This change is enough to render null and void your anticipation of a world after the explosion.³³¹

In this instance the comparison between the worlds before and after any cataclysmic shift in status does not offer us reason enough to fear such a change. Life in its making has always already been a playground of mutating constituents that render each world anew in the process of unrepresentable becoming. What we regard as ontology is always already ontogenesis. To be otherwise would be to abolish any possibility of a future regarded by us, or our postnatural descendants.

Thingly Theory

³²⁹ Hurley, *The Gothic Body*, 33.

³³⁰ Marie Mulvey-Roberts, "'A Spook Ride on Film': Carpenter and the Gothic', in *The Cinema Of John Carpenter: The Technique Of Terror*, ed. Ian Conrich and David Woods (Wallflower Press, 2004), 83.

³³¹ Jean-Francois Lyotard, 'Can Thought Go On Without a Body?', in *Posthumanism*, ed. Neil Badmington, Readers in Cultural Criticism (Houndmills, Basingstoke, Hampshire ; New York: Palgrave, 2000), 130.

In a 1982 *New York Times* movie section, printed alongside a striking half-page action shot of Harrison Ford from the movie *Blade Runner*, critic Vincent Canby poured yet more scorn on John Carpenter's 'Thing' remake:

The Thing is a foolish, depressing, overproduced movie that mixes horror with science fiction to make something that is fun as neither one thing or the other... There may be a metaphor in all this, but I doubt it... The Thing... is too phony looking to be disgusting. It qualifies only as instant junk. ³³²

Chiming with his critic peers, Canby expresses his desire that the monster show its nature – be monstrum – only in respect of some 'norm'; ³³³ some 'interpretive framework', ³³⁴ that the narrative will eventually uncover. By setting up 'junk' as a kitschy opposite to this supposedly palatable logic, Canby unwittingly generates a point from which to disrupt the very notion of the interpretive framework itself. The Thing is indeed more than a metaphor. Rather, it can be read paradigmatically, and in so doing Canby's appeal to 'instant junk' can be read as the monstrum, the revealing of that which constitutes the norm. The monster stands in for difference, for other, and in so doing normalises the subject position from which the difference is opposed: the canon. In the case of *The Thing* that canon is first and foremost the human male, standing astride the idea of a world-for-us. The 'us' is always already monopolised, as if all non-male ontogenetic permutations were cast out into the abject abyss of alien weirdness. In reclaiming 'junk' as a 'register of the unrepresentable' ³³⁵ a Thingly discourse shares many of the tenets of cyber-feminism – after Donna Haraway – and interrelated becomings. As Rosi Braidotti makes clear, referring to the work of Camilla Griggers:

'Queer' is no longer the noun that marks an identity they taught us to despise, but it has become a verb that destabilizes any claim to identity, even and especially to a sex-specific identity. ³³⁶

³³² Vincent Canby, "'The Thing' Is Phony and No Fun', *The New York Times*, 25 June 1982, sec. Movies.

³³³ Derrida, 'Passages: From Traumatism to Promise', 385–86.

³³⁴ Thacker, 'The Sight of a Mangled Corpse—An Interview With', 380.

³³⁵ Braidotti, *Metamorphoses*, 180.

³³⁶ Braidotti, 180.

The queer, the weird, the kitsch, are among the most powerful of orders because they are inherently uncategorised, un-representable and in flux. The rigid delineations of language and cultural heteronormativity are further joined in the figure of the Thing by a non-anthropocentric imaginary that exposes a whole range of human norms and sets into play a seemingly infinite variety of non-human modes of being and embodiment. Braidotti refers to the work of Georges Canguilhem in her further turn outwards towards the weird, 'normality is, after all, the zero-degree of monstrosity,'³³⁷ signalling a posthuman discourse as one which, by definition, must continually question – perhaps even threaten – the male, self-same, canonised, subject position:

[A] shift of paradigm is in course, towards the teratological or the abnormal/anomalous/deviant... We need to learn to think of the anomalous, the monstrously different not as a sign of pejoration but as the unfolding of virtual possibilities that point to positive alternatives for us all... the human is now displaced in the direction of a glittering range of post-human variables.³³⁸

In her book *The Death of The Posthuman* (2014), Claire Colebrook looks to the otherwise, the un-representable, to destabilise the proposition of a world being *for* anyone. She begins by considering the proposed naming of the current geological era 'the Anthropocene,'³³⁹ a term that designates a theoretical as well as scientific impasse for human beings and civilisation, in which human activity and technological development have begun to become indistinguishable, and/or exceed processes implicit within what is considered to be the 'natural' world. As if registering the inevitable extinction of humans isn't enough, the Anthropocene, by being named in honour of humans, makes monsters of those times – past and present – which do not contain humans. Its naming therefore becomes a writerly mechanism allowing the imagination of 'a viewing or reading in the absence of viewers or readers, and we do

³³⁷ Braidotti, 174.

³³⁸ Rosi Braidotti, 'Teratologies', in *Deleuze and Feminist Theory*, ed. Claire Colebrook and Ian Buchanan (Edinburgh: Edinburgh University Press, 2000), 172.

³³⁹ A term coined in the 1980s by ecologist Eugene F. Stoermer and widely popularized in the 2000s by atmospheric chemist Paul Crutzen. The Anthropocene is, according to Jan Zalasiewicz et al., 'a distinctive phase of Earth's evolution that satisfies geologist's criteria for its recognition as a distinctive stratigraphic unit.' Jan Zalasiewicz et al., 'Are We Now Living in the Anthropocene', *GSA Today* 18, no. 2 (2008): 6.

this through images in the present that extinguish the dominance of the present.’³⁴⁰ The world ‘without bodies’ that is imaged in this move, Colebrook argues, is written upon by the current state of impending extinction. Humans are then able to look upon the future world-without-us in a state of nostalgia coloured by their inevitable absence. Here the tenets of the horror genre indicated by Eugene Thacker are realised as a feature of a present condition. The world-in-itself has already been subsumed by the Thingly horror that is the human species. A posthuman journey Thierry Bardini refers to as ‘a becoming-junk’:

By this I mean more than a horror/science-fiction trope of rhetorical power over the imagination, but quite literally the production of living entities from human origins, but with the legal and cultural status of dead matter.³⁴¹

For even the coming world-without-us, a planet made barren and utterly replaced by the Thingly junk of human civilisation, will have written within its geological record a mark of human activity that goes back well before the human species had considered itself as a Thing ‘in’ any world at all. This shift names critical theory itself as a work of horror that, Claire Colebrook notes, necessarily ‘follows from being exposed to a world that is not ourselves... without that “outside” world there could be no inner subject, no “we,” no agent of practice. But this existing world to which we are definitely bound is therefore impossible: the given world is given *to us*, never known absolutely.’³⁴²

In an analysis of the etymology of the Anthropocene, McKenzie Wark also turns to theory as a necessary condition of the age of extinction:

All of the interesting and useful movements in the humanities since the late twentieth century have critiqued and dissented from the theologies of the human. The Anthropocene, by contrast, calls for thinking something that is not even defeat.³⁴³

³⁴⁰ Colebrook, *Death of the PostHuman*, 28.

³⁴¹ Thierry Bardini, *Junkware* (Minneapolis: University of Minnesota Press, 2011), 23.

³⁴² Colebrook, *Death of the PostHuman*, 32.

³⁴³ McKenzie Wark, ‘Anthropocene Futures’, *Versobooks.com*, 23 February 2015, <http://www.versobooks.com/blogs/1875-anthropocene-futures>.

As Matthew Lepori and others have argued, the 'anthropos' of 'anthropocene' conjoins every living or dead human being into a 'single body... a universal subject of history.'³⁴⁴ This universalizing, which Lepori refers to as 'species talk,' is 'the logical outcome of a narrative that only contains two actors: humans and nature.'³⁴⁵ It is crucial in handling the figure of The Anthropocene to regard the insides and outsides implicit in its context and use, lest it become the fabricator of further 'others'. The Anthropocene, like 'queer' or 'weird', should be made into a verb, and relinquished as a noun, as name. Once weirded in this way it becomes a productive proposition, Wark goes on, quoting Donna Haraway, 'another figure, a thousand names of something else.'³⁴⁶ In the 2014 lecture quoted by Wark, Haraway called for other such worldings through the horrific figure of capitalism, through arachnids spinning their silk from the waste matter of the underworld, or from the terrible nightmares evoked in the fiction of H.P. Lovecraft:

The activation of the chthonic powers that is within our grasp to collect up the trash of the Anthropocene, and the exterminism of the Capitalocene, to something that might possibly have a chance of ongoing.³⁴⁷

That weird, ongoing epoch is 'the Chthulucene', a monstrum 'defined by the frightening weirdness of being impossibly bound up with other organisms,'³⁴⁸ of what Haraway calls, in an earlier lecture, 'multi-species muddles.'³⁴⁹ The horror of 'the nameless thing' is here finally brought to bear in Haraway's Capitalocene and Chthulucene epochs. Haraway's call for 'a thousand names of something else' is Thingly in its push towards the endlessly bifurcated naming, and theoretical subsuming. The anthro-normalisation casts out infinitely more possibilities than it brings into play; Haraway's playful word play opens onto a dazzling array of potentially

³⁴⁴ Matthew Lepori, 'There Is No Anthropocene: Climate Change, Species-Talk, and Political Economy', *Telos* 2015, no. 172 (1 September 2015): 104.

³⁴⁵ Lepori, 104–5.

³⁴⁶ Wark, 'Anthropocene Futures'.

³⁴⁷ Donna Haraway, 'Capitalocene, Chthulucene: Staying with the Trouble' (5 September 2014), <https://vimeo.com/97663518>.

³⁴⁸ Leif Haven, 'We've All Always Been Lichens: Donna Haraway, the Cthulucene, and the Capitalocene', *ENTROPY* (blog), 22 September 2014, <http://entropymag.org/weve-all-always-been-lichens-donna-haraway-the-cthulucene-and-the-capitalocene/>.

³⁴⁹ Donna Haraway, 'SF: Sympoiesis, String Figures, Multispecies Muddles' (24 March 2014), <https://www.youtube.com/watch?v=Z1uTVnhIHS8>.

unnameable variables. Although Donna Haraway makes it clear that her Chthulucene is not directly derivative of H.P. Lovecraft's Cthulhu mythos, her intentional mis-naming and slippery non-identification exemplifies the kind of amorphous thinking and practice she is arguing for. Haraway's Chthulucene counters Lovecraft's Cthulhu with an array of chthonic, non-male, tentacled, rhizomatic, and web spinning figures that attest to the monstrosity still exposed by Lovecraft's three quarters of a century old work. As writer Alan Moore has attested:

[I]t is possible to perceive Howard Lovecraft as an almost unbearably sensitive barometer of American dread. Far from outlandish eccentricities, the fears that generated Lovecraft's stories and opinions were precisely those of the white, middle-class, heterosexual, Protestant-descended males who were most threatened by the shifting power relationships and values of the modern world... Coded in an alphabet of monsters, Lovecraft's writings offer a potential key to understanding our current dilemma, although crucial to this is that they are understood in the full context of the place and times from which they blossomed.³⁵⁰

The continued – renewed – fascination with Lovecraft's weird 'others' thus has the capacity to expose the dread of *these* times. The dominant humanistic imagination may no longer posit white cis-males as the figure that 'must' endure, but other uncontested figures remain in the space apparently excavated of Lovecraft's affinities. To abandon what Colebrook calls 'the fantasy of one's endurance,' may be to concede that the posthuman is founded on 'the contingent, fragile, insecure, and ephemeral.'³⁵¹ But, as Drucilla Cornell and Stephen D. Seely suggest, it is dangerous to consider this a 'new' refined status for the beings that remain, since 'this sounds not like the imagination of living beyond Man, but rather like a meticulous description of the lives of the majority of the world under the condition of advanced capitalism right now.'³⁵² The quality of the Thing that makes it most terrifying to the men of the encampment –

³⁵⁰ H. P. Lovecraft, *The New Annotated H.P. Lovecraft*, ed. Leslie S Klinger (Liveright, 2014), xiii.

