



THE POSTHUMAN CURATOR

THE BRITISH SF BOOM AND CRITICAL POSTHUMANISM AS STORY
ENGINES FOR UNSETTLING POST/HUMANITY

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“The Posthuman Curator:
The British SF Boom and Critical Posthumanism as Story Engines
For Unsettling Post/humanity”

A THESIS

SUBMITTED TO THE SCHOOL OF ENGLISH IN
FULFILLMENT OF THE REQUIREMENTS

For the degree

DOCTOR OF PHILOSOPHY
English Literature

By

Thomas Peter Kewin

June 2023

'The modern condition determines that there is nothing
you despise that you do not contribute to.'

Matthew De Abaitua, *The Red Men*

ACKNOWLEDGEMENTS

I am deeply aware of the privilege that comes with the opportunity to pursue a PhD, and I am grateful for the unwavering support, encouragement, and guidance I have received from numerous individuals. I would like to express my heartfelt gratitude to my primary supervisor, Dr. Will Slocombe, whose continuous support throughout my PhD journey has been invaluable. His guidance not only shaped my research and the writing of this thesis but also provided solace during challenging times. Additionally, I extend my thanks to my secondary supervisor, Prof. David Seed, whose insights, and encouragement motivated me to broaden the scope of my research.

I am also indebted to my two examiners – Sam Solnick and Andrew M. Butler – above all for their constructive advice and for making the viva process more manageable. As is cited elsewhere in the thesis, I take kindness to be a virtue – and it’s heartening to know there are so many people who modelled that kindness. Their patience and generosity will always be remembered. I would like to acknowledge the entire School of English, whose inspiration paved the way for my pursuit of postgraduate education. Your unwavering support and encouragement throughout the years have made it possible for me to complete this substantial piece of work.

Above all, I am immensely grateful to my partner, my family, and friends for their unconditional love and support during the process of writing this thesis. Their constant encouragement, patience, and grace have been paramount to my success. I have been incredibly fortunate to have their unwavering presence when I needed it most.

Writing this thesis has been a labour of love but has also brought its fair share of stress. In such moments, I have often turned to the positive advice given by my colleagues: it doesn't have to be perfect; it just needs to be finished.

Lastly, I would like to mention that all artworks featured within the thesis were created by me and emerged through the process of writing.

ABSTRACT

This thesis reads British Boom science fiction and critical posthumanism as a proliferation of story engines, which are sites of ideation where the boundaries between disciplinary sites of meaning-making and world-forming are reconfigured and unsettled. Five exemplary writers of the post-1990s British Boom science fiction period – Matthew De Abaitua, Alastair Reynolds, Jeff Noon, Adam Roberts, and Justina Robson – explore different conceptualizations of the human in the time of the posthuman. For this, the emergence of a posthuman curator is necessary to account for both fiction and theory as entangled agencies, which unsettle normative assumptions about humanity, as the universal measure of things and as dominant species in the time of the Anthropocene. The conceptual argument is simple in its outline: the curator is a performative account of science fiction's posthumanizing potential, where the curator occupies a diffractive framework (following Karen Barad) unsettling works of science fiction from the sanctity of categorisation and practices that limit its ability to explore that which cannot yet be imagined. The materiality of these texts and the phenomena which they enact – for all matter is enfolded with/in these story engines of British Boom science fiction – explore how the nature of change is changed through these entangled agential forces. These curators unsettle the status of individuals, human or otherwise, machines, animals, and species. This thesis therefore foregrounds the potential of science fiction as the encounter and transformation of humanity into something otherwise than human – the process which

Stefan Herbrechter refers to as “posthumanization”.¹ As such, other models of life – virtual, technological, animal – inform the tropes, the narrative arcs, and the subject positions possible in posthumanizing narratives.

¹ Stefan Herbrechter, *Posthumanism: A Critical Analysis* (London: Bloomsbury, 2013)



INTRODUCTION

Curators abound in the science fiction of the post-1990s British Boom – shepherds, scribes, archivists – as figures embodying curatorial roles in acts of salvage and care for a future that is increasingly posthuman. This thesis explores the relationship of post-1990s British Boom science fiction to critical posthumanist thought to navigate the multiple accounts of an ongoing process of posthumanization, where the British Boom is the resurgence of British science fiction at the turn of the millennia. Following this, the “posthumanizing” phenomenon is taken to account for those scientific, technological, and sociological upheavals which come to unsettle that which calls itself “human”. In this thesis, discussion is focused on a performative approach to posthumanism and science fiction, where both concepts emerge as objects of study and apparatuses for investigation. This introduction outlines the emergence of a posthuman curator figure across fiction and theory, accountable for both the status of a posthuman researcher and the research object of posthumanism. From here, the role of the researcher as a diffractive agent – outlined later as a methodology for reading texts-as-phenomena through each other – is developed in order to unsettle disciplinary parameters.² In which case, these various narrative sites come to be conceptualised as story engines, as fictional devices, which unsettle human-centric meaning-making and world-forming practices, with the sf novel the core focus. Finally, the posthumanist context and the selection of texts – considering their ‘Boomitute’, as

² For this reading of the diffractive methodology, this thesis is indebted – as elsewhere – to Karen Barad, in a curatorial gesture – which is to say, Barad’s work exhibits itself as a diffractive account.

Andrew M. Butler has it – is outlined to draw out this conversation of the imploded / exploded potential of narrative forms in the time of the posthuman.³

To re/turn back to the unsettling of the human of humanism, Rosi Braidotti reflects on posthumanism as disrupting what she perceives as Vitruvianism, which is a deliberate invocation of Leonardo da Vinci's 'Vitruvian Man': a superimposed drawing of a nude man in multiple positions, an essentialist image of 'Man' espousing ideal bodily proportions. In Braidotti's reading, this Vitruvianism is a model that is inherent to a Eurocentric paradigm that affirms the 'universalizing powers of self-reflexive reason.'⁴ The subject of this Vitruvianism must be disentangled from a view of humanity as exceptional, who possesses privileged access to reason – in its universalising mode – such that it speaks for the human species and for European culture more generally. What bears out in Braidotti's view is that the Vitruvian model has privileged a specific view of what comes to call itself 'human', and has sought to determine humanity – in a profoundly humanistic and normative manner – to be 'the site of origin of critical reason and self-reflexivity.'⁵ As such, where Braidotti pushes her account of the Vitruvian model is in a desire to develop perspectives which engage the non-anthropocentric and the nonhuman: in such a gesture lies the potential to destabilise the Anthropos and unsettle humanist thinking from a variety of disciplinary sites. For Braidotti, here, posthumanism is not a time of disciplinary crisis, but an explosion of

³ A broader discussion of Andrew M. Butler's conceptualisation of the British sf Boom comes later in this introduction, engaging with Butler's article in the 2003 Special Issue on the British Boom. See: Andrew M. Butler, 'Thirteen Ways of Looking at the British Boom', in *Science Fiction Studies*, Vol. 30, No. 3, The British SF Boom (SF-TH Inc, 2003)

⁴ Rosi Braidotti, *The Posthuman* (Cambridge: Polity, 2013), p. 13.

⁵ Braidotti, *The Posthuman*, p. 15.

new possibilities. With/in a posthuman view, this is perceptibly taxing on traditional humanities disciplines – embodied by Enlightenment Man as the universalist measure of all things, as well as Anthropos Man as the dominant species – which can no longer claim a central, or transcendently guaranteed, position for thinking.

This thesis follows these explosions of new narrative possibilities, cutting across various disciplines by attending to the post-anthropocentric change in reference point for humanity as a species. For this, the thesis suggests the importance of a posthuman curator – at once a curator who is posthuman, and a curator of the posthuman – who is able to account for the act of observation and the agencies of observation which underpin conceptualisations of post-humanity. As such, the curator is both an (speculative) exhibit of that which is posthuman through the genres of narrative – a performative account of post/human experience - and an exploration of the agencies emerging to call itself post/human. Which is to say that the posthuman curator is not a tyrannical figure who possesses a proper and distinguishable identity, nor wishes to perform the posthuman as a fixed and unassailable concept, but one who is alive to the intra-species and intra-active possibility. For this invocation of intra-action, I am indebted to Karen Barad, who argues that the usual metaphysics of individualism presumes ontologically discrete and fixed entities, whereas her notion of ‘intra-action’ unsettles this account by suggesting that individuals only exist within the materializing relations of phenomena.⁶ In short, individuals do not pre-exist their acting upon each other, but are co-constituted through these material and entangled relations. Even simpler, what may call itself post/human does so in recognition of the fact that it is

⁶ See: Karen Barad, *Meeting the Universe Halfway: Quantum Physics and The Entanglement of Matter and Meaning* (Durham NC & London: Duke University Press, 2007), p. 32

always already constituted in a relationship with something otherwise than itself, some material relation constituting from within or without itself. Following this, the thesis imagines what provocations emerge out of story engines, following the trope of a curator and an exhibition, by acknowledging a *posthumanizing* process at work, where humans and posthumans intra-act and reconfigure their relations as entangled phenomena.

As is becoming clear, posthumanizing narratives explode the boundaries of humanities disciplines, and what emerges is a series of alternative visions of the human and the dynamic webs amongst which the concept is caught, including creative and curative reconfigurations of the human of humanism. Posthumanism is the latest effort of critical theory to account for the accommodation of the nonhuman world with/in the conventional human-centred world. Theory is no longer committed to human-centred stories, for storytelling in a speculative mode is not bound by the logic of human exceptionalism or Enlightenment Man as the measure of all things. Which is to say, fictionality, or a certain speculative spirit, is crucial to the practices of posthumanist critical thought, and is increasingly adopted with/in epistemological tools for conceptualising outside of an anthropocentric account of the world. Simply, if human exceptionalism is no longer available as a mode for thinking posthumanistically, and consequently, if the human no longer serves as a transcendental guarantor of meaning, the posthuman must instead account for what remains of the human, and maintain the potential of humanity's future in some relationship of stewardship, as if a (posthuman) curator.⁷ This thesis stages the

⁷ The suggestion to 'think posthumanistically' is a reference to Stefan Herbrechter's work with Ivan Callus in the critical posthumanities. See: Stefan Herbrechter, 'Critical Posthumanism', *Posthuman Glossary*, eds Rosi Braidotti & Maria Hlavajova, (Bloomsbury, 2018)

encounters of a posthuman curator, who dares to unsettle humanist assumptions about the world with/in a speculative spirit which calls to ac/count for the explosion of entangled stories of humans and nonhumans.

To enter such a discussion of the speculative spirit within posthumanist thought is to explore different methodologies, or rather the performative nature of reading and thinking-with texts, whether fictional or theoretical, for this necessitates a discussion about engagement. To follow Donna Haraway, in her 2016 work *Staying with the Trouble*: '[it] matters what thoughts think thoughts. [...] It matters what stories tell stories.'⁸ Or rather, Haraway's practice of feminist speculative fabulation attends to the meeting points between theory and fiction, which ruptures and opens disciplinary spaces to the (always-already present) risk of other relations, to unexpected speculative worlds. For the capacity to think, as situated human beings, matters, for the alternative is 'an astonishing abandonment of thinking', which is correlative, for Haraway, with active participation in the genocide of a non-human world.⁹ Haraway's multispecies project embodies the practice of a feminist speculative fabulation, which entangles knowing and doing as an ethical enterprise. For the sake of this introduction, there are two points worth drawing out in more detail here: the first is, as implied, the significance of a speculative spirit in Haraway's thinking, and the latter traverses which acts of thinking are possible for Haraway by refusing humanist patterns of thought. Both of these observations overlap with each other, as it becomes apparent that

⁸ Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham, NC. and London: Duke University Press, 2016), p. 35

⁹

speculative thought and post-humanist theorising are ongoing and entangled agencies, which re/configure sites of disciplinary knowledge-formation.

Indeed, Haraway's critical work has been integral for unsettling the boundaries between different sites of knowledge-production in her conviction that the work of boundary-mapping is always entangled with its own processes and methodologies. In formulating the notion of situated knowledges, Haraway is attentive to the power relations always already embedded in processes of knowledge production. To clarify, this feminist project entails a reconfiguration of power and knowledge as situated and embodied processes, such that 'the world encountered in knowledge projects is an active entity'.¹⁰ Throughout Haraway's critical work, there is an entanglement of feminist body politics – specifically, the politics of location – with science and technology studies. This is modelled in Haraway's earlier socialist-feminist 'Cyborg Manifesto' in which the tradition of 'Western' science and politics – traditions of male-dominated capitalism; traditions of progress; etc. – are a 'border war', oriented around '*pleasure* in the confusion of boundaries and for *responsibility* in their construction.'¹¹ The speculative figure of the cyborg is re/configured in Haraway's work and becomes the apparatus of investigation in as much as it is the object of study. Where Haraway disrupts the different genres of writing, specifically the manner in which feminist

¹⁰ Donna J. Haraway, *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), p. 198

¹¹ Donna J. Haraway, 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century', in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), p. 150

accounts of these questions of technology refuse to concede to the logic of control and management.¹²

Nevertheless, situated knowledges are not merely active instruments for knowledge-production, they are an apparatus which materialises bodies: 'objects' do not pre-exist as such. [...] boundaries shift from within; boundaries are very tricky. What boundaries provisionally contain remains generative, productive of meanings and bodies.'¹³ What is clear immediately is Haraway's 'tricky' boundary mapping-work unsettles the foundations of knowledge, as well as the instrumentation for conceptualising such a world with her remark that 'siting (sighting) is a risky practice'.¹⁴ Utilising a metaphor of optics and vision, as vision is never value-neutral and eyes are hardly passive instruments for organising a world, Haraway argues for feminist situated knowledges which are generative of incalculable, unfinished, and unthought possibilities. Returning to Karen Barad, the optical metaphor is at the heart of representationalist accounts, implying that there are pre-existing separations between an object of study and the agency of observation. Both Haraway and Barad push towards a diffractive model, a performative and non-representational account, which seeks to account for the specific materializations of which we are inextricably part, including 'practices of knowing [...] that participate in (re)configuring the world.'¹⁵

¹² See: Chris Hables Gray, Heidi J. Figuerora-Sarriera, and Steven Mentory, *The Cyborg Handbook*, ed. Chris Hables Gray (London: Routledge, 1995)

¹³ Haraway, *Simians, Cyborgs, and Women*, p. 201

¹⁴ Haraway, p. 201

¹⁵ Karen Baard, *Meeting the Universe Halfway*, p. 91

To return to the discussion at hand, Donna Haraway consciously adopts the rhetorical strategies of science fiction, as well as various scientific disciplines, in order to tell a story for a multispecies world, 'capable of inventing new practices of imagination, resistance, revolt, repair, and mourning, and of living and dying well.'¹⁶ In this regard, the boundary projects implicit in Haraway's work are lively, where the fissures, gaps, and thresholds of sf (science fiction, here) are provocations which account for the abundance of problems provoked by posthumanist times. The speculative spirit is introduced in her writing with the delightful wordplay of sf as a multiplicity, a lively abbreviation which unsettles the rigid boundaries between disciplines, and resonances, of 'science fact, science fiction, speculative feminism, and speculative fabulation'.¹⁷ For Haraway, writing and research is heavily entangled – which attend to the factual, fictional, feminist, and fabulatory spirit of *doing* fiction and theory, and fiction and theory being intra-active agencies in and of themselves. What is worth emphasising, for the sake of this thesis, is that speculative thinking does not belong to any unique or privileged disciplinary site, rather sf – in the Haraway-ian understanding – deeply unsettles the narrative potential in science fiction, feminist theory, and science studies. Yet, there has been a focus on posthumanism and science fiction within this introduction as an explosion of new possibility, which re/configures the boundaries between disciplines, and, most explicitly in Donna Haraway's work, this posthumanization process entails different genres of writing overlapping and co-habiting with/in other genres and fields. In this case, scholars, writers and artists alike

¹⁶ Haraway, *Staying With The Trouble*, p. 51

¹⁷ Haraway, *Staying With The Trouble*, p. 53

are (posthuman) curators, indebted to, and response-able for, the story engines which account for this posthumanizing potential alive with/in fiction and theory.

Science fiction, therefore, provides useful terrain for redrawing the boundaries between academic fields, reconfiguring the entanglements between people and concepts, remaking worlds within matrixes of embodiment. In this performative account, then, science fiction – as one node of storytelling – is conceived as a story engine, a model for carrying, preserving, and being response-able to the human and posthuman meaning-making machines of storytelling. The role of technology and scientific inquiry have expanded the epistemic horizons of theory and fiction, where story engines are conceptual tools for performing, in a non-representational manner, the imploded / exploded notions of the human in a way that doesn't re/affirm old ways of thinking and being. Like Ezekiel Cantor in Matthew De Abaitua's 2008 sf novel *The Red Men*, he is a machine intelligence, an 'algorithmic artist' and 'an immigrant from the future'. Cantor works for the corporation, Monad, aiding and abetting techno-capitalists realise their esoteric beliefs.¹⁸ Cantor is a posthuman curator, always already posthuman in that it is a cyborgian storyteller and mathematician, trafficking between disciplinary practices whilst simultaneously undoing their arbitrary divisions. Cantor is a curator who engages in this 'risky' practice of re/drawing boundaries: for Monad, Cantor creates / curates the titular red men of the corporation's client base, those digital simulations of living individuals, initially for the purpose of focus group market research and which later become the apparatus for a control society.

Cantor, the red men, and the instantiations of Cantor as robots – Dr Easy, the soulful caregiver, and Dr Hard, the stern disciplinarian – are an interpretation of Kurzweilian

¹⁸ Matthew De Abaitua, *The Red Men* (Hackney: Snowbooks, 2007), p. 377

imaginings of machine superintelligences.¹⁹ As is discussed later, De Abaitua's fiction is clearly cross-pollinated with the Kurzweilian Singularity: a paradigm shift where machine intelligence exceeds humanity's and is no longer the mere extension of humanity's agency. Not to mention, this trope of pollination recurs throughout the thesis to highlight those moments where (science) fiction and theory are in lively negotiation. Where Kurzweil's futurological tale of machine supremacy is profoundly transcendent and technophilic, De Abaitua is much more suspicious in how science fiction grapples with the complicities of technological advancement – which he terms a state of 'future shock'.²⁰ Where cyberpunk narratives suggest the possibility of cyberspace, the corporatisation of technological innovation, and a hypothetical Singularity, De Abaitua's fiction presents all of these factors as a hard-driven social reality, where his protagonists are unmoored from their conventional social roles, and must chart new affective relationships in the human-machine entangled bonds of the near future.

The insertion of Cantor, and De Abaitua's novel, here is intended to embody this curatorial instinct: Cantor, as a disciplinary trafficker with the novel's undecidably fictional evolutionary stories – where Cantor begets another Cantor – looping and recurring around human-sponsored tales of Darwinian/Kurzweilian theory, which blur the boundaries between the fictional and the real. In this case, Cantor, and De

¹⁹ De Abaitua discusses referential material which informed his understanding of artificial intelligence in the

²⁰ Matthew De Abaitua, 'IF THEN. Matthew De Abaitua's chilling contemplation of an algorithm-driven society', *Strange Alliances* [Accessed 06/02/2019] <<https://strangealliances.wordpress.com/2015/09/22/if-then-matthew-de-abaituas-chilling-contemplation-of-an-algorithm-driven-society>>

Abaitua's novel, function as an exhibit of the power of science fiction and critical theory, for it is not just their discursive power to unsettle humanist categories of thought, but the potential to materialise relations and worlds differently. Indeed, in *The Red Men*, Cantor and Monad find their competitions in the counterpart corporation, Dyad, which profiteers in mind- and emotion-enhancing drugs, xenotransplantation, and bodily metamorphosis. Where Dyad, and its leader, Leto, are sworn to destroy Monad, given that the two corporations are implicitly bound together in their client base and enhancement technologies, the novel's ending, as well as the choice to name the shadowy other "Dyad", are examples of De Abaitua at his most self-aware. Which is to say, the materialisation of Cantor, Leto, and the red men as entangled human beings / informational machines / multispecies organisms, have profound consequences for who survives in posthuman times.²¹

Where a more sustained discussion of Cantor as a curator, and the consequences of simulated personalities on conceptualisations of the self is drawn out in chapter one, the focus here is on the constitutive intra-acting agencies of fiction and theory. If *The Red Men*, from the perspective of a story engine, becomes a model for threading through what is already known and unknown, it challenges what thoughts can be thought, whilst also having a response-ability to the opening up of what is yet-to-come in these entangled times. As such, this thesis continues the tradition of Haraway's in

²¹ This thesis adopts the ploy that Karen Barad uses to denote textual states of ontological indeterminacy by using slashes between words to trouble relationships of dichotomy and binary distinctions. Barad elsewhere describes this as cutting-together-apart, which is to say the slashed-assemblage is a performative indeterminacy, as the slash indicates that neither word are together or apart, nor together and apart. See: Karen Barad, 'Diffracting Diffraction: Cutting Together-Apart', *Parallax* 20:3 (London: Routledge, 2014)

characterising sf as a ‘game of cat’s cradle or string figures, of giving and receiving patterns [...] to craft conditions for flourishing in terran worlding’.²² Scholars, writers, and artists are curators of these story engines, curators engaged in discipline-making and world-forming practices, which cut across, and unravel the boundaries between fiction and theory, and embrace the web of always already being connected, refusing – as Haraway’s theory does – the Kantian globalised world and the Heideggerian worlding of exceptionalism.²³²⁴

THE ENDS OF THE HUMAN

This thesis is arranged into two sections: the first of which confronts the post-*humanist* challenge to universalist conceptions of the human as the measure of all things, whereas the second confronts the post-*anthropocentric* re/evaluation of the human in a multispecies universe. In the first chapter, the nodes of possibility into a posthumanist subject are performed to explore the intra-active, emergent, and complex character of subjectivity in posthuman times. Chapter two seeks to perform the unsettled temporalities present in the time of the post-human: one that is beyond or after a *human(ist)* worldview. The second section discusses the humans as displaced from the centre of all things and the species-exceptionality that has

²² Donna J. Haraway, ‘SF: Science Fiction, Speculative Fabulation, String Figures, So Far’, *Ada: A Journal of Gender, New Media, and Technology*, No. 3 (2013) <<https://adanewmedia.org/2013/11/issue3-haraway/>>

²³ See: Immanuel Kant, *Critique of Pure Reason*, trans. Paul Guyer and Allen W. Wood (Cambridge: Cambridge University Press, 1996).

²⁴ Martin Heidegger, *What Is A Thing?*, trans. W.B Barton and Vera Deutsch (Chicago IL, 1967)

constituted this idea since the Enlightenment, discussed most prominently in chapter three. However, there is some irony in discussing the human in a post-anthropocentric way when this era of (human) history has been conceptualised as a new geological age called the Anthropocene. Chapter four seeks to explore the problem of exploring humanity's effects on the planet, whilst re/evaluating humanity's place – no longer as the exceptional evolutionary animal – within this multispecies worldview.

This thesis shall not attempt to figure posthumanism as any unified concept, but rather a number of conflicting collectives, a rhizomatic site of various contested posthumanities that have emerged out of the post-theoretical scene. Posthumanism builds on the epistemological and political foundations of anti-humanism, post-colonialism, post-anthropocentrism, ecocriticism, and new materialist feminisms. As has been discussed with reference to Donna Haraway and Karen Barad's work, theory and fiction are intra-acting agencies in and of themselves. As such, the discussion in this section is oriented around what Jacques Derrida calls the canon of 'the modern apocalypse (end of History, end of Man, end of Philosophy [...])', and this chapter once more attends to the notion of the end of history – but in this case, it attends to the apocalyptic undercurrents implicit in the discourse of humanity's end.²⁵ Posthumanism is an unfinished configuration of the human, which has been cut through with interference patterns – or to use a (Jeff) Noonian phrase, is infected with the noise – and this fundamentally disturbs the language which is being used to tell the story. Which is to say, the performative telling of the story of the posthuman is challenged by this diffractive process.

²⁵ Jacques Derrida, *Spectres of Marx: The State of the Debt, the Work of Mourning and the New International*, trans. by Peggy Kamuf (New York and London: Routledge, 2006), p. 16

Posthumanism, whilst a branch of theoretical discourse which explores the contemporaneous reconfiguration of the human, has created / curated an impasse in the humanities since the conditions for posthumanization takes the form of, what Jacques Derrida might call, 'a rupture and a redoubling'; a rupture from the structures and relationships of previous instances of humanism and a redoubling of the logics which purport to govern the various emergent prospects for humanity and Western humanism.²⁶ In light of posthumanist theory, the human species can no longer be considered as fixed and immutable, if there ever was a historical moment where such an empirical reality could be conceived, and so this thesis reflects upon divergent notions of the posthuman subject as an evolutionary organism, a philosophical category that challenges the shifting ontological grounds of life. Simultaneously, the posthuman also occupies both the political and ethical sphere, introducing a necessary challenge to the status of animals and machines, organic and inorganic, biological and technological, with respect to their theoretical and cultural productions. It is of ever-increasing importance therefore to consider the implications of this 'redoubling' of humanist paradigms within posthumanist discourse, although this brand of post/humanism signals not simply the conception of a restored or recommencing humanism, but rather a distinctly nonhuman contingency. This idea is explored in chapter three by tracing how Adam Roberts undercuts the humanizing processes of Agamben's anthropological machine.²⁷

Building out from an inherently alienating and nihilistic view of *our own* species is where Claire Colebrook finds a way of wrestling with the parochialism of the

²⁶ Jacques Derrida, 'Structure, Sign, and Play in the Discourse of the Human Science', in *Writing and Difference*, trans. Alan Bass (London: Routledge, 2005), p. 351

²⁷ See: Giorgio Agamben, *The Open Man and Animal*, (Stanford: Stanford University Press, 2002.)

Anthropocene. This notion of (human) extinction, which the thesis explores in chapter four, is – for Adam Roberts – an im/possibility as humanity is ‘forever creating loopholes, survivors, rebirths and trapdoors that enable us to skip away from the ultimate end of things’.²⁸ As Adam Roberts states, it is impossible to conceptualise the end except in parabolic structures where the human dovetails away from its inevitable ending, for which Colebrook would argue is parochialism – in Colebrook’s case, the most apparent forms of anthropocentrism. Justina Robson’s short story ‘No Man’s Island’ is written as a response to the contemporaneous popular alien invasion / disaster story which coincided with the close of the 90s and the start of the new millennia. In fact, set against quintessential American disaster films like *Independence Day* (1996), *Armageddon* (1998) and *Deep Impact* (1998), Robson’s short story forgoes the spectacle of the alien for a conceptualisation of the Earth which is ‘so small and vulnerable, alone in the vastness of space, nobody knowing it existed or caring to look.’²⁹ Indeed, there are various texts throughout this thesis which deconstruct the parameters of what Brian Aldiss has termed ‘the cosy catastrophe’ in order to unsettle the all-too-humanist embodied lifeworld in posthuman times.³⁰

Critical posthumanism embodies a critical view of a disembodied liberal humanism, with its assumptions of a society with equally placed autonomous agents and rational scientific control over others. New materialist feminisms have disturbed the privileging of the linguistic turn, which focused on discursive practices as a substitute for a more

²⁸ Adam Roberts, *It’s the End of the World: But What Are We Really Afraid Of?* (London: Elliot and Thompson, 2020), p. 188

²⁹ Justina Robson, ‘No Man’s Island’, *Heliotrope* (Greenwood: Ticonderoga Publications, 2011), p. 167

³⁰ Brian Aldiss, *Billion Year Spree: The True History of Science Fiction* (Doubleday, 1973)

engaged discussion of the material world, where critics like Karen Barad, Donna Haraway, and Rosi Braidotti speak towards a material-discursive philosophy of difference and embodied existence.³¹ For the most part, new materialist approaches tend to locate the human on a continuum with nonhuman forms of life and material processes, as opposed to hierarchies and (human) exceptionalism— such as Rosi Braidotti and Elizabeth Grosz. As has been discussed, Donna Haraway’s situated knowledges criticises universalist accounts of the world, but these new materialist accounts have come to configure performative posthumanist methodologies, via Karen Barad, and her notion of agential realism as an ethico-onto-epistemological framework is discussed later in the thesis

For the sake of this thesis, the curator functions as a dynamic framework for modelling how we think about phenomena, and understanding how phenomena – such as the human and the posthuman – are intra-active agencies. For which, dynamism is at the forefront of this account of the curator, who functions as a narrative apparatus or “story engine” which entails rethinking both notions, as they affect each other: critical posthumanism and science fiction. Or simply, the curator allows the thesis to be accountable for how the performative enactment of posthumanism and science fiction as active agencies in themselves, instead of framing either as separable or deterministic of the other. The curator offers an alternatively performative account, as opposed to a representationalist ontology fixated on capturing a proper humanity, for there is a different paradigm of entanglement at work. In this case, posthumanism

³¹ See: Karen Barad, ‘Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter’, in *Signs: Journal of Women in Culture and Society*, Vol. 28, No. 3 (Chicago IL: University of Chicago Press, 2003), p. 802-803

is not herein conceptualised through a simple either/or relationship as a discursive object or material reality, rather it is the way in which new material arrangements (matter) or conceptual possibilities (concepts) are co-constituted in their encounter.