³⁵¹ Colebrook, *Sex After Life*, 22.

³⁵² Drucilla Cornell and Stephen D Seely, *The Spirit of Revolution: Beyond the Dead Ends of Man* (Polity press, 2016), 5.

its capacity to apparently transmute, shift, and mutate as each and any situation proscribes it – is a quality those subjects not considered of ‘the canon’ have always had to adopt, to varying degrees, throughout history. To be blunt, the white western heterosexual male need not affirm ‘his’ identity, since it exists at ‘the zero-degree of monstrosity,’³⁵³ but those who have been enslaved, cast out, derided or castigated for their race, religion, sexuality or gender have always had to maintain a certain Thingliness to survive; to thrive. As long as the zero point of monstrosity has been maintained, Thingly subjects have risen up to meet it, to understand it, to counter it. Their capacity to survive and flourish is an equal and opposite rejoinder to the zero point. The human, the canon, the zero-point subject merely *is* (ontology is their weakness). Alternatively, the excluded other, the devalued outsider, the repressed Thingly subject must continually *become* (ontogenesis is their strength).

As Claire Colebrook warns, posthumanism often relinquishes its excluded others – women, the colonised, nonhuman animals, or ‘life itself’³⁵⁴ – by merely subtracting the previously dominant paradigm of white heteropatriarchy, whilst failing to confront the monstrem that particular figure was indicative of:

Humanism posits an elevated or exceptional ‘man’ to grant sense to existence, then when ‘man’ is negated or removed what is left is the human all too human tendency to see the world as one giant anthropomorphic self-organizing living body... When man is destroyed to yield a posthuman world it is the same world *minus humans*, a world of meaning, sociality and readability yet without any sense of the disjunction, gap or limits of the human.³⁵⁵

The idea of humanity as a whole, as a single consensus, with a shared history, and a shared future, is too stable a system. No *single* movement, no single charismatic mankind, or carefully crafted blueprint for the future can upset this metanarrative. Rather, the Thingly engages in recognising individual dispossessions. Of bringing to the centre as many of them as possible, urging them into the manufacture of further worlds. There is no centre, there are centres, there is no singular humanity, but neither

³⁵³ Braidotti, *Metamorphoses*, 174.

³⁵⁴ Cornell and Seely, *The Spirit of Revolution*, 3–4.

³⁵⁵ Colebrook, *Death of the PostHuman*, 163–64.

is there merely a plural: the principle of consensus is inadequate. Rather there are many singulars, many little Thingly narratives which must fragment the big, idealised whole. Posthumanism as a practice of revealing many worlds already embedded within the structures of the one. As in Haraway and Wark's call for not just 'naming, but of doing, of making new kinds of labor for a new kind of nature,'³⁵⁶ posthumanist theory and practices must be allowed to take on the form of the monsters they pursue, moulding and transforming critical inquiries into composite, hybrid – Thingly – figures that never settle in one form lest they become stable, rigid, and normalised. In fact, this metaphor itself is conditioned too readily by the notion of a mastery 'Man' can wield. Rather, theory must be encouraged 'to monster' separately, to blur and mutate beyond the human capacity to comprehend it, like the infinite variety of organisms Haraway insists the future opens onto. The very image of a posthumanism must avoid normalising the monster, rendering it through analysis an expression of the world-for-us. For Thacker this is the power of the horror genre, to take 'aim at the presuppositions of philosophical inquiry – that the world is always the world-for-us – and [make] of those blind spots its central concern, expressing them not in abstract concepts but in a whole bestiary of impossible life forms – mists, ooze, blobs, slime, clouds, and muck.'³⁵⁷ Within these 'impossible life forms' cultural norms are disturbed as monsters, and unstoppable, invisible forces battle for supremacy at the edges of human imagination. Because these horrors are themselves plastic, mutating forms, able to incorporate all manner of malleable beings and disturbances, they are 'as unstoppable as the transformations [they] mirror'.³⁵⁸ That is, as Rosi Braidotti argues, only horrific figures can keep up with, represent, and perhaps combat, the horror of (post)human times. Simply *referring* to these processes undoes some of the fluidity I argue this thesis, and figures, exhibits. In the following chapter this problem is emphasised further through a figuring of the problem of a 'flat ontology' which emerges out of aligning the human with the vibrant material world. After staging the 'collapse' of the elements I paradigmatically assemble, chapter four segues into a conclusion by way of the portfolio of work: *The 3D Additivist Manifesto*. I argue that

³⁵⁶ Wark, 'Anthropocene Futures'.

³⁵⁷ Thacker, *In the Dust of This Planet*, 9.

³⁵⁸ Braidotti, *Metamorphoses*, 185 (my emphasis).

the Manifesto is a principle example of the kind of posthumanist practice I argue for in this thesis, in that it enters into the composition of its own collapse, engendering a 'Thingly' discourse as a fundamental part of a critical stance against itself. This act responds, once again, to Michel Foucault's criticism of humanism's appeal to anthropological universality, a dogma which therefore stops 'short of applying [the] protocols and commitments [of the Enlightenment] to *itself*.'³⁵⁹ A critical posthumanist practice, in this sense, should be considered 'post' in a certain apocalyptic sense, not because it invokes a total destruction of the world, but rather because it engages in the 'destruction of totalizing structures, of those universal notions that do not just describe 'how things are' but serve to prescribe and insist that 'this is how things must be.'³⁶⁰

The Thing is both a process that shows (is monstrum of) the unthinkability of human life 'in' the world, whilst also addressing Braidotti's call for theory that 'learn[s] to think about processes and not only concepts... [that] represent[s] in-between zones and areas of experience or perception.'³⁶¹ These aberrations should be considered not as differences opposed to norms, but as actions in process, as the ontogeny of mutation and discursion. With this conceit in process the Thing becomes a writerly mechanism; a runaway philosophical framework wont to take on the appearance of whatever figure(s) are placed alongside it. The power to 'become' the monstrum of Man under refreshed circumstances is necessary if any central figure is to be overcome. The ability to perform self-effacement and subsequent renewal at every moment, from programmes previously stored in its memory, is the Thing's most enduring quality. The zone of transition from human to posthuman is, then, a Thingly mass of eruptions and bifurcations that is always being undergone. If the paradigm of posthumanism is to be understood as a discourse of this monstrum, then it must be rendered as a monstrous paradigm, lest posthumanism become normalised, stable, and thus, not 'post' human(ist) anymore.

³⁵⁹ Wolfe, *What Is Posthumanism?*, xvi.

³⁶⁰ Evan Calder Williams, *Combined and Uneven Apocalypse: Luciferian Marxism* (John Hunt Publishing, 2011), 3.

³⁶¹ Braidotti, *Metamorphoses*, 173–74.

Chapter Four: Kipple and the Collapse of the Hoard

“He heard the kipple coming, the final disorder of all forms,
the absence which would win out.”

Kipple and

Living at the very limit of his means, Philip K. Dick, a two-bit, pulp sci-fi author, was having a hard time maintaining his livelihood. It was the 1950s and Dick was living with his second wife, Kleo, in a run-down apartment in Berkley, California, surrounded by library books Dick later claimed they ‘could not afford to pay the fines on.’³⁶² In 1956 Dick had a short story published in a brand-new pulp magazine: *Satellite Science Fiction*. Entitled, *Pay for the Printer*,³⁶³ the story contained a series of themes that would come to dominate his work.

On an Earth gripped by nuclear winter, humankind has all but forgotten the skills of invention and craft. An alien, blob-like species known as the Biltong co-habit Earth with the humans. They have an innate ability to ‘print’ things, popping out copies of any object they are shown from their formless bellies. The humans are enslaved not simply because everything is replicated for them, but, in a twist Dick was to use again and again in his works, as the Biltong grow old and tired, each copied object resembles the original less and less. Eventually everything emerges as an indistinct, black mush. Saved from the wreckage of the nuclear apocalypse, a host of original items – lawn mowers and woollen sweaters and cups of coffee – are in short supply. Nothing ‘new’ has been made for centuries. The Biltong must produce copies from copies made of copies, seeding each facsimile with errors passed down along an imperfect replicative chain. Not only do the Biltong ‘prints become blurred and lose definition,’³⁶⁴ the entire human social order has blurred beyond recognition, lingering as a poor image of

³⁶² Gale (2008)

³⁶³ Philip K. Dick, ‘Pay for the Printer’, in *The Philip K. Dick Reader* (Carol Pub. Group, 1997, 1956), 239.

³⁶⁴ Fredric Jameson, *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions* (New York: Verso, 2005), 347.

the golden era the populous nostalgically yearns for. An 'object-world tend[ing] to disintegrate under its own momentum.'³⁶⁵ The short story ends with the Biltong themselves decaying, leaving humankind alone again on their degraded planet, surrounded by collapsed houses and cars with no doors and bottles of whiskey that taste like anti-freeze.

In his 1968 novel *Do Androids Dream of Electric Sheep?* Philip K. Dick gave a name to the crumbling, ceaseless, junk-disorder that often engulfed his science fiction: kipple. A vision of a pudding-like universe, in which obsolescent objects merge, featureless and identical, flooding every apartment complex from here to the pock-marked surface of Mars. Kipple is obsolescence incarnate. An inescapable tendency of matter applied, with typical Dickian humour, to the fused toaster and melted kettle, to umbrella stands that topple over and malfunctioning typewriters no longer supported by their manufacturers. Kipple extends from mass-production and the commodity fetish through a scathing parody of inbuilt obsolescence, all the while exemplifying the power entropic processes have over everything in the larger scheme of fundamental physical laws. By playfully transforming the second law of thermodynamics into a principle of the human object world, Dick suggests that the entire universe would one day succumb to the ravages of capitalist processes. For behind the lively order of human civilisation lurked the formless shadows of entropy and waste, the former – in conjunction with capitalist consumerism – inevitably turning base materiality into the latter:

No one can win against kipple... it's a universal principle operating throughout the universe; the entire universe is moving toward a final state of total, absolute kippleization.³⁶⁶

Captured by film director Ridley Scott under the title *Blade Runner* (1982), Philip K. Dick's vision of kipple abounds in a world where mankind lives alongside shimmering, partly superior, artificial humans. For Dick, human and android efficacy was suspended somewhere between pure vitality and base matter, a fact brought to the fore by the

³⁶⁵ Jameson, 346.