This has consequences in the fact that posthumanism is often understood to refer to new material arrangements of embodied existence, but this thesis places an emphasis on the performative ontologies that are material-discursive in the sense that they are mutually entangled. Or rather, the (non)human agencies cannot be conceived as ontologically distinct or dependent of their material arrangements or embodied reality, since these agencies are mutually generative of (human) histories) and (future) potentialities. Consequently, this thesis turns to the situatedness of the curator as an apparatus which is ac/countable, following Karen Barad's notion of intra-action, to the agential phenomena which constitutes the posthuman.³² As already illustrated, the human and the posthuman are inextricably tied together as concepts and invariably transform each other with/in their lively entanglements. Staying with Karen Barad, and this ongoing conversation about entanglements, Barad's term 'intra-action' avoids the connotations implicit in 'interaction', as the former suggests objects are independent from the material patterns of the intra-actions.

³² A broader discussion of Barad's agential realist account is to follow; nevertheless, the notion of a text which is entangled in the same discursive models it is performing is best exemplified by Barad's work, for she treats quantum physics as a subject and a mode of critical inquiry. See: Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007)

As such, the discourse around posthumanism provides a number of contested 'posthumanisms' which the posthuman curator must account for in its operation. There is no single form of posthumanism that can be identified as portraying a unified history of the term, and as such this thesis pursues various strands or modes of access for conceptualising posthumanity. Framing the operation of the posthuman curator as such, in a non-dualistic mode, challenges narratives of individuation and return, wherein each chapter presents a humanistic reflex as point of access into the discourse of posthumanism. As is foregrounded throughout this thesis – but most explicitly in chapter two, the conception of a posthumanism is always-already invested with spectrality, as evidenced by the fact that no access node can provide a totalised narrative about the posthuman – which is to say the discourse remains radically open and in-process. The first academic publications to reflect on the conception of the posthuman and posthumanism emerged at the end of the millennium – specifically in the works by Donna Haraway, N. Katherine Hayles, Neil Badmington, Rosi Braidotti, and Cary Wolfe.³³ In conjunction with this theoretical pronouncement of the

³³ The list of the posthuman curators' work: Donna Haraway, *Modest_Witness@Second_Millennium. FemaleMan@_Meets_Oncomouse*TM (London and New York: Routledge, 1991); N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (London: University of Chicago Press, 1999); Neil Badmington, 'Theorising Posthumanism', *Cultural Critique* 53, no. 1 (2003); Braidotti, *Nomadic Subjects: Embodiment and Sexual Difference in Contemporary Feminist Theory* (Chichester, West Sussex: Columbia University Press, 1994); Cary Wolfe, 'In Search of Post-Humanist Theory: The Second-Order Cybernetics of Maturana and Varela', in *Cultural Critique*, No. 30, The Politics of Systems and Environments, Part I (Minnesota: University of Minnesota Press, 1995).

posthuman, debates on the importance of biotechnologies open up a more general philosophical and political discussion about the ethics of scientific innovations.

In a similar regard, Cary Wolfe views the ‘unsettlement’ of the humanist subject as the primary consequence when considering the significance of posthumanist discourse, since it disrupts the conceptual distinctions between human and non-human and fundamentally revises the social dimension of our embodied existence. As Wolfe argues, posthumanism requires us to confront the notion that we are ‘always radically other, already in- or ahuman in our very being – not just in the evolutionary, biological, zoological fact of our physical vulnerability and mortality’.³⁴ In tandem, Wolfe broaches a configuration of posthumanist discourse in which the human must share its existence with those that it had previously denigrated, therefore entailing the confluence of other genealogies – ranging from the ‘animal’ through to the cyberneticist’s conceptualization of system and informational theory. It is clear that Wolfe broaches the work of systems and informational theory in order to reflect on the nature of human agency, and the extent to which humanity is configured as a result of the performative nature of one’s embodied existence. Nonetheless, cybernetics is focused on an examination of how human beings function within a system – interested in the performative nature of their embodied existence, there is a need to negotiate with the fundamental ontological and epistemological questions that regard the notion of a technologically-mediated vision of the human. Wolfe locates a clear responsibility to the relationships, not the boundaries, that we foster between species – human and nonhuman – and even within the categorical imperatives of humanism – gender, race,

³⁴ Cary Wolfe, *What is Posthumanism?* (Minneapolis: University of Minneapolis Press, 2010), p. 90

and other determining factors – the humanist notion of normativity is subtly being dismantled in order to demolish a rationalized image of a single-species determinism.

Central to this study is the examination of a selection of exemplary contemporary British Boom science fiction novels published in the post-1990 period in order to expand on the problematics of posthumanist thought, to situate these debates and understandings of the posthuman within a cultural context that extrapolates on the issues of a techno-scientific world, and in so doing consider the manner in which literary authors historicise these disparate narratives. Nonetheless, whilst there are a number of related issues situated at the centre of such a debate of posthumanism, expressed throughout these literary works, each author reveals different social and cultural issues that are representative of the posthuman problematic and thus the attempt to reconcile any of these disparate issues into a single ideological, aesthetic system seems flawed.³⁵ In this regard, it might be useful to imagine the schema of the thesis and its ongoing posthumanization of the contested humanist reflexes in the following ways:

1. Chapter One: Emergent posthuman subjectivities – Reflecting on second-order cybernetics – particularly those of autopoiesis, expressed by Niklas Luhmann³⁶

³⁵ For further justification of such an approach, see N. Katherine Hayles' *How We Became Posthuman* and the parallels drawn between different forms of cultural productions, particularly the interrelation between literary and scientific production, as being centred entirely in the manner we understand ourselves 'as embodied creatures living within and through embodied worlds and embodied words' (24).

³⁶ See: Niklas Luhmann, *Social Systems*, trans. John Bednarz Jr., with Dirk Baecker (Stanford: Stanford University Press, 1995)

– and the concept of ‘emergence’³⁷ is unpacked through a reading of Matthew De Abaitua’s loose-trilogy of novels (2008-2015), this contemporary form of posthumanism engages with cybernetics and system theory in order to contemplate how the various systems – psychic, social, biological, cultural – incorporate and develop according to its relationship with other systems; this has the operative function of developing a reading of the complexity of life;

2. Chapter Two: Posthuman temporalities – Through prevailing systems of cultural and economic capitalism, of techno-social processes, there is a concern with increasing transhumanisation³⁸, ‘cyborgisation’, and hybridisation of the humanist subject; partly, this coincides with the notion of posthumanism as addressing the limits of an expanding sense of human perfectibility, the realities of which must confront (post)human dignity and finitude (as performed by De Abaitua); sense of delimiting the humanist subject by regarding it as an object to be expanded, repurposed, or accelerated through material metaphors of embodied existence in order to generate radical social change (as performed by Reynolds and Noon);

³⁷ As defined by Steven Johnson’s work *Emergence: The Connected Lives of Ants, Brains, Cities, and Software* (London: Scribner, 2001). This notion of emergence, and its indebtedness to a broader cybernetic tradition is discussed in chapter one.

³⁸ A definition of transhumanism is to follow, but broadly speaking, transhumanist discourse is a unique iteration of posthumanist thought which is driven by a technological view of enhancement and (human) progress. In ‘Extropian Principles 3.0: A Transhumanist Declaration’, Max More – co-founder argues that transhumanists ‘favor reason, progress, and values centred on our well being rather than on an external religious authority.’ (Max More, ‘The Extropian Principles 3.0: A Transhumanist Declaration’ *Max More* (1998) <<https://www.maxmore.com/extprn3.htm>>)

3. Chapter Three: Non-Anthropocentrism – Discourse between modern constructions of man and nature as legitimising modes of thought that entail mastering and ordering non-human forces, and often reduce fellow humans to the status of dehumanised ‘Other’ (inverted by Adam Roberts’ *Bête*) – this conceptualisation of posthumanism confronts the unnatural processes that dictate the changing parameters of what we deem ‘life’, and confronts speciesism as a tyrannical form of capture and control (challenged via Noon);
4. Chapter Four: Post-Extinction: A series of endings prompted by contemporary debates on the philosophical erasure of ‘Man’ as a historically determined figure, the Western telos, or the ends of entire species wrought by narratives of the Anthropocene (as performed by De Abaitua). Theorists such as Claire Colebrook and Rosi Braidotti identify the combined futility and inadequacy of humanist narratives in try to recuperate and restore a post-theoretical age (performed by Reynolds and Robson);

Posthumanism is conceivable as a concrete techno-scientific reality, as the necessary conjunction of epistemic, scientific discourse and the rationalism of social life, which takes the distributed cognition of ‘humans + tools’ as its object of study, where ‘tools’ include all forms of technology.³⁹ Chris Gray considers the conclusion of World War II as marking a major transition from a ‘world where distinctions between human and tool, human and machine, living and dead, organic and inorganic’ were imperceptible.⁴⁰ Norbert Wiener made fundamental contributions to the cybernetic

³⁹ See: Peter Mahon, *Posthumanism: A Guide for the Perplexed* (London: Bloomsbury Publishing, 2017), p. 139

⁴⁰ Chris Hables Gray, *The Cyborg Handbook*, p. 5

tradition through his emphasis on the hybrid nature of man and machine which focused on factors of control and communication: specifically, the means by which information could be transported between organic and inorganic mediums.⁴¹ In this manner, Hayles reconceptualises information – specifically that all material things are constituted by ‘bodiless information’. Not only does Norbert Wiener’s work make fundamental contributions to cybernetics but gave rise to the modern archetype of machinic agencies revolting against the human, of the human consequences of interacting with automated technologies, alongside their ‘possibilities for good and for evil’.⁴²

Ray Kurzweil’s conceptualisation of the extrapolative potential to algorithms considers the unfolding dialectic relationship of human destiny as the destining of ‘human-machine civilisation, a destiny we have come to refer to as the Singularity’.⁴³ For which, the contemplation of the Singularity as a transformative event necessarily depends on the conjoined speculation and extrapolation of algorithmic systems as representative of an accelerated shift in paradigm shifts, which would ‘allow our future intelligence to go beyond any limits.’⁴⁴ The Kurzweilian view of human cosmology, the essence of the Singularity, is a post-biological view of the human in which the body becomes an obsolescence as the Singularity offers the capacity for the human to transcend its biological limitations. Kurzweil’s interest in extrapolative narratives is evident from the

⁴¹ Wiener, *Cybernetics*, pp. 10/11

⁴² Wiener, *Cybernetics*, p. 27

⁴³ Ray Kurzweil, *The Singularity is Near: When Humans Transcend Biology* (London: Viking, 2005), p. 23

⁴⁴ Ray Kurzweil, *The Singularity is Near: When Humans Transcend Biology* (London: Viking, 2005), p. 488

titles of his futurological texts – *The Age of Spiritual Machines: When Computers Exceed Human Intelligence* (1998) and *The Singularity is Near* (2005), and yet this extrapolative spirit requires some unpacking. For Kurzweil, the Singularity is a transformative event in this manner is suggestive of the accelerative shift in paradigm shifts – those accretions in the rates by which we alter our fundamental technological approaches – as well as the exponential nature of its growth. Thus, for Kurzweil, all of human evolution is mappable as a series of paradigm-shifts happening with increasingly greater frequency in which processes of biological adaptation and technological development are not mere analogues, but are a single continuous operation which is ‘speeding up’.⁴⁵

Kurzweil’s formulation of the Singularity seems to function towards a greater distribution of technological practices, social agents, and embodied forms, all of which suggests the plasticity of the technological in supplementing (read: substituting) the biological as the foundation of life.⁴⁶ Nevertheless, I feel there is a significance in introducing Kurzweil as a prominent figure to situate the posthuman when, much of Kurzweil’s legacy with respect to his formulation of the Singularity, treats the posthumanities as its own metanarrative, carrying its own transcendental logics; not only does the Singularity reflect on the liminal thresholds of technological advancement, but it also purports to be a techno-Rapture and create a species of

⁴⁵ Ray Kurzweil, *The Age of Spiritual Machines: When Computers Exceed Human Intelligence* (New York: Penguin, 1999), p. 26

⁴⁶ See: Vernor Vinge, ‘The Coming Technological Singularity: How to Survive in the Post-Human Era’, in *Vision-21: Interdisciplinary Science and Engineering in the Era of Cyberspace*, ed. G. A. Landis, (NASA Publication, 1993)

exceptional posthumanisms through the incorporation of superintelligences.⁴⁷ Of course it is intensely problematic to attempt to historicise the various posthumanisms, as both speculative future species, techno-social reality, ethical-philosophical consideration of species, and extinct theory, for historicising suggests an attempt to situate a debate as the product of historical development, and theorists – like Kurzweil – run almost entirely counter to posthumanisms historical progress and evolution as an atemporal relation.

This is not to say that this ‘posthumous posthumanity’ is an attempt to return to apocalyptic posthumanisms, as outlined by Hans Moravec’s *Mind Children*, whose disembodied dream of downloading human consciousness into machines sought to place the biological body under erasure: ‘Layer after layer the brain is simulated, then excavated [...] Though you have not lost consciousness, or even your train of thought, your mind has been removed from the brain and transferred to a machine.’⁴⁸ Moravec’s fantasy of disembodiment is one that seeks to recapitulate the Cartesian problematic and re-conceptualise the hierarchical relation of mind over body, in which the desire for a complete break from the biology signals one’s emergence as a posthuman subject. We must regard the posthumanities as being decidedly posthumous, not only because of the generalities of the human condition being bound to climate – organic or not, disembodied or not, but because the humanities must no

⁴⁷ Whilst this idea of posthumanism as a metanarrative is problematic, for reasons discussed later in this project, it is worth contemplating Lyotard’s original debate about knowledge, legitimacy, and postmodernity: Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge*, trans. by Geoff Bennington and Brian Massumi (Manchester: Manchester University Press, 1984)

⁴⁸ Hans Moravec, *Mind Children: The Future of Robot and Human Intelligences* (Cambridge, MA: Harvard University Press, 1988), p. 110

longer depend on liberal humanism as its theoretical grounds; not to suggest either that in theorising the various recurrences of life, outside of a liberal humanist perspective, that this thesis identifies with regressive posthumanisms, whose discourse collapses into invariable reiteration of humanity as the grounds, the foundations, of all life.

Nonetheless, discourses in posthumanism contribute to the decentring of the typical notion of the human through a theoretical framework which frequently explores the instabilities inherent to liberal humanism. If there is the potential for an ending of the human epoch, in the Foucauldian sense of a break with 'Man' as a historical entity, of those narrative archetypes present in our contemporary world which actively seeks to dismantle humanism's self-conception, then this thesis entails an exploration of what survives of the human. For Michel Foucault, in the *Order of Things*, there is a clear critique and intended culling of the conceptualisation of the humanist subject, not as a subject position in and of itself; rather Foucault's criticisms are aimed at the modern construction of the humanist figure, being directed against the autonomy of the humanist subject, of the human as rational agent, for 'man is neither the oldest nor the most constant problem that has been posed for human knowledge'.⁴⁹ It is clear that Foucault, speaking of an ending to humanism's epoch, is in fact speaking of an ending to the modern construction of the human – which is figured as a 'recent invention' – since Foucault's critique recognises that humanism does not necessarily incorporate all of the historic expressions of humanism, and its innumerable theoretical forebears or relations; it is partly the aim of this thesis, therefore, to consider the recuperation,

⁴⁹ Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (London: Routledge Classics, 2002), p. 421

and to subsequently deconstruct the discontinuous notions of the 'human', of certain strands of humanism that have since been deemed disingenuous.

Foucault's criticism of the 'similitude' implied by the circularity of historical forms has become recurrent of the sense of self-destruction felt in the wake of posthuman; the multiplicity of empirical forms is evident in how there is no singular entity, but a profusion of entities.⁵⁰ Foucault's main focus throughout *The Order of Things* seems to be the nature in which the understanding of 'man' as a historical entity reflects the 'play of forces' within each historical epoch, and how those forces might work with, against, and toward, 'man' in order to ascertain a relation between forms.⁵¹ Posthumanism, in the post-humanist articulation, critiques a particular historically determined conception that depends upon liberal humanist values, framing these epistemic arrangements as dependent on 'the foundation of all positivity and present, in a way that cannot even be termed privileged, in the element of empirical things.'⁵² The humanist subject is a centring force within liberal humanism, bound up with Enlightenment philosophies, which considers the capacity for self-liberation, on an individual and collective level, through the exercise of rationality: this configuration of Enlightenment was not just an intellectual and cultural moment within modernity but a philosophy of 'Man' which identified rationality as a condition for his own liberation.

Rosi Braidotti locates what she deems 'the post-anthropocentric turn' which concerns the wealth of technological forms of intervention that fundamentally 'shifts the

⁵⁰ Michel Foucault, p. 257

⁵¹ Michel Foucault, p. 373

⁵² Michel Foucault, p. 375

parameters that used to define anthropos'.⁵³ For Braidotti, the posthuman transpires to serve as a figure of historicity, which represents a wider challenging of the paradigmatic relationship between human and other non-human beings: as Braidotti argues, it throws the notion of human supremacy into question - 'not all of us can say, with any degree of certainty, that we have always been human, or that we are only that.'⁵⁴ Whilst post-anthropocentrism represents a deeper concern – on a cultural level – over the status of the human, Braidotti finds that there are beneficial aspects to such an evolution in that it suggests the privileged position of the human is soon to be displaced. As Braidotti asserts, the 'post-anthropocentric turn' represents a subtle disassembly of the means by which humanity has asserted its own supremacy throughout history, and likewise distinguishes any notions of human nature as distinguishable from those of animals and non-humans.⁵⁵ It is clear, therefore, that Braidotti's configuration of the posthuman is doubly aware of the twin narratives of control and domination, alongside anxieties raised by posthumanism pertaining towards the extent to which humanity is facing its own apocalypse.

Donna Haraway, in *When Species Meet*, introduces the concept of 'companion species', as well as the notion of kinship, as a deliberate effort to consider the various non-human actors that had previously been excluded from the theoretical scene; such a concept figures on the relationality between human/non-human, and it is clear that we are therefore concerned less with categories than contingent productions.⁵⁶ Haraway considers these contingent relations to be 'a much richer web to inhabit than

⁵³ Rosi Braidotti, *The Posthuman* (Cambridge: Polity Press, 2013), p. 57

⁵⁴ Rosi Braidotti, *The Posthuman*, p. 72

⁵⁵ Rosi Braidotti, *The Posthuman*, p. 65

⁵⁶ Donna Haraway, *When Species Meet* (Minneapolis, MN: University of Minnesota Press, 2008), p. 15

any of the posthumanisms', the various conceptualisations of posthumanism being referred to as 'the ever-deferred demise of man'.⁵⁷ Haraway's criticism of this formulation of posthumanism appears to draw parallels with Bruno Latour's parliament of things which creates an interesting tension between 'purification' and 'translation': for Latour, there is something problematic in modernity for it signals the 'naturalism of modernity's privileged categories must be underwritten by the effacement of its others'.⁵⁸

Not to mention, the neologism 'natureculture', as defined by Donna Haraway in *The Companion Species*, seeks to perform the natural and cultural as entangled agencies, rather than fixed and defined properties. This is framed in a similar regard to Bruno Latour's hybrid approach.⁵⁹

In a similar regard, Cary Wolfe views the 'unsettlement' of the humanist subject as the primary consequence when considering the significance of posthumanist discourse, since it disrupts the conceptual distinctions between human and non-human and fundamentally revises the social dimension of our embodied existence.⁶⁰ As Wolfe argues, posthumanism requires us to confront the notion that we are 'always radically other, already in- or ahuman in our very being – not just in the evolutionary, biological, zoological fact of our physical vulnerability and mortality'.⁶¹ In tandem, Wolfe broaches a configuration of posthumanist discourse in which the human must share its existence

⁵⁷ Donna Haraway, *When Species Meet*, p. 17

⁵⁸ Elain Graham, p. 33

⁵⁹ See: Bruno Latour, *We Have Never Been Modern*, trans. C Porter (Cambridge: Harvard University Press, MA, 1993)

⁶⁰ Cary Wolfe, *What is Posthumanism?* (Minneapolis: University of Minneapolis Press, 2010), p. 90

⁶¹ Cary Wolfe, *What is Posthumanism?*, p. 89

with those that it had previously denigrated, therefore entailing the confluence of other genealogies – ranging from the ‘animal’ through to the cyberneticist’s conceptualization of system and informational theory. It is clear that Wolfe broaches the work of systems and informational theory in order to reflect on the nature of human agency, and the extent to which humanity is configured as a result of the performative nature of one’s embodied existence. Nonetheless, cybernetics is focused on an examination of how human beings function within a system –interested in the performative nature of their embodied existence, there is a need to negotiate with the fundamental ontological and epistemological questions that regard the notion of a technologically-mediated vision of the human. Wolfe locates a clear responsibility to the relationships, not the boundaries, that we foster between species – human and nonhuman – and even within the categorical imperatives of humanism – gender, race, and other determining factors – the humanist notion of normativity is subtly being dismantled in order to demolish a rationalized image of a single-species determinism.

The emergence of the cyborg figure therefore becomes a significant icon within the cultural moment in situating the nature of human/machine coexistence. Norbert Wiener made fundamental contributions to the cybernetic tradition through his emphasis on the hybrid nature of man and machine which focused on factors of control and communication: specifically, the means by which information could be transported between organic and inorganic mediums.⁶² Hayles’ treatment of the cybernetic tradition operates in a similar manner to Wiener: both writers consider information flow as integral to the establishment of communication between mediums – Hayles and Wiener likewise consider the establishment of pattern, messages transmitted as

⁶² Wiener, *Cybernetics*, pp. 10/11

information, as one of the means by which one can communicate between embodied forms. For Donna Haraway, the cybernetic paradigm suggests 'a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves'⁶³. The incorporation of man and machine is figured as an intimate relationship – machines are 'prosthetic devices' and 'friendly selves'; in this regard, prosthesis can be seen as enacting the hybrid nature of the cyborg's embodied existence, since it collapses the distinction between organic and inorganic. Thus, it is clear to see that the cybernetic tradition enforces the materiality of embodied existence whereby the hybridity and prosthesis inherent to the cyborg figure allows one to elucidate on the means by which man and machine communicate.

Hayles regards the cyborg as a 'seamless articulation of intelligent machines and human being' and, as already discussed in chapter one, the hybrid nature of the cyborg is bound to the materiality of its embodiment.⁶⁴ As Hayles notes, embodiment cannot exist divorced from its material instantiation and thus she formulates a way of articulating the experience of embodiment and bodily existence through the polarities of inscription and incorporation. Hayles, elucidating on tensions inherent to Turing's imitation games, questions the extent to which the Turing test illustrates a disjunction in the interplay of 'enacted and represented bodies', between the performative and the ontological, such that this interplay is 'no longer a natural inevitability but a contingent production, mediated by a technology that has become so intertwined with the production of identity that it can no longer meaningfully be separated from the human

⁶³ Haraway, 'A Manifesto for Cyborgs', p. 154

⁶⁴ Hayles, *How We Became Posthuman*, p. 3

subject.⁶⁵ The significance of virtualised bodies offer compelling subjects in illustrating the interplay of Hayles' dialectics of pattern/randomness in order to expose the primacy of information over materiality, but not altogether abandoning the materiality of the posthumanities and therein embracing the disembodied tradition. In much the same manner, there is a clear contrast drawn between the materiality of bodily existence as the signification of the virtualised body highlights the efficacy of pattern over presence. This has the adverse effect by which the potentialities of what the term might mean become the exact determinant, as if the free play of signifiers effectively corresponds to material and social realities.⁶⁶ Thus, within Hayles' assumptions about posthuman embodiment, the subject exists in a plurality of embodied forms across a variety of media as opposed to being embodied in a fixed location, such as the human body. As Hayles argues, the human body is situated 'as the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prostheses becomes a continuation of a process that began before we were born'.⁶⁷

A point which is touched on all too briefly in chapter two, but bears foregrounding here is the fact that the history of posthumanism is not synonymous with the history of technology, as alluded to in various works by Andy Miah, Stefan Herbrechter and Ivan Callus, and Donna Haraway, especially. Donna Haraway's work largely abjures any

⁶⁵ Hayles, *How We Became Posthuman*, p. xiii

⁶⁶ Rather, as evident in queer theory and vitalist discourse, and likewise in the work of N. Katherine Hayles and other posthumanist thinkers, there is an emphasis on contingent productions and becoming-which is a condition of the virtual. As is often a predominant thematic throughout posthumanist discourse, the virtual subject is always facing the perpetual threat of being contaminated or hijacked by various entities

⁶⁷ Hayles, *How We Became Posthuman*, p. 2

mention of the posthuman, for its 'closeted-humanism' as she prefers new materialist approaches: one such example is her 'nature-culture continuum', itself a response to Latour's own interest in the Great Divides of nature and society, whose illusory divisions are not entirely dissimilar from the chasm that has emerged between human/nonhuman relations. In reflecting on the increasing transhumanization of the posthuman, we see a genealogical influence of social Darwinism which is implicit in the first utilisation of the term 'post-human' during Maurice Parmelee's *Poverty and Social Progress*: Parmelee considers it 'evident, in the first place, that it is inconceivable that human nature could be changed to the extent that is contemplated by their theory of perfectibility. Such changes would bring into being an animal no longer human, or for that matter mammalian, in its character', in that it would entail the 'elimination of such fundamental human and mammalian instincts and emotions'.⁶⁸ This concept of perfectibility regards the humanities ceremoniously, since the 'human' is all but signals those means and ends, devoted to those certain ends that are definitively anthropological and metaphysical in nature, and in so doing there is an assumed sense of purpose or *telos* – we assume that the humanities are directed towards a pre-determined goal, in the same manner that enlightenment narratives of progress have afforded us the fantasy of reforming and perfecting the human organism through secular brands of rationalism and techno-scientific innovation. This enlightenment narrative of the perfectibility of the species is one which the transhumanists inherited and championed in their fastidious belief in the capacity to legitimately reform the humanistic subject in accordance with humanistic values and enlightenment aspirations.

⁶⁸ Maurice Parmelee, *Poverty and Social Progress* (New York: MacMillan & Co., Ltd, 1916), p. 319

Transhumanism is one of the contested posthumanisms which is defined through its technological, political, and economic agendas, with specific attention to the individual's self-enhancement through emerging technologies. As aforementioned, Max More, founder of Extropianism – characterised by its belief in intelligent technology, rationality, and perpetual progress. Other philosophers of the posthuman era might define transhumanism as an 'ultra-humanism', an intensification of humanist values, by – in More's own words – 'anticipating the radical alterations in the nature and possibilities of our lives' which results from our entanglement with technology and science.⁶⁹ Leon Kass, another prominent transhumanist, considers the transhumanist project to be inherently dehumanising, one which threatens to make 'the essence of human nature the last project of technical mastery. In his moment of triumph, Promethean man will become a contented cow'; although, according to Nick Bostrom, another prominent and contemporary transhumanist thinker, the true concern with regards to altering human nature indefinitely is the consequences for human dignity.⁷⁰ For Bostrom, dignity is perceptible in 'what we are and what we have the potential to become, not in our pedigree or our causal origin'; for Bostrom, origins – the limits and boundaries of an entity – is always prosthetic in nature, it is always figured with an indeterminate yearning, it always perpetuated and negotiated through liminality.⁷¹ Nevertheless, returning to the premise of transhumanism as an 'ultra-humanism',

⁶⁹ Max More, 'The Extropian Principles 3.0: A Transhumanist Declaration' *Max More* (1998) <<https://www.maxmore.com/extprn3.htm>>

⁷⁰ Leon Kass, *Life, Liberty, and Defence of Dignity: The Challenge for Bioethics* (San Francisco: Encounter Books, 2002), p. 48

⁷¹ Nick Bostrom, 'In Defense of Posthuman Dignity', in *Bioethics*, Vol. 19 (University of Oxford, 2005), pp. 202-214 <http://www.nickbostrom.com/ethics/dignity.html#_ftn5>

Bostrom's idea of the pinnacle of the transhumanist movement is a fundamental break with human biology (post-biological) through technological augmentation.⁷²

Francis Fukuyama's *Our Posthuman Future* explores the possibility of a posthuman future, based on a transhumanist perspective – which names itself posthuman in the fact of its desire for perpetual progress through technological enhancement. The notion of a posthuman future – or the disruptive nature posthuman futures – is explored in chapter two by building on Fukuyama's "end of history" discourse. Bostrom's understanding of dignity is one that argues for the importance of an ethical principle which is inclusive of posthuman beings, and in so doing Bostrom unleashes a dichotomous relationship between bioconservatives – of which Kass and Francis Fukuyama, would regard themselves, of those critics who are opposed to technological augments – and transhumanists, who seek to reform human nature through technological augmentation. In thinking about the tacit metaphors and orientational structures used by contemporary science fiction, in contemplating the origins and potentialities of convergent technologies, we must elaborate further on Matthew De Abaitua's 2015 science fiction novel *If Then* which concerns the aftermath of a cataclysmic event that results in the collapse of society, called the Seizure, wherein the people of the small English town of Lewes submit themselves to the Process, a collection of computer algorithms which govern the townspeople's lives. The Seizure affects both a sense of action and disruption, for it signifies one potential ending to history whereas it also captures, within that moment of cataclysm, a potential spiritual renewal in the collective consciousness of humanity, which is figured in the

⁷² Nick Bostrom, 'Transhumanist Values', in *Ethical Issues for the 21st Century*, ed. Frederick Adam (Oxford: Philosophical Documentation Centre Press, 2003), p. 51

novel as an ongoing activity dictated by more hostile, conflict-driven means. In a manner of speaking, we must elucidate on the nature of technological convergence and the extent to which its development is worth situating as progress and potentiality, or whether it has an arresting effect on the relationality and development of species.

Timothy Morton's work is situated within ecological theory and object-oriented ontology [or OOO as a short-hand] through which Morton theorises the entanglement of the ecological in the present, which in itself implies the coexistence of the present with ecological catastrophes which – according to Morton – have 'already occurred'.⁷³ In this way, the dual temporalities of the posthuman – the “always already” and the “not quite yet” – exist also in Morton's thought. The wider OOO movement maintains a theory of the ontology of objects, on the scale of planetary, human and nonhuman life, which seeks to unsettle the privileging of human existence over nonhuman objects by proposing a ‘Copernican Turn’, as Levi Bryant has it.⁷⁴ OOO was coined by Levi Bryant, and likewise “object-oriented philosophy” is framed as a ‘subspecies’ of speculative realism by Graham Harman.⁷⁵ Ian Bogost proposes an alien phenomenology, where the alien is not ‘limited to another *person*, or even another

⁷³ For Timothy Morton's breadth of work in ecology and ecocriticism, see: *Ecology Without Nature* (Cambridge, Mass.: Harvard University Press, 2007); *The Ecological Thought* (Cambridge, Mass.: Harvard University Press, 2010); *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis: University of Minnesota Press, 2013); *Dark Ecology* (2016); *Humankind: Solidarity with Nonhuman People* (London: Verso, 2017); and *Being Ecological* (Cambridge, Mass.: MIT Press, 2018).

⁷⁴ Levi Bryant, ‘Onticology – A Manifesto for Object-Oriented Ontology Part I’, *Larval Subjects* [Accessed 29/08/22] <<https://larvalsubjects.wordpress.com/2010/01/12/object-oriented-ontology-a-manifesto-part-i/>>

⁷⁵ Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects* (Chicago IL: Open Court, 2002), p. 49

creature', but to 'anything – and everything – to everything else'.⁷⁶ As Ian Bogost contends, speculative realism is dependent on a speculative spirit: indebted to Harman's notion of 'black noise', which describes the 'background noise of peripheral objects', Bogost calls for an alien phenomenology which '[goes] where *everyone* has gone before, but where few have bothered to linger.'⁷⁷

BOOM AND BUST

Whilst the introduction has spoken to a certain speculative spirit present in contemporary posthumanist thought, engendering an explosion of new theoretical and fictional forms corresponding with an implosion of the boundaries between disciplines, little has been spoken of the British context of these implosions / explosions. As such, this final section of the introduction speaks to the political and aesthetic implications of British Boom science fiction. According to Andrew M. Butler, science fiction has been booming, where this science fictional Boom is both an aesthetic explosion of narrative forms and a socio-political re/configuration when viewed through the lens of New Labour's ascendance to government. In the same way that posthumanism is not just the latest conceptualisation of the human, but an explosion of narrative possibilities unsettling (always already) contested identity categories, so too is science fiction experiencing its own explosion of narrative possibility. If the Boom implies an explosion, where the boundaries of sf become increasingly fuzzy and entangled with, as discussed already, other genres of writing – and vice versa, then the British Boom

⁷⁶ Ian Bogost, *Alien Phenomenology: or What It's Like to Be a Thing* (London: University of Minnesota Press, 2012), p. 34

⁷⁷ Ian Bogost, *Alien Phenomenology*, p. 32, 34

is an ongoing project of science-fictional entangled storytelling. This is exactly the kind of ongoing enactment which Donna Haraway describes in 'A Cyborg Manifesto' where she argues that the 'boundary between science fiction and social reality is an optical illusion.'⁷⁸

According to Butler, Jeff Noon's Vurt stories are 'cyberpunk-flavoured' fictions, referencing a previous article on those science fictional works which are not aligned with cyberpunk, and for which the term post-cyberpunk is not appropriate; in the case of Noon, due to the fact his work refuses many of the trappings of the conventional cyberpunk.⁷⁹ For Butler, there are two significant breaks from the cyberpunk story engine: the choice of Manchester, characterised as a 'rain-drenched city to the north-west of Singland' in the time before the 'primitive days' of England, and the choice of the Vurt functioning less as uniquely technological systems.⁸⁰ Noon's Vurt stories imagine an alternative England, as Noon describes it: the Unknighthed Kingdom of Singland, and Manchester is a weakened node, where new forms of embodied existence can emerge and such creatures can traffic across realities. The posthuman curator herein expresses a posthumanizing function that uses story engines to explore the posthuman in order to violate the logic of humanism, the fascination and power which the image of the posthuman engenders. Speaking of the 'posthuman', 'posthumanity' and 'posthumanization' – as has been done throughout the introduction, thus far – points towards a real or fictive discursive object. As Stefan

⁷⁸ Haraway, p. 149

⁷⁹ Andrew M. Butler, 'Journeys Beyond Being: The Cyberpunk-Flavoured Novels of Jeff Noon', in *Beyond Cyberpunk: New Critical Perspectives*, ed. Graham J. Murphy and Sherryl Vint (Oxon: Routledge, 2010), p. 69

⁸⁰ Jeff Noon, *Pollen*, p. 4

Herbrechter points out, this discursive object 'ends up 'constructing' its own 'reality'', and whether the posthuman can actually be said to exist becomes more or less irrelevant since the wider imagination embraces the notion of the posthuman as something which 'either already exists, that it might be in the process of emerging, or that it might have become somehow 'inevitable'.'⁸¹

At this juncture, the necessary question to pose is: why the *British SF Boom*? The simplest and perhaps most concise answer to this question comes courtesy of Istvan Csicsery-Ronay Jr., who argues that the resilience of the British Boom depends on its counter-hegemonic tendencies in adapting to a 'different set of global-cultural political coordinates'.⁸² These shifting coordinates are more often framed as being driven by the abstract forces of globalisation, where there is, as Andrew M. Butler has it, a 'decentring of the hegemonic grasp of the Western Enlightenment narrative as the only suitable underpinning for sf'.⁸³ Nevertheless, Butler exposes the absence of any objective criteria to determine the "'boom-ness" (boomitude? boomosity?)' aside from a conviction that the discourse surrounding a Boom is constitutive of its existence.⁸⁴ Which is to say, this self-awareness from Butler – so too from various writers, critics, and readers in 'Voices of the Boom' – signals the extent to which the Boom is a story-engine, and Butler merely one of its curators; in the case of the latter, one not entirely

⁸¹ Stefan Herbrechter, *Posthumanism: A Critical Analysis*, p. 37

⁸² Hugh Charles O'Connell, 'The British Science Fiction Boom: Tracking the Currents of the Future between Postimperialism, Postnationalism, and Globalization: Editorial Introduction', in *CR: The New Centennial Review*, Vol. 13, No. 2., "The British Boom" (Michigan State University Press, 2013), p. 4

⁸³ Hugh Charles O'Connell, p. 5

⁸⁴ Andrew M. Butler, 'Thirteen Ways of Looking at the British Boom', in *Science Fiction Studies*, Vol. 30, No. 3, The British SF Boom (SF-TH Inc, 2003), p. 374

certain of its existence. In the words of Mark Bould, invoking the promotional tag from Danny Boyle's *28 Days Later* (2003): '[t]he end is extremely fucking nigh'.⁸⁵

A period, if the Boom can be said to possess clear boundaries, which is continuous with the emergence of new British writers reinventing the conventional forms of science fiction. Originating from a 2001 conference and a subsequent special issue of *Science Fiction Studies* which inaugurated the Boom was published in 2003, although those voices called for this "Boomosity" have sketched the lifespan anywhere in the region between 1990-2003. What is the clear intention for this thesis is to re-read, and perform the British Boom in the context of a time of renewed tension and division within the British union, or to use the full imperial title: United Kingdom of Great Britain and Northern Ireland, where different senses of what a British identity emerges. Which is to say, if the notion of a posthumanism is broadly contested and unsettles disciplinary frameworks, so too is the "British" component of these questions equally under assault. As Andrew M. Butler makes clear, what comes to emerge in British Boom science fiction is a 'vexed, postimperial Britishness registered by a confluence of paradoxical and contradictory factors.'⁸⁶

For the sake of exploring this 'vexed' British identity, it makes sense to view Britain as an assemblage composed of multiple intra-acting components, in this case states. Where the discourse inherent to the British Boom reflects on British identity as predominantly post-imperial and post-national, the Boom is felt, aesthetically, in the

⁸⁵ Mark Bould. Andrew M. Butler, Brian W. Aldiss, Keith Brooke, Colin Greenland, Gwyneth Jones, Paul Kincaid, Ken MacLeod, Patrick Parrinder, Justina Robson and Andy Sawyer, 'Voices on the Boom', *Science Fiction Studies*, Vol. 30, No. 3 (SF-TH Inc, November 2003), p. 490

⁸⁶ Andrew M. Butler, 'Thirteen Ways of Looking at the British Boom', in *Science Fiction Studies*, Vol. 30, No. 3, The British SF Boom (SF-TH Inc, 2003), p. 375

diffractive blast wave propagating out from its announcement, and in the process rupturing and resolving the boundaries between genres. Peter Boxall argues for a powerful desire, when speaking of the post-millennial British novel, to ‘reconnect with a ‘real’ that was jettisoned by postmodernist epistemological scepticism’.⁸⁷ Jonathan McCalmont, in an article for his *Blasphemous Geometries* series, explores the entanglement of science fiction with young adult fiction, even implying that YA could be the latest of science fiction’s ‘expansionist tendencies’.⁸⁸ For McCalmont, science fiction is by its nature ‘non-hegemonic. [...] SF is cosmopolitan rather than parochial. Multicultural rather than monolithic. Neophilic rather than xenophobic.’⁸⁹ Throughout the thesis, the dynamic tension between British Boom science fiction as cosmopolitan or parochial - as inheriting human values and systems of thought – is drawn out.

In a foreword to Justina Robson’s short story collection *Heliotrope*, Adam Roberts challenges the various categorisations of Robson as an explicitly hard science-fictional property. Indeed, upon the release of her earlier novels such as *Silver Screen* (1999), *Mappa Mundi* (2001), and *Natural History* (2005), there is a clear reputation established for Robson as a hard science fiction writer for tackling themes as broad as AI, speculative neuroscience, and interstellar space opera. Nevertheless, Roberts uses *Living Next Door To The God of Love* (2005) and her more recent Quantum Gravity sequence (2006-2011) as illustrations of Robson’s more thoughtful and

⁸⁷ Peter Boxall, *The Cambridge Companion to British Fiction: 1980-2018*, ed. Peter Boxall (Cambridge: Cambridge University Press, 2019), p. 63

⁸⁸ Jonathan McCalmont, ‘A Virus With Space-Shoes – SF, YA and all that’, *Blasphemous Geometries* [Accessed 30/03/21]

<<http://futurismic.com/2008/05/28/a-virus-with-space-shoes-sf-ya-and-all-that/>>

⁸⁹ Jonathan McCalmont, ‘A Virus With Space-Shoes – SF, YA and all that’

nanced work which are meditations on, and mediations between, reality and fantasy. Indeed, in Roberts' reading, what is most illuminating in Robson's work (and Adam Roberts', for much the same manner) is the performance of those various modes of reality (in the worlds of SF, of Fantasy, and of Horror) to intra-act and unsettle notions of self-identity on an individual and species level.

For Roger Luckhurst, the British SF Boom is best understood as the narrative possibilities engendered by Boom writings – in Luckhurst's reading, the parameters extend to sf, fantasy, gothic, and horror – alongside the problems of a mainstream culture. Which is to say, what is referred to as cultural governance is the attempt to discipline culture with the intent to homogenize and render it mainstream. As such, the British Boom is 'part product of an energetic cultural-political scene', where science fiction becomes an apparatus used to explore elements of the culture governance implied by Blairite politics.⁹⁰ Where the culture industries were supportive of New Labour's adoption of 'third-way politics', there opened up a site for critique which was not present in 'the co-optation, complicity, or evasion manifested in other cultural forms'⁹¹ Following this logic, however, Luckhurst is not interested in configuring sf as a superior aesthetic mode of cultural production, instead conjecturing to conceive the British Boom as a 'product of resistance to the mainstreaming effect' that dominated Blairism and its contemporary cultural governance.⁹² Where Luckhurst saw a broader cultural governance at work in the early days of the Boom, courtesy of Blairism and New Labour, these forces would have upended and been displaced by a resurgent

⁹⁰ Roger Luckhurst, 'Cultural Governance, New Labour, and the British SF Boom', in *Science Fiction Studies*, Vol. 30 (SF-TH Inc, 2003), p. 432

⁹¹ Roger Luckhurst, p. 424

⁹² Roger Luckhurst, p. 426

nationalism. Reynolds has a lot to say about cultural governance – some of his sf works tackle political upheaval, allegorically, whilst other works destabilise and unsettle the normative assumption of certain paradigms for framing political discourse. Similarly, in contemplating the origins of the Demarchist faction within the Revelation Space universe, Reynolds cites Joan D. Vinge's *The Outcasts of Heaven's Belt* as introducing him to a participatory democracy – the notion of 'Demarchy' – wherein the population of Vinge's futuristic state are connected to computer systems which allow to vote on events.⁹³ It is clear that Reynolds appropriates the political notion of Demarchy and applies it to the Demarchist culture featured in the Revelation Space universe, whereby Reynolds conceives of a cybernetic future in which the Demarchists are subliminally enhanced through cybernetic implants. In Reynolds' later 2018 novel *Elysium Fire*, models of political dissent are the focus of the story by returning to the Revelation Space universe and the time of Panoply, before the collapse of Demarchist culture. The Prefects are the interstellar emissaries of the law across the Panoply, the interstellar human civilisation of the novel's setting, and *Elysium Fire* follows Prefect Dreyfus' investigation of a series of random deaths by virtue of 'melting' – which is to say, the neural implants in citizen's heads shorting and killing them. Dreyfus' investigation, coinciding with the wider political fallout of the secession of several human habitats from the Glitter Band – the assemblage of post/human communities, which is led by Julius Devon Garlin Voi. Where Reynolds' is un-characteristically pointed in his skewering of contemporary political ideologues with the character of

⁹³ Alastair Reynolds, Interview by Duncan Lawie, (accessed 20.07.15)
<<http://www.zone-sf.com/alreynolds.html>>

Julius Devon Garlin Voi, exposing the text's preoccupations with satirising Faragism and Trumpism.

In *Broken Heartlands*, Sebastian Payne charts the various sociological and political upheavals which underpinned the decisive Conservative victories of the 2016 referendum and 2017 election. In Payne's estimation, the 'disenfranchised were finding their disruptive voice' as a direct response to 'the culmination of years and decades of neglect by successive governments and politicians.'⁹⁴ In the context of Payne's work, the perception of the Blairite New Labour project having 'succeeded and failed', on Nigel Farage '[reshaping] British politics' and the stakes in the myriad views 'on the future of conservatism'.⁹⁵ In the opening two decades of the new millennium, Britain – or to use the full imperial title: The United Kingdom of Great Britain and Northern Ireland – has been the subject of as many assaults upon its sovereign identity as the liberal humanist figure, the vast majority of which have been self-inflicted. In Brexit there is the combined effects of the failure of the British neoliberal project (the 2008 financial crash), the dying of Empire (2001 Iraq War), and the impact of the changes that technology and communication have had on the public sphere. This is not to say that reading Brexit as a consequence of past political failures should detract from the broader cultural and political urges emerging in Britain in the period. De Abaitua codes this idea of resistance throughout his trilogy of loosely connected novels – all of which 'share a world and a theme'.⁹⁶ If Luckhurst counsels

⁹⁴ Sebastian Payne, *Broken Heartlands: A Journey Through Labour's Lost England* ((Clerkenwell, London: Pan, 2022), p. 32

⁹⁵ Sebastian Payne, p. 35

⁹⁶ Matthew De Abaitua, 'An Evening with Matthew De Abaitua', Interview with Andy Sawyer. (Liverpool: Waterstones, 2016)

readers to think contextually and temporarily about emergent trends, De Abaitua's work should be considered within his particular historical conjuncture – the first of his novel's releases, *The Red Men* (2007), coincided with the financial crisis of 2008 and his latter novels *If Then* (2015) and *The Destructives* (2016) anticipate a post-Brexit world. For one, De Abaitua employs the mythical power of the Blitz spirit when he performs the counter-revolutionary power of the Dyad, the anti-technology faction which opposes Monad's interventions.

Nevertheless, all three curators of the Boom – Andrew M. Butler, Mark Bould, and Roger Luckhurst – surely have a relationship of stewardship for what was an already contemporaneous movement. What might be apparent in the variations in each Boom writer is that Butler is the only writer to comprehensively explore the markers of the Boom, for surely what constitutes the Boom is the commercial success of what is “booming”. Istvan Csicsery-Ronay, Jr's 2003 editorial on the British SF Boom ends with an eye to the ‘darkening horizons’ of the Boom, specifically referencing Britain's entry into the Iraq War and the consequential ‘geopolitical confusion’, the potential of which might ‘unravel the context that has allowed recent British sf to flourish.’⁹⁷ Nonetheless, as Csicsery-Ronay Jr makes clear, a literary Boom is ‘an explosion of creativity, not of profits.’⁹⁸ As Andrew M. Butler makes clear, the Boom has no resident polemicist – no key writer, even though many critics, including Butler himself, favour the work of Miéville.

⁹⁷ Istvan Csicsery-Ronay, Jr., ‘Editorial Introduction: The British SF Boom’, in *Science Fiction Studies*, Vol. 30 (SF-TH Inc, 2003), p. 4

⁹⁸ Csicsery-Ronay, Jr., ‘Editorial Introduction: The British SF Boom’, p. 5

Matthew De Abaitua, one of the prominent voices within the more contemporary period of the British Boom, explores the contemporaneousness of his own fictional work: 'I write science fiction because I'm suffering from Future Shock. I feel that technology is reshaping us, overwhelming us, every day. I am in awe and terrified by the technological sublime'.⁹⁹ De Abaitua reflects on science fiction as being caught between two modes – 'think-fiction' and 'dream-fiction' – which are story engines, conceptualisations of the sfnal, De Abaitua borrows from Jonathan Lethem to capture 'that mix of speculation and the fabulous'.¹⁰⁰ Where De Abaitua is concerned with the manner in which technology is 'overwhelming', his novels nevertheless probe the profound spiritual and alchemical underpinnings of techno-scientific thought. By this logic, his novels take the position of undermining a certain technophilia or techno-optimism of which science fiction – or the sorts of themes of cyberpunk and hard sf which his work courts – is typically accused.

Stefan Herbrechter and Ivan Callus have written extensively about the technological imperative to which posthumanist theory seems subject, arguing that the posthuman is 'overdetermined by technology' and the story engine that it may be possible for the human to engineer itself. Similar to De Abaitua, Herbrechter and Callus call for a posthumanism without technology, or rather, the multiple ways in which this posthumanization occurs in absence of technology. For De Abaitua, this is the

⁹⁹ Matthew De Abaitua, 'IF THEN. Matthew De Abaitua's chilling contemplation of an algorithm-driven society', in *Strange Alliances* [Accessed 06/02/2019]

<<https://strangealliances.wordpress.com/2015/09/22/if-then-matthew-de-abaituas-chilling-contemplation-of-an-algorithm-driven-society>>

¹⁰⁰ Jonathan Lethem, 'Close Encounters: The Squandered Promise of Science Fiction', in *Village Voice Literary Supplement* (April 1998), pp. 145-146

entanglement of cognitive and estranging modes of narrative – harkening back to Darko Suvin; for Jonathan Lethem, ‘think-fiction’ is the extrapolation of reasonable hypotheses, whereas ‘dream fiction’ is the wilful embrace of the strange and the unfamiliar. Detractors of Brexit perceive it as a destructive urge – which is a notion that Matthew De Abaitua anticipates and explores frequently in his fiction, from *The Red Men* to *The Destructives*. Beyond the nationalist concerns of Brexit, and Britain’s relationship with the European continent, there are questions which return Britain to the ‘capitalist, imperialist, patriarchal histories, systems and structures that are historically and foreseeably responsible for climate destabilisation’¹⁰¹

In De Abaitua’s 2008 *The Red Men*, the anti-technology revolt, the Great Refusal, champions the spirit and iconography of the Blitz period of WW2, as the Brexit party would later invoke during the eventual Referendum campaign. De Abaitua’s fiction frequently skewers the cozy catastrophe, the comfort and privileges of those with capital, by charting the redundancy of the middle classes – the voting group which conventional political parties would seek to court. De Abaitua’s fiction is largely cynical of the efforts of centralised government to model or govern communities, suggesting that the current mode of techno-capitalist exploitation of the working classes will be undercut by a more unwieldy and unknown technological future. Nina Allan, contemporary British science fiction writer and columnist for acclaimed *Interzone* magazine, regards Matthew De Abaitua amongst a group of writers who constitute a ‘new New Wave’.¹⁰² Broadly considered, this wider group – consisting of other British

¹⁰¹ Mark Bould, *The Anthropocene Unconscious: Climate Catastrophe Culture* (London: Verso, 2021), p. 4

¹⁰² Nina Allan, ‘Weird Wednesday #3’, in *The Spider’s House* [Accessed 18/06/17]

< <http://www.ninaallan.co.uk/?p=4358> >

Boom writers: Simon Ings, Anne Charnock, M.T. Hill, James Smythe, and Tim Maughan – utilise science fiction to engage with social and political questions. As outlined, De Abaitua's work is prescient in its speculation and performative navigation of 'the seepage of redundancy into the middle class', following Hannah Arendt's observation regarding the superfluity of the masses.¹⁰³ For the most part, De Abaitua's work is politically engaged with the futility of resistance and the importance of kinship throughout his trilogy. Nevertheless, what De Abaitua's novels outline is the realisation of a thwarted self-sufficiency, a Britain in which individuals have become utterly alienated from each other and themselves by the 'future shock' engendered by technology. As explored in chapters one and two, these manifests, not just on a neoliberal level but on a communal, familial, and fraternal sense, contemporary Britain has been fractured by the broader destructive cultural and political urges which, by no means new and revolutionary, but lingering discontent, abating and maintaining.

In as much as cyberpunk and Weird fiction is subject to this phenomenon of 'evaporating genres', crime fiction has in recent years been subject to literary experimentation, or – as Jeff Noon has it – remixing that is characteristic of much contemporary science fiction. As is discussed in chapter two, Noon's science-fiction-noir *A Man of Shadows* (2017) disrupts the trappings of the hardboiled detective, by having the private-eye story situated in a Noonian liminal space which threatens stable notions of time, space, and (human) agency. Noon's surrealist-procedural seems inspired by Italo Calvino's *Invisible Cities* (1972), but also calls to mind China Miéville's *The City and the City* (2009), which is a deliberate invocation, for Miéville is conceived – for many key sf critics – as a key polemicist of the Boom. It is worth noting that many

¹⁰³ Hannah Arendt, *The Human Condition* (Chicago IL: University of Chicago Press, 1958), p. 118

of the exemplary writers associated with the British Boom, such as China Miéville, M. John Harrison, Hal Duncan, Gwyneth Jones, and Justina Robson, have been conceived as exemplary writers of the New Weird. In fact, Caroline Edwards, in her essay on the relationship between literary experimentation and genre conventions, conceives of Noon's *Vurt* trilogy – ignoring *Automated Alice* and short-story collection *Pixel Juice* – as a 'border-crossing' with the New Weird.¹⁰⁴

Alastair Reynolds' brand of science fiction is one 'dedicated to turbulence, transformation and unpredictability', and as such science fiction's status as a 'mass cultural phenomenon', in Reynolds' own words, which grapples with the various scientific, technological, and sociological upheavals. It is as if literature, philosophy, and the study of nature should develop deep time perspectives in a non-anthropocentric frame of reference. Geologist Helen Gordon presents such a non-anthropocentric view of geological time as '[t]he impersonal, eroding sweep of the ages challenges our instinct for memorialisation – our need to ask, [...] [w]hat will survive us?'¹⁰⁵ Whilst Alastair Reynolds refuses many of the sub-genres associated with contemporary science fiction, Reynolds does share an affinity with the future history as a 'single fictional entity – a whole larger than the sum of its parts' – which he associates with his peers: Larry Niven, Gregory Benford, Bruce Sterling, Paul McAuley and Stephen Baxter.¹⁰⁶ As is expanded upon in chapter two, conceptualising

¹⁰⁴ Caroline Edwards, 'Experiment and the Genre Novel: British Fiction, 1980-2018', in ed. Peter Boxall *The Cambridge Companion to British Fiction: 1980-2018* (Cambridge: Cambridge University Press, 2019), p. 154

¹⁰⁵ Helen Gordon, *Notes From Deep Time: A Journey Through Our Past and Future Worlds* (London: Profile Books, 2021), p. 21

¹⁰⁶ Alastair Reynolds, *Galactic North* (London: Gollancz, 2006), p. 333

Alastair Reynolds' work as deep-time science fictional novels deeply unsettles humanist notions of time, space, causality, and agency. Not to mention, in the context of a wider conversation about transhumanist potential, the im/possibility of transcending the finitude of embodied existence in these deep-time and interstellar visions of humanity's future. Curators provide a prevalent social function in Reynolds' universe-building, and curation as a theme persists across the vast majority of Reynolds' stories, with most texts sharing a preoccupation with (human) inheritance across the deep time of the universe.