³⁶⁶ Philip K. Dick, *Do Androids Dream of Electric Sheep?* (Random House Publishing Group, 2008, 1968), 56–57.

preponderance of complex mass-produced things like calculators and washing machines, little understood by the humans who use and discard them. The vibrancy of things, and the thingness of the vibrant, came crashing together in the drive Dick's fictional androids exhibit to avoid *their own* kippleisation. For how would the world of matter exhibit its own autonomy, when humans were so busy using it up in lieu of their own? The animating principle of the world Dick envisions can be considered as the 'immanent force of *zoe*' named by Rosi Braidotti as 'life in its nonhuman aspects.'³⁶⁷ As Wisam Kh. Abdul Jabbar points out, Philip K. Dick spoke publically on this liminal force some four years after the publication of *Do Androids Dream...*:³⁶⁸

The greatest change growing across our world these days is probably the momentum of the living toward reification, and at the same time a reciprocal entry into animation by the mechanical. We hold now no pure categories of the living versus the non-living; this is going to be our paradigm... In a very real sense our environment is becoming alive, or at least quasi-alive, and in ways specifically and fundamentally analogous to ourselves.³⁶⁹

This vision of mankind merging with a burgeoning ecosystem of 'quasi-alive' machines marked, for Dick, an anxious quality of the world. Negotiating with an android, a vending machine, a pocket calculator, a drone, or any number of vibrant interactive automatons is to encounter a world exhibiting 'life' with uncanny human *and* nonhuman simultaneity. M. Keith Booker and Anne-Marrie Thomas read *Do Androids Dream...* as 'a complete breakdown of the opposition between natural and artificial... call[ing] the definition of "human" into question by blurring the boundaries between human and android.'³⁷⁰ A consummation of human vitality and base materiality, brought into being by engineered, 'synthetic' processes.

³⁶⁷ Braidotti, *The Posthuman*, 66.

³⁶⁸ Wisam Kh. Abdul Jabbar, 'Colonial Mimicry in Philip Dick's *Do Androids Dream of Electric Sheep?*', *Inquire: Journal of Comparative Literature*, no. Literary Violence: Issue 2.2 (June 2012), <http://inquire.streetmag.org/articles/91>.

³⁶⁹ Philip K. Dick, 'Man, Android and Machine', 1975,

<http://www.philipkdickfans.com/mirror/websites/pkdweb/Man,%20Android%20and%20Machine.htm>.

³⁷⁰ M. Keith Booker and Anne-Marie Thomas, *The Science Fiction Handbook* (John Wiley & Sons, 2009), 222.

On a physiological level, Dick's androids cannot fake empathy, yet their quasi-aliveness is exhibited with a synthetic virulence that appears to far exceed the fragile corporeality of human beings. When Roy Batty, the enigmatic leader of the replicants, introduces himself he performs this status, seeming to predestine works by Donna Haraway and N. Katherine Hayles via a munificent belief in the merit of materiality: 'We're not computers, Sebastian. We're physical.'³⁷¹

Kipple is a significant step along the line that all matter fashioned for human use passes through on its way to waste – eventually being disseminated into what many still consider the 'natural' world. But kipple can also be understood as a celebration of matter's potential to affect – a potential that all junk and crap and detritus retains in abundance as it leaches from landfills, or gets broken down by raging ocean currents. In his *Exegesis*³⁷² Dick wrote: 'Premise: Things are inside out... therefore the right place to look for the almighty is in the trash in the alley.'³⁷³

This brief aside is remarkable in its prescience of the work of contemporary materialists, not least Jane Bennett, who in her 2010 book *Vibrant Matter* turns to a particular experience she had with an arrangement of things in a Baltimore storm drain to explore 'the "excruciating complexity and intractability of nonhuman bodies."³⁷⁴ For Bennett the very idea of a 'dead or thoroughly instrumentalized matter'³⁷⁵ is in fact the result of a hyperconsumptive civilisation overburdened with commodities and driven to 'junk' them 'to make room for new ones.'³⁷⁶ We see matter as dead and innocuous today because the efficacy of a thing is predicated almost entirely on its use value. Kipple marks the transition of base matter *through* capitalism, and is thus the perfect figure to explore the inhuman vibrancy of the material world, leading back to a

³⁷¹ Scott Bukatman, *Blade Runner*, BFI Modern Classics (London: British Film Institute, 1997).

³⁷² A text of over a million words written by Dick in the later years of his life, partly to explain a strange religious experience he had.

³⁷³ Thierry Bardini, quoting Dick in *Junkware* (Minneapolis: University of Minnesota Press, 2011), 174.

³⁷⁴ Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010), 4 quoting Stephen Jay Gould.

³⁷⁵ Bennett, ix.

³⁷⁶ Bennett, 5.

refiguring of human beings as themselves being composed of flowing and expressive and mutating constituents.

Junk and Trash and Garbage and Waste and

Junk and trash and garbage and waste. Though these terms can be defined by their nuances and distinct cultural significations, they are commonly used when referring to things which are unusable or worthless to human purposes. 'As such,' Myra J. Hird observes, 'no entity is in its essence waste, and all entities are potentially waste.'³⁷⁷ Digging through landfill middens produced by capitalist accumulation over the last century, our archaeologist descendants will peel at layer beneath layer of plastic food packaging and baby pacifiers and unfixable kitchen appliances in a journey back through our times. Human detritus indicates and organises the fashions of each decade, not only in testimony to what consumers once valued, but 'as a material enactment of forgetting.'³⁷⁸ Hird continues:

Landfills swell with things we once wanted and now do not want, once valued and no longer value. What remains after our disgorgement is what we (want to) consider our real self.³⁷⁹

The capitalist obsession with forgetting is ritualised through the separation, organisation and eventual dumping of waste. Calling on Mary Douglas' work on impurity and pollution, Greg Kennedy defines waste as that which 'settles outside the ruled lines of our conceptual schema,'³⁸⁰ remarking further that 'a society preoccupied with concealing its wastes must have something important to hide from itself.'³⁸¹ Kippleized things are similarly defined by a status at the edge of categorisation. Kipple retains the *form* of original functioning objects, but also attains a conceptual ambiguity founded on the unlikely chance of it ever functioning again. A desktop printer need not be *broken* in order for it to become kipple, rather, the object

³⁷⁷ Myra J. Hird, 'Knowing Waste: Towards an Inhuman Epistemology', *Social Epistemology* 26, no. 3–4 (October 2012): 455.

³⁷⁸ Hird, 456.

³⁷⁹ Hird, 457.

³⁸⁰ Kennedy, *An Ontology of Trash*, 6.

³⁸¹ Kennedy, 4.

in question may have lain forgotten for so long that the technosocial order has moved on, plunging it into obsolescence by proxy. In booby-trapped cupboards and cobwebbed loft spaces kipple accumulates, driving out non-kipple until the day it is ritually discarded, at which point it *becomes* waste.

Alongside its unusability, the thing that appears to define waste is its powerful repulsive capacity. That is, not only the affect rotten, decaying and putrid matter has on the human bodies that disguise, hide, and dispose of it, but in waste's incredible ability to propel itself to the echelons of an apparently considered, organised society: 'Waste is the scrub between city and country. Garbage is all that anonymous stuff falling between valued objects and simple dust.'³⁸² Today perhaps the most iconic testament to forgetting and the anonymity of waste is the Great Pacific Garbage Patch. 'The creation,' Jane Bennett explains, 'of the conjoint actions of water currents, capitalist accumulation, a fervent ideology of economic growth and free markets, and the trillions of plastic bags, toys, packagings, machines, tools, bottles that humans manufacture, use and discard every minute.'³⁸³ In the Great Pacific Garbage Patch the ritualistic enactment of forgetting becomes monumentalised at a scale difficult for us to comprehend. It is what Timothy Morton refers to as a 'hyperobject',³⁸⁴ an entity of such size and magnitude that it dwarfs our perceptual schema. For Morton, hyperobjects like the Great Pacific Garbage Patch and the Anthropocene and the nuclear catastrophe at Fukushima and the Gulf Oil Spill of 2010, are cataclysms that *close the beyond*.³⁸⁵ There is no 'away' anymore, no 'Outside' into which we can ritually cast those things we wish to rule out of the schema of ourselves; into which garbage eventually propels itself. The Great Pacific Garbage Patch is a distributed testimony of forgetting that will remain etched into the geological record long long after we are gone.

³⁸² Kennedy, 7.

³⁸³ Jane Bennett, 'Powers of the Hoard: Artistry and Agency in a World of Vibrant Matter' (Lecture, 26 September 2011), <https://vimeo.com/29535247>.

³⁸⁴ Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World*, Posthumanities 27 (Minneapolis: University of Minnesota Press, 2013).

³⁸⁵ Morton, 94.

Building an epistemology of 'junk', Thierry Bardini notes the etymology of 'juncus' as 'the prime agent of conjunction, of joining together.'³⁸⁶ From Gilles Deleuze and Felix Guattari's *A Thousand Plateaus* Bardini expands this genus of junk further:

A rhizome has no beginning or end; it is always in the middle, between things, interbeing, intermezzo. The tree is filiation, but the rhizome is alliance, uniquely alliance. The tree imposes the verb "to be," but the fabric of the rhizome is the conjunction, "and...and...and..." This conjunction carries enough forces to shake and uproot the verb "to be."³⁸⁷

The Great Pacific Garbage Patch as hyperobject rests uneasily between the classifications provided by Deleuze and Guattari. The Great Pacific Garbage Patch is a seemingly endless series of things, divested of value and usefulness; a rhizomatic interbeing made to conjoin and reconjoin by a swirling mass of indifferent ocean currents. But the Great Pacific Garbage Patch becomes a singular 'thing', in Morton's definition, a figure of sublime contemplation that towers large enough to place even 'the beyond' into question. It is therefore imperative to maintain the conjunction AND as a means of separation as well as connection. The flat ontology of the hyperobject renders difference meaningless, and re-centres the affirmation of the hyperobject back onto the human subject. Objects and kipple and nature and waste, rather, enable a chain of endless becomings that productively uproots the categorical particularities imposed by (human) language.

The Object and The Collection and

In his book *Genesis*, Michel Serres, argues that objects are specific to the human lineage. Specific, not because of their utility, but because they indicate our drive to classify and categorise and order: 'The object, for us, makes history slow.'³⁸⁸ Before things become kipple, become waste, they stand distinct from one another. Nature seems defined in a similar way, between a tiger and a zebra there appears a broad gap,

³⁸⁶ Bardini, *Junkware*, 13.

³⁸⁷ Bardini, 13–14.

³⁸⁸ Michel Serres, Geneviève James, and James Nielson, *Genesis* (University of Michigan Press, 1997), 87.

indicated in the creatures' inability to mate with one another; indicated by the claws of the tiger and the hooves of the zebra. But this gap is an illusion, as Michel Foucault neatly points out in *The Order of Things*, 'all nature forms one great fabric in which beings resemble one another from one to the next.'³⁸⁹ The dividing lines indicating categories of difference are always abstracted from the 'great fabric' of nature, and understood through human categories isolated in language and mediated through the conjunction 'and'. Two orders of order are exposed here, starting with what Jean-Luc Nancy calls the 'artificial order' which completes the 'natural order.'³⁹⁰ The order of the one, single, great fabric of nature becomes reordered via language through 'every conceivable mode of creation for noninherent orders, which are constituted by humans and constructed deliberately.'³⁹¹ Humans themselves are constituted by this great fabric: culture and language are a deeply woven bind. Human's apparent mastery over creation comes from one simple quirk of being: the tendency we exhibit to categorise, to cleave through the fabric of creation. As Erik Swyngedouw persuasively argues, we cannot even escape, "'producing nature" ... [forcing] us to make choices about what socio-natural worlds we wish to inhabit... a qualitative transformation of BOTH society AND nature has to be envisaged.'³⁹²

In his essay, *The System of Collecting*, Jean Baudrillard makes a case for the profound subjectivity produced by the categorical world view. Once things are divested of their function and placed into a collection, they, 'constitute themselves as a system, on the basis of which the subject seeks to piece together [their] world, [their] personal microcosm.'³⁹³ The use-value of objects gives way to the passion of systematization, of order and sequence and the projected perfection of the complete set. As the collector buys another pretty trinket and carefully stows it in the Wunderkammer of their home they enact one of the most primitive of human drives to capture and classify the messy, entropic world around them. Sifting through an abandoned family

³⁸⁹ Foucault, *The Order of Things*, 160.