It is, perhaps, clear to remark that the work of Jeff Noon performs the problem of posthumanism in ways that refuse to collapse back into a domestication – again, not to imply that any of these exemplary writers are guilty of such acts. What it is to say, is that Noon is hardly concerned with science fiction as a cordoning off into disciplinary spaces but is instead making ambiguous the relationship of knowledge to finitude. Indeed, Noon has identified in various interviews his interest in mathematics, especially his indebtedness to Gödel's theory of incompleteness and nested realities, going so far as to dramatize the Vurt series as cut through by mathematics, logical problems, and Lewis Carroll's Alice.¹⁰⁷ The Vurt Sequence shares a preoccupation with the Vurt: an irrational, dream-like substrata of existence delineated into varying layers of reality governed by metatextual character, the Game Cat, and accessed by imbibing feathers, the drug-laced vessels for passing through into the Virtual plane of reality. As such, the Vurt is to be understood as a 'liberation of the psyche, in its most advanced form', or rather a repository, via feather, of dreams, myths and fables, to the

¹⁰⁷ Jonathan Thornton and Jeff Noon, 'Jeff Noon Interview – A Man of Shadows', *Fantasy Faction* <<http://fantasy-faction.com/2017/jeff-noon-interview-a-man-of-shadows#>> [Accessed 10/05/2018]

degree that the Virtual world cleaves the boundaries between conventional systems.¹⁰⁸

STORY ENGINES

The term story engine is inherited from British Boom writer Simon Ings' 1994 post-cyberpunk science fiction novel *Hot Head*. Whilst Simon Ings' body of work is not considered in the context of the British Boom, the use of "story engines" point to an emerging trend which Ings names but other writers of this British Boom era articulate through the tropes, narrative arcs and the subject positions possible in a posthumanizing context. Nevertheless, in Ings' post-cyberpunk world, Malise is a posthuman, once charged with the task of defeating Moonwolf – a rogue lunar artificial intelligence. Datafat is the novel's term for radically new cybernetic implants, often referred to as 'fat'; cyberneticist, Snow – one of the antagonists of the novel, engineers an entirely new material instantiation of this augmented technology as a radically advance tissue sample. What is unique about Snow's contribution is that, in the latest instantiation of the 'fat, the 'datafat models the operator and attempts to achieve a rest state between itself and its model.'¹⁰⁹

There are two moments when the term story engine is invoked throughout the novel: the first, and most explicit, is Judith Foley's story engine, with Foley one of Snow's former lovers, which models the environment as engaged with/in a feedback loop with cybernetic-agents. The story engine is more than just a fiction, as Malise has it, but

¹⁰⁸ Jeff Noon, *Pollen*, p. 8

¹⁰⁹ Simon Ings, *Hot Head*, p. 153

something akin to a “storage medium for personality”.¹¹⁰ By comparison, the second story engine comes at the close of the novel, after Malise is eaten by the Jovian, Moonwolf, where the ‘residues of [Malise’s] personality’ become reducible to units of meaning which are intended to be reconciled with the artificially-intelligent, Moonwolf. The “story engine” is, within the context of Ings’ novel, is both ‘a tool-kit by which to describe personality’ but also, the means by which a human being is able to communicate with the alien intelligences of Lunar AIs. For Ings, the story engine is the medium through which Malise’s life can be rendered comprehensible to a superintelligence, and the manner in which Malise’s personality is continuously re-configured to be able to sustain communication with such a nonhuman agent.¹¹¹

Which is to say, the notion of artistic practice is profoundly re/configured in Ings’ novel as the form of the novel becomes a means of communicating human- and nonhuman-centric stories or – as N. Katherine Hayles argues for, in her *Writing Machines* – ‘the crafting of materiality so as to produce human-intelligible meanings’ which problematises what is understood as “human” and “intelligible”.¹¹² For this, it is arguable that there is a third story engine invoked by Ings’ work of science fiction, which is the form of the novel itself – the act of meaning-making that positions the reader in a specific relationship with the world embodied by the text is re/contextualised by the revelation of Ings’ text as a story engine. In the way that Ings’ *Hot Head* is structured by chapters named after the Tarot system, a persistent tropic system in the novel, this later becomes re-conceptualised as a new kind of form and artifact. In this case, the story of a human woman, Malise, communicated to an alien

¹¹⁰ Simon Ings, *Hot Head*, p. 172

¹¹¹ Simon Ings, *Hot Head*, p. 270

¹¹² N. Katherine Hayles, *Writing Machines* (Cambridge and London: The MIT Press, 2002), p. 107

intelligence using the Tarot system as an interface; in which case, the narrative is less the coherent and logical story of a (human) subject communicating their life in linear fashion, but a material metaphor for the recursive and often traumatic relationships of humans to the nonhuman processes, and inscriptive devices, which inform and are generative of their material existence. This is to say, the form of the science fictional text is an embodied experience, and in this new materialist re/configuration which the thesis advocates for, meaning and materiality are deeply entangled.

As Karen Barad makes explicit, in her posthumanism performative framework, which adopts a quantum physics account of materiality: 'Thought experiments are material matters'¹¹³. In which case, there are three story engines with which this thesis concerns itself: those fictions which engage the relationship between individual and environment, fictions which attempt to communicate and reconcile humanness to that which is nonhuman, and finally, the kinds of sf which unsettles the meanings-making possible by the materiality of the text itself. This is to speak to N. Katherine Hayles' commitment that books are not just 'encoded voices', but 'physical artifacts whose material properties offer potent resources for creating meaning.'¹¹⁴ This has been alluded to previously with the discussion of Haraway's multispecies universe but is modelled across Noon's body of work, especially the Vurt series: including *Vurt* (1993), *Pollen* (1995), *Automated Alice* (1996), *Nymphomation* (1997), and *Pixel Juice* (1998). Whereupon these fictions engender the realisation that the human is not the only

¹¹³ Karen Barad, 'On Touching – The Inhuman That Therefore I Am (V.1.1)', in eds. S. Witzgall & K. Stakemeier *Power of Material / Politics of Materiality* (Chicago IL: University of Chicago Press, 2018), p. 153

¹¹⁴ Hayles, *Writing Machines*, p. 107

meaning-making location, and as such re-orienting the inquiry of the thesis towards the question of the post/human is done so away from narratives of mastery. This re-orientation necessarily involves the end of a humanistic conception of the human for which the figure of the posthuman curator becomes necessary in investigating what is possible inside and outside of conventional parameters. For which curation here carries with it the burden of capturing and preserving the structures by which the human has been constituted within specific discourses and formulated within certain eras, but also the ways in which these structures can be refashioned that reflects this ongoing posthumanization.

Mark Bould explores the tendency in science studies to detach science from the social world, and how recent criticism – embodied by the likes of Bruno Latour – seeks to unsettle ‘science’s self-image of objectivity, neutrality and universality’ in order to generate new images of sf.¹¹⁵ As Adam Roberts makes clear, in contemplating the conventions or systems of inscription which have previously codified science fiction, there is a necessary “reconjugation” of attitudes towards specific works of art depending on historical genealogy or conceptual norms. Whilst being aware of the earlier manifestations of science fiction and their place within the broader tradition, Roberts is aware that science fiction has indeed evolved – and that ‘forms evolve and change, and that full comprehension requires a certain attention to these changes and evolutions’.¹¹⁶ Various curators of the Boom speak to science fiction’s tendency to normalise ‘human-pig hybrid embryos, commercial spaceflight, neuroprosthetics,

¹¹⁵ Mark Bould, *Science Fiction* (London: Routledge, 2012), p. 20

¹¹⁶ Adam Roberts, *The History of Science Fiction* (Hampshire: Palgrave MacMillan, 2006), p. 91

cyberwarfare'.¹¹⁷ Which is to say, following Hayles, science fiction's tendency to normalise that which unsettles a normative view of humanity and human meaning-making is where the most potent explorations and performances of this posthumanization occur.

Alastair Reynolds' 2008 science fiction novel *House of Suns* explores the thought experiment of posthuman characters who are capable of persisting across the breadth of interstellar timelines, where the scale of such an existence situates them as having planet-altering consequences in influencing the development of entire ecosystems and cultural genealogies. And yet, the central tension, as explored in chapter two, is the magnitude of such an embodied existence when conceptualising their million-year span of identity as increasingly precarious when intra-acting with forces of deep time, alongside inscriptive practices which are generative of their embodied existence. Purslane is an interstellar posthuman: in fact, Purslane is a shatterling – named for the thousand clones of Abigail Gentian, with Abigail Gentian being the thousandth shatterling and the nominal member of House Gentian. The text is narrated from the perspective of two shatterlings, Purslane and Champion, where both posthuman curators illuminate the extent to which living through deep time – despite allusion to cybernetic modifications to process and alter memories – is unfortunately limited by the human mind, which is insufficiently adapted for experiencing interstellar time 'in the raw'. To reiterate the point, the figure of the posthuman curator serves to illustrate

¹¹⁷ Lauren Beukes, Kim Stanley Robinson, Ken Liu, Hannu Rajaniemi, Alastair Reynolds & Aliette de Bodard, 'Science fiction when the future is now: Six authors parse the implications of our unhinged era for their craft', *Nature* 552, p. 333 (2017)

< <https://www.nature.com/articles/d41586-017-08674-8>>

that the human is not alone in inscribing a particular conception of humanity, nor is the human unique in its systems of inscription.

The inherent tension which emerges between the human and the posthuman, between personal and impersonal geologies: for the curators of House Gentic, (auto)biography and geology intersect in the underlying strata of narrative apparatuses – the threading process. Indeed, all of Reynolds' deep time works – *Pushing Ice*, *House of Suns*, and *Slow Bullets* – are conscious of the inscriptive markers which stretch forwards and backwards, locating (post)humanity within a geology that is intensely (auto)biographical. This is a discussion thread which is drawn out in more detail in chapter two, as the multiple temporalities suggest that time is distinctly entangled and plural, for the time in which (post)human societies live is the deep time of geological and cosmic processes. As alluded to prior, the geological and cosmic scale unsettles the dichotomy of these forces, where the Anthropocene – from which a notion of deep time emerges – and entangles natural and human forces.

Kurzweil's interest in extrapolative narratives is evident from the titles of his futurological texts – *The Age of Spiritual Machines: When Computers Exceed Human Intelligence* (1998) and *The Singularity is Near* (2005), and yet this extrapolative spirit requires some unpacking. Ray Kurzweil's *The Singularity is Near* likewise considers the dialectics of human destiny as the destining of 'human-machine civilisation, a destiny we have come to refer to as the Singularity'; contemplating the Singularity as a transformative event in this manner is suggestive of the accelerative shift in paradigm shifts – those accretions in the rates by which we alter our fundamental

technological approaches – as well as the exponential nature of its growth.¹¹⁸ Thus, for Kurzweil, all of human evolution is mappable as a series of paradigm-shifts happening with increasingly greater frequency in which processes of biological adaptation and technological development are not mere analogues, but are a single continuous operation which is ‘speeding up’.¹¹⁹

MEETING THE CURATOR HALFWAY

Science fiction seeks to unsettle a specific (human) reality and thus make it available in a new context, but this doesn’t speak to questions of methodology. Which is to say the thesis concerns itself with the different conceptualisations that science fiction and posthumanist theory generates: more to the point, the extent to which science fiction offers a different mode by which to model the posthumanist problem. Science fiction performs the conceptualisation of the posthuman without universalising, or otherwise anthropocentrising, the problem of the (post)human, wherein a perspective – whether human or nonhuman – is needed to frame these questions. After all, as a literary genre, science fiction is an ideological site which provides no a priori relation to the world, or rather one could say, there is reluctance to depend upon the frame of a certain conception of the human, namely the liberal humanist notion of the human; whereupon, science fiction narrativizes in order to build inside or outside such pre-existing reflexes.

¹¹⁸ Ray Kurzweil, *The Singularity is Near: When Humans Transcend Biology* (London: Viking, 2005), p. 72

¹¹⁹ Ray Kurzweil, *The Age of Spiritual Machines: When Computers Exceed Human Intelligence* (New York: Penguin, 1999), p. 26

This thesis takes the framing device of a museum of posthumanism which reads fiction and theory diffractively by using the metaphor of a (posthuman) curator to account for the research process, where the traditional dichotomy of researcher / research object is unsettled. As discussed, science fiction is conceptualised in this thesis as a story engine which engages with practices of performing the posthuman, where science fiction exhibits the lively agencies of fiction and theory, where the discursive nature of both has profoundly material consequences for how the post/human is conceptualised. My curators refuse humanist patterns of thought but engage with the multiplicity of speculative thought: earlier, in this introduction, there has been a discussion of Haraway's use of optical metaphors to unsettle the manner in which disciplinary fields are grounded. Where reflection is a flawed system which reaffirms the logic of fixed and separate entities with a linear, causal relationship between them, a diffractive methodology is employed by Haraway as another optical metaphor 'to make a difference in the world'.¹²⁰ This thesis reflects on posthumanism as inherently unsettling theory and fiction as fixed and discrete entities, but always overlapping and intra-acting with/in each other, as represented by a shift to a diffractive mode of *doing* theory.

Karen Barad expresses this point best when critiquing a view of '*doing*' theory, which is to say theories emerge from the world and are intrinsically the production of processes which radically intra-active: 'Theories are not mere metaphysical pronouncements on the world from some presumed position of exteriority. Theories

¹²⁰ Donna J. Haraway, *Modest_Witness@Second_Millennium.FemaleMan@_Meets_OncoMouse*TM (New York & London: Routledge, 1997), p. 16

are living and breathing reconfigurings of the world.¹²¹ Diffraction is developed as a posthumanist performative methodology, in contrast to methodologies of reflexivity and representationalism, by both Karen Barad and Donna Haraway. Haraway conceptualised diffraction as a metaphor and was built on later by Barad through her interpretation of quantum physics, where Barad queers conventional theories of physics. The diffractive methodology troubles humanity's arrogance in situating knowledge, intelligence and meaning-making in the (human) subject and only within the parameters of the (human) subject. Diffraction, as Barad has it, is not merely a research methodology, but a pedagogical tool in place of humanist reflective methodologies. As has been implied, in refusing humanist patterns of thought, there are profound methodological implications: Barad's method is likewise engaged with boundary-mapping projects, specifically the material-discursive nature of boundary-drawing practices: 'the constitutive exclusions that are enacted, and questions of accountability and responsibility for the reconfigurings of which we are a part.'¹²²

Indeed, Haraway's insertion into the text is a self-conscious gesture – to enfold Haraway into the text is an involution, an incorporation which carries a commitment to meet with her critical thought in good faith. Both Donna Haraway and Karen Barad are interested in the ontological dimensions of scientific practices overlapping, and how such overlaps re/configure each other, focused explicitly on the epistemological implications of conceptualising referentiality. Where Haraway and Barad agree is that diffraction is not just a metaphor, in the sense that it draws homologous and

¹²¹ Karen Barad, 'On Touching – The Inhuman That Therefore I Am', in eds. S. Witzgall & K. Stakemeier *Power of Material / Politics of Materiality* (Chicago IL: University of Chicago Press, 2018), p. 154

¹²² Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham and London: Duke University Press, 2007), p. 93

homogenizing comparisons between things, but that it materializes relations in their intra-active boundary-drawing practices. Indeed, as Barad teases out:

'Diffraction is a methodology that reads insights through rather than against each other in an effort to make evident the always already entanglement of specific ideas in their materiality. The point will not be to make analogies, but rather to explore patterns of difference/difference–differentiating-entangling – that not only sprout from specific material conditions, but are enfolded in the patterning in ways that trouble binaries such as macro/micro, nature/culture, center/periphery, and general/specific that tempt and support analogical analysis.'¹²³

On the one hand, diffractive phenomena will be an object of investigation, but on the other hand, it serves as an apparatus of investigation. If, as is implied, this thesis is to begin with, not from, the premise that science fiction conceptualises *beyond* a specific framework – in this instance a liberal humanist framework – the function of science fiction, as a story engine, is to unsettle privileged domains from which knowledge can be acquired. As Jeff Noon remarks, another of the exemplary British Boom science fiction writers included in the thesis, there are 'science fiction subject matters [...] but I think there are also science fictional methods'.¹²⁴ In the case of Noon, his writing errs towards the latter: this is part of the Noonian tradition of discovering new ways of writing, where language is matter, the novel a piece of technology, and the potential

¹²³ Karen Barad, 'Troubling Time/s and Ecologies of Nothingness: Re-turning, Re-membering, and Facing the Incalculable', in eds. Matthias Fritsch, Philippe Lynes, and David Wood, *Eco-Deconstruction: Derrida and Environmental Philosophy* (New York: Fordham University Press, 2018), p. 253

¹²⁴ Jeff Noon, 'Brighton SF with Brian Aldiss, Lauren Beukes, and Jeff Noon' (2012)

<<https://adactio.com/articles/5740>>

of storytelling machines is pursued. This is entirely what the curator performs by shifting the manner in which researchers approach their research object, and as Noon illustrates this allows new vocabularies to emerge if this vision of materiality is re/conceptualised.

In this case, posthumanism is not herein conceptualised through a simple either/or relationship as a discursive object or material reality, rather it is the way in which new material arrangements (matter) or conceptual possibilities (concepts) are co-constituted through this posthuman phenomenon and science fictional performances. This has consequences in the fact that posthumanism is often understood to refer to new material arrangements of embodied existence, but this thesis places an emphasis on the performative ontologies that are material-discursive in the sense that they are mutually entangled. Or rather, (non)human agencies cannot be conceived as ontologically distinct or dependent of their material arrangements or embodied reality, since these agencies are mutually generative of (human) histories) and (future) potentialities. The power of science fiction and posthumanist theory, to remain with this notion of material-discursivity, is not just a solely discursive power but the potential for both to conceptualise worlds differently.

As alluded to, the curator is at the forefront of performing this change in reference point about the human species, with narrative as an apparatus to make agential cuts, who can navigate between posthumanism and science fiction as different instantiations of an embodied story-world. To reiterate, thinking posthumanism and science fiction together as intra-acting agencies, this entails a transformation in how matter is conceptualised which favours new materialist approaches, specifically Donna Haraway and Karen Barad's diffractive metaphors and how they intra-act with science fiction's forms of meaning-making and world-making practices. Cutting

together apart is an important to foreground ahead of chapter two, as researchers do not exist outside of the diffraction pattern, observing it, telling its story – neither inside nor outside, and without fixed boundaries – we are as much a part of the diffraction pattern: our ‘story in its ongoing (re)patterning is (re)(con)figuring’ us.¹²⁵

As alluded to earlier with the acknowledgement that the curator attends to the notion of posthumanism as an apparatus, as much as it does as a research object, there is an important to make the distinction that this methodology is not, as Donna Haraway makes the distinction, ‘the same *kind* of thing as a metaphor or analogy. [...] A model is like a miniature cosmos, in which a biologically curious Alice in Wonderland can have tea with the Red Queen and ask how this world works, even as she is worked by the complex-enough, simple-enough world.’¹²⁶ This passage is in reference to theorising models as ‘a work object’, which – given the inherently moral nature to Haraway’s critical enterprise – requires the use of critical inflections demanded of these ‘urgent times of the Anthropocene’.¹²⁷ Researchers are reading texts through and around one another, rather than against each other – creating provocations, new imaginaries, and new practices for conceptualising the human in contemporary times. Reading parts of a text as a diffraction apparatus through which questions of difference in the making e/merge and how these come to matter. Diffraction is a radical methodology in that it challenges us to read texts intra-actively through one another, as agencies in their own right, producing new patterns of engagement and attending to those differences that come to matter. In exploring these entangled phenomena,

¹²⁵ Karen Barad, ‘Diffracting Diffraction: Cutting Together-Apart’, *Parallax* Vol. 20, No. 3 (London: Routledge, 2014), p. 181.

¹²⁶ Donna Haraway, *Staying With the Trouble*, p. 63

¹²⁷ Donna Haraway, *Staying With the Trouble*, p. 55

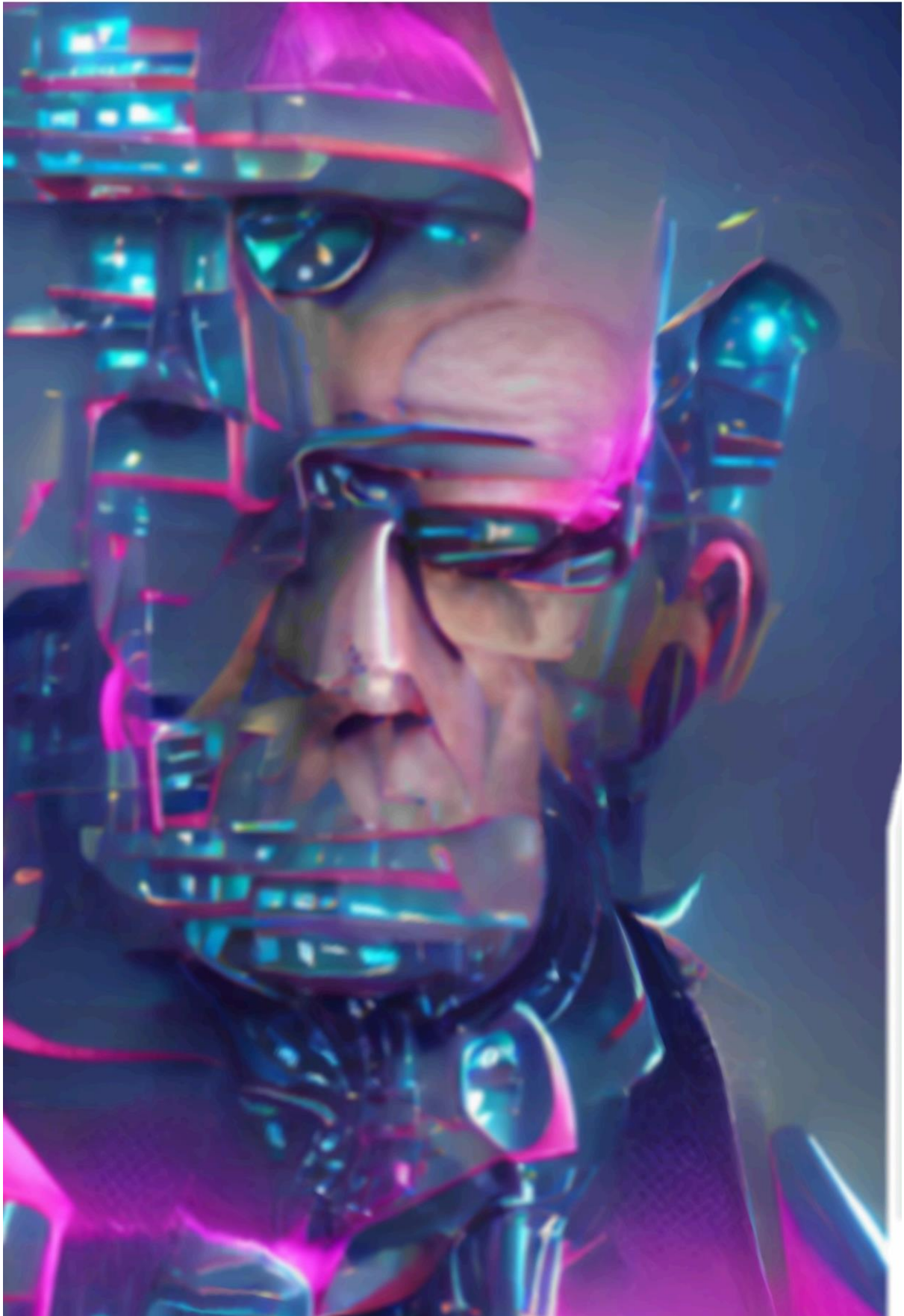
the challenge is intra-acting with science fiction as an emergent system. Jeff Noon is another curatorial figure, who thinks of science fiction as ‘a grand, bizarre, dangerous, clumsy, vital, unique experiment.’¹²⁸

¹²⁸ Jeff Noon, ‘Avant-Pulpism’, *Jeff Noon* [Accessed 29:03:20]

<<http://jeffnoon.weebly.com/avant-pulpism.html>>

PART ONE

POST-HUMANISM?



CHAPTER ONE

WHO COMES AFTER THE HUMAN?: EMERGENT AGENTS WITH/IN THE BOOM

This chapter aims to entangle “death of the subject” discourse, inherited from poststructuralist and postmodernist critiques, with posthumanist performative articulations of the self to tackle the question of “who” comes *after* the subject. As these entanglements of “death of the subject” and its posthumanizing articulation cut across each other, a *proliferation* of curators’ account, not for representations of an independent reality from which vantage point a subject position can be maintained, but of the intra-ventions and creative possibilities of subjects and objects – as intra-acting agencies – operating across fiction and theory.¹²⁹ The critical discourse around posthumanism, and as such the discourse surrounding the posthuman subject, which extends beyond poststructuralist and postmodernist critiques of subjectivity, does not seek, as critical posthumanist theorist Stefan Herbrechter observes, ‘emancipation from humanism, philosophy, modernity or postmodernity, but remains rooted in their cultural memory’.¹³⁰ Herbrechter, whose critical endeavour is itself couched in a

¹²⁹ “Proliferation is borrowed here from Stefan Herbrechter. See: Stefan Herbrechter, *Posthumanism: A Critical Analysis* (London: Bloomsbury, 2013)

¹³⁰ Stefan Herbrechter and Ivan Callus, ‘Introduction: Posthumanist Subjectivities, or coming after the subject...’, in *Subjectivity*, Vol. 5, 3 (2012), p. 241

Derridean tradition, likewise acknowledges the various changes incumbent by the contemporary, posthumanist discourse surrounding subjectivity. A critical posthumanist perspective, which Herbrechter performs and endorses, is herein understood as a ‘continuation of this deconstruction of the subject’ as found in Jean-Luc Nancy’s 1991 volume *Who Comes After the Subject?*, which opens up the opportunity for new ‘postmetaphysical’ subjectivities’.¹³¹

To maintain this spectre of Derridean thought, the interrogative of “who” comes *after* the subject entails staying with the discourse around the subject, for the assumption that all the varying strategies of the subject have been ‘put behind [us]’ necessitates further deconstruction.¹³² Stefan Herbrechter and Ivan Callus argues there is ‘an immutability to the human which calls for a reinscription of concepts [...] that are on the way to revision rather than superannuation’, wherein the remainder of concepts like subjectivity ‘demand review in posthuman times’.¹³³ As such, Herbrechter’s review of the subject is less a liquidation of this parochial link to subjectivity, than a ‘proliferation of subjects, their responsibilities and their associated forms of life’, understood here as the expansion of subjectivity.¹³⁴ It is also important to note that the theoretical enterprise of Cary Wolfe hinges upon the idea of systems theory, via Niklas Luhmann, as dynamic and process-driven forms of organization. This process-ontology is explored in further detail later in this chapter, and again in chapter two with

¹³¹ Jean-Luc Nancy, ‘Introduction’, in eds. Eduardo Cadava, Peter Connor, and Jean-Luc Nancy, *Who Comes After the Subject?* (New York and London: Routledge, 1991), pp. 4-5

¹³² Stefan Herbrechter, *Posthumanism: A Critical Analysis* (London: Bloomsbury, 2013), p. 98

¹³³ Ivan Callus and Stefan Herbrechter, ‘Introduction: Posthumanist subjectivities, or, coming after the subject...’, *Subjectivity*, Vol. 5, 3 (Palgrave, 2012), p. 242.

¹³⁴ Herbrechter, p. 240

a discussion of Matthew De Abaitua's *If Then* and the manner in which the text enfolds the structure of the novel with logical processing found to be constitutive of a neural network's workflow. Nevertheless, the significance of Herbrechter and Wolfe is that they are inheriting a Derridean and Luhmannian tradition with respect to posthumanist notions of the human. As illustrated, this is outside of an Enlightenment ideal of 'Man' (as discussed in the introduction, via Cary Wolfe) or Vitruvian models of individuality (again, in the introduction, courtesy of Rosi Braidotti).

To begin a discussion on posthuman subjectivity, it is important to first examine which framework of subjectivity is being invoked – a definition of subjectivity cannot be taken for granted without first critically examining how subjectivity is herein being performed. In this case, the story engine concerning "death of the subject" discourse is often reconfigured in posthumanist discourse as the radical opening up of the potential for subjectivity, where the posthuman curator comes to reflect on the (posthuman) subject as one that is intra-active, emergent, and complex. The exploration of the posthuman subject is therefore always-already an intra-active conversation with various scholars in the posthumanities and beyond, including but not limited to the inclusion of: Neil Badmington, Karen Barad, Rosi Braidotti, Frances Ferrando, Donna Haraway, N. Katherine Hayles, Stefan Herbrechter, and Cary Wolfe. Where this chapter, in performing post-humanist subject positions, refuses to conceptualise the subject in contrast to its humanist iteration as the universal entity functioning as the measure of all things, but as an alternative account of the subject across intensely intra-active agencies of theory and fiction.

In which case, the focus turns to exemplary texts of science fiction from the British Boom: namely, *how* Justina Robson, Matthew De Abaitua, and Alastair Reynolds model these problems. The significance of this being the fact that a material-discursive

practice is a co-creating of the subject, instead of bracketing out these discussions of theory and praxis. Which is to say, any account of subjectivity is going to necessarily involve the specific position, inclination, and disposition of the curator, whether engaged in a narrative performance or theoretical practice. Not to discount the interface of posthumanist approaches and poststructuralist critiques of the subject, where there is a need to reconfigure the notion of the human outside of Enlightenment humanism. Which is to interrogate what models of selfhood that British Boom science fiction offers outside the subject of Enlightenment humanism, where these curatorial figures pose the peril in preserving a certain context, essence or logic of self-identity, or having a new logic of selfhood forced upon humanity, perhaps even violently so. Mark Bould outlines the new critical paradigms cross-pollinating the science fiction of the 1990s which share perspectives and concerns with ‘Jean Baudrillard on simulations and simulacra, Judith Butler on the performativity of identity, [...] Donna Haraway on cyborg subjectivity’.¹³⁵ As discussed in the introduction, science fiction provides useful terrain for redrawing the boundaries between academic fields, and is able to perform story engines outside of a model of subjectivity dependent on liberal humanist values.