³⁹⁰ Jean-Luc Nancy, *What's These Worlds Coming To?* (New York: Fordham University Press, 2014), 62.

³⁹¹ Nancy, 62.

³⁹² Erik Swyngedouw, 'Apocalypse Now! Fear and Doomsday Pleasures', *Capitalism Nature Socialism* 24, no. 1 (March 2013): 18.

³⁹³ Jean Baudrillard, 'The System of Collecting', in *The Cultures of Collecting*, ed. John Elsner and Roger Cardinal (Reaktion Books, 1994), 7.

loft, or watching in awe as television crews crawl through the kippleized home of a hoarder, the overwhelming emotion can be one of displacement. How such descript objects, contrived into micro-collections, then jumbles of memory, then scattered heaps, can feel so essential to one person, and so repellent, impossible – even, dare we admit it, insane – to everyone else.

In her writings on collecting, Susan Stewart makes a distinction between the collections of ‘the hobbyist’ and ‘the miser’.³⁹⁴ Differentiation is the key distinction between their assemblages of things, whereas the hobbyist collects in order to systematise, the miser’s collection ‘refuses the very system of objects and thus metonymically refuses the entire political economy that serves as the foundation for that system.’³⁹⁵ The miser relies on an acquisition of objects that, once entered into their collection, are removed from the economy of use. Whereas the hobbyist instigates a new value upon an object by its very entrance into the system, the miser removes all value, and all chance of value. Homogeny is the miser’s art, each object becoming equally useless. Whereas the hobbyist relies on differentiation, between classes of flowers and pocket-watches and butterflies, the miser allows only one class to determine their system: things are either in it, or they are not. The miser, as opposed to the hobbyist, values kipple. Removing objects from their intended use, or collecting objects that have already become kippleized – and thus are now *useless* – the miser transgresses the market’s primary intention, that all objects should be used until they break or become obsolete; that, in essence, all objects are designed in order to be replaced.

Hobbyist collectors gather things about them in order to exert mastery over, what Michel Serres has termed, ‘the abundance of the Creation’.³⁹⁶ For the obsessive collector, each object in a series marks out the collection’s proposed finality. Abundant creation is reduced to a manageable expression of class and sequence: from red and yellow through to blue, each shade of butterfly placed alongside one another is a

³⁹⁴ Stewart, *On Longing*, 154.

³⁹⁵ Stewart, 154.

³⁹⁶ Michel Serres, *The Parasite*, 1st University of Minnesota Press ed. (Minneapolis: University of Minnesota Press, 2007), 47.

complete collection. The collector enacts a primitive writing into place, locating themselves, at what Alan Bourassa terms ‘the position of masters who control a circus of unruly signs.’³⁹⁷ For the hobbyist collector, every red butterfly in existence is necessarily repeatable, an iteration of its class. In the collection, function is replaced by exemplification. The limits of the collection dictate a paradigm of finality; of perfection. Once the blue butterfly is added to the collection it stands, alone, as *an example* of the class of blue butterflies to which the collection dictates it belongs. Only one red butterfly is needed to measure every red butterfly in its class, so long as the class containing *all* butterflies is limited by a similar, arbitrary, list of features. Placed alongside the yellow and green and blue butterflies, the red butterfly exists to constitute all four as a series. The entire series itself then becomes the example of *all* butterflies. A complete collection: a perfect catalogue. Cosmic disorder re-constituted and classified as a finite catalogue, arranged for the grand collector’s singular pleasure. The collector lives in the knowledge that differentiation necessitates a closure to every collection. If the collection is a metonym for the collector, then positioning the final iteration in the series denotes – according to Baudrillard – the death of the subject: ‘It could indeed be added that the point where a collection closes in on itself and ceases to be orientated towards an unfilled gap is the point where madness begins.’³⁹⁸

Bill Brown references Cornelius Castoriadis in this regard, who disavows the idea of representation as ‘a projection screen which unfortunately separates the “subject” and the “thing.”’³⁹⁹ The hobbyist collector collects and collates and aggregates and names and curates not merely because they desire, but because without these nominative acts the pivot of desire – the illusory subject – could not be sustained as the centre of their ‘index of reality.’⁴⁰⁰ The collection and the world are simultaneous: in order to maintain their mastery over creation, then, a collector must sequence increasingly arbitrary lists of classes, *ad infinitum*. This overlap veils an important

³⁹⁷ Bourassa, ‘Literature, Language and the Non-Human’, 62.

³⁹⁸ Baudrillard, ‘The System of Collecting’, 13.

³⁹⁹ Cornelius Castoriadis, *The Imaginary Institution of Society* (MIT Press, 1998), 329.

⁴⁰⁰ Castoriadis, 332.

distinction for those who envisage the collection: is the collector 'mad', for insisting on so many arbitrary conditions of order? Or is the Creation itself the madness the collector's cleaving disqualifies? A question echoing Michel Foucault's suggestion in *Madness and Civilization* that, '[t]here is nothing that the madness of men invents which is not either nature made manifest or nature restored.'⁴⁰¹

An answer to this question may be glimpsed upon examining Susan Stewart's 'miser' collector: a figure we may more considerately term 'the hoarder'. In psychological studies of hoarding disorder, families and friends cite an inability to make rational decisions, or a general lack of insight, as the defining feature of their relative's condition.⁴⁰² In psychiatric circles, the *compulsive* quality of hoarding provokes fierce debate.⁴⁰³ At base, is it the hoarder's drive to collect, or their inability to classify that defines them as social outsiders? According to Randy O. Frost, a professor of psychology at Smith College, Massachusetts, hoarders 'see more connections between things, which leads them to value those things much more than the rest of us do.'⁴⁰⁴ At its most extreme, hoarding disorder is a debilitating condition that sees its sufferers inhabit the confines of living spaces enclosed with kipple. This enclosure often makes daily activities such as washing, cooking and sleeping next to impossible, as boxes, piles and muddle spill onto work surfaces, or engulf beds and doorways.⁴⁰⁵ In this state hoarders enact their daily rituals regardless, but have to refine each activity to an extremely particular algorithm. Utility and compulsion and ritual oppress each other in these instances to such a degree that it is hard to distinguish one from the other. Something strange happens when the meaningful limits of collections and classes are put under so much pressure. Grey disorder seeps back when too many conditions of order are imposed. When the act of *collecting* comes to take precedence over the

⁴⁰¹ Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason* (Psychology Press, 2001), 283.

⁴⁰² David F. Tolin, Randy O. Frost, and Gail Steketee, 'An Open Trial of Cognitive-Behavioral Therapy for Compulsive Hoarding', *Behaviour Research and Therapy* 45, no. 7 (July 2007): 1461–70.

⁴⁰³ Thomas Maier, 'On Phenomenology and Classification of Hoarding: A Review', *Acta Psychiatrica Scandinavica* 110, no. 5 (1 November 2004): 323–37.

⁴⁰⁴ Nina Bernstein, 'So Much Clutter, So Little Room: Looking Inside the Hoarder's Lair - New York Times', 31 December 2003, <http://www.nytimes.com/2003/12/31/nyregion/so-much-clutter-so-little-room-looking-inside-the-hoarder-s-lair.html>.

⁴⁰⁵ Alberto Pertusa et al., 'Refining the Diagnostic Boundaries of Compulsive Hoarding: A Critical Review', *Clinical Psychology Review* 30, no. 4 (June 2010): 371–86.

microcosm of the *collection*, when the differentiation of things begins to break down, collectors shift between Stewart's definitions. The hoarder's stash exemplifies chaos, the very thing the hobbyist builds their catalogues in opposition to. As William H. Gass explains, true chaos is a cold, final entropic state impossible to differentiate:

[W]e must think of chaos not as a helter-skelter of worn-out and broken or half-heartedly realised things, like a junkyard or potter's midden, but as a fluid mishmash of thinglessness in every lack of direction as if a blender had run amok. 'AND' is that sunderer. It stands between. It divides light from darkness.

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At these limits of classification, the outsider finds neither light nor darkness in the miser's stash. In the hoard 'and' has no particular place, yet, pick up one rotten remnant in isolation and ask the hoarder to choose its fate, the conjunction 'and' wins out again. Without 'and' the Creation would function as nothing but pudding, each class, condition or thing leaking into its partner, in an endless flattened mush. But the problem with 'and', with classes and categories and order is that they can be cleaved anywhere. Jorge Luis Borges exemplified this perfectly in a series of fictional lists he produced throughout his career. The most infamous list, which Michel Foucault claimed influenced him to write *The Order of Things*, refers to a 'certain Chinese encyclopaedia' in which animals are divided into categories of the frenzied and the embalmed and the tame and the innumerable and the fabulous and those that from a long way off look like flies.⁴⁰⁷ In writing about his short story *The Aleph*, Borges also remarked:

In the Aleph... [m]y chief problem in writing the story lay in... setting down of a limited catalog of endless things. The task, as is evident, is impossible, for such a chaotic enumeration can only be simulated, and every apparently haphazard

⁴⁰⁶ William H. Gass, "'AND'", in *Habitations of the Word: Essays* (Simon & Schuster, 1986), 183.

⁴⁰⁷ Jorge Luis Borges, 'The Analytical Language of John Wilkins', in *Other Inquisitions 1937-1952* (University of Texas Press, 1964), 101-5.

element has to be linked to its neighbour either by secret association or by contrast. ⁴⁰⁸

No class of things, no collection, no cleaving of kipple into non-kipple can escape the functions of either 'association or by contrast'. Kipple can be cleaved anywhere, even the hoarder themselves lives in danger of having their distinct identity erased by the grey goo of the hoard.

The Hoard and The Hoarder and

Brothers Homer and Langley Collyer lived in a mansion at 2078, Fifth Avenue, Manhattan. Sons of wealthy parents – their father was a respected gynaecologist, their mother a renowned opera singer – the brothers both attended Columbia University, where Homer studied law and Langley engineering. In 1933 Homer suffered a stroke which left him blind and unable to work at his law firm. As Langley began to devote his time to looking after his helpless brother both men became inseparable from the mansion their family's wealth and prestige had delivered. ⁴⁰⁹ Over the following decade or so Langley would leave the house only at night. Wandering the streets of Manhattan, collecting water and provisions to sustain his needy brother, Langley's routines became ritualised, giving his life a meaning above and beyond the streets of Harlem that were fast becoming run-down and decrepit. Langley's clutter only went one way: *into* the house.

On March 21st 1947 the New York Police Department received an anonymous tip-off that there was a dead body in a Harlem mansion. Attempting to gain entry, police smashed down the front-door, only to be confronted with a solid wall of newspapers. Finally, after climbing in through an upstairs window, a patrolman found the body of 65-year-old Homer Collyer, slumped dead in his kippleized armchair. In the weeks that followed, police removed one hundred and thirty tons of rubbish from the house. On

⁴⁰⁸ Jorge Luis Borges, *The Aleph and Other Stories 1933-1969*, ed. Norman Thomas Di Giovanni (New York: Bantam Books, 1971), 189–90.

⁴⁰⁹ Christopher Turner, 'Buried Alive: At Home with the Collyer Brothers', *Cabinet Magazine*, Spring 2010.

Saturday the 22nd of March 1947 a New York newspaper headline read: 'One Collyer Dead, Second Hunted in 5th Ave. Palace of Junk.' ⁴¹⁰

The body of Langley Collyer was eventually discovered crushed and decomposing under an enormous mound of crap, lying only a few feet from where his brother had starved to death. Crawling through the detritus to reach his blind and ailing brother, Langley had triggered one of his own booby traps, set in place to catch any robbers who attempted to steal their clutter. The list of objects pulled from the brother's house reads like a Jorge Luis Borges original:

solid walls of baby carriages and plaster statues and garden baskets and Christmas trees and picture frames and chandeliers and bundles of sheet music and dressmakers' dummies and everywhere, everywhere, the stacks of newspapers; every issue of every New York paper since 1918, waiting for the day when Homer Collyer would see again. ⁴¹¹

In a final ironic twist of kippleization, the brothers became mere examples of 'human' within the system of clutter they had amassed. Langley especially had hoarded himself to death. His body, gnawed by rats, was hardly distinguishable from the kipple that fell on top of it. A *Time Magazine* obituary from April 1947 said of the Collyer brothers: 'They were shy men, and showed little inclination to brave the noisy world.' ⁴¹²

At the precise moment the Langley hoard collapsed the noisy world was supplanted by the noise of the hoard: a collection so impossible to conceive and to cleave and to order, that it had dissolved into pure, featureless kipple. Today, the compulsion to hoard is sometimes referred to as 'Collyer syndrome'. Also named in their honour, is the 'Collyer's Mansion', a modern firefighting term for a hoarder's dwelling. Collyer's Mansions can become so overrun with trash and debris that they endanger not only those who amass them, but the firefighters who stumble upon them. Poorly maintained, and spilling over with refuse, the hoarder's residence can be a serious fire hazard, a place where disease and dust accumulate on top of one another. The danger

⁴¹⁰ Jay Maeder and The New York Daily News, *Big Town Big Time* (Sports Publishing LLC, 1998), 108.

⁴¹¹ Maeder and News, 108.

⁴¹² Time Magazine (New York), 'The Shy Men', *Time Magazine (New York)*, 7 April 1947.

for hoarders is to achieve a similar fate to the Collyer brothers: their clutter eventually wiping them out in one final collapse of systemic disorder.

For the purposes of this chapter, the 'collapse' of the hoard should be understood in more than a physical sense, as a description from a 2015 article on hoards and the teams that clean them indicates:

Bleak as the place was, they had seen worse. An apartment so swollen with belongings that the tenant, a woman, died standing up, unable to collapse to the floor. ⁴¹³

Bodies and beings lose distinction, and categories of object and use collapse as hoard and hoarder finally meld into one congealed muddle of thinglessness. The co-internment of object and human, of thing *qua* thing, occurs in mutual encounter. The hoarder, unable to carry out the rituals that sustain their existence amongst their aching edifice of things, is all at once overcome and entangled by hoard. As the final ritual runs down and is extinguished the hoarder becomes kipple, a simultaneous becoming complete and final and enclosed of the hoard; the ultimate consummation of Jean Baudrillard's proclamation on the death of the collector who has finally parsed the entire universe into their wunderkammer.

Speaking on what she calls the 'inorganic sympathy' between hoarders and their clutter, Jane Bennett turns to Sigmund Freud's description of 'the death drive' in which, 'the human body longs to return to the indeterminacy of the inorganic.' ⁴¹⁴ The hoarder's impulse to agglomerate things and mingle among stuff, Bennett explains, 'is a distinctive form of relationality, a peculiar associational logic, a subterranean sympathy, between bodies that we normally assign to different categories: life, matter, person, thing, animal, vegetable, mineral.' ⁴¹⁵ It is possible that the closure of the hoard marks an apocalyptic becoming that 'weaves all beings into the interdependent context of the manifest world.' ⁴¹⁶

⁴¹³ N. R. Kleinfield, 'The Lonely Death of George Bell', *The New York Times*, 17 October 2015, <http://www.nytimes.com/2015/10/18/nyregion/dying-alone-in-new-york-city.html>.

⁴¹⁴ Bennett, 'Powers of the Hoard: Artistry and Agency in a World of Vibrant Matter'.

⁴¹⁵ Bennett.

⁴¹⁶ Kennedy, *An Ontology of Trash*, 162.

The moment that hoard and hoarder become 'one' exhibits a type of universality I wish to affirm: a universality inducted as *the abolishment of the same* in a cacophony of *difference*. It is a noise to which the posthuman always aims, and by being manifest only once all (human) categories have coalesced, it is a noise that may drown out even the exclusive moan of the posthuman imperative that calls for it in the first place. In the case of the hoarder whose body was found propped, standing up, amongst her clutter, the collapse of the human qua hoard / hoard qua human is not a momentary event. To aggregate the entire universe is a slow process, replete in the rituals that make it possible for a hoarder to exist amongst that ordered disorder in a sense we term 'human'. But in that figure of the hoarder stood upright I find a strong indicator of what the posthuman might 'look' like, of how one might single it out from its equivocal becoming.

This image is, no doubt, a troubling one, manifest by the dead body of a woman I have mobilised for my own, figural, purposes. But I want to reaffirm the constitution of this figure in some very posthuman sense which escaped the Collyer brother, found crushed under his collapsed hoard. Unable to collapse to the floor, because of a new universe she had conferred around herself, this macabre figure retains her humanness, even as she lingers at the edges of the categories of living lively flesh and dead inert matter. This contradictory status is one posthumanism is always in practice with, as this thesis has shown in each chapter, and across each of its figural constructions. It is a liminal state that posthumanism cannot simply refer to, but must become as a mode of its own practice, a practice I argue this thesis is paradigmatically constitutive of.

Portfolio of Work / Conclusion

**“a fantasmagoric and unrepresentable repertoire
of actual re-embodiments of the most hybrid kinds”**

Through the figures of *The Phantom Zone*, *Crusoe*, *The Thing* and *the Hoard(er)* this dissertation delineates the boundaries of the human and posthuman; boundaries that meet and overlap and coalesce and mingle and affirm and deny and destroy one another. I wish to end this dissertation at the point of this amalgamation, leading into my portfolio of work. The dissertation text and portfolio of work make a whole which can be considered the thesis. The following description of the portfolio offers some background to the work, but it is in the work itself that the thesis should be considered as ‘concluded’. My portfolio of art work underscores the critical posthumanist practice my dissertation argues for, wavering on the boundary between a critical posthumanist practice and practice-based research. *The 3D Additivist Manifesto* is a critical posthumanist work in its own right, it is a call for others to submit posthumanist works to a larger collective, and it also stands as the culmination of the work of this thesis. The 3D printer can be considered as a figure, designed to sit alongside the others figures of this thesis.

The 3D Additivist Manifesto was released in March 2015, a collaborative project conceived and created with artist and activist Morehshin Allahyari. The manifesto would not have become what it was without both of us working together, but for the purposes of this thesis it is important to note how much of the posthumanist critical work of my own particular research went into its writing. The Manifesto is a call to push creative technologies beyond their breaking point, into the realm of the speculative, the provocative, and the weird. The resulting *3D Additivist Cookbook* – composed of work by over 100 artists, designers and theorists submitted to our ‘call’ – was published in December 2016. #Additivism is a portmanteau of additive and activism: a movement concerned with critiquing ‘radical’ new technologies in fablabs, workshops, and classrooms; at social, ecological, and global scales.

Read and watch *The 3D Additivist Manifesto* at additivism.org/manifesto

Download and browse The *3D Additivist Cookbook* at additivism.org/cookbook

‘Plastic,’ theorist Heather Davis suggests, ‘is the ultimate material of tempophagy, or time-eating, one that consumes the compressed bodies of ancient plants and animals, a process that took thousands of years, only to be transformed into a single-use take-out container.’⁴¹⁷ One of many precocious children conceived by crude oil and industrial capitalism, plastic is composed of long strings of organic polymers separated by fractioning processes. Oil itself is what Amanda Boetzkes and Andrew Pendakis call ‘fossilized death;’⁴¹⁸ a fluid, concentrated remainder of entire ecosystems, coalescing over millions of years into the lifeblood of capitalist causes. Calling out Roland Barthes’ obsession with plastic as a substance of *instantaneity*, Heather Davis regards oil and its plastic miscellany as a form of *slow violence* of inexplicable, drawn out, material consequence. Once disposed of and disregarded, plastic enters into a further, distended relationship with microscopic flora and fauna. Broken down into microplastic fragments by exposure to the sun and tidal forces, plastic become an ecosystem for bacterial colonies and viruses, locking themselves to its smooth surfaces. As it disperses even further, plastics leach their chemical constituents, perhaps most infamously *Bisphenol A*, which mimics the effects of the hormone oestrogen, and has been shown to impact on the fertility of fish, amphibians, and some evidence suggests, human beings.

Once we are confronted with the ubiquitous and globally calamitous material affects of materials like plastic, ‘nature’ collapses as a conceit. We can argue that the Garbage Patch – and other so-called hyperobjects that swirl and coalesce around the figure of the Anthropocene – are *more* the responsibility of Western, industrialised nations than humankind as a whole. But, as Dipesh Chakrabarty outlines in his *Four Theses* on climate change, the ‘crises cannot be reduced to a story of capitalism.’⁴¹⁹ They point to a universal, common catastrophe which can only be understood at a geological,

⁴¹⁷ Heather Davis, ‘Toxic Progeny: The Plastisphere and Other Queer Futures’, *PhiloSOPHIA* 5, no. 2 (2015): 235.

⁴¹⁸ Amanda Boetzkes and Andrew Pendakis, ‘Visions of Eternity: Plastic and the Ontology of Oil | e-Flux’, *E-Flux*, no. 47 (September 2013), <http://www.e-flux.com/journal/visions-of-eternity-plastic-and-the-ontology-of-oil/>.

⁴¹⁹ Dipesh Chakrabarty, ‘The Climate of History: Four Theses’, *Critical Inquiry* 35, no. 2 (2009): 221.

planetary scale – far above and beyond that of any particular or generalised conception of the human. A scale that demands approaches to politics and identity that touch at the edge of deep timescales, stretching both behind and ahead of every living thing on the planet. #Additivism takes into consideration Bronislaw Szerszynski's analysis that:

Geology may be our fate, but our encounter with it disrupts our understanding both of geology and of the human. So if we are to discern a 'geoethics' for the Anthropocene, it cannot take the form of a good, pure writing, enclosed in and stabilised by the volume of the book of nature, or by the self-present human subject. It will take place in and be conditioned by the much more unstable volume opened up by this multiple dispersal of the human.⁴²⁰

This proposal of a 'geoethics' sets into play several key factors for #Additivism. Firstly, how the ethical imperatives of human beings are partly inconsequential on grand geological timescales. Secondly, a more obvious, but nuanced feature of the geological sciences: geology is a stratigraphic science that understands time through the preponderance of layers of rock. And lastly, the connection between these two factors, the 'semiotic' character of both geological activity and human behaviour: what does it mean to 'write' our existence into a future we will never see?

The 3D Printer, and its related technologies, are a perfect figure for these factors, being a technology that proceeds by the layering of material over time, much like a geological process. What is more, the *politics* of 3D printing is a material one, being that the plastics used in many additive processes are composed of petrochemical derivatives. Deep time is inherent in all 3D printing, because crude oil is itself a substance from ancient geological epochs processed for the machines of tech-capitalism, and plastic is a substance that decays relatively slowly over grand timescales, thus acting as one of the definitive markers of The Anthropocene.