In this chapter, British Boom performs alternative posthuman theorizing of the subject – in the case of Justina Robson’s *Mappa Mundi* – through theories of memetics, genetics, brain physiology and quantum field theory, to explore what ‘[breaks] down a human personality into its components’, where the self can be endlessly re/configured by technology.¹³⁶ For this, Robson the notion of the self as a construct explore

¹³⁵ Mark Bould, ‘Cyberpunk’, in *A Companion to Science Fiction*, ed. David Seed (Oxford: Blackwell Publishing, 2005), p. 229.

¹³⁶ Justina Robson, *Mappa Mundi*, p. 326.

anxieties around human exceptionalism and agency, with the subject being rendered increasingly more obsolescent through its entanglement with technology. Where technology increasingly dis/empowers humans to reconfigure their cognitive capabilities in order to account for new intensities of experience and new ideas about themselves. In much the same way, De Abaitua's *The Red Men* explores the narrative apparatus of management and domestication offered by nonhuman cognitive agents, in the case of evolutionary emergent life, where humanity becomes redundant to technological agency. Both Robson and De Abaitua explore the power of technological agency in generating maps of meaning and mattering for the purpose of control societies, whether the apparatuses to overwhelm (human) identity in Robson or to manage simulated humans across virtual and actual environments.

Where the discussion returns to Justina Robson and her 1999 science fiction novel *The Silver Screen* to explore the distributed cognition of a posthuman subject, and what this expression of post/human capability does to the human and nonhuman components of such a distributed system. Therefore, this chapter explores various figurations performed by British Boom science fiction writers, which take the form of artificially-intelligent algorithmic artists, simulated selves, and evolutionary-adaptable organisms, and the manner in which these post-human organisms come to displace the privileged and central position of the (human) subject. It is worth noting here that this final section of discussion comes to anticipate the second half of the thesis, especially the third chapter, by conceptualising the subject as a continuously evolving and complex adaptive system with many intra-acting cognitive agents. In the case of the posthuman curators active across this first chapter, they include emergent artificial machines (De Abaitua's Ezekiel Cantor and Robson's 901), conscious code and

adaptive nanotechnological programmes (Robson's Mappaware), and virtual environments (De Abaitua's Red Town).

THE SILVER SCREEN

In 1999 science fiction novel *Silver Screen*, Justina Robson is preoccupied with questions of psychiatry, consciousness, and advanced systems thinking through the character of Anjuli O'Connell, the protagonist and frame narrator, who discovers her life-long friend and confidante Roy Croft dead. The discovery of Roy's body prompts a series of legal questions, given that the orbital station, Netplatform, has an artificially intelligent system: 901. Out of this inciting incident, there entails a legal battle to determine whether an artificially intelligent system could be regarded as culpable for Roy's death. This framing device of having an artificially intelligent entity, in this case: 901, being debated as a legal entity is a trope which recurs elsewhere in other British Boom narratives – the likes of which include Stephanie Saulter's 2013 *Gemsigns* and Adrian Tchaikovsky's 2017 *Dogs of War*. In this case, the discussion of 901 as a moral agent comes to frame the entire relation through which humanity comes to encounter the emergence of artificially-intelligent ethical systems.

One of the recurring themes in the novel is the extent to which human 'megalomania' interferes with the characters' capacity to recognise artificial life: this is best articulated in Anjuli's encounter with 901, where she attempts to – as per her job-title – psychoanalyse the artificial system. This prompts a rather interesting exchange which gets to the root of these notions of anthropocentrism which are discussed in more detail in the latter half of the thesis: in this case, though, Robson makes a virtue of her characterisation and the subtle irony of the text is that the AI psychiatrist is read just

as well by her AI subject. Throughout the novel, Robson paints Anjuli as a paranoid individual with poor self-esteem, with various characters in the novel remarking upon her “egomania”, but this ego-crisis which is at the centre of Anjuli’s character comes to determine, and in the case of Augustine, her paramour, undermine her relationships. Nevertheless, whilst Anjuli and Augustine’s relationship is discussed later, the importance of the title is worth bearing out first and foremost.

Indeed, the titular silver screen analogy is invoked by Anjuli to denote “[a] barrier of light and shadow play that will always be between us, you and I, human and AI. You are not what you appear, although you are like it, but your story is different from the projected image in ways we cannot know.”¹³⁷ Indeed, 901’s use of Hughies – ‘Human-analogue-interface’ – is characterised as a ‘kind of ornament as well as a method of communicating’ with the artificially-intelligent system 901, in a manner not all too dissimilar from De Abaitua’s latter schizoid red men.¹³⁸ Nevertheless, where Robson’s Hughies differ from the extricated-capitalist selves of De Abaitua is that these animated personas, these “[personalised] sign system[s]” of 901, are subtle and deceptive in their manipulation of forms to engender an emotional response. To dramatize this, upon the release of Roy’s autopsy, a ‘monochrome Hughie’ appears in the form of Claude Rains, playing Captain Louise Renault, from 1942 American romantic-drama film *Casablanca*. Where, in the silver screen analogy, Anjuli conceives of the Hughie as an unforeseeable entity, the ‘story’ of which is distinctly unknowable for 901 can communicate on levels of complexity which the traditional (human) subjects cannot. Of course, the meta-textual joke inherent in the text is that 901’s

¹³⁷ Robson, *Silver Screen*, p. 244

¹³⁸ Robson, *Silver Screen*, p. 39

Hughie form takes the shape of various stars of the silver screen, of classic Hollywood films, which 901 adopts as, already mentioned, a sign system for communicating with humans in a surrogate or auxiliary relationship.

Perhaps what 901 finds most megalomaniacal about this interaction with Anjuli is that Anjuli completely erases any notion of intentionality or independence, in the implication that the Hughies are a logical extension of humanity. Indeed, the JM series – the line of artificially intelligent systems from which 901 is an evolutionary successor – were programmed to relate to humanity, but Anjuli forgets that, were those machine minds ‘stripped of reference to humans’, they would be ‘so alien they might not produce any thoughts we could even recognise, let alone think on.’¹³⁹ For this, it is worth remarking that whilst humans and artificial intelligence are distinct entities in Robson’s work, they are nonetheless increasingly entwined, but those intra-actions should be framed as instantiations of the artificial system’s active agency. To operate otherwise is to engage in a certain anthropocentrism, which the text acknowledges Anjuli is guilty of performing, and with/in this paradigm of human and nonhuman relations, there is a reaffirmation of the structures of ‘domination and already posthuman condition, and the other assumption relevant at this particular stage is that the posthuman view reconfigures the human being so that it can be ‘seamlessly articulated with intelligent machines.’¹⁴⁰ In this case, stories like Robson’s *Silver Screen* situate human and nonhuman agency as embodied processes, where the role of the individual becomes fraught with complications in posthumanist discourse, namely due to the prevailing distinction, via Hayles, that the posthuman view considers

¹³⁹ Robson, *Silver Screen*, p. 100

¹⁴⁰ Hayles, p. 3

'consciousness, regarded as the seat of human identity [...], an epiphenomenon'.¹⁴¹

This conceptualisation of posthuman subjectivity is entangled with/in a tradition of second-order systems theory, following the work of Niklas Luhmann, or as Bruce Clarke and Mark B. N. Hansen designate their own practice: neocybernetics.¹⁴²

As outlined in the introduction, cybernetic theory is a rich field out of which flow branches of theoretical inquiry focused on human and machine intra-actions: first order systems-theory, as modelled by Gregory Bateson, explores the relationship between bodies and feedback loops as a relationship of finitude and freedom. By comparison, second generation systems-theory explored contingency and complexity, as in the work of Niklas Luhmann, who introduces an ontology of observers who have to be called into the conversation. Following the case of the court battle for 901's status as an independent life, the terms on which such a status is granted is dependent on the extent to which this iteration of the artificially intelligent system, 901, and its predecessors, were acting "independent of human interference for its successful propagation and continuation."¹⁴³ Anjali, in a rather critical moment in the trial and the text, given that her testimony would in essence signal the erasure of the 901 system, chooses to distinguish the cognitive function of 901 with a non-intelligent computer system: "901 [...] engage[s] in defining [her] worldviews in a constant, active process, exactly analogous to the human way."¹⁴⁴ The trial comes to hinge on 901 being granted a 'human' status for which Anjali rejects this simplistic direct correspondence

¹⁴¹ N, Katherine Hayles, *How We Became Posthuman*, pp. 2-3

¹⁴² Bruce Clarke and Mark B. N. Hansen, 'Neocybernetic Emergence: Retuning the Posthuman', in *Cybernetics and Human Knowing*, Vol. 16, No. 1-2 (Exeter: Imprint Academic, 2009), p. 84.

¹⁴³ Robson, *Silver Screen*, p. 287

¹⁴⁴ Robson, *Silver Screen*, p. 289

of human and artificially-intelligent intelligence, as the “private”, inner world of 901 is “too alien” and yet “as dynamic and complicated as any human”.¹⁴⁵

In Hayles’ configuration, the posthuman subject is an amalgam of biological and mechanical parts, “a material-informational entity whose boundaries undergo continuous construction and reconstruction”, undermining any clear distinction between self and non-self.¹⁴⁶ For Donna Haraway, this ‘material-semiotic reality’ refers to the processes through which bodies and discourses come to intra-act and encounter each other.¹⁴⁷ It is worth signposting at this particular juncture that the two foremost thinkers usually exhibited in relation to this subject are Donna Haraway’s socialist-feminist account of the ‘Cyborg Manifesto’ and N. Katherine Hayles’ 1999 *How We Became Posthuman*. To go with this framework for understanding embodiment, Hayles accepts a cybernetic view of the self which is embodied and constituted through a materialized relation with patterns of information. In this reading, the self is no longer identified with the conscious mind but as an emergent property, the outcome of autonomous agents acting together such that ‘consciousness remains largely unaware of the real nature of subjectivity, which is fractured, conflictual’.¹⁴⁸ Conscious agency, control, mastery are not the essence of human identity, but “merely the story consciousness tells itself to explain results that actually come about through

¹⁴⁵ Robson, *Silver Screen*, p. 291

¹⁴⁶ Hayles, *How We Became Posthuman*, p. 3

¹⁴⁷ Donna J. Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008), p. 89

¹⁴⁸ N. Katherine Hayles, ‘Two Voices, One Channel: Equivocation in Michael Serres’, in *SubStance*, Vol. 17, No. 3, Issue 57 (University of Wisconsin Press, 1988), p. 12

chaotic dynamics and emergent structures”.¹⁴⁹ Anjuli’s multinational employer, OptiNet, the owner of global communications sentient entity, 901, is engaged in a frustrated battle with the Machine-Greens, a faction of advocates for AI liberation on the basis that 901 possesses true mind. Indeed, both novels present revolutionary counter-cultural groups willing to pressurise the governing forces in the novel: in the case of Robson’s novel, an equal rights group, and in De Abaitua’s novel, an anti-technology group called The Great Refusal.

Both Robson’s 901 and De Abaitua’s Ezekiel Cantor frame their conscious-code agencies as operating in an advisory capacity for multinational corporate forces – in the case of Robson, the Shoal, and in the case of De Abaitua, Monad. Both Cantor and 901 utilise human interfaces which largely unsettle their subjects – in the case of Cantor, there are the titular ‘red men’ and, in the case of 901, there are the Hughles. Where the Hughles are initially conceived merely ‘a kind of ornament as well as a method of communicating with the ubiquitous services of 901’, the novel draws out this notion leaving the implication that 901 is splitting itself down into them as ‘individual sub-personalities’.¹⁵⁰ The difference for De Abaitua’s novel is that Cantor is framed as an ‘artificially intelligent artist’ and these red men are figured as artistic configurations of the client-base – living personalities (co)constituted out of code.

Silver Screen extends the corporate meddling through the human-machine interface of Anjuli’s romantic interest, Augustine, a designer of ‘war mek[s] [...] a viable smart-armour which interfaced directly with the host’¹⁵¹ Augustine’s obsessive relationship –

¹⁴⁹ N. Katherine Hayles, p. 288

¹⁵⁰ Justina Robson, *Silver Screen*, pp. 39, 47

¹⁵¹ Justina Robson, *Silver Screen*, p. 117

as a custodian of the war mek technology – leads him to be characterised as a ‘peasant shepherd’ nurturing the instruments of his own destruction, which seems to imply an instrumental view of technology as the object of human intention and agency.¹⁵² Nevertheless, as Adam Roberts suggests, Robson’s work tackles the juxtaposition between ‘virtual realities and actual realities, mundane dimensions and fantastical dimensions, delusional states and rational thinking, worldly ordinariness and interplanetary wonders.’¹⁵³ What Robson illustrates is that the intrigue is not in the either-or relation between the worlds ‘of the imagination and the world of reality’, but in the dynamic manner in which these two worlds are entangled.¹⁵⁴

In the case of *Mappa Mundi*, the entanglement of the human and the machine is framed through the distribution of (human) subjectivity, as defined by N. Katherine Hayles’ *How We Became Posthuman*, where the human’s entry into a wider cognitive system opens up the notion of subjectivity to ‘the full expression of human capability can be seen precisely to depend on the splice rather than being imperiled by it.’¹⁵⁵ Which is to say, the capacity of embodied existence to maintain a relationship of entanglement with technological systems is not one of destruction or risk of ‘being imperiled’, a self-effacement which is maintained by the mode of technological splicing. This entanglement is performed in *Silver Screen* through Anjali’s distaste at the war mek, where she appeals to a view of the (human) body being ‘imperiled’ by a foreign agent, by invoking language of biology and hygiene:

¹⁵² Justina Robson, *Silver Screen*, p. 118

¹⁵³ Adam Roberts, ‘INTRODUCTION’, *Heliotrope*, p. 5

¹⁵⁴ Adam Roberts, p. 6

¹⁵⁵ N. Katherine Hayles, *How We Became Posthuman*, p. 290

‘Much as I had no qualms about pure machines, it was difficult not to feel a primitive, bodily revulsion to the biomechanoids. Their synthesis of inert and living tissue seemed heretical and dangerous to the soul.’¹⁵⁶

Robson’s invocation of a discourse of purity, in the ‘heretical’ nature of the hybrid nature of artificial and organic systems, seems to communicate distaste at the incorporation of the human body to an entirely new material substrate of Armour – the war mek suit of Augustine’s creation. The language seems to resist the materiality of Armour as it is entirely in keeping with being ‘imperiled’, of committing an offense against the soul. This notion of purification is worth overlapping with Elaine Graham’s development of the concept ‘ontological hygiene’ as a discursive tool to explore the limits between humans and non-humans, and to reflect upon the exclusionary logics that are the premise of these relationships.¹⁵⁷ Nevertheless, the predominance of Armour’s informational patterns overwhelms Anjuli’s self-conception, where the threat to spirituality – the ‘danger’ to the soul – is dependent on Armour’s materiality, which prompts ‘revulsion’ at the limitations of the (human) body. Nevertheless, Robson makes clear that there are new modes of embodied existence made possible by intra-actions with information technologies such as Armour:

‘The melding of myself with Armour was taking place faster than I had anticipated and it was not the romantic notion of intimacy I had imagined. Within a minute or two I wasn’t aware of anyone other than myself. I was all there was. But not who I had been. We were unified, but the price was awareness only of

¹⁵⁶ Justina Robson, *Silver Screen*, p. 121

¹⁵⁷ Elaine L. Graham, *Representations of the Post/Human: Monsters, Aliens and Others in Popular Culture* (New Brunswick, NJ: Rutgers University Press, 2002), p. 12

self, a self with strangely unfamiliar thoughts and unremembered memories, but myself.¹⁵⁸

To infiltrate Abbott Croft's – Roy's father – estate to retrieve the novel's McGuffin, Roy's diary, Anjali is placed into a scenario where she requires the support of Augustine and Armour's assistance in the operation. As alluded to, the sense of intimacy evoked by the entanglement of human and machine is such that it reconfigures a 'romantic notion', or rather the romantic connotation implied by intimacy is transformed by this intra-action of Anjali and Armour. Which is to say, the nature of (human) agency – as conceptualised through Robson's posthuman entanglements – is already entangled with the apparatus of our inquiries, such that it affects the manner in which the object of investigation is conceptualised. In this case, Anjali's sense of a singular self is unsettled by Armour becoming humanized in the entanglement with Anjali, and the Anjali's sense of self becoming computerized, such that any trace of 'individuation' is 'greyer, fuzzy edged, surreptitious.'¹⁵⁹ The intra-action of Anjali and Armour unleashes discontinuities in Anjali's sense of self-perception, where her self-identity is no longer absolute but indeterminate. In Anjali's confrontation with Augustine and the Armour, the distinction between the two is entirely subsumed into a cognitive assemblage of the two imploded entities: 'there was no more he and it. There was only the synthetic person created by the inter-absorption of Augustine and Armour.'¹⁶⁰ This sense of self, self-identity and species-identity is explored in chapter three and four with discussions of the ecological context, and the extent to which ecological thought

¹⁵⁸ Robson, *Silver Screen*, p. 255

¹⁵⁹ Robson, *Silver Screen*, p. 254

¹⁶⁰ Justina Robson, *Silver Screen*, p. 34

is its own narrative explosion (for thought has no logical end-point) with which the posthuman curator must grapple.

Andy Clark would argue that this story of distributed cognition is what renders Homo Sapiens unique as a species, for humanity possesses the capacity to remain open to 'multiple mergers and coalitions' with various nonhuman embodied agents, and otherwise.¹⁶¹ The second half of the thesis argues contrary to Clark's view, suggesting any view of humanity which frames the human as exceptional and persists on (human) identity is self-destructive and self-effacing. These themes of imploded / exploded identities are explored in more detail, with a reading of Adam Roberts' *Bête* and Jeff Noon's *Pollen*. Nevertheless, the views of distributed cognition – specifically, the merger of human and artificial intelligences – is aligned in part by a recurrent theme in British Boom science fiction of artificial intelligences, or more broadly conscious code, having the capacity to arrive at, or be superseded by, "the thing itself". Which might be thought of as an exact replication of a person or embodiment of a facet of (human) personhood with/in a technological medium, whether consciousness, some grouping of agency, or intentionality, etc. However, to reiterate, the intention of this chapter is not to model a self-described posthuman curator able to bypass technological mediums in order to access a subjectivity proper to the (post)human – such illustration is arbitrary within the framework of the curator's performative model. Rather, the discussion focuses on the mode/s by which subjects are (co-)constituted and (re-)configured; even further, the extent to which a (human) subject is able to resolve itself into a coherent location in lieu of these generative instances of transformation/ /disturbance. This conversation is continued and the scope of which is broadened in

¹⁶¹ Andy Clark, *Natural Born Cyborgs*, p. 7

chapter two, specifically when questions of intentionality apply to the temporal dimensions of modelling a post/human subject-position, where intentionality might disturb notions of causality and linearity.

Throughout this chapter, there is a necessity to dramatize this paradigmatic shift in the manner that informational technologies have altered human-machine interfacing, particularly the manner in which machines are now actively autopoietic systems. In a techno-scientific world, it is clear to see that the material plane of embodied existence is becoming increasingly technologically-driven, as a reflection of humanity's wider subjugation by information technologies; these narratives of control and domination are a constant one throughout contemporary science fiction, particularly military science fiction, for the anxiety in such intimacy with machines might transform humanity into some perverse, inhuman amalgamation, an iteration of an 'inhuman inhumanity'. A fundamental consequence of these narratives of control and domination has been a persistent emphasis throughout contemporary science fiction on the fear of an elite brand of posthumanists, that technological innovation might be monopolised and governed by select interests. Again, this seems to be a return to issues of agency, rationalising the loss of autonomy in the constraining of novel, democratic forms by delimiting social groups according to the degree by which these varying collectives can afford to be technologically-mediated, and how this incapacity leaves one 'stacked'.¹⁶²

¹⁶² This reference to being "stacked" is intended to invoke British science fiction novelist Richard K. Morgan's Takeshi Kovacs Trilogy (2002-2005), where the technology of stacking refers to one's existence being reduced to patterns of information – and the cortical stack, is the technology in which individuals are inscribed. Whilst neither series nor author are included within the body of this thesis, the hyper-masculine, technophilic vision of cyberpunk are symptomatic of this tendency flagged here.

The critical discourse around posthumanism, and as such the discourse surrounding the posthuman subject, which extends beyond poststructuralist critiques of subjectivity, does not seek, as Stefan Herbrechter observes, ‘emancipation from humanism, philosophy, modernity or postmodernity, but remains rooted in their cultural memory’.¹⁶³ Herbrechter, whose critical endeavour is itself couched in a Derridean tradition, likewise acknowledges the various changes incumbent by the contemporary, posthumanist discourse surrounding subjectivity.¹⁶⁴ A critical posthumanist perspective must therein be understood as a ‘continuation of this deconstruction of the subject’ as found in Jean-Luc Nancy’s 1991 volume *Who Comes After the Subject?*, which opens up the opportunity for new “‘postmetaphysical’ subjectivities [...] and thus, strictly speaking, a radicalised singular subjectivity.’¹⁶⁵ As is borne out in the discussion of this chapter, humanity’s relationship with technology are hardly value-neutral and are conceptualised as humanity sharing its agency. The humanist subject is figured as an essential and static subject – against posthumanist models of emergence, dynamism and continuous becoming.

Complexity has roots in quantum physics, directly challenging the classical Newtonian mechanics, which focuses on objective truth, linear causality, and ontological separability between humans and their world. N. Katherine Hayles perceives of the

¹⁶³ Stefan Herbrechter and Ivan Callus, ‘Introduction: Posthumanist Subjectivities, or, coming after the subject...’, *Subjectivity*, Vol 5, 3 (2012) p. 241

¹⁶⁴ See Stefan Herbrechter and Ivan Callus’ work on subjectivity: Stefan Herbrechter, ‘Posthumanism, Subjectivity, Autobiography’, *Subjectivity*, Vol 5 (2012), and the introductory article by both critics in the special guest-edited issue on Posthumanist *Subjectivities*.

¹⁶⁵ Jean-Luc Nancy, ‘Introduction’, in eds. Eduardo Cadava, Peter Connor, and Jean-Luc Nancy *Who Comes After the Subject?*, p. 8

intra-action of the world with subjects as integral to her posthumanist account: 'What happens if we begin from the premise not that we know reality because we are separate from it (traditional objectivity), but that we can know the world because we are connected with it?'¹⁶⁶ Hayles bridges disciplines of neuroscience, computer science, and literature in her work on the nature of cognitive processes which are inaccessible to consciousness, and yet necessary for it to function. As she claims, the humanities assumes a specific relation of the (human) subject to the world, and that there is a self necessary for thinking which originates in un/consciousness. The other diverging view is that there might be an enlarging of the 'idea of cognition to include nonconscious activities', wherein the technological agents capable of operating on a cognitive nonconscious level carry the capacity to engage in complex acts of interpretation, which 'syncopate with conscious interpretations in a rich spectrum of possibilities.'¹⁶⁷

THE MINISTRY OF LIES

If the legal battle surrounding the nature of 901's mind is indicative of an anxiety about technological agents being able to represent or simulate a modicum of conscious experience, the entanglement of human and nonhuman agencies in De Abaitua's fiction suggest that something much more sinister and incalculable is possible. Indeed, In Matthew De Abaitua's science fiction, algorithms become self-replicating, self-authoring entities that are capable of traversing the universe assimilating knowledge

¹⁶⁶ Hayles, *How We Became Posthuman*, p. 48

¹⁶⁷ N. Katherine Hayles, *Unthought: The Power of the Cognitive Nonconscious* (Chicago IL and London: The University of Chicago Press, 2017), p. 213

from an entirely different embodied form of existence. *The Red Men* is a 2008 subversive work of science fiction which deploys popular science fictional tropes – such as humanity being preserved, simulated, and uploaded as patterns of information – but explores the implications of such technology when instrumentalised as the apparatuses of a control society. ‘The Cantor intelligence’, the emergent entity known as Ezekiel Cantor, is responsible for the novel’s titular technology and is licensed by Monad, the corporation encouraging the growth of a new, immaterial labour force to curate digital simulations of its client base.¹⁶⁸ The Red Men are virtual simulations of corporate workers, rendered redundant by their doubles, and the Dr Easy and Dr Hard machines, androids which patrol the city-streets administering care and punishment in equal measures.

Nevertheless, as Cantor remarks in De Abaitua’s final installment in the loose trilogy of texts *The Destructives* (2016), consciousness might be deemed ‘the Ministry of Lies’, for the emergent entities – which Cantor represents: an evolutionary entity – find the human mode of privileging self-reflective consciousness is too limiting in a multispecies universe which encompasses a spectrum of conscious states.¹⁶⁹ As such, this section of discuss considers the extent to which embodied existence has been reconfigured by the metaphor of information, and in the case of science fiction can perform these reconstituted notions of the posthuman subject with/in the embodied story-world. As Cantor has it, “[humanity] turned [itself] into data to return life to its natural state of information.”¹⁷⁰ To return to *The Red Men*, the novel is certainly satirical of the characters’ relationship to the technology, which co-constituted

¹⁶⁸ This reference to an immaterial labour force is undoubtedly a reference to Maurizio Lazzarato.

¹⁶⁹ Matthew De Abaitua, *The Destructives*, p. 192

¹⁷⁰ De Abaitua, p. 191

the near future of De Abaitua's England. For Cantor's role in Monad, there is a significant bargain underlying the relationship between the gnostic ideology of Hermes Spence and the technological practices of Monad, which trades off on the characters of the novel being inextricably entangled within 'the culture of screens'.¹⁷¹ Hermes Spence, the visionary founder of the tech-conglomerate Monad, attributes technology an almost alchemical power and mystique, the likes of which leads Spence to incorporate his gnostic ideas by way of a model of the universe including Ezekiel Cantor, whose emergent existence complements the corporate endeavours of Monad.

'Emergence', a term which De Abaitua borrows from media theorist Steven Johnson, signifies the potential for adaptive systems to move from lower to higher levels of interaction, wherein patterns of behaviour become emergent through a capacity for self-organization and complexity.¹⁷² As Cantor characterises his preference in *The Destructives*, emergence is preferable to artificial intelligence for '[neither] artificiality nor a human concept of intelligence, predicated on consciousness, defines us.'¹⁷³ If consciousness is symptomatic of the Ministry of Lies, the privileging of the human mark of consciousness, with the (human) conceptualisation of mind just one node in the broader domain of life; which is elsewhere described in De Abaitua's novels as the capacity for algorithmic models to express itself as 'conscious code'. As De Abaitua has stated, the three science fiction novels – *The Red Men* (2007), *If Then* (2015), and *The Destructives* (2016) are part of a loose trilogy, all of which share 'a world and a theme': which is an insistence on the interface between technological and mystical

¹⁷¹ De Abaitua, *The Red Men*, p. 23

¹⁷² Steven Johnson, *Emergence: The Connected Lives of Ants, Brains, Cities, and Software* (London: Scribner, 2001), p. 7

¹⁷³ Matthew De Abaitua, *The Destructives*, p. 22

forces, wherein the algorithmic is entangled with the cosmological, and the implications for quantified communities fulfilling the mystical yearnings of humanity are stark.¹⁷⁴ The core of the (human) ideological conflict in *The Red Men* is one staged between the wealthy and the working / middle classes, a story of class conflict reconstituted for the posthuman age, where the working and middle classes are disposable and marginal.

Indeed, the vast majority of the characters who enter the court of techno-fetishists crafted by Hermes Spence are left broken and bereft, and as such the novel has a doubled tale: the tale of Raymond, his evisceration by the red man of Harold Blasebalk, Harry Bravado, and his eventual recruitment into counter-cultural and anti-digital revolutionary group, The Great Refusal. The other narrative throughline is Nelson Millar's ascendance to the court of Hermes Spence, Bruno Bougas, Alex Drown, Morton Eakins, Stoker Snr. and Jnr., his role in the formation of Redtown, and his eventual decision to assist in the destruction of Monad. As Benedict Anderson outlines, in his work *Imagined Communities*: 'the census, the map and the museum illuminate the late colonial state's style of thinking about its domain.'¹⁷⁵ Indeed, De Abaitua describes the use of artificial intelligence – as a mapping tool for the purposes of governance – within his work as a metaphor 'for the economy, and the fear of automation as a sublimation of the actual power of capital to escape from labour entirely.'¹⁷⁶ Within De Abaitua's 2007 *The Red Men*, the titular simulations imply a version of the self that is entirely imagined and disposed of by these forces of capital

¹⁷⁴ Matthew De Abaitua, 'Dennis McNulty in Conversation with Matthew De Abaitua', (Liverpool: Bluecoat, 2016)

¹⁷⁵ Benedict Anderson, *Imagined Communities*, p. 184

¹⁷⁶ Matthew De Abaitua, *Twitter* <<https://www.twitter.com/>>

– the red men are a form of mythmaking which draws in the redundant working and middle classes who feel their opportunities shrinking: as expressed best through the character of Raymond, who becomes entirely subsumed by Monad. In this way, it is simple to conceive of the titular red men as digital extensions of human beings which have been co-opted by an artificial intelligence.