Szerszynski's concept of a 'pure writing' – and ways to disrupt, and oppose it – sit at the heart of the practice of #Additivism. In devising *The 3D Additivist Manifesto* we

⁴²⁰ Bronislaw Szerszynski, 'The End of the End of Nature: The Anthropocene and the Fate of the Human', *Oxford Literary Review* 34, no. 2 (2012): 181.

were confronted with a writerly dilemma: how to gesture to an unbounded Outside, without limiting what may exist there through our all-too-human words and deeds. We wanted to instil into *The Manifesto* all the malleability and monstrosity of waste plastic, deep futures, and dark, ancient, crude oil. Only then could it possibly succeed us, its writers, and begin working of its own accord. The language we chose, and the forms we injected into the video, are science fictional, ironic, contradictory, humorous, and 'weird' in form and intent. But it is perhaps the list form of *The Manifesto* that does the majority of the posthuman weirding. In attempting to set down, what Jorge Luis Borges called 'a limited catalog of endless things,'⁴²¹ our concern was to gesture to the unheard, and the disempowered, by way of the unspoken, and the unthinkable. A posthuman yearning for what we call in *The Manifesto* – mutating the words of Rosi Braidotti – 'a fantasmagoric and unrepresentable repertoire of actual re-embodiments of the most hybrid kinds.'⁴²² The list keeps growing until it descends/ascends to monstrous proportions. Until it exceeds language, and grows bigger than words can signal. For every object, tool, weapon or poetic conceit we packed into *The Manifesto* there are an infinite remainder that did not, and perhaps could not, make it in.

The 3D Additivist Manifesto was extended by the publication of *The 3D Additivist Cookbook* in December 2016: a compendium of imaginative, provocative works from over 100 world-leading artists, activists and theorists. *The 3D Additivist Cookbook* contains 3D .obj and .stl files, critical texts, templates, recipes, (im)practical designs and methodologies for living in this most contradictory of times. Speculative forms and interventions that take into account the deep history and global impact of material practices. Ideas and objects that do not propose to 'fix' problems, but instead (re)align the natural, the human, and the technological with the fluid Outside cast off by Anthropogenic processes. *The 3D Additivist Cookbook* asks the question of how to reconcile shifts in ethical and ontological frameworks with a future that humans may never see. Is it possible to 'write' into, to 'design' that future, without limiting what it (and we) might become? #Additivism gestures towards the mutations in bodies, identities and minds that will be necessary if any such practice is possible.

⁴²¹ Borges, *The Aleph and Other Stories 1933-1969*.

⁴²² Braidotti, *Metamorphoses*, 195.

Bibliography

- Agamben, Giorgio. 'Difference and Repetition: On Guy Debord's Films'. In *Art and the Moving Image: A Critical Reader*, edited by Tanya Leighton and Charles Esche, 313–19. London : New York: Tate Publishing in association with Afterall, 2007.
- . 'Nymphs'. In *Releasing the Image: From Literature to New Media*, edited by Jacques Khalip and Robert Mitchell, 60–81. Stanford, California: Stanford University Press, 2011.
- . *The Signature of All Things : On Method*. New York ;Cambridge Mass.: Zone Books ;;Distributed by the MIT Press, 2009.
- Andermann, Jens. *The Optic of the State: Visuality and Power in Argentina and Brazil*. University of Pittsburgh Press, 2007.
- Armstrong, Karen. *A Short History Of Myth*. Canongate Books, 2004.
- BackStarCreativeMedia. 'Datamoshing – the Beauty of Glitch', 9 April 2009.
<http://backstar.com/blog/2009/04/09/datamoshing-the-beauty-of-glitch/>.
- Badmington, Neil. 'Pod Almighty!; Or, Humanism, Posthumanism, and the Strange Case of Invasion of the Body Snatchers'. *Textual Practice* 15, no. 1 (2001): 5–22.
- , ed. *Posthumanism*. Readers in Cultural Criticism. Houndmills, Basingstoke, Hampshire ; New York: Palgrave, 2000.
- Bakhtin, Mikhail. *Rabelais and His World*. Indiana University Press, 1984.
- Baran, Paul. 'On Distributed Communications Networks'. *IEEE Transactions on Communications Systems* 12, no. 1 (March 1964): 1–9.
- Bardini, Thierry. *Junkware*. Minneapolis: University of Minnesota Press, 2011.
- Baudrillard, Jean. 'Prophylaxis and Virulence'. In *Posthumanism*, edited by Neil Badmington, 34–41. Readers in Cultural Criticism. Houndmills, Basingstoke, Hampshire ; New York: Palgrave, 2000.
- . *Simulations*. Translated by Paul Foss, Paul Patton, and Philip Beitchman. Semiotext (e) New York, 1983.
- . 'The System of Collecting'. In *The Cultures of Collecting*, edited by John Elsner and Roger Cardinal, 7–24. Reaktion Books, 1994.
- Baudrillard, Jean, and Sylvère Lotringer. *The Ecstasy of Communication*. Autonomedia, 1988.
- Benjamin, Walter. 'Doctrine of the Similar (1933)'. Translated by Knut Tarnowski. *New German Critique* Spring, 1979, no. 17 (1 April 1979): 65–69.
- . 'The work of art in the age of its technological reproducibility (1936)'. In *The work of art in the age of its technological reproducibility, and other writings on media*, edited by Michael William Jennings, Brigid Doherty, Thomas Y Levin, and E. F. N Jephcott, 19–55. Cambridge, Mass.: Belknap Press of Harvard University Press, 2008.

- Bennet, Spencer Gordon. *Atom Man vs. Superman*. Film Serial. Columbia Pictures, 1950.
- Bennett, Jane. 'Powers of the Hoard: Artistry and Agency in a World of Vibrant Matter'. Lecture, Vera List Center for Art and Politics, 26 September 2011. <https://vimeo.com/29535247>.
- . *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University Press, 2010.
- Bernstein, Nina. 'So Much Clutter, So Little Room: Looking Inside the Hoarder's Lair - New York Times', 31 December 2003. <http://www.nytimes.com/2003/12/31/nyregion/so-much-clutter-so-little-room-looking-inside-the-hoarder-s-lair.html>.
- Bhabha, Homi K. *The Location of Culture*. Repr. London: Routledge, 2003.
- . 'The Other Question...' *Screen* 24, no. 6 (1 November 1983): 18–36.
- Billson, Anne. 'The Thing Set on Survival'. *The Guardian*, 27 August 2009. <http://www.theguardian.com/film/2009/aug/27/the-thing-john-carpenter>.
- Blumenberg, Hans. *Shipwreck with Spectator: Paradigm of a Metaphor for Existence*. Studies in Contemporary German Social Thought. Cambridge, Mass: MIT Press, 1997.
- Boetzkes, Amanda, and Andrew Pendakis. 'Visions of Eternity: Plastic and the Ontology of Oil | e-Flux'. *E-Flux*, no. 47 (September 2013). <http://www.e-flux.com/journal/visions-of-eternity-plastic-and-the-ontology-of-oil/>.
- Booker, M. Keith, and Anne-Marie Thomas. *The Science Fiction Handbook*. John Wiley & Sons, 2009.
- Borges, Jorge Luis. *The Aleph and Other Stories 1933-1969*. Edited by Norman Thomas Di Giovanni. New York: Bantam Books, 1971.
- . 'The Analytical Language of John Wilkins'. In *Other Inquisitions 1937-1952*, 101–5. University of Texas Press, 1964.
- Bourassa, Alan. 'Literature, Language and the Non-Human'. In *A Shock to Thought: Expression After Deleuze and Guattari*, edited by Brian Massumi. Routledge, 2002.
- Boym, Svetlana. 'Svetlana Boym, The Off-Modern Mirror / Journal / e-Flux'. *Eflux*, no. 19 (October 2010). <http://www.e-flux.com/journal/view/175>.
- Braidotti, Rosi. *Metamorphoses: Towards a Materialist Theory of Becoming*. Cambridge, UK ; Malden, MA: Polity Press in association with Blackwell Publishers, 2002.
- . 'Signs of Wonder and Traces of Doubt: On Teratology and Embodies Differences - in - Between Monsters, Goddesses and Cyborgs: Feminist Confrontations with Science, Medicine and Cyberspace'. In *Between Monsters, Goddesses and Cyborgs: Feminist Confrontations with Science, Medicine and Cyberspace*, edited by Nina Lykke and Rosi Braidotti. London: Zed Books, 1996.

- . 'Teratologies'. In *Deleuze and Feminist Theory*, edited by Claire Colebrook and Ian Buchanan, 156–72. Edinburgh: Edinburgh University Press, 2000.
- . *The Posthuman*, 2013.
- Brown, Bill. 'Thing Theory'. *Critical Inquiry* 28, no. 1 (1 October 2001): 1–22.
- Buck-Morss, Susan. *The Dialectics of Seeing: Walter Benjamin and the Arcades Project*. MIT Press, 1991.
- Bukatman, Scott. *Blade Runner*. BFI Modern Classics. London: British Film Institute, 1997.
- . *Matters of Gravity: Special Effects and Supermen in the 20th Century*. Duke University Press, 2003.
- . *Terminal Identity: The Virtual Subject in Postmodern Science Fiction*. Durham: Duke University Press, 1993.
- . *The Poetics of Slumberland: Animated Spirits and the Animating Spirit*. Berkeley: University of California Press, 2012.
- Buñuel, Luis. *Robinson Crusoe*. Film. Producciones Tepeyac, 1954.
- Burroughs, William S. *The Electronic Revolution*. ubu.com: ubuclassics, 2005.
- Campbell, John W. *Who Goes There?* Rocket Ride Books, 2009.
- Campbell, Norah, and Mike Saren. 'The Primitive, Technology and Horror: A Posthuman Biology'. *Ephemera: Theory and Politics in Organization* 10(2) (2010): 152–76.
- Canby, Vincent. "'The Thing' Is Phony and No Fun'. *The New York Times*, 25 June 1982, sec. Movies.
- Carey, James W. *Communication as Culture, Revised Edition: Essays on Media and Society*. Routledge, 2008.
- Carpenter, John. Bringing The Thing to life, Invasion, Tomorrow's Worlds: The Unearthly History of Science Fiction, 14 November 2014. <http://www.bbc.co.uk/programmes/p02bwk1p>.
- . *The Thing*. Film. Universal Pictures, 1982.
- Carroll, Noël. *The Philosophy of Horror, or, Paradoxes of the Heart*. New York: Routledge, 1990.
- Castoriadis, Cornelius. *The Imaginary Institution of Society*. MIT Press, 1998.
- Caygill, Howard. *Walter Benjamin: The Colour of Experience*. Routledge, 1997.
- Certeau, Michel De. *The Practice of Everyday Life*. 3rd Revised edition. Berkeley: University of California Press, 1984.
- Chakrabarty, Dipesh. 'The Climate of History: Four Theses'. *Critical Inquiry* 35, no. 2 (2009): 197–222.
- Cixous, Hélène. *The Newly Born Woman*. University of Minnesota Press, 1986.
- Clark, Katerina, and Michael Holquist. *Mikhail Bakhtin*. Harvard University Press, 1984.

- Colebrook, Claire. *Death of the PostHuman: Essays on Extinction, Vol. 1*. Open Humanities Press, 2014.
- . *Sex After Life: Essays on Extinction, Vol. 2*. Open Humanities Press, 2014.
- Conrich, Ian, and David Woods, eds. *The Cinema Of John Carpenter: The Technique Of Terror*. Wallflower Press, 2004.
- Cornell, Drucilla, and Stephen D Seely. *The Spirit of Revolution: Beyond the Dead Ends of Man*. Polity press, 2016.
- Creed, Barbara. 'Horror and the Monstrous-Feminine: An Imaginary Abjection'. *Screen* 27, no. 1 (1 January 1986): 44–71.
- Cubitt, Sean. 'Supernatural Futures: Theses on Digital Aesthetics'. In *FutureNatural: Nature, Science, Culture*, edited by George Robertson, Melinda Mash, Lisa Tickner, Barry Curtis, and Tim Putnam, 237–55. Psychology Press, 1996.
- . *The Cinema Effect*. Cambridge, Mass.: MIT Press, 2004.
- Cuthbertson, Anthony. 'Exoskeletons v Wheelchairs: Disability Advocates Clash with Futurists over "offensive" Solution'. International Business Times UK, 14 April 2015. <http://www.ibtimes.co.uk/exoskeletons-vs-wheel-chairs-disability-advocates-clash-futurists-over-offensive-solution-1496178>.
- Davies, Tony. *Humanism*. The New Critical Idiom. London ; New York: Routledge, 1997.
- Davis, Heather. 'Toxic Progeny: The Plastisphere and Other Queer Futures'. *PhiloSOPHIA* 5, no. 2 (2015): 231–250.
- Defoe, Daniel. *The Life and Adventures of Robinson Crusoe (1808)*. Gutenberg.org, 2004. <http://www.gutenberg.org/files/12623/12623-h/12623-h.htm>.
- Delany, Samuel R. 'Is Cyberpunk a Good Thing or a Bad Thing?' *Mississippi Review* 16, no. 2 & 3 (1988): 28–35.
- . *Silent Interviews: On Language, Race, Sex, Science Fiction, and Some Comics—A Collection of Written Interviews*. Wesleyan University Press, 2011.
- Deleuze, Gilles. *Bergsonism*. New York: Zone Books, 1988.
- . *Cinema 1: The Movement Image*. Continuum, 2005.
- . *Cinema 2: The Time Image*. Minneapolis: University of Minnesota Press, 1989.
- . *Foucault*. Bloomsbury Publishing, 2006.
- Deleuze, Gilles, and Félix Guattari. *EPZ Thousand Plateaus*. Continuum, 2004.
- Deleuze, Gilles, and David Lapoujade. *Two Regimes of Madness: Texts and Interviews 1975-1995*. Semiotext(e), 2006.
- Demos, T. J. *Dara Birnbaum: Technology/Transformation: Wonder Woman*. One Work. London : Cambridge, Mass: Afterall ; Distributed by the MIT Press, 2010.
- Derrida, Jacques. 'Passages: From Traumatism to Promise'. In *Points: Interviews, 1974-1994*. Stanford University Press, 1995.

- Derrida, Jacques, Michel Lisse, and Geoffrey Bennington. *The Beast and the Sovereign. 2: [...].* Seminars of Jacques Derrida. Chicago: The University of Chicago Press, 2011.
- Dick, Philip K. *Do Androids Dream of Electric Sheep?* Random House Publishing Group, 2008, 1968.
- . 'Man, Android and Machine', 1975.
<http://www.philipkdickfans.com/mirror/websites/pkdweb/Man,%20Android%20and%20Machine.htm>.
- . 'Pay for the Printer'. In *The Philip K. Dick Reader*, 239. Carol Pub. Group, 1997, 1956.
- Didur, Jill. 'Re-Embodying Technoscientific Fantasies: Posthumanism, Genetically Modified Foods, and the Colonization of Life'. *Cultural Critique* 53, no. 1 (2003): 98–115.
- Donner, Richard. *Superman*. Film. Warner Bros., 1978.
- Earman, John. 'An Attempt to Add a Little Direction to "The Problem of the Direction of Time"'. *Philosophy of Science* Vol. 41, no. No. 1 (March 1974): 15–47.
- Eco, Umberto. *The Open Work*. Cambridge: Harvard University Press, 1989.
- Emily, Alpert Reyes. 'L.A. Agrees to Spend \$1.3 Billion to Fix Sidewalks in ADA Case'. [latimes.com](http://www.latimes.com/local/lanow/la-me-ln-lawsuit-broken-sidewalks-20150331-story.html), 1 April 2015. <http://www.latimes.com/local/lanow/la-me-ln-lawsuit-broken-sidewalks-20150331-story.html>.
- Emily, Ladou. 'Fix Discriminatory Attitudes and Broken Sidewalks, Not Humans'. *Motherboard*, 8 April 2015. <http://motherboard.vice.com/read/fix-discriminatory-attitudes-and-broken-sidewalks-not-humans>.
- Fanon, Frantz. *The Wretched of the Earth*. Translated by Richard Philcox. New York: Grove Press, 2004.
- Fisher, Mark. *The Weird and the Eerie*, 2016.
- Foucault, Michel. *Madness and Civilization: A History of Insanity in the Age of Reason*. Psychology Press, 2001.
- . 'Right of Death and Power Over Life'. In *Biopolitics: A Reader*, edited by Timothy C. Campbell and Adam Sitze, 41–60. Durham: Duke University Press, 2013.
- . *The Order of Things: An Archaeology of the Human Sciences*. Repr. Routledge Classics. London: Routledge, 2007.
- Gass, William H. "'AND'". In *Habitations of the Word: Essays*, 160–84. Simon & Schuster, 1986.
- Gerber, Steve. *Superman: Phantom Zone*. New York: DC Comics, 2013.
- Goriunova, Olga, and Alexei Shulgin. 'Glitch'. In *Software Studies : A Lexicon*, edited by Matthew Fuller, 110–18. Cambridge Mass.: MIT Press, 2008.
- Graham, Elaine. *Representations of the Post Human : Monsters, Aliens, and Others in Popular Culture*. New Brunswick N.J.: Rutgers University Press, 2002.

- Grenville, Bruce, ed. *The Uncanny: Experiments in Cyborg Culture*. Vancouver, B.C: Arsenal Pulp Press, 2002.
- Halberstam, Judith M., and Ira Livingston. *Posthuman Bodies*. Indiana University Press, 1995.
- Hansen, Mark B. N. 'Cinema Beyond Cybernetics, or How to Frame the Digital Image'. *Configurations* 10, no. 1 (2002): 51–90.
- . *Embodying Technesis: Technology beyond Writing*. Studies in Literature and Science. Ann Arbor: University of Michigan Press, 2000.
- Haraway, Donna. 'A Manifesto For Cyborgs: Science, Technology, And Socialist Feminism In The 1980s'. In *The Haraway Reader*, 7–46. Psychology Press, 2004.
- . 'Capitalocene, Chthulucene: Staying with the Trouble'. University of California at Santa Cruz, 5 September 2014. <https://vimeo.com/97663518>.
- . 'SF: Sympoiesis, String Figures, Multispecies Muddles'. University of Alberta, Edmonton, Canada, 24 March 2014. <https://www.youtube.com/watch?v=Z1uTVnhIHS8>.
- . 'Situating Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective'. *Feminist Studies*, 1988, 575–599.
- . *The Haraway Reader*. Psychology Press, 2004.
- Haraway, Donna, and Martha Kenney. 'Anthropocene, Capitalocene, Chthulucene'. In *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies*, edited by Heather Davis and Etienne Turpin, 255–70. London: anexact, 2015.
- Hardt, Michael, and Antonio Negri. *Empire*. New Ed. Harvard University Press, 2001.
- Haven, Leif. 'We've All Always Been Lichens: Donna Haraway, the Cthulucene, and the Capitalocene'. *ENTROPY* (blog), 22 September 2014. <http://entropymag.org/weve-all-always-been-lichens-donna-haraway-the-cthulucene-and-the-capitalocene/>.
- Hayles, N. Katherine. *Chaos Bound: Orderly Disorder in Contemporary Literature and Science*. 3. print. Ithaca, NY: Cornell Univ. Press, 1994.
- . *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago, Ill.: University of Chicago Press, 1999.
- Heijningen Jr., Matthijs van. *The Thing*. Film. Universal Pictures, 2011.
- Herbrechter, Stefan, and Ivan Callus. 'What's Wrong With Posthumanism?' *Rhizomes*, no. 7 (Fall 2003). <http://www.rhizomes.net/issue7/callus.htm>.
- Hird, Myra J. 'Knowing Waste: Towards an Inhuman Epistemology'. *Social Epistemology* 26, no. 3–4 (October 2012): 453–69.
- Hurley, Kelly. 'Reading like an Alien: Posthuman Identity in Ridley Scott's *Aliens* and David Cronenberg's *Rabid*'. In *Posthuman Bodies*, edited by Judith M. Halberstam and Ira Livingston. Bloomington: John Wiley & Sons, 1996.

- — —. *The Gothic Body: Sexuality, Materialism, and Degeneration at the Fin de Siècle*. Cambridge University Press, 2004.
- Hymer, Stephen. 'Robinson Crusoe and the Secret of Primitive Accumulation'. *Monthly Review* 63, no. 4 (23 September 2011).
- Istvan, Zoltan. 'In the Transhumanist Age, We Should Be Repairing Disabilities, Not Sidewalks'. Motherboard, 3 April 2015. <http://motherboard.vice.com/read/in-the-transhumanist-age-we-should-be-repairing-disabilities-not-sidewalks>.
- — —. 'Transhumanism and Our Outdated Biology'. The Huffington Post, 21 April 2016. http://www.huffingtonpost.com/zoltan-istvan/transhumanism-and-our-out_b_9749138.html.
- Jabbar, Wisam Kh. Abdul. 'Colonial Mimicry in Philip Dick's Do Androids Dream of Electric Sheep?' *Inquire: Journal of Comparative Literature*, no. Literary Violence: Issue 2.2 (June 2012). <http://inquire.streetmag.org/articles/91>.
- Jager, Eric. 'The Parrot's Voice: Language and the Self in Robinson Crusoe'. *Eighteenth-Century Studies* 21, no. 3 (1988): 316.
- Jameson, Fredric. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions*. New York: Verso, 2005.
- Keller, Evelyn Fox. *Refiguring Life: Metaphors of Twentieth-Century Biology*. [S.l.]: Columbia Univ Press, 1996.
- Kelly, Kevin. *Out Of Control: The New Biology of Machines, Social Systems, and the Economic World*. Reprint edition. Reading, Mass.: Basic Books, 1995.
- Kember, Sarah, and Joanna Zylińska. *Life After New Media: Mediation as a Vital Process*. Cambridge, Mass: MIT Press, 2012.
- Kennedy, Greg. *An Ontology of Trash: The Disposable and Its Problematic Nature*. Albany, NY: State University of New York Press, 2007.
- Kleinfield, N. R. 'The Lonely Death of George Bell'. *The New York Times*, 17 October 2015. <http://www.nytimes.com/2015/10/18/nyregion/dying-alone-in-new-york-city.html>.
- Kroker, Arthur. *Body Drift: Butler, Hayles, Haraway*. U of Minnesota Press, 2012.
- Kurzweil, Ray. *The Singularity Is Near*. London: Duckworth, 2005.
- Leiner, Barry M., Vinton G. Cerf, David D. Clark, Robert E. Kahn, Leonard Kleinrock, Daniel C. Lynch, Jon Postel, Larry G. Roberts, and Stephen Wolff. 'A Brief History of the Internet'. *ACM SIGCOMM Computer Communication Review* 39, no. 5 (7 October 2009): 22.
- Lem, Stanisław. *Summa Technologiae*. Translated by Joanna Zylińska. Electronic Mediations 40. Minneapolis: University of Minnesota Press, 2013.
- Lepori, Matthew. 'There Is No Anthropocene: Climate Change, Species-Talk, and Political Economy'. *Telos* 2015, no. 172 (1 September 2015): 103–24.
- Lovecraft, H. P. *The New Annotated H.P. Lovecraft*. Edited by Leslie S Klinger. Liveright, 2014.