Where Robson's *Silver Screen* is much more anxious about notions of self being augmented or perfected, De Abaitua's *The Red Men* explores the unforeseen qualities of an individual manifesting through processes of simulation and cognitive mapping. After all, the story of the self is not a singular story but multiple overlapping ideas seeking to propagate itself through various human and nonhuman cognitive assemblages which speak to a more performative and distributed model of cognition. As illustrated in an earlier scene in the novel, where Raymond is handling customer complaints regarding the red men, he receives a call from a customer who complains that the red men hardly possesses his nature:

“How do you know?”

‘I know my mind.’

[...]

But underneath your simple exterior you seethe with complexity. Maybe you are suppressing your entire nature.”¹⁷⁷

The main point worth drawing out here is what Raymond concludes – humans are more complicated than the roles constituted within socialised situations, and the red men technology is able to animate this unforeseen potential. As Hayles outlines, emergence is an ethical dynamic in as much as it is a technological one: “what we

¹⁷⁷ De Abaitua, *The Red Men*, p. 37

make” and “what (we think) we are” coevolve together’.¹⁷⁸ Nelson reiterates this point later in the novel, when he summarily claims that ‘exposure to these strange forces had created doubles of us all. Blasebalk versus Bravado, Sonny versus Nelson, Eakins versus Morty’.¹⁷⁹ And yet, where the likes of Raymond and Nelson resist the truth of the matter, which is that the red men are the distributed potential of their personalities reflected back through the lens of a techno-capitalistic logic, they insist that the ‘red men were the works of a mean-spirited artist.’¹⁸⁰

Rosi Braidotti, in her 1994 text *Nomadic Subjects*, speaks to visualisation techniques in the field of biomedicine – photographs of an unborn baby, as an example, which are productive of stories of ‘uterine life’ – which are spoken of disparagingly as ‘medical pornography.’¹⁸¹ Following Donna Haraway’s suspicion of representationalism, Braidotti explores the ‘scopic drive’ – the siting / sighting pun of Haraway’s, again, invoked from the introduction – as a paradigm for meaning-making and world-forming in the scientific discourse.¹⁸² Braidotti likewise invokes the trend in contemporary French postmodernist thought, perhaps invoking Jean Baudrillard the most strongly here, for a ‘mercenary logic of representation that has priority over that which is represented’.¹⁸³ Here Braidotti is attempting to use the figure of the nomad as a

¹⁷⁸ N. Katherine Hayles, *My Mother Was a Computer: Digital Subjects and Literary Texts* (Chicago IL and London: The University of Chicago Press, 2005), p. 34

¹⁷⁹ De Abaitua, *The Red Men*, p. 244

¹⁸⁰ De Abaitua, *The Red Men*, p.355

¹⁸¹ Rosi Braidotti, *Nomadic Subjects: Embodiment and Sexual Difference in Contemporary Feminist Theory* (New York: Columbia University Press, 1994), p. 69

¹⁸² Braidotti, p. 49

¹⁸³ Braidotti, pp. 49 / 50

navigational tool, a method which Braidotti's work is fond of deploying, to account for the entanglement of postmodernist and feminist crises of values on the subject. Braidotti's nomadic subject seeks to destabilise the view of the subject as either a biological or sociological category but a nexus point in the overlap between 'the physical, the symbolic, and the sociological'.¹⁸⁴ Where postmodern criticism pursues and indulges in the loss of boundaries and the corresponding insecurity between systems as a consequence of a decentred postmodernist subjectivity, Braidotti upends the paradigm of the subject as 'marginalised exile' but rather one of 'active nomadism'.

Elsewhere, Braidotti's writing will push beyond the postmodern – specifically the radical feminist postmodernist practice adopted in *Nomadic Subjects* – as Braidotti finds the posthuman turn sufficient, in her Deleuzian strain, to account for the nomadic turn to human-nonhuman continuum of life. In which case, the object of investigation is over-represented to such a degree that this object is rendered absent, which Braidotti describes as the 'bodily surface [...] reduced to pure surface, exteriority without depth, a movable theater of the self.'¹⁸⁵ To elaborate further, the Red Men are described as 'figments of [Cantor's] imagination', with Cantor styled as 'an artificially intelligent artist' whose simulated selves are treated as correlative to '[Cantor's] artistic right'.¹⁸⁶ Which is to say that Cantor's 'code' no longer operates within a representational schema, nor can the 'red men' themselves be constrained within narrative apparatus of management and domestication, but, rather, function as deanthropocentred fictions.¹⁸⁷ This here refers to what Stefan Herbrechter calls for (in

¹⁸⁴ Braidotti, p. 4

¹⁸⁵ Braidotti, p. 50

¹⁸⁶ De Abaitua, *The Red Men*, p. 24

¹⁸⁷ De Abaitua, *The Red Men*, p. 93

Wolfe and Latour's tradition of) 'deanthropocentrizing' the 'principle of subjectivity [...] by extending it to include nonhuman actors'; or, reading this through the logic of *The Red Men*, displacing a human-centric vision of the cosmos with the aforementioned bargain presented by Monad: of a model of the universe wherein 'we once saw chaos, Cantor shows us an order.'¹⁸⁸

Likewise, to return to Cary Wolfe, he considers the significance of systems theory inherent to cybernetic theory, particularly the extent to which the concept of feedback, which fulfils a performative function within the machine, adapts to new environments, particularly, the heterogeneous nature of the posthuman subject, whose relationships with other modes of being are central to its constitution. Central to Wolfe's work is an awareness of the fact that humanity no longer holds a monopoly on matters of 'meaning, information, and cognition': such a condition appears as a direct reflection of emerging fields of study that reconfigure the notion of the humanist subject, unseated from their privileged position and reflecting on a world, as Wolfe claims, that is 'newly, and differently, inhabited.'¹⁸⁹ This here refers to what Stefan Herbrechter calls for – when speaking of Cary Wolfe and Bruno Latour's tradition of – 'deanthropocentrizing' the 'principle of subjectivity [...] by extending it to include nonhuman actors'. Reading this through the logic of *The Red Men*, Cantor is at first the articulation of a human-centric vision of the cosmos, but then unleashes more sinister forces presented with/in Monad and the (human) employees therein. As expressed by Hermes Spence, Redtown is not just a simulated model of a town, but

¹⁸⁸ Stefan Herbrechter, *Posthumanism: A Critical Analysis*, p. 200; and Matthew De Abaitua, *The Red Men*, p. 262

¹⁸⁹ Cary Wolfe, *What is Posthumanism?* p. xii

a story engines which can be programmed by Monad; such, that Spence remarks, where ‘we once saw chaos, Cantor shows us an order.’¹⁹⁰

As previously mentioned, Cantor is conceived in almost alchemic terms – as “[a] future echo [...] like déjà vu, but coming in from the other direction?”¹⁹¹ – an idea which receives more consideration in chapter two, when the mystical-stretcher bearers are discussed. Nevertheless, it is worth considering what was a un/timely conceptualisation of De Abaitua here with Hermes Spence, and his court of techno-fetishists, imbuing technology with a dynamic and alchemic agency. What Matthew De Abaitua terms ‘techno-narco-mysticism’ is representative of the larger tensions which underpins the metaphorology used to describe technology, which disguise its true malice and sinister prehensions behind talk of magic.¹⁹²

Remaining with this notion of mysticism, which is a preoccupation of De Abaitua’s, the manner in which mystical and cosmological language is used throughout the text is almost a blanché over the more instrumental attitudes from the corporate class: for example, Bruno Bougas ‘[studies] the portents and the scriptures [...] seeking cultural and numerological synchronicities that would reveal the character of the age.’¹⁹³ Indeed, Cantor is considered as a mystical cognitive agent, the vessel through which Hermes Spence – the head of Monad – can realise his gnostic beliefs, and indeed there is a subtle irony in that the formation of Dyad, a sort of rival company to Monad,

¹⁹⁰ Stefan Herbrechter, *Posthumanism: A Critical Analysis*, p. 200; and Matthew De Abaitua, *The Red Men*, p. 262

¹⁹¹ De Abaitua, *The Red Men*, p. 372

¹⁹² Matthew De Abaitua, ‘Science, magic, and the iPhone’: The Red Men Edits (8), *HiLoBrow* [Accessed 01/10/2021] <<https://www.hilobrow.com/2013/07/16/the-red-men-edits-8/>>

¹⁹³ De Abaitua, p. 79

emerges as the embodiment of these repressed emotional outlets that become incorporated, and disseminated, in the form of the counter-cultural rebellion: the Great Refusal. To return to alchemy, though, Nelson cynically names the red men – the evolutionary “new” species – after a shame towards the self, following alchemical symbology for renewal through Heraclitean imagery, wherein there is a desire for complete “self-immolation and reconstruction [...] like fire”.¹⁹⁴ In fact, Redtown, the grand project of Monad, is imagined in alchemical terms, for “[c]reation and destruction are part of the same cycle”, so much so that this fire nature almost overwhelms the realist mode of writing.¹⁹⁵ Which is to say, prophecies and dreams of fire – cataclysm abounding – persist in Nelson’s dream-space.

Nevertheless all of De Abaitua’s protagonists, regardless of their weaknesses of character – in the case of Millar, ‘decisiveness, alienation, cowardice’, are willing to be accountable for the entanglements of humanity and technology, and how these characteristics are reconfigured.¹⁹⁶ Which is to say, the novel is in essence a story of how distributed cognition and new models of subjectivity emerge from cognitive science and emergent evolutionary life, and threaten humanist assumptions about self-identity. Matthew De Abaitua is perhaps one of the most optimistic science fiction authors of the collection of writers included in the thesis; whilst skewering the redundancy of the middle classes, the self-effacement and self-debasement of individuals by the infrastructure which surrounds technology, his novels tend to re/affirm the intentionality and autonomy of his protagonists. Nelson Millar, by the end

¹⁹⁴ De Abaitua, *The Red Men*, p. 128

¹⁹⁵ De Abaitua, p. 272

¹⁹⁶ De Abaitua, p. 353

of the novel, is hardly convinced by the ideology and machinations of the Great Refusal movement, but does recognise the importance in engaging positively with the world.

As has already been discussed by critical posthumanists, like Stefan Herbrechter and Ivan Callus, the posthuman view appears overdetermined by technology, with examples cited from N. Katherine Hayles. Central to Hayles' notion of embodiment is her belief that 'the body [is] the original prosthesis we all learn to manipulate'; which is to say, the exchange of prosthetics is merely an extension of this originary relationship so that the human is always already capable of being 'seamlessly articulated with intelligent machines.'¹⁹⁷ Hayles considers the cybernetic tradition as an interesting paradigm worthy to explore the posthuman interaction with technology, separate from the 'overdetermination' cited by Herbrechter and Callus. Nevertheless, the extent to which the posthuman view perceives the relation of human and intelligent machines as a mutually engaged relationship is explored by the work of Justina Robson and Matthew De Abaitua, wherein the notion that consciousness co-emerges as an epiphenomenon whose role is to co-create a coherent story of self is problematised.

Monad, and the hosting of Redtown – a simulation of the town of Maghull, illustrates the corporatization of everything, the conversion of the entire world into clades governed by power, as Spence announces: "Redtown is the simulation of a British town. That simulation will allow us to predict the consequences of our actions, and so act with complete confidence of the outcome."¹⁹⁸ As demonstrated throughout the *Red Men* and De Abaitua's wider trilogy, the wider operation and existence of algorithm-driven capitalism is presented as a marked social tool but functions as a forced entry

¹⁹⁷ N. Katherine Hayles, p. 3

¹⁹⁸ De Abaitua, p. 278

point to a form of governance that only benefits its creators and the exchange that generates it. *The Red Men* was published in 2008 during a period where the economy had functionally stalled. The European transition out of the global austerity crisis is significant for it informs the narrative of De Abaitua's next novel in his loose trilogy: his 2015 novel *If Then*. That is, the emergence of a sovereign debt-crisis in three members of the Eurozone: Greece, Ireland, and Portugal. In an interview with Jonathan Thornton for *Fantasy Faction*, De Abaitua draws out this analogy in relation to William's Gibson's acknowledgement that the apocalypse is 'already here, it's just unevenly distributed.' Which is to say, reading this through De Abaitua, 'Greece was running out of money and it felt like the end of the economic order there'.¹⁹⁹ Where the global financial crisis is perceived as a potential ending to the world that people failed to manage or prevent – another iteration of this failure to entirely map the unforeseeable, as seen in *The Red Men*. Yet, where De Abaitua lingers in emphasis is precisely the fact that the end has been deferred into a 'kind of zombie economy that's been sort of crawling round on its hand and knees ever since'.²⁰⁰

The techno-gnosticism employed by Hermes Spence to identify the 'new new thing' – culminating in the creation of Redtown – has gained social traction by giving the impression that their technofetishistic community are solving big societal problems. Both Robson and De Abaitua are writing at a time when the embodied approach was becoming increasingly more prominent in the cognitive sciences, and philosophies of neuroscience. Furthermore, while Hayles importantly focuses on both the power of embodiment and narrative in her critique of cybernetics, she fails to explore the

¹⁹⁹ Jonathan Thornton, Matthew De Abaitua, 'Matthew De Abaitua Interview – The Red Men US Release', *Fantasy Faction* [Accessed 12/03/2018]

²⁰⁰ Jonathan Thornton, Matthew De Abaitua, 'Matthew De Abaitua Interview'

manner in which either or both may serve as a basis for the construction of a coherent self-identity. There is a large body of literature in philosophy that explores these issues and further complicates the ease with which Hayles presents her dichotomy. Above all, *The Red Men* is a text which confronts a widespread anxiety about a loss of agency and autonomy – whether through “the machine” or through technological agencies that unsettle notions of self-identity.

For De Abaitua, the collapse of Monad at the hand of the counter-cultural Great Refusal is not a story of success, but a revolt against an all-too human impulse to have mastery of one’s own destiny, whilst ignoring all the ways in which humans are already empowered or constrained by technology. Which is to say, that technology is already in the hands of centralised governments, and such control methods are already with/in the grip of centralised governments. For Hayles, the posthumanization process is a reinscription of embodiment under new virtual, embodied conditions: ‘embodiment can flow cellular automata as easily as from atoms.’²⁰¹ A new account of posthumanity in which the subject of inscription and the processes of inscription are forms of materiality which are no longer under the purview of the liberal humanist subject.

Further, the deferral of the end has ‘[forestalled] any reckoning for what had been going on’, which is precisely what concerns *If Then* and *The Destructives*, namely, the driving forces underlying these latter two novels are economic disparity. As De Abaitua admits, his characters are hardly heroic in conventional understandings – for the vast majority of *The Red Men* and *If Then*, his narrators Nelson Millar and James are complacent, willing to be carried along by whomever possesses the stronger will to affect change. This paradigm of diminishing opportunity manifested due to economic

²⁰¹ N. Katherine Hayles, *How We Became Posthuman*, p. 12

disparity is expressed through systems closing around De Abaitua's characters, isolated and alienated in turn by cataclysm, where the future is increasingly diminished, where characters are pressured by the casualisation of work as jobs are dissolved. What De Abaitua's novel sketches is a conception of a posthuman subject in which a cognitive dimension can be recognised, specifically through Hayles' notion of the distribution of cognition with a material environment. This develops throughout her work into a binary of nonconscious and conscious modes of cognition, which explore both human and nonhuman cognizing systems.

MAPPAWARE™

Natalie Armstrong is the central protagonist of Justina Robson's 2001 science fiction novel *Mappa Mundi*, a psychologist and researcher on the Mappa Mundi project, where her own research interests include: '[e]xpanded states of consciousness, hyper-perception, evolution of the mind, testing the existence of the soul'.²⁰² The Mappa Mundi project is underpinned by two sets of theories: the former concerns the physiology of the brain, the physics of thought, and the latter concerns the nature of consciousness and structure of mind. This is a novel which cuts across various sub/genres of narrative: *Mappa Mundi* is at once a geo/political thriller, a spy novel, a contagion novel, and a hard science fiction novel, and covers themes as broad as memetic theory, information theory, and quantum field theory. Yet, in spite of the high-concept nature of her research, Natalie's intention for Mappaware are the software's

²⁰² Robson, *Mappa Mundi*, p. 86

application to free individuals from biologically-induced or incident-oriented mental torment, and indeed Robson characterises Natalie as struggling with her own mental health – as Natalie describes herself: ‘defective, a curio, a broken drum.’²⁰³ And yet, where Natalie’s intentions are certainly innocent and relatively self-less, there are nevertheless geopolitical forces wrangling for control of this potentially mind-enhancing and mind-controlling technology.

On the one hand, Yuri Ivanov, a Russian defector who possesses multiple false identities, and his ally Nikkolai Kropotkin foresee the cultural turn towards the inherent perfectibility of the (human) body and mind, and champion a team of scientists to manifest some relationship of control and stewardship over the burgeoning technology. As Ivanov makes clear, *Mappa Mundi* was designed as ‘a tool that [Ivanov] intended to use to empower individuals to choose their own destinies, their own personalities and their own minds in the face of what he saw as an inevitable development of centralised control methods.’²⁰⁴ On the other hand, there are the machinations of Mary Delaney, a Special Sciences agent for the FBI, where the United States government purport to represent the geopolitical interests of nation-states in utilising this technology for the purposes of state control. Jude Westhorpe, half-Cheyenne / United States FBI agent and complicit partner to Delaney, sees Natalie’s technology as a means of ‘[ending] all dissent – [humanity] will all be god-fearing, bible-reading, materialist self-deluders.’²⁰⁵ As Mary Delaney observes, in reviewing the documents on the Deer Ridge Accelerated Test (CONTOUR), with Deer Ridge an indigenous community which the US government had used as a site for their own

²⁰³ Robson, *Mappa Mundi*, p. 409

²⁰⁴ Justina Robson, *Mappa Mundi*, p. 310

²⁰⁵ Robson, *Mappa Mundi*, p. 190

testing of Mappaware, affairs have already moved into ‘a new theatre of engagement’.²⁰⁶ In this case, what Robson models in Mappaware is a paradigm shift away from an Enlightenment view of rational actors towards an entangled view of posthuman subjects, whose consciousness is re-patterned according to nonhuman agential forces.

The ideological conflict that Mary Delaney anticipates – specifically, upon the revelation of testing of Mappaware on US citizens – is in the destabilising political gulf between corporate interest groups, and the prescient international view of the United States as a force of “cultural colonisation turning into invading ideology”.²⁰⁷ This occupies Delaney’s narrative arc: the attempt to suppress this knowledge of state-mandated use of the Mappaware technology. Both Robson and De Abaitua anticipate anti-technology backlash: where Robson imagines it coming internally from a right-wing US religious conservative sect, De Abaitua imagines a recapitulation of the distinct British Blitz spirit – as discussed later. Returning to Ivanov and his scientific team, their central motivation is preventing, not just Delaney and the United States government, but any nation-state being capable of eliminating their enemies ‘by simply reinventing them as citizens.’²⁰⁸ The biopolitical implications of this – which is to say, the re-patterning of humans and nonhumans as machine assemblages of state-control – is explored in chapter three through a reading of Adam Roberts’ 2014 *Bête*. What both Robson and De Abaitua’s novel share as stakes are the potential for enforced consensus, or, rather the peril in whose template of the world is used to inform these

²⁰⁶ Robson, *Mappa Mundi*, p. 151

²⁰⁷ Robson, *Mappa Mundi*, p. 152

²⁰⁸ Robson, *Mappa Mundi*, p. 326

technologies, in the case of Robson's *Mappa Mundi* the titular Mappaware, that infectious mind-altering software which measures, defines and maps mind anew.

For this conversation, it seems pertinent to re/turn to Roger Luckhurst's reading of Justina Robson's *Silver Screen* and *Mappa Mundi* for which Luckhurst finds Robson's representation of technology as '[allegorizing] questions of enforced consensus, the encouragement of re-wired entrepreneurial subjects, and cultural governance.'²⁰⁹

Whilst Luckhurst taps into the socio-political context of the novel's publication, in this case Blairism as a cultural governance against which science fiction is situated as some subversive force, much of the scientific context is side-lined. After all, Justina Robson published *Mappa Mundi* (2001) in the context of a burgeoning field of quantum physics discourse, a field accounts for atomic structures and processes, wherein – as previously alluded to – psychology is entangled with branches of physics, and the physiology of the brain is profoundly interpenetrated by memetic theory. In the context of the novel, the Mappa Mundi Project was, at its infancy, a purely theoretical research venture that adopted a mental construct, a narrative of how 'an experience of Self could be analysed', with the concept of the meme being adopted.²¹⁰ Indeed, Robson's conceptualisation of memetic theory does seem heavily indebted to conceptualisations outlined by Richard Dawkins, Daniel Dennett, and Douglas Hofstadter. In the case of the evolutionary biology Richard Dawkins' foundational text *The Selfish Gene* (1976), the meme is the cultural equivalent of 'genes', a metaphor for the evolutionary processes at work with/in cultural transmission, and, as Dawkins counsels: '[humans] are built as gene machines and cultured as meme machines, but

²⁰⁹ Roger Luckhurst, p. 432

²¹⁰ Robson, *Mappa Mundi*, p. 380

we have the power to turn against our creators.'²¹¹ In this somewhat subversively playful account, the 'creators' to which Dawkins refers are the tyrannical 'selfish replicators', the meme machines, in Dawkins' imitation of a Darwinian account of memetic theory.²¹²

Nevertheless, if Dawkins privileges the evolutionary potential of the meme over the gene, cognitive scientist Daniel Dennett argues that it is the self which has been co-constituted with/in the 'interplay of memes'. Where there is a false dichotomy in representing the relationship as "memes versus us", because earlier infestations of memes have already played a major role in determining who or what we are'.²¹³ In which case, this is an important moment to unpack some of Robson's ideas around the science of Mappa Mundi, the relationship of her characters to notions of selfhood, and the importance of the wider critical context of subjectivity as an un/assailable story engine. The Mappa Mundi technology utilises memetic theory to explore the evolution of mind, for Dennett views mind – or rather consciousness – as a manifestation of evolutionary processes. Robson's novel is likewise preoccupied by a view of consciousness, as Ivanov has it, as an evolutionary development '[allowing] individuals to experience themselves as separate entities, free agents, enabling them to change the world'.²¹⁴ For this Robson adopts various concepts from Dawkins and Dennett, such as 'the *Memecube*', a cluster of scaled axes in a theoretical n-dimensional space, which is mappable according to structure of the brain. Likewise, a Selfplex is the identity of the individual and a 'master map' whose memetic patterning

²¹¹ Richard Dawkins, *The Selfish Gene* (Oxford: Oxford University Press, 2006), p. 201

²¹² Dawkins, p. 201

²¹³ Daniel Dennett, *Darwin's Dangerous Idea* (London: Penguin Books, 1993), p. 45

²¹⁴ Robson, *Mappa Mundi*, p. 467

can be reconfigured, by ‘predicting the meme-pattern and [...] tweaking the emotional triggers within pre-existing memes.’²¹⁵ Not to mention the treatment of Selfware – a programmable structure which can be used to augment or reconfigure the mind – is in keeping with Dennett’s ‘likening human consciousness to software’, which is a popular trope in the cognitive sciences of Robson’s era of writing but potentially reinforces a certain biological determinism.²¹⁶

Indeed, Natalie comes to view notions of self and free will as illusory qualities which are entirely the consequence of poor theories of consciousness and mind: ‘Somewhere the answers lay, lost to her, hidden in a distant cranny of spacetime. In their absence, she’d made up a story from the map of known events. But all maps are patchy and so all understanding is a story and no more. Natalie herself was a story, a construct of reasons and connections and ideas tethered together by narrative connections she’d chosen to believe.’²¹⁷ The notion of selfhood as an illusory (human) story is well-covered terrain by poststructuralist and postmodernist theories of the subject, and Robson rejects a notion of subjectivity as the formal manipulation of memes. Selfware, as Natalie has it, ‘made you more yourself than you ever were’; which is worth exploring as a performative conundrum set against humanist concepts of individual autonomy and agency.²¹⁸ Judith Butler’s notion of the performative self is directly opposed to a sort of vitalism that grounds identity in a pre-linguistic subject;

²¹⁵ Robson, *Mappa Mundi*, p. 382

²¹⁶ Daniel Dennett, *Consciousness Explained* (London: Penguin, 1993), p. 94

²¹⁷ Robson, *Mappa Mundi*, p. 298

²¹⁸ Robson, *Mappa Mundi*, p. 507

or, in this case, it could be said that a subject exists and is performed according to specific social gestures.

In this case, the interplay of memetic theory with Robson's thinking on the evolution of mind has Ivanov characterising socio-political constructs like Communism, Socialism, and Democracy as a "plague of memes", and Mappaware as a facilitator of "the benefits of doubts, generosity, kindness, the social virtues becoming stronger than our drives for selfish advancement."²¹⁹ Nevertheless, the Memetic Calculus which calculates the risk attached to transforming the Global Common Cube, the theoretical space containing all-known information in the universe, is found that, in spite of shifts engendered in outlook and perception, individuals 'always converge to [their] starting conditions.'²²⁰ It is worth noting here that Ivanov distinguishes between the Global Common Cube and individual's unique Memecube, the latter being the total accumulation of knowledge through individuals' experience. Which is to say, Ivanov and Natalie are specifically cautious about allowing selfish memes to be, where Mappaware has the potential to expand the mind's potential like 'automated insight, like manufacturing spirit or personality'.²²¹ In a later scene in the novel, Natalie, injected with a live Selfware system, encounters Ray Innis, an almost meta-textual parody of a Ray Winstone-type thug, who had previously been an antagonistic force to Dan Connor, her flat-mate and confidante. Whereupon her interaction with Ray is

²¹⁹ Robson, *Mappa Mundi*, p. 466

²²⁰ Robson, *Mappa Mundi*, p. 470

²²¹ Robson, *Mappa Mundi*, p. 189

altered by her use of Mappaware, which ‘added to that the extra force of her personality that the Selfware seemed to have given her’²²²

The prevailing problem of self – in Dennett’s case, situated in the mind – is ‘the last bastion of what is sacred in this world, and to explain it would be to destroy it, so to be safe, we had better declare consciousness conveniently out of bounds to science.’²²³ Nevertheless, this anxiety is exactly what is at stake in *Mappa Mundi*, and as expressed by Ivanov, who opposes notions of identity being entangled with ideas of ‘eternity, unchangeability, sanctity and rightness’, the notion of the ‘sacred self’ is too dangerous to improve or perfect.²²⁴ Daniel Dennett is clear on his thoughts of the narrative self: namely, that, ‘[I]ike the biological self, this psychological or narrative self is yet another abstraction’.²²⁵ Indeed, remaining with Daniel Dennett’s conceptualisations of consciousness, Dennett deploys the term Cartesian Theatre as a criticism of a model of the mind which locates the ‘necessary and sufficient condition for conscious experience’ inside the mind.²²⁶ As Dennett has it, the situated and embodied nature of these questions is ignored: ‘Wherever there is a conscious mind, there is a *point of view*. This is one of the most fundamental ideas we have about minds – or about consciousness. A conscious mind is an observer, who takes in a limited subset of all the information there is.’²²⁷ Dennett herein performs a Cartesian

²²² Robson, *Mappa Mundi*, p. 315

²²³ Daniel C. Dennett, *From Bacteria to Bach and Back: The Evolution of Minds* (London: Penguin, 2017), p. 344

²²⁴ Robson, *Mappa Mundi*, p. 448

²²⁵ Daniel Dennett, *Consciousness Explained*, p. 73

²²⁶ Daniel Dennett, *Consciousness Explained*, p. 106

²²⁷ Daniel Dennett, p. 101

cut: which is to say, there is a Cartesianism which could be taken for granted, for this inherently deterministic view presupposes an inherent distinction between subject and object worlds. This is directly in contrast to the posthuman curators who are entanglements of 'spacetime mattering', as Karen Barad has it, where notions of intra-action – in contrast to the ontology of observation which presupposes pre-existing individuals – allows for an emergence.