- Lykke, Nina. *Feminist Studies: A Guide to Intersectional Theory, Methodology and Writing*. Routledge Advances in Feminist Studies and Intersectionality 1. New York: Routledge, 2010.
- Lyotard, Jean-Francois. 'Can Thought Go On Without a Body?' In *Posthumanism*, edited by Neil Badmington, 129–40. Readers in Cultural Criticism. Houndmills, Basingstoke, Hampshire ; New York: Palgrave, 2000.
- Mackenzie, Adrian. *Transductions: Bodies and Machines at Speed*. Technologies. London ; New York: Continuum, 2006.
- Maeder, Jay, and The New York Daily News. *Big Town Big Time*. Sports Publishing LLC, 1998.
- Maier, Thomas. 'On Phenomenology and Classification of Hoarding: A Review'. *Acta Psychiatrica Scandinavica* 110, no. 5 (1 November 2004): 323–37.
- Man of Steel Viral - General Zod's Warning (2013) Superman Movie HD*. Film Trailer, 2013. <http://www.youtube.com/watch?v=5QkfmqsDTgY>.
- Manovich, Lev. *The Language of New Media*. 1st MIT Press pbk. ed. Cambridge Mass.: MIT Press, 2002.
- Margulis, Lynn, and Dorion Sagan. *What Is Life?* University of California Press, 1995.
- Marx, Karl, and Friedrich Engels. 'Das Kapital Volume One', 1867. https://en.wikisource.org/wiki/Das_Kapital_Volume_One.
- Mignolo, Walter D. *Local Histories/Global Designs: Coloniality, Subaltern Knowledges, and Border Thinking: Coloniality, Subaltern Knowledges, and Border Thinking*. Princeton University Press, 2012.
- Milburn, Colin. 'Monsters in Eden: Darwin and Derrida'. *MLN* 118, no. 3 (2003): 603–21.
- Morrison, Grant. *Supergods: Our World in the Age of the Superhero*. London: Vintage Books, 2012.
- Morton, Timothy. *Hyperobjects: Philosophy and Ecology after the End of the World*. Posthumanities 27. Minneapolis: University of Minnesota Press, 2013.
- Mulvey-Roberts, Marie. "'A Spook Ride on Film": Carpenter and the Gothic'. In *The Cinema Of John Carpenter: The Technique Of Terror*, edited by Ian Conrich and David Woods, 78–90. Wallflower Press, 2004.
- Murray, Timothy. 'Time @ Cinema's Future: New Media Art and the Thought of Temporality'. In *Afterimages of Gilles Deleuze's Film Philosophy*, edited by David Norman Rodowick, 351–72. Minneapolis: University of Minnesota Press, 2010.
- Nancy, Jean-Luc. *What's These Worlds Coming To?* New York: Fordham University Press, 2014.
- Novak, Marcos. 'Trans Terra Form: Liquid Architectures And The Loss of Inscription', 1999. <http://www.krcf.org/krcfhome/PRINT/nonlocated/nlonline/nonMarcos.html>.

- Noyes, J. K. *Colonial Space: Spatiality in the Discourse of German South West Africa 1884-1915*. Routledge, 2012.
- O'Brien, Geoffrey. *The Phantom Empire: Movies in the Mind of the Twentieth Century*. Norton, 1995.
- O'Sullivan, Simon. *On the Production of Subjectivity: Five Diagrams of the Finite-Infinite Relation*. Palgrave Macmillan, 2012.
- Parisi, Luciana, and Tiziana Terranova. 'Heat-Death: Emergence And Control In Genetic Engineering And Artificial Life'. *CTheory*, 5 October 2000. www.ctheory.net/articles.aspx?id=127.
- Pertusa, Alberto, Randy O. Frost, Miguel A. Fullana, Jack Samuels, Gail Steketee, David Tolin, Sanjaya Saxena, James F. Leckman, and David Mataix-Cols. 'Refining the Diagnostic Boundaries of Compulsive Hoarding: A Critical Review'. *Clinical Psychology Review* 30, no. 4 (June 2010): 371–86.
- Poster, Mark. *The Second Media Age*. Wiley, 1995.
- Regis, Ed. 'Meet the Extropians'. WIRED, 10 January 1994. <http://www.wired.com/1994/10/extropians/>.
- Requarth, Tim. 'Why Life Is Not a Thing but a Restless Manner of Being'. Aeon, 11 January 2016. <https://aeon.co/essays/why-life-is-not-a-thing-but-a-restless-manner-of-being>.
- Roden, David. 'Kevin LaGrandeur on Posthumanism and Transhumanism'. *Enemyindustry* (blog), 29 July 2014. <http://enemyindustry.net/blog/?p=5282>.
- Rodowick, David Norman. *Gilles Deleuze's Time Machine*. Duke University Press, 1997.
- Rutsky, R.L. 'Allegories of Emergence: The Generative Matrix of Walter Benjamin'. Heidelberg, 2011.
- . *High Technē: Art and Technology from the Machine Aesthetic to the Posthuman*. Minneapolis, MN: University of Minnesota Press, 1999.
- . 'Mutation, History, and Fantasy in the Posthuman.' *Subject Matters: A Journal of Communications and the Self* 3.2/4.1 (2007): 99–112.
- . 'Walter Benjamin and the Dispersion of Cinema'. *Symploke* 15, no. 1–2 (2008): 8–23.
- Serres, Michel. *The Parasite*. 1st University of Minnesota Press ed. Minneapolis: University of Minnesota Press, 2007.
- Serres, Michel, Geneviève James, and James Nielson. *Genesis*. University of Michigan Press, 1997.
- Shavero, Steven. *The Cinematic Body*. Minneapolis: University of Minnesota Press, 1993.
- . *Without Criteria: Kant, Whitehead, Deleuze, and Aesthetics*. MIT Press, 2012.
- Shieber, Stuart. *The Turing Test: Verbal Behavior as the Hallmark of Intelligence*. MIT Press, 2004.

- Shiff, Richard. 'Cezanne's Physicality: The Politics of Touch'. In *The Language of Art History*, edited by Salim Kemal and Ivan Gaskell, 129–80. Cambridge University Press, 1991.
- Smith, Darryl A. 'Droppin' Science Fiction: Signification and Singularity in the Metapocalypse of Du Bois, Baraka, and Bell'. *Science Fiction Studies* 34, no. 2 (2007): 201–19.
- Smith, Linda Tuhiwai. *Decolonizing Methodologies: Research and Indigenous Peoples*. London ; New York : Dunedin, N.Z. : New York: Zed Books ; University of Otago Press ; Distributed in the USA exclusively by St. Martin's Press, 1999.
- Snyder, Zack. *Man of Steel*. Film. Warner Bros., 2013.
- Sobchack, Vivian Carol. *Carnal Thoughts Embodiment and Moving Image Culture*. Berkeley: University of California Press, 2004.
- Stacey, Jackie. *Teratologies: A Cultural Study of Cancer*. International Library of Sociology. London ; New York: Routledge, 1997.
- Stewart, Garrett. 'Cinemonics versus Digitime'. In *Afterimages of Gilles Deleuze's Film Philosophy*, edited by David Norman Rodowick, 327–50. Minneapolis: University of Minnesota Press, 2010.
- Stewart, Susan. *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection*. Duke University Press, 1993.
- . *Poetry and the Fate of the Senses*. University of Chicago Press, 2002.
- Steyerl, Hito. 'Hito Steyerl, A Thing Like You and Me / e-Flux', no. 15 (April 2010). <http://www.e-flux.com/journal/view/134>.
- . 'In Defence of the Poor Image'. In *The Wretched of the Screen*, E-flux Journal., 31–44. Sternberg Press, 2012.
- Stiegler, Bernard. 'Anthropocene and Neganthropology'. Canterbury, November 2014.
- . 'Escaping the Anthropocene'. translated by Daniel Ross. Durham University, 2015. https://www.academia.edu/12692287/Bernard_Stiegler_Escaping_the_Anthropocene_2015_.
- Swyngedouw, Erik. 'Apocalypse Now! Fear and Doomsday Pleasures'. *Capitalism Nature Socialism* 24, no. 1 (March 2013): 9–18.
- Szszynski, Bronislaw. 'The End of the End of Nature: The Anthropocene and the Fate of the Human'. *Oxford Literary Review* 34, no. 2 (2012): 165–184.
- Taussig, Michael T. *Mimesis and Alterity: A Particular History of the Senses*. Psychology Press, 1993.
- Thacker, Eugene. *After Life*. University of Chicago Press, 2010.
- . 'Data Made Flesh: Biotechnology and the Discourse of the Posthuman'. *Cultural Critique* 53, no. 1 (2003): 72–97.
- . *In the Dust of This Planet*. Ropley: Zero, 2011.

- . 'Nekros; Or, The Poetics Of Biopolitics'. *Incognitum Hactenus* 3, no. Living On: Zombies (2012): 26–47.
- . 'Nine Disputations on Theology and Horror'. *Collapse: Philosophical Research and Development* IV: 55–91.
- . 'The Sight of a Mangled Corpse—An Interview With'. *Scapegoat Journal*, no. 05: Excess (2013): 378–87.
- Thau, Michael. *The Magic Behind the Cape*. Film Documentary. Warner Bros., 2001.
- 'The Aleph: Robinson Crusoe: The First Marxist?' Accessed 3 July 2015.
<http://blazinghog.blogspot.co.uk/2005/10/robinson-crusoe-first-marxist.html>.
- Thompson, Nato, Gregory Sholette, Joseph Thompson, Nicholas Mirzoeff, C. Ondine Chavoya, Arjen Noordeman, and Massachusetts Museum of Contemporary Art, eds. *The Interventionists: Users' Manual for the Creative Disruption of Everyday Life*. North Adams, Mass. : Cambridge, Mass: MASS MoCA ; Distributed by the MIT Press, 2004.
- Time Magazine (New York). 'The Shy Men'. *Time Magazine (New York)*, 7 April 1947.
- Tolin, David F., Randy O. Frost, and Gail Steketee. 'An Open Trial of Cognitive-Behavioral Therapy for Compulsive Hoarding'. *Behaviour Research and Therapy* 45, no. 7 (July 2007): 1461–70.
- Turing, A. M. 'Computing Machinery and Intelligence'. *Mind*, New Series, 59, no. 236 (1 October 1950): 433–60.
- Turner, Christopher. 'Buried Alive: At Home with the Collyer Brothers'. *Cabinet Magazine*, Spring 2010.
- 'Vernor Vinge on the Singularity'. Accessed 23 March 2017.
<http://mindstalk.net/vinge/vinge-sing.html>.
- Waldby, Catherine. *The Visible Human Project: Informatic Bodies and Posthuman Medicine*. Routledge, 2003.
- Wark, McKenzie. 'Anthropocene Futures'. Versobooks.com, 23 February 2015.
<http://www.versobooks.com/blogs/1875-anthropocene-futures>.
- West, Lauren. 'I Don't Need Fixing...' The Huffington Post UK, 21 April 2015.
http://www.huffingtonpost.co.uk/laurenwest1/i-dont-need-fixing_b_7086086.html.
- Williams, Evan Calder. *Combined and Uneven Apocalypse: Luciferian Marxism*. John Hunt Publishing, 2011.
- Wolfe, Cary. *What Is Posthumanism?* Posthumanities Series, v. 8. Minneapolis: University of Minnesota Press, 2010.
- Woodard, Ben. *Slime Dynamics*. John Hunt Publishing, 2012.
- Zalasiewicz, Jan, Mark Williams, Alan Smith, Tiffany L. Barry, Angela L. Coe, Paul R. Bown, Patrick Brenchley, et al. 'Are We Now Living in the Anthropocene'. *GSA Today* 18, no. 2 (2008): 4.

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