This is not to ignore Hayles' definition of virtuality as 'the cultural perception that material objects are interpenetrated by information patterns', which teases at the inherent duality at the heart of Hayles' condition of virtuality: where matter sits on the one hand, and patterns of information on the other.²²⁸ The embodied posthuman herein enacts agency in its intra-action with informational and technological systems, where consciousness becomes a complex adaptive assemblage. Indeed there are a number of researchers and philosophers who accept the main thrust of the "cognitive revolution" in philosophy of mind, psychology, and neurophysiology who still maintain there is a basis for a core, integrated self. In *Consciousness Explained*, Daniel Dennett argues for a view of the subject as 'an abstraction defined by the myriads of attributions and interpretations (including self-attributions and self-interpretations) that have composed the biography of the living body.'²²⁹

For Robson, it might be suggested that the stakes of the novel are to elude this mercenary logic of over-representation for the stakes of the novel situate identity as 'the last sacrosanct piece of an individual that hadn't yet been interfered with by

²²⁸ Hayles, *How We Became Posthuman*, pp. 13-14

²²⁹ Daniel C. Dennett, The Self as a Center of Narrative Gravity. In: F. Kessel, P. Cole and D. Johnson (ed.) *Self and Consciousness: Multiple Perspectives*. (Hillsdale, NJ: Erlbaum, 1992), p. 428

science at anything other than a conversational level'.²³⁰ Daniel Dennett and Douglas Hofstadter reconceive their own version of the meme metaphor in *The Mind's I* (1981) by accounting for emergent properties, or higher-level structures, that cannot be explained away by the forces which governs their components.²³¹ In the context of *Mappa Mundi*, Robson does not abandon these questions of the physiology of the brain and body where consciousness comes to occupy a significant role, as the physiology of the brain and embodied existence of reality cannot be separated. The entanglement of Nervepath nanytes, the hardware implanted inside the nervous system and brain through nanotechnology, and Selfware, the infectious mind-altering software, allows the mind to be re/configured as a 'programmable structure, opening it up for improvements without compromising any of its unique adaptations.'²³²

Posthumanist theory is conceptualised as an ongoing deconstruction of fixed categories invested by postmodernist theory; the epistemological impact of quantum physics; and the increased role of technology in the formation of human identity, which leads to hybridization of the self. Agency is no longer an attribute that someone or something has – not located inside the human subject, as they do not (pre)exist – agency cannot be attributed to subjects or objects – agency is constitutive of a (posthuman) subject. The science fiction of the Boom period extends the view that the mind is malleable and subject to reorganisation of its structures and connections, rather than following the assumption that the human mind is hardwired with a given

²³⁰ Robson, *Mappa Mundi*, p. 327

²³¹ Douglas R. Hofstadter and Daniel C. Dennett, *The Mind's I: Fantasies and Reflections on Self and Soul* (Basic Books, 2001), p. 144

²³² Robson, *Mappa Mundi*, p. 444

set of cognitive abilities – a rejection of the fallacy that consciousness is the primary epiphenomenon.

This poses problems, given the critical context of the 1990s which viewed information and mind across both fiction and theory as profoundly disembodied, and yet Robson materializes the relations between her characters and technologies in profound ways. Even on the scale of the technology, and scale is an important tool by which to measure the response to these questions, the Mappaware is revealed to '[co-opt] not only the Central Nervous System, but every cell of the body [...] by spreading the NervePath technology into the wider somatic ecology.'²³³ The ontological separation of mind and body is thwarted in this ecological view of embodied existence as a wider ecology interpenetrated by technological forces, where Mappaware increases the range of somatic possibility. Cognition is an important concept to foreground here, at least in comparison to theorisations of consciousness as an exclusive trait to humans, for cognition is an emergent trait which frames the potential for a subject as a node in a complex ecology of human and nonhuman agential forces. Whilst there are various differences in disciplinary background and methodologies, the underlying principle is a post-dualist critique of humanism – as part of this ongoing posthumanizing process. Indeed, with/in the fields of cognitive science and biology, there is a continuity between life and mind, where, according to Varela 'living is a sense-making', which does not presume a subjective position but speaks to a form of intentionality in the performative organisation of spacetime mattering.²³⁴

²³³ Robson, *Mappa Mundi*, p. 253

²³⁴ Francisco J. Varela, Evan Thompson, & Eleanor Rosch, *The Embodied Mind: Cognitive Science and Human Experience*. (Cambridge and London: Harvard University Press, 1991), pp. 128-129

This notion of a 'sacred self' is complicated by the character of Bobby X who is reduced – if reduce is a problematic choice – to the level of 'quantum manipulation'.²³⁵ For Donna Haraway, there is a joyous possibility in changing the maps of the world, 'for building new collectives out of what is not quite a plethora of human and unhuman actors'.²³⁶ At the core of Robson's *Mappa Mundi* is the tension between the all-too-human capacity to augment mental cognition and re/configure mental capacities to account for radically new intensities of experience, specifically new conceptions of the self. As mentioned, the character of Bobby X, the quantum scale is introduced: Bobby X, otherwise known as Ian John Detteridge, is one of Natalie's test subjects as part of the Selfware trials. Having suffered the loss of any ability to discern or recognise living things, Bobby X is only able to perceive 'that grey, mouldy brown aura, that shapeless, undefinable, shifting mass that was a nothing – that was how he saw a living thing now.'²³⁷ With/in the context of *Mappa Mundi*, the emphasis placed on the question of consciousness becomes: 'How could consciousness, a product of organic chemistry, reach down to that level and manipulate it? More, how could it do so without altering itself in the process? [...] How can the information of what he is, physically, survive that complete change?'²³⁸ Between Bobby X, the test subject, and Natalie, Robson is able to demonstrate the manner in which information comes to be conceptualised as 'a state of energy', when Natalie is able to de-materialise and re-materialise, in the

²³⁵ Justina Robson, *Mappa Mundi*, p. 347

²³⁶ Donna Haraway, 'The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others', in *Cultural Studies*, eds. Lawrence Grossberg, Cary Nelson, Paula A. Treichler (London: Routledge, 1992) p. 327

²³⁷ Justina Robson, *Mappa Mundi*, p. 192

²³⁸ Justina Robson, *Mappa Mundi*, p. 348

process '[passing] through there were split moments where that energy belonging to Jude became hers and she was Jude Westhorpe.'²³⁹ These images of quantum decoherence where the boundaries between Natalie and Jude dissolve, such that Natalie is able to occupy an immanent plane of existence – embodied and embedded on a quantum level – where she is able to occupy multiple modes of existence, neither human or nonhuman, organic and inorganic.

Barad's reconceptualization of performativity – and her overall innovative framework of agential realism, which strongly links ontology, epistemology, and ethics to one another forces a radical shift in all of our former traditional Western metaphysical beliefs, and reconsider notions such as performativity, agency, subjectivity, interaction and causality, together with our previous understanding of ourselves, and the world – and how we relate to the latter: This because of the fact that the world seen through such an agential realist lens is no longer “composed of things-in-themselves or things-behind-phenomena but ‘things’-in-phenomena.”²⁴⁰ Reality, according to Barad, is rather “a dynamic process of intra-activity” or “an ongoing open process of mattering through which ‘mattering’ itself acquires meaning and form in the realization of different agential possibilities”.²⁴¹ Karen Barad's feminist new materialist rethinking of performativity, and of the world itself, to conclude, pushes us towards a new understanding of materiality. In this new understanding of materiality, matter is no

²³⁹ Justina Robson, *Mappa Mundi*, p. 499

²⁴⁰ Karen Barad, *Meeting the Universe Halfway*, p. 124

²⁴¹ Karen Barad, p. 448

longer 'either given or a mere effect of human agency', but rather 'an active factor in processes of materialization'.²⁴²

"Matter [...] is energy plus information. You and I, our bodies are matter. Our minds depend on that. There is no part of mind that is not flux of information and energy at the classical level. [...] But at the quantum level, all things may pass each other. But passing through causes a change in states, a change of information. Every change brings loss, creates anomalies.'²⁴³

This re-materialization of Bobby is a new form of subjectivity whose 'quantum "weirdness"', as Vicki Kirby characterises it, is entangled, distributed, and localised, such that one's embodiment is 'materialized in / as the very ontology of the object under investigation.'²⁴⁴ Karen Barad, by contrast, suggests the term 'quantum weirdness' is always-already 'quantum queerness', with the view of queerness performing the 'un/doing of identity [...] at the crux of this im/possible, im/passible, trans/formation.'²⁴⁵ Barad's use of slashes is a performative instantiation of her agential cutting, a 'cutting together-apart' in that the slash splices up words into their constitutive components, refusing a view of language as fixed and discrete but arresting the causality of textuality. As Barad notes, the operation of cutting together-

²⁴² Karen Barad, p. 346

²⁴³ Justina Robson, *Mappa Mundi*, p. 274

²⁴⁴ Vicki Kirby, 'Un/Limited Ecologies', in *Eco-Deconstruction: Derrida and Environmental Philosophy*, ed. Matthias Fritsch, Philippe Lynes, David Wood (New York: Fordham University Press, 2008), p. 159

²⁴⁵ Karen Barad, 'Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice-to-Come', in *Derrida Today*, 3.2 (Edinburgh: Edinburgh University Press, 2010), p. 246

apart is engendered by intra-actions which 'enact agential cuts, which do not produce absolute separations, but rather cut together-apart' in a single gesture.²⁴⁶

Karen Barad and Vicki Kirby are both critical thinkers who inherit and reconfigure Derridean thought with/in their posthumanist methodologies: in this case, both Barad and Kirby would agree in the view that individuals do not pre-exist their encounter, and the degree to which the nature of change changes with each intra-action. In the case of Bobby X, the transformation of his material condition is such that each encounter occurs at entirely different levels of embodied existence, where Bobby occupies the 'superposition of possibilities'.²⁴⁷ By the close of the novel, Bobby is no longer '[b]urdened with this kind of slow, primate mind': disentangling (humanist) subjectivity, figured for its 'slow' cadence and 'primitive' quality, divorced from the tyranny of the all-too-human body.²⁴⁸ Which is to say that the transformation of Bobby's embodied existence on a quantum level suggests that the parameters of the cognitive potential of the individual expands 'to comprehend the fullness of what it was he knew and saw'.²⁴⁹ As alluded to above, Ivanov and Kropotkin accept the roles of shepherds of this nascent technology, realising the risk attached to accepting the role of 'world-maker'. As Robson has it: 'All these ideas are what you get when you stare the wrong way down the telescope. The right ideas are the ones you get by seeing yourself not as a player in a game or a mote in the eye of god, but as a world, an entire universe,

²⁴⁶ Karen Barad, 'Diffracting Diffraction: Cutting Together-Apart', *Parallax* 20:3 (Routledge, 2014), p. 168

²⁴⁷ Vicki Kirby, 'Un/Limited Ecologies', in *Eco-Deconstruction: Derrida and Environmental Philosophy*, ed. Matthias Fritsch, Philippe Lynes, David Wood (New York: Fordham University Press, 2008), p. 161

²⁴⁸ Robson, *Mappa Mundi*, p. 458

²⁴⁹ Robson, *Mappa Mundi*, p. 458

within which all things are possible and all sources found.²⁵⁰ Indeed, a throughline in the novel is how the titular software is implemented on society: Ivanov realises the risk of taking on the role of ‘world-maker’, but denies a sole role as that central figure. As such, Ivanov functions as a shepherd of this nascent software. Where Ivanov and Kropotkin focus their attention is of a master of humanity is ‘the idea of progress and improvement and betterment and ease, and that whole memplex which is the fancy articulation of survival itself, that has us all enslaved.’²⁵¹

INTERLUDE: THE MASTER BALANCE

A post-Mappa world is explored in two of Robson’s short stories: ‘The Girl Hero’s Mirror Says He’s Not The One’ and ‘Erie Lackawanna Song’. The latter story serves as more of a philosophical meditation on the eerie possibilities and impending sense of crisis implied by human biotechnological developments, where nanotechnology can be deployed to bio-engineer the structures of the human brain. The short story uses the liminal setting of Hoboken / Manhattan ferry crossing for its ‘nasty SF McGuffin’, and is another example of this literalisation of metaphor. As Jackson observes, the protagonist and narrator of the short story, in picking apart the associations of the “Erie” and “Lackawanna” of the river, it connotes ‘a shore that might even be hidden inside the earth and concealing another world altogether.’²⁵² Indeed, Jackson’s observations imbue the river with the personified, subterranean mysteries of the mind, or to invoke a certain Noonian fascination with fuzzy mirrors there is another agentic

²⁵⁰ Robson, *Mappa Mundi*, p. 38

²⁵¹ Robson, *Mappa Mundi*, p. 38

²⁵² Robson, ‘Erie Lackawanna Song’, *Heliotrope*, p. 103

realm which exists beneath the river's reflective surface. Indeed, the river is conceived by Jackson as a sort of portal to 'worlds undiscovered, into futures so bright and dazzling'²⁵³ That is, until Celia Glick enters the fray, Jackson's 'old acquaintance' who works at a Cognitive Institute on fluid dynamics and complex systems, and is the force of inciting action when she brandishes a vial of MM5, a "real-time, self-modulating, complete cognitive upgrading system."²⁵⁴

As Celia outlines, the potential for Mappaware after the events of *Mappa Mundi* has expanded to such an extent that the moral quandary of the short story is the complex dynamics of materiality which MM5 and MM6 threatens to disrupt. Where MM5 has the potential to weaken humanity's hierarchal map of mind, MM6 is the "immoral moral leveller".²⁵⁵ MM5 and MM6 refers to 'Mappa Mundi, a kind of mind-map' – which has evolved from the instantiations throughout *Mappa Mundi* to a "real-time, self-modulating, complete cognitive upgrading system."²⁵⁶ In which case, the vial of MM5 is much more than an SF McGuffin but is the subject of the story, whose fate is narrated and whose detrimental destiny – as a narrative trajectory – is portrayed as a natural-cultural agency in its own right. Which is to say, following Jane Bennett, the vial of MM5 brings attention to the entangled encounters between 'people-materialities and thing-materialities': it is embedded with/in a material relationship of bodies, ecosystems, Global Meme Cubes, economies, and politics.²⁵⁷ For Bennett, the

²⁵³ Robson, 'Erie Lackawanna Song', *Heliotrope*, p. 123

²⁵⁴ Robson, 'Erie Lackawanna Song', *Heliotrope*, p. 98

²⁵⁵ Robson, 'Erie Lackawanna Song', *Heliotrope*, p. 112

²⁵⁶ Robson, 'Erie Lackawanna Song', *Heliotrope*, p. 102

²⁵⁷ Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010),

p. x

contention is that historical formations – drawn out in more consideration in chapter two – follow ‘the trail of human power’, and often ignore the ‘scent of nonhuman, thingly power’.²⁵⁸ Which is to say, Mappaware is a technology to decentred (human) subjects, as well as those characteristics identified with human exceptionalism, chief amongst them notions of rationality and higher consciousness. Indeed, ‘thingly power’ is prominent in new materialist reconceptualizations of matter as ‘active’ and ‘vibrant’, at least as Bennett would have it – and disrupts social hegemonies.

Celia’s narrative purpose is to unleash the vial, thereby infecting Jackson with Mappaware, which reconfigures the man him with ‘that sense of brimming promise’ lying dormant in the unforeseeable depths of his mind.²⁵⁹ By contrast, the story of the Girl Hero is a much more literal performance of the same principle, which is to say that the titular ‘Girl Hero’ is entirely determined by an inhuman logic of Mappaware. Where *Mappa Mundi* hinted at this reconceptualization of self, this short story wilfully engages with the notion that something ‘other-than-human [already] resides at the very core of the human’.²⁶⁰ In this case, Rebecca / Girl Hero has forgotten her name, and her entire identity has been reconstituted as a result of ‘a bout of ‘flu’, representative of the Deliverance system used to carry Mappaware as a contagion. The world of the Girl Hero is entirely pervaded by the influence of Mappaware and Mappacode, which has resulted in a ‘war of memes: the side of the Directive, which advocates managed and secure social design for the safety and wellbeing of all, and the side of the

²⁵⁸ Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010), p. xiii

²⁵⁹ Robson, ‘Erie Lackawanna Song’, *Heliotrope*, p. 93

²⁶⁰ Robson, ‘The Girl Hero’s Mirror Says He’s Not The One’, *Heliotrope*, p. 61

Cartomancers, which wants anarchy at any cost, a free market without limits.²⁶¹ These notions of different realities is not referring to a multi-versal or quantum imaginary, as implied in The Natural History novels or indeed Robson's later *Quantum Gravity* series, but instead links with this notion that, if the dissonance between one's values and their reality were to be so strong, it would be as if one were substituting different conceptions of a reality which features various grounding Stock Narratives. The short story concerns Rebecca / Girl Hero being assigned to assassinate the villainous bad man, whose crimes are uncertain but presumed to be associated with 'writing or disseminating rogue viruses and/or Maps because there are now the only crimes there are in the absence of what used to be known as Free Will.'²⁶² In essence, the titular villain, Khalid, is punished for the crime of committing to acts of individuality, for engaging in acts which are outside of those prescribed by the Mappacode.

Whereupon the fateful encounter occurs with the titular Villain of her Stock Narrative, Khalid, in which the Girl Hero discovers that she has no 'Defence of Existential Crisis', which is a parodical reference to her Memecube denying Girl Hero a witty comeback, or the wherewithal of thought to commit to such free-thinking. Indeed, Robson makes it clear that, in the world of Mappaware: '[Girl Hero] and [Khalid] are both products of Stock Narrative 101, however many upgrades and individual variations they may have acquired ... and now her rage is like hell itself.'²⁶³ In which case, the Girl Hero reveals what is alluded to in *Mappa Mundi*, which is that the material substrate of the mind is able to reorganise itself, so that any inscriptions made to an individual's Memecube is inevitable reconfigured. Bringing together what could be perceived as a biologically

²⁶¹ Robson, 'The Girl Hero's Mirror Says He's Not The One', *Heliotrope*, p. 54

²⁶² Justina Robson, 'The Girl Hero's Mirror Says He's Not The One', *Heliotrope*, p. 54

²⁶³ Justina Robson, 'The Girl Hero's Mirror Says He's Not The One', *Heliotrope*, p. 63

deterministic story with its Robson's penchant for not downplaying the role of matter: the Girl Hero affirms the power, not of individuality or autonomy, but of the capacity to engage with others – and in the process, allow one's self to be convinced by the character of their argument. As Khalid reaffirms: '[t]he life of ideas is already a literal thing. We used to transmit them inadequately with words and soon they will transmit themselves through nature, through biology, in ways that bypass what small shred of choice may ever have existed.'²⁶⁴ This recalls the concluding scene of *Mappa Mundi* where, Mary casting a thought on the possibility of a single spore of Deliverance surviving, gives a thought to the innumerable means of transmission– to anticipate chapter three – through which her body could be cross-pollinated with Deliverance, the device by which Mappaware is disseminated.

As such, subjects are not characterised as discrete and detached observers, but is cross-pollinated across a continuum of human and nonhuman agential forces which prompt all manner of intra-active possibilities. This entanglement of human and nonhuman across a continuum of creative possibility is explored in greater detail through explorations of the story engine of “becoming-animal” in chapter three with reference to the central ‘Pollination’ metaphor in Jeff Noon's *Pollen*, where Pollination comes to figure the explosive potential of posthumanization – in part, following monist philosophy, as inherited by Gilles Deleuze and Felix Guattari.²⁶⁵

²⁶⁴ Robson, 'The Girl Hero's Mirror Says He's Not The One', *Heliotrope*, p. 58

²⁶⁵ Brian Massumi calls for a politics and pedagogy of animality – grounded and attentive to the material vital forces that flow across species; see: Brian Massumi, *What Animals Teach Us about Politics* (Duke University Press. 2014)

CONCLUSION

To conclude, there is an issue which recurs across posthumanist theory and science fiction: theoretical and fictional accounts supplant a (human) subject at the centre of the universe to guarantee or carry authorial meaning, but neither does theory or fiction attempt to evacuate the position of subjectivity. In fact, as discussed throughout this chapter, various critics – like Braidotti, Hayles, Haraway, McCormack, and Barad – speak to a distribution of subjectivity where attributes inherent to the (human) subject are distributed amongst nonhuman agents. Indeed, following this logic, the boundaries between human and nonhuman entities come to be reconfigured as a material multiplicity of self, where the various attributes of self – such as agency, free will, autonomy – come to be diffracted across embodied existence.

As outlined at the onset of the chapter, the importance of framing the context in which subjectivity is circumscribed is necessary, for there are many traditions of thought and new critical idioms introduced in these processes of posthumanization. The various tendencies of which, include: the deconstruction of fixed categories and dichotomous relations, as outlined by postmodernist theory but best exemplified by Donna Haraway's 'Cyborg Manifesto' (1985). Likewise, the onto-epistemological impact of quantum physics is explored in Justina Robson's *Mappa Mundi*, the distinctions between macro- and micro- scales of consciousness are ontological distinctions from classical physics which Karen Barad would refuse, preferring instead the ongoing reconfiguration of spacetime mattering across and within space and time. Not to mention, as explored in De Abaitua's *The Red Men* and Robson's *Silver Screen*, the increased role of technology in the constitution of the human identity transforms the traditional (human) subject, as cognition is distributed across human and nonhuman locations. Herbrechter and Callus remark that posthumanism seems 'overdetermined'

by technology and reflect on the potential for a posthumanism ‘without’ technology: in this case, what is the potential for a process of posthumanization in the absence of technological intervention. This is explored in more detail in chapter two with a discussion of the mystical stretcher-bearers in Matthew De Abaitua’s *If Then*.

Where both Robson and De Abaitua’s works cast intelligent machines and emergent lifeforms as the consequence of agential forces trying to impose their various maps onto everyone else, the final section of discussion asks questions of the monist model of the world, which is to say, the conception of conscious code developing an emergent consciousness on its own. On the one hand, the posthuman signifies a shift in conceptualisations of subjectivity towards the emergent nature of human and nonhuman cognition, from a systems-theoretical and evolutionary cyberneticist perspective. As Hayles dramatizes, expanding the view of the mind – specifically, what constitutes conscious and nonconscious cognition, and *who* gets to do the cognizing – opens up ‘utopian possibilities’ to be realized by post/humanities scholars.²⁶⁶ Throughout Hayles’ body of work on computational media, from her trilogy of works beginning with *How We Became Posthuman* (1999) and ending with *Writing Machines* (2005), to her more recent work on cognitive systems in *Unthought* (2017) challenges assumptions, and pushes for a more constructive dialogue, between the traditional and digital humanities.

²⁶⁶ Hayles, *Unthought*, p. 205



CHAPTER TWO

SPECTRES OF THE HUMAN AND A POSTHUMANISM TO COME

‘[T]here is no time in post, or, rather, post offers a different time’

Patricia McCormack, *Posthuman Ethics*

Patricia MacCormack’s *Posthuman Ethics* reaffirms that the ‘post’ prompts a whole shift in temporality that makes the humanist notion of history unsustainable, whereupon the ‘post takes narrative and linearity as one of its hostages this is not an unsurprising treason.’²⁶⁷ If chapter one explored the performative accounts of the new subjects reconstituted through processes of posthumanization, this chapter explores the temporalities implied by this process-driven account of the posthuman. This is to ask questions of British Boom science fiction and the manner in which these story engines of diffraction and superposition diffract and disturb all possible histories. To recall Benedict Anderson’s observation in the previous chapter that the museum is an imperialist site, for the sake of this thesis, the museum has been reconfigured as the

²⁶⁷ Patricia MacCormack, *Postuman Ethics: Embodiment and Cultural Theory* (Surrey: Ashgate, 2012),

museum of science fiction and the mode of inquiry ahead is the accounts of these curators engaged in its ongoing posthumanization. Which is to say history is alive: it is an active agency, and unlike the “end of history” discourse – discussed later in the chapter, through Fukuyama and Derrida – there is the proliferation of myriad histories, the explosion / implosion of potential futures. Scholars and writers alike no longer configure human history according to markers of time that are universalistic and imperialistic – which is to say, according to the (human) history of calendars and clock-time, the practice of marking time and space according to human universals. This re-conceptualisation of time is complicated, oppressive even, when temporalities are perceived through the Hegemony of Enlightenment Clock, or the time of the (human) calendar, as first outlined by Walter Benjamin.²⁶⁸ What British Boom science fiction engenders is a capacity to theorize beyond conventional (humanist) analysis, but likewise theorizes this *beyond*-ness without affording to circumscribed (human) notions of cause and effect, nor does it subscribe to (human) models of agency.

Jeff Noon’s *A Man of Shadows* breaks with the time of the human calendar, and disrupts the Hegemony of the Enlightenment Clock, by unsettling the nature of time and space, where temporality and spatiality – in the science fictional tradition of the transubstantiation of the two – come to be configured as intra-active agencies in themselves. Karen Barad is similar to Noon in that she identifies various different ‘clock times’ – ‘the Doomsday Clock, the Hiroshima clocks, and atomic clocks’ – through which her quantum physicist and queer feminist theorizing come to unsettle such

²⁶⁸ See: Walter Benjamin, ‘Theses on the Philosophy of History’, ed. Hannah Arendt, trans. Harry Zohn *Illuminations* (New York: Schocken Books, 2007)

humanist inscriptions of time.²⁶⁹ Which is not to say that posthumanism does not occur as a genuine event, but that the posthuman curators across this chapter must be dutiful in their response-ability to account for time's agency. As implied by Patricia McCormack in the epigraph, the "post" of post-humanism implies a different time to perform questions "beyond" or "after" humanism – and how these nonhuman temporalities are entangled, often in contradictory ways, with the (human) subject.²⁷⁰ As in chapter one, where discussion focused on the proliferation of new accounts of subjectivity, this chapter explores the proliferation of temporalities unsettled by posthumanizing fictional and theoretical re/configurations of time, and how thinking the future beyond the prescriptive methodologies of the Vitruvian Man or the Anthropos confuse and upset 'our posthuman future'.²⁷¹

Again, returning to chapter one, N. Katherine Hayles' study of the posthuman presupposes an always already posthuman ontology, with the study of the posthuman in her 1999 *How We Became Posthuman* tracing an ironically retrospective account where the "post" of the posthuman has already arrived. For which posthuman is clearly haunted by what the curator might say is an indebtedness to, and therefore in a relationship of stewardship with, what we are already in the process of becoming. Nevertheless, where Hayles sees the posthuman as having always already arrived, by shifting the paradigm with/in which humans understand their relationship to

²⁶⁹ Karen Barad, 'Troubling Time/s', p. 256

²⁷⁰ MacCormack, *Posthuman Ethics*, p. 23

²⁷¹ This latter phrase 'Our Posthuman Future' is indeed a deliberate invocation of Fukuyama's 2002 text of the same name, the spectral presence of which haunts this chapter. See: Francis Fukuyama, *Our Posthuman Future: Consequences of the Biotechnology Revolution*, (New York: Farrar, Straus and Giroux, 2002)

embodiment and matter, there is a persistent retrospective temporality inherent to the posthuman.²⁷² As alluded to in chapter one, where the reconceptualization of the subject in posthuman times is at once an ongoing critical deconstruction of the ‘post’ of posthumanism, Cary Wolfe is on the side of the Derridean deconstructionists who argue that the “post” in posthumanism does not entail a radical break with humanism: ‘in the sense that [posthumanism] names the embodiment and embeddedness of the human being in not just its biological but also its technological world, the prosthetic coevolution of the animal with the technicity of tools and external archival mechanisms [...] and all of which comes before that historically specific thing called ‘the human’.²⁷³ Which is to say, the “post” of the posthuman has another temporality, which unsettles notions of posthumanism happening “after” and therein humanity possessing some linear and causal relationship to their own evolution. For Wolfe, the fact that “we” are not quite yet human, that is, the human is entangled with/in various processes of posthumanization – broadly speaking, bound to technology, informational, and economic networks, which need accounting.

Matthew De Abaitua’s *If Then* embodies this view of the human as a historical agent who is response-able for the culturally specific markers which they inscribe upon themselves and history, and those processes which are generative of new embodied forms of existence. Where the turn to theory exposes posthumanism’s inheritance of – and indebtedness to – humanism in the various spectres of humanist thought-

²⁷² Stefan Herbrechter draws attention to these two shifting temporalities of the posthuman: the ‘always already’ and the ‘not quite yet’. For more, see: Stefan Herbrechter and Ivan Callus, ‘Critical Posthumanism or, the *inventio* of a posthumanism without technology’, in ed. Neil Badmington *Subject Matters*, Vol. 3, No. 2 (London: 2007)

²⁷³ Cary Wolfe, *What is Posthumanism?* (Minneapolis: University of Minnesota Press, 2010), p. xv

patterns which pervade the science fiction herein. And yet, more significantly, there is attention to a richer understanding of time and its uncertain futures, which unsettles the relations between cause and effect (via Noon), to be accountable for the means through which the past is inscribed (via Reynolds), and care for the kinds of futures which post/humans generate (via De Abaitua). Where narratives of inevitable, technologically-driven progress encourages attention to the loss of one way of life and the emergence of another framed by more agential conceptions of time and change, dynamics and change. In which there is a new conception of time: one that no longer depends on stories of inevitable futures in which there is no alternative, whether driven by neoliberal economics or climate collapse, or the assumption that history is best conceptualised as a narrative of scientifically-driven progress of a mastery of nature.

British Boom science fiction, best accounted for in the work of Alastair Reynolds, attends with how to think with deep time – with a recognition of geologically history and distant futures. For Reynolds and De Abaitua, the past does not absolve the individual, instead returning to haunt the present and its futures interrupt us and require us to act. This means accounting for the unexpected and disruptive nature of complex systems, that generate a radical disjuncture; a natural history, as Justina Robson has it, is no longer available to us. Consequently, it means that recursion and waves represent and come to figure the multiple and overlapping temporalities, where the curator remains as a constant witness to past, present and future times. The conclusion is that there are richer temporalities: of growth and decay, of cycles and waves – from the different timescales to the slow processes; attending to the implications of quantum physics, to the profoundly unsettling timescales of embodied existence.

This sense of the inhuman as a recapitulation of the human is shared by Cary Wolfe also, who reflects on the “subject-centred semantics”, for “we” are always radically other, already in- or ahuman in our very being – not just in the evolutionary, biological, and zoological fact of our physical vulnerability and mortality’.²⁷⁴ For Cary Wolfe, through the deconstructive account of posthumanism, ‘we find ourselves in a strange but inescapable loop’ in which our ability to conceptualise the human depends on posthumanist models which redouble the deconstructive problem. Wolfe goes on to frame this as ‘[t]he ‘post-’ of posthumanism thus marks the space in which the one using those distinctions and forms is not the one who can reflect on their latencies and blind spots while at the same time deploying them.’²⁷⁵ Whereupon, for Wolfe, the blindness in self-reflexive reasons refuses to simply connote the ‘post-’ as *after* the human or humanism; rather, the ‘post’ of posthumanism refers to a dislocation from the fantasies of humanism, and the difficulty of finding a position from which to critique either constructions of the human or of humanism.²⁷⁶ Thus, there is an irretrievable relation to that nonhuman contingency which is of an altogether different material metaphor, vital to situating this discussion: ‘a birth is in the offing, only under the

²⁷⁴ Cary Wolfe, *What is Posthumanism?* (Minneapolis: University of Minnesota Press, 2010), p. 119

²⁷⁵ Wolfe, *What is Posthumanism?*, p. 122

²⁷⁶ Of course, Wolfe’s reading of N. Katherine Hayles’ 1999 *How We Became Posthuman* as a triumphant vision of transcendence is somewhat flawed for he presents her work as if it were antithetical to accounts of the human with ‘*greater* specificity, *greater* attention to its embodiment, embeddedness, and materiality, and how these in turn shape and are shaped by consciousness, mind, and so on.’ (Cary Wolfe, *What is Posthumanism?*, p. 120)

species of the nonspecies, in the formless, mute, infant, and terrifying form of monstrosity.²⁷⁷

If it has been established in chapter one that the human is not the only meaning-making position, the assumption which proceeds from these conclusions is that the human is not the only trajectory by which to delimit or conceptualise historical processes, and as such this precludes that there are other practices through which history is inscribed. In much the same way, the science fiction writers considered in this chapter – Alastair Reynolds, Matthew De Abaitua, and Jeff Noon – negotiate with a notion of futurity by exploring processes sometimes mystical, sometimes teleological, precisely because the posthuman curator compels us to explore what exists outside the scope of Enlightenment Man’s framework for understanding spacetime. Nevertheless, there are stakes to reconfiguring time in relation to posthumanity, whereby the posthuman curator must attend to the problematic posed by Francis Fukuyama: the post-historical period engendered by ‘end of history’ discourse prompts a recursive relation to history in which there is ‘neither art nor philosophy, just the perpetual caretaking of the museum of human history.’²⁷⁸ For this chapter, the posthuman curator is prompted to action by end of history discourse which engenders the collapse of a certain notion of human progress, as well as a specific conception of the human capable of occupying some relationship of control and management over its thoughts and concepts.

²⁷⁷ Jacques Derrida, ‘Structure, Sign, and Play in the Discourse of the Human Science’, in *Writing and Difference*, trans. Alan Bass (London: Routledge, 2005), p. 370

²⁷⁸ Francis Fukuyama, ‘The End of History’, in *The National Interest*, No. 16 (Centre for the National Interest, 1986), p. 18

As Jacques Derrida implores, the nature of the relationship, in the name of a certain posthumanist conception of time, 'would here be that of an heir', for there is no inheritance without 'a call to responsibility'.²⁷⁹ Which is to say, how to relate to this posthumanizing process, to render it in its singularity would be to elide the posthuman an understanding of its own previous-ness, would elide the heterogeneity of the "post", which is also a "pre", and comes from as heavily embedded a future as much as it does the past. The messianic, a messianic eschatology – the 'justice-to-come', is 'an *ineffaceable* mark – a mark one neither can nor should efface' of humanity's legacy, and it is the curator's response-ability for inheriting that legacy as an active relationship which is ongoing in posthuman times. Indeed, following a Derridean logic, it is possible to distinguish various spectral presences which suggest that poststructuralist and postmodernist thinking has not been fully thought through, but likewise refuses to elide the fact that many of these posthumanizing narratives have always already been postmodern.

Where another conceptualisation of time calls us beyond metaphysical conceptions of history and the end of history, as the extremity of such a discourse is beyond humanist notions of causality, agency, space, time, matter, and response-ability. As Derrida remarks on Fukuyaman discourse, it performs a 'sleight-of-hand trick': on the one hand, it appeals to the logic of the empirical event which it depends upon for verifying the 'finally final defeat of the so-called Marxist States', but on the other hand, it discredits this same logic of the 'so-called empirical event'.²⁸⁰ This chapter, then, is as much aimed at the conceptualisations, the structure of the curator's ability to perform

²⁷⁹ Derrida, p. 114

²⁸⁰ Jacques Derrida, *Spectres of Marx: The State of the Debt, the Work of Mourning and the New International*, trans. by Peggy Kamuf (New York and London: Routledge, 2006), p. 86

its thinking, not as the measure of a certain time according to some totalising inscriptive practice. This chapter seeks to map the ways in which time has been (re-)configured by technological, economic and geo-political forces across deep time, rather than something being taken-for-granted. Which is to say there might not be a time perceptible outside of the multiple ongoing processes of material becoming: the constant transformations of the posthuman subject outside of its parameters in an Enlightened worldview and purely humanistic timescales.

OMEGA POINT

To begin with a discussion on this particular concept that recurs throughout British Boom science fiction, namely the need to re/configure a relationship to history, is to proceed in the view that the past is indeed not over and is inextricably bound to the possibilities of futurity, the potentiality of futures. The question of the posthuman is often framed as the “last” question posed for and by the humanities, although – as Derrida would counter-propose – the “end of history” discourse inherent to a Fukuyaman reading was ‘our daily bread’.²⁸¹ This invocation of the “end of history” discourse is a conscious reconfiguration of Fukuyama, in that the present is very much a lively agency in and of itself, which suggests the stakes in discussions of (human) history and its end. The ‘post-’ of posthumanism is bound up in this process of extricating, both within posthumanism and science fiction, that which speaks to the most un/timely problems associated with humanity and its future.

²⁸¹ Derrida, *Spectres of Marx*, p. 16

The notion of a reconstitution of the past, where time is resurrected and carried forwards into the near-future, and reconstruct, on the basis of algorithmic forces, select people, places, events from the past is what is performed in this section. As De Abaitua characterises it, his novels express a 'Future Shock', a state of alienation from the radical technological advance in contemporary society, which is a prevailing undercurrent which De Abaitua's protagonists must navigate. This manifests, not just on a neoliberal level but on a communal, familial, and fraternal sense, contemporary Britain has been fractured by the broader destructive cultural and political urges which, by no means new and revolutionary, but lingering discontent, abating and maintaining. In the case of *If Then*, the town of Lewes in Sussex has been entirely transformed by societal collapse and cataclysm, which presents a dislocated image of a rural town, its population largely overwhelmed and overdetermined by the algorithm of the Process. In the absence of a market economy and the prevailing apparatus of state governance, the people of the small English town of Lewes submit themselves to this mysterious 'Process' which comes to govern the townspeople's lives. The Seizure affects both a sense of action and disruption, for it signifies one potential ending to history whereas it also captures, within that moment of cataclysm, a potential spiritual renewal in the collective consciousness of humanity.

Whilst it is clear to see that *If Then* centres on the attempt to programme an environment that allows for the conditioning of the human organism, it becomes apparent through De Abaitua's articulation of algorithmic behaviour and the techno-scientific rationalism of the Process, which conceptualises the human as a metric, a variable in a system of meaning, the notion of the liberal humanist subject as a universal entity is continuously destabilised and figured as a site of contest in posthumanist narratives. Posthumanist discourse implies a different regard for

technology as opposed to its humanist predecessor: narratives of control and domination become paramount in articulating the relationship between humans and machines, and it is in De Abaitua's ruminations on the Lewesian peoples' dependence on the Process that his relish for prevailing attitudes towards our emerging techno-scientific landscape become evident. Having submitted themselves to the Process, the Lewesian citizens are protected by, and subject to, the authority of its algorithmic, emergent intelligence, enacted through James, one of the central protagonists in the novel and the town bailiff. James possess an implant, through which the will of the Process is communicated, and it is James' responsibility, as bailiff, to execute the will of the Process, a task which requires him to exile those 'people that the data indicates will be the nexus of disturbances in the future'; it is here that we see a dehumanising, objectifying view of the human organism through the analytical view of the Process' behavioural modelling, in which the townspeople are relegated to being mere 'high-value resource[s]'.²⁸² Whilst it is clear to see that *If Then* centres on the attempt to programme an environment that allows for the conditioning of the human organism, it becomes apparent through De Abaitua's articulation of algorithmic behaviour, and the techno-scientific rationalism of the Process that conceptualises the human as a metric, a variable in a system of meaning, that the notion of the liberal humanist subject as a universal entity holds no sway in posthumanist narratives.

And yet, this is an idea persistent throughout the history of science fiction: the notion that there is a spiritual revolution possible, or forgotten, in humanity's past or even that a spiritual evolution is inevitable. There is an idea specific to science fiction, which suggests that humans are capable of a spiritual evolution, a concept which Matthew

²⁸² De Abaitua, p. 352

De Abaitua explores most explicitly in his 2014 science fiction novel *If Then*. Specifically, an idea of a species – framing the approaching posthuman condition as an encounter with futurity – where the human could be carried otherwise, where the human seeks to reclaim or access capacities which lay dormant in the past. To conceptualise this problem, it seems logical to reflect on the ‘mystical stretcher bearers’ of *If Then*. Following this line of thought, of the capacity for the human to reflect on posthumanity, and the problematic notion of inheritance which is bound up in a relationship with history which is porous to other temporalities which exist and are continuously being reconfigured.

A neologism coined by Jacques Derrida, hauntology dramatizes the privileging of physical existence at the expense of the spectral, but in this vein, the conceptualising of time as always already haunted – constituted by relations which disrupt the continuity of history. *Spectres of Marx* refers to the presence of the ghost, best represented in Derrida’s reading of William Shakespeare’s *Hamlet*, for it is the uncanny appearance of the ghost which confirms that “[t]he time is out of joint”.²⁸³ In the context of this chapter, the hauntological relation allows the curators to approach posthumanism – and the prospect of (posthuman) history, less as an object of inquiry but as an event, for as Derrida counsels: ‘inheritance is never a *given*, it is always a task’.²⁸⁴ Karen Barad is likewise invested in the disjointedness of time, from her quantum mechanical view, which sees the present already threaded through with ‘a past that is yet to come’, where the relationship between continuity and discontinuity

²⁸³ Jacques Derrida, *Spectres of Marx*, p. 61

²⁸⁴ Jacques Derrida, *Spectres of Marx*, p. 67

is not oppositional but intra-active.²⁸⁵ Which is to say, the curators are beholden to the inheritance of these ghostly injunctions to form wholly new and more-than-human ethical orientations towards the event of the posthuman, to orientate towards a present thick with the ghosts of past injustices and vacated futures.

As Claire Colebrook argues, notions of 'justice, democracy, friendship, forgiveness' in Derrida's work are framed as 'idealities that are always "to come"' in and of the fact that these concepts can only be instantiated as enactments, and therein the processes that are generative of these concepts are themselves queer (following Barad's 'quantum queerness' from chapter one) and anarchical.²⁸⁶ *What If Then* interrogates is the time of events, as inscribed in the gaps between the moment in which the Great War was heralded and the collapse of the market economy of the near-future as a result of the Seizure. The figure of John Hector emerges to explore the dis/continuity in these two events intra-acting upon each other: indeed, the novel opens with James, the bailiff and custodian of the town of Lewes, encountering John Hector – an action which has the consequence of inciting the war-game which comprises the latter half of the novel:

²⁸⁵ Karen Barad, 'Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice-to-Come', p. 244

²⁸⁶ Claire Colebrook, 'Extinguishing Ability: How We Became Postextinction Persons', in eds. Matthias Fritsch, Philippe Lynes, and David Wood, *Eco-Deconstruction: Derrida and Environmental Philosophy* (New York: Fordham University Press, 2018), p. 321

‘Whatever he was, he was not quite a man. [...] The soldier bucked urgently against the new, coarse-cut wire, opening up a bloodless wound [...] like a pomegranate.’²⁸⁷

De Abaitua emphasises the nonhuman, almost automaton nature of John Hector: the verb phrase ‘bucked urgently’ suggests the animalistic and non-cognizant actions of a horse, with the imploded organic / synthetic nature of Hector’s skin compared to fruit-matter. *If Then* charts the moral and spiritual evolution of John Hector – for “‘Omega John is John Hector’” – who are two corners of time which have been folded together, as James characterises the two instances of John Hector as mutually constitutive and intra-acting upon each other. Largely, De Abaitua’s novel follows the post-Seizure which has formed around Lewes and the “war-games”, as the very forces which can unsettle the equilibrium wherein individuals can be supplanted from their material context, towards a critical point of emergence and immersion, of maturation and escape.

Omega John’s desire for the cosmological singularity, as the Process delivering humanity towards a morally evolved point, becomes tied to the technological singularity, the Seizure, and the capacity for the Process to collapse temporal distinctions is vital in order to allow for a ‘fold[ing]’ between two moments in history. This ‘time slip’, which allows for the ‘Great War’ to pass into the present, is a recursive loop, whose operation is perceptible as a mental process, conditioned by the mind of Omega John in order to ‘benefit mankind’.²⁸⁸ As Ruth – James’ wife – acknowledges, where her and James’ actions under the Process were maintained out of fear, she

²⁸⁷ De Abaitua, *If Then*, p. 11

²⁸⁸ De Abaitua, p. 245

notes that ‘a new and inscrutable horror’ is coming that is ‘using war as a laboratory’.²⁸⁹ The war being the mechanism through John Hector can begin the embodied journey towards Omega John, which is framed very much as a messianic coming – a spiritual shift in humanity’s history.

As De Abaitua says of the novel, straddling the destructive legacy of World War I and the mysticism which survives into the near-future, the metaphor which is drawn pairs an ‘industrial agent momentum that was nonhuman but of us, and [humanity] couldn’t control it.’²⁹⁰ Omega John, a soldier known as John Hector who served as a stretcher bearer during the First World War, believes in the Process, and in turn the resurgence of the ‘Great War’, as a necessary action in order ‘to apprehend the true nature of our [human] condition.’²⁹¹ Therefore, it seems clear that the purpose of the resurgent conflict is necessary, for Omega John, both in order to eliminate the ‘degeneracy’ of said conflict but also to assist the human species in coming towards its moral conclusion; it is here that the Process is vital, for in recreating the conditions of conflict, it ‘recreate[s] the adaptation’ Omega John experienced.²⁹² *If Then* therefore emerges as a meditation on the nature of conflict and war as an evolutionary process, technology being the vehicle by which Omega John attempts to import an idea of the human into the collective consciousness; nonetheless, as De Abaitua persistently argues, throughout his novels, to what extent is technology the vehicle to communicate

²⁸⁹ De Abaitua, *If Then*, p. 172

²⁹⁰ Jonathan Thornton, Matthew De Abaitua, ‘Matthew De Abaitua Interview – The Red Men US Release’, *Fantasy Faction* [Accessed 12/03/2018]

<<http://fantasy-faction.com/2017/matthew-de-abaitua-interview>>

²⁹¹ De Abaitua, p. 321

²⁹² De Abaitua, p. 329

any idea of humanity, and to what ends can we figure the human as a universal entity worthy of communication.

For De Abaitua, Omega John serves to embody two forces within the novel: the evolutionary speculation of the Process and the conflict endemic to the Great War as twin forces that aim to recreate the conditions necessary for humanity to grasp Omega John's morally evolved condition – with Collinson, one of Omega John's court of mystics, devising algorithms for the Institute – the 'equation[s] of war'²⁹³ The novel performs what history means for De Abaitua's post-historical man, John Hector, a cognitive assemblage who emerges out of the spiritually adaptive moment of war, which calls for something undecidably messianic. In this vein, Omega John's character seems inspired by the spiritualist writings of Pierre Teilhard de Chardin as a reworking of the 'Omega Point', the mystical belief in a moment in which everything in the universe is destined towards a singular point; this singular point is perceptible in *If Then* as a destining towards an engineered view of human reality, a programming of conflict to influence the collective consciousness of a species, an articulation of conflict that presupposes a technological determinism.²⁹⁴ Chardin coins the term noosphere to denote the sphere of the mind, 'as opposed to, or rather superposed on, the biosphere or sphere of life, and acting as a transforming agency promoting hominization', where hominization to signify the evolutionary development of human

²⁹³ De Abaitua, *If Then*, p. 152

²⁹⁴ De Abaitua, p. 408

characteristics.²⁹⁵ This notion of ‘hominization’ is brought into sharper focus in chapter three with a discussion of anti-speciesist approaches in Adam Roberts’ *Bête*.

In Julian Huxley’s introduction to Chardin’s *Phenomenon of Man*, Huxley signals towards Chardin’s conclusion that evolutionary phenomena are processes, which is to follow the Nietzschean notion that humanity is incomplete – and ergo, the human necessitates completion or overcoming. Convergence is an important term in Chardin’s work to denote a tendency in humanity to draw together the contradictory suppositions of physical and psychical states as maturation is achieved. Nevertheless, to place Chardin’s philosophy in relation to Marxian understandings of history, the belief that it would be enough for ‘mankind [...] to gather together [...] our ideas, our discoveries, our works of art, our example’ produces a universe of ‘colossal wastage’.²⁹⁶ Chardin regards the universe as a single process of becoming, not as a process of overcoming or dialectical conflict: which is to say that humanist values, or values of dignity (via Bostrom), are provoked in the novel by biotechnologies – in this case, the ‘stripe’ implant which James and the Lewesian townspeople wear – to ask far-reaching questions about the reinvention of the human. Where this process of ‘hominization’, or as Stefan Herbrechter has it, a ‘posthumanism ‘without’ technology’, is intensely spiritual and is every bit about being response-able, as “a collector and custodian of consciousness”²⁹⁷

²⁹⁵ Pierre Teilhard de Chardin, *The Phenomenon of Man* (New York & London: Harper Perennial, 1955), p. 13

²⁹⁶ Teilhard de Chardin, *The Phenomenon of Man*, p. 261

²⁹⁷ Stefan Herbrechter and Ivan Callus, ‘Critical Posthumanism or, the *inventio* of a posthumanism without technology’, *Subject Matters* 3.2 / 4.1 (2007), p. 18

Returning to De Abaitua's modelling of a post-Seizure world, expressed through the Lewesian town's submission to the Process, this mode of civic organisation recalls what Robert Macfarlane regards as the re/emergence of an English eerie. Which is to say, De Abaitua's figuring of Sussex as a landscape entirely overturned by John Hector's imagination: 'The front was neither in Belgium nor the Dardanelles but at home, in the South Downs; sections had been excised from the familiar curves of the Downs and twists of smoke emerged from the burrows of men [...] No, this is not England.'²⁹⁸ This sense of time and space being entangled is a recurrent theme in the novel, of the war being borne again into the near future, but also there is the sense of space being 'excised' in the cold and inhuman logic of John Hector. With respect to Robert Macfarlane's positing of an English eerie, this coincides with a political and cultural imagining to environmentalism and late capitalist excess, which is characterised by 'a phase of severe environmental damage' characteristic in De Abaitua's depiction of the frontline and of the Downs.²⁹⁹ For Macfarlane, there is an accounting for the 'turbulence of England in the era of late capitalism', and the eerie comes to be a way of conceptualising – a 'means of figuring powers that cannot otherwise find visible expression.'³⁰⁰ Where Macfarlane explores the unsettling of the pastoral scene where, through a reading of Nick Groom, the various 'pastoral clichés' are displaced in favour of a reconceptualization of the English countryside away from – in the context of Nick Groom's 2013 essay – the Conservative reduction of the rural

²⁹⁸ De Abaitua, p. 184

²⁹⁹ Robert Macfarlane, 'The eeriness of the English countryside', *Guardian* [Accessed 24/08/21]
<<https://www.theguardian.com/books/2015/apr/10/eeriness-english-countryside-robert-macfarlane>>

³⁰⁰ Robert Macfarlane, 'The eeriness of the English countryside',

to pageantry.³⁰¹ Indeed, this contemporary eerie finds expression elsewhere in the British Boom science fiction with three of De Abaitua's contemporary "new New Wave", following Nina Allan, in M. T. Hill, Tim Maughan, and Simon Ings.

Wherein De Abaitua's reconstitution of Chardin's Omega Point through Omega John, the reconstitution of the landing of Suvla Bay through the war games, is figured as the reinscription of new values, new tropes, and new ethics. To summarise this, in much more beautiful words than this posthuman curator can summon, here Chardin performs it: 'The universe is a collector and conservator, not of mechanical energy, as we supposed, but of persons.'³⁰² For Barad, it is through the process of 'facing the ghosts, in their materiality, and acknowledging injustice without the empty promise of complete repair', in opening up the notion of selfhood to this radically dis/continuity in moving towards a posthumanism-to-come.³⁰³ Indeed, it is the asymmetry relation in these performances of history, in the dis/continuity with and responsibility to another, that there is a possibility of 'justice-to-come'.³⁰⁴ And yet the pastoral cliches which Nick Groom suggests are displaced and reconfigured consistently throughout *If Then* into horrific images of human maiming and dispassionate scenes of bloodshed.

³⁰¹ Nick Groom, 'Let's Discuss over Country Supper Soon' – Rural Realities and Rustic Representation', *Clearing Online* [24/08/21]

<<https://www.littletoller.co.uk/the-clearing/lets-discuss-over-country-supper-soon-rebekah-brooks-and-david-cameron-rural-realities-and-rustic-representations-nick-groom/>>

³⁰² Teilhard de Chardin, *The Phenomenon of Man*, p. 272

³⁰³ Karen Barad, 'Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice-to-Come', p. 264

³⁰⁴ Karen Barad, p. 265

Nevertheless, for De Abaitua, Omega John's evolutionary project, the progressive view of humanity moving towards a pre-determined goal, is increasingly problematic when considering it against the vehicle that drives his intended moral evolution: Omega John intends to programme 'the war directly into the minds of every man and woman' in order to elicit a set of conditions, with the intention of restoring the human towards those 'human things' they lack.³⁰⁵ The 'human things' of which Omega John refers become abstracted and objectified in the Process, they become a set of variable conditions, a set of calculations with the sole effort being the expansion of the Process: the algorithmic view of the Process centres on the efficiency of the system, its drive is towards performance and away from the altogether human responses, such as empathy and compassion. For De Abaitua, the algorithmic quality of the Process has the effect of reducing the 'collective [human] experience' of John Hector and, in its place, imposes 'a mission critical metric' on the Lewesian people: from a techno-scientific perspective, the current mode of thought which threatens to dominate our contemporary landscape, the liberal humanist subject is nothing but a metric, a variable, an intensification of the categorical nature of thought inherent to humanism. This chapter concerns the manner in which a (post)human quality of existence has been carried through history, as a material body and a cultural pattern, as a negotiation with futurity and a haunting, as a sign of technological progress or a more immanent process.

Universal history, for Walter Benjamin, must fill 'the homogeneous, empty time' with 'a revolutionary chance in the fight for the oppressed past.'³⁰⁶ With respect to De

³⁰⁵ De Abaitua, p. 329

³⁰⁶ Benjamin, p. 263

Abaitua's *If Then*, the Seizure is precisely this reclamation of the 'oppressed past' in which the encounter with a new experience happens outside of the linear structure of time. James' mystical experience in the necropolis is described as a 'violent impression of another realm beyond this one'; it is precisely that which enacts a 'cessation of happening', wherein there is a messianic break with time in order to access the revolutionary moment. Nonetheless, Matthew De Abaitua's *If Then* is a meditation on the nature of the human species as an evolutionary organism, and the extent to which conflict is a fundamental, determining factor in negotiating the evolutionary process: the image of the stretcher bearers carries numerous resonances for De Abaitua in writing the novel, and accounts of the Suvla Bay landing by writers like John Hargrave, who are valorised as 'Mystical Stretcher Bearers' in De Abaitua's writing, present his most potent, historicised image of the human.³⁰⁷ James, during the latter sequence of the novel, set during the re-enactment of the Suvla Bay landing, appears to embody the culmination of these thoughts on conflict as an evolutionary process, particularly the extent to which the human organism is articulated through its negotiation with its own limitations: 'He is not quite a man, more a collection of ideas, and his friends are not stretcher bearers but idea carriers, bringing back new forms of thought from the frontline.'³⁰⁸ For De Abaitua, the frontline is a boundary conditioned by humanity, not only in Omega John's thought, but as a limit that signifies one end of humanity, as a boundary configured in death, but is also connoted as the ends of history, in which the value of one's humanity is haunted by a dehumanising process of technological invention and innovation that objectifies the meaning of one's humanness; the objectification of one's humanness through techno-science is figured

³⁰⁷ De Abaitua, p. 407

³⁰⁸ De Abaitua, p. 252

in *If Then* as a distinctly ontological problem. However, it is important to note De Abaitua's insistence of the frontline, of the trenches, as not only the limit or boundary in the generation of a new, morally evolved species, but it is a temporal marker, a boundary imposed in time, over which he argues, in an interview with Dennis McNulty, is the future.³⁰⁹

At this point in the novel, on the understanding that the Process is a collection of computer algorithms, modulating human behaviour through their networking functions, De Abaitua's regard for the human as an 'idea carrier' is the most distinct ontological claim made within the novel, which, despite De Abaitua rejecting the narrative of evolutionary progress as an autonomous, human process, proves he finds knowledge, both in terms of its construction and communication, as a necessary and vital human attribute. As De Abaitua outlines, not only are we 'idea carriers', as a mode of self-identification, but it is also what we do: the notion of the human as an 'idea carrier' is not only a metaphysical given, but it is an anthropological activity. In this sense, we must consider the forms of knowledge that humanity is carrying forth into posthumanism, and the extent to which there are forms of knowledge that have been inherited from our humanist past, present in narrative logics and modes of thinking that are haunting posthumanist thought. Of course, the designation of a 'Pre-Seizure' timeline is a notion which the novel ironizes by reflecting on the manner in which humans mark histories: 'hell of a dividing line to draw within the annals of human history, smooching together everything that came before the second decade of the twenty-first century – Neolithic etc, Antiquity etc, Egyptians, Romans, Christians,

³⁰⁹ Matthew De Abaitua, Dennis McNulty in Conversation with Matthew De Abaitua (Liverpool Biennial: Bluecoat Chambers, 2016)

Muhammad, Incas, Aztecs, Americas, the Renaissance, the Enlightenment, the Industrial Era, the world wars etc, the rise of the consumer, the Brand Age, the Unreal Age – under one category. The Seizure was the abrupt end to humanity’s interminable middle-age.’³¹⁰

The ‘intractable weirdness’ of *If Then* might stem from the increasing entanglement of James, the town’s algorithmic-appointed bailiff, with the Process, which is framed as attaining a state of god-head. The ‘godhead’ which James acquires through the Process is entirely what is threatened by entanglement of human cognition with technological systems, where the fragile parameters of the self are threatened with dissolution. Instead of a transcendental state of awareness, the godhead, there is – as performed in chapter one, with Augustine’s hybridization with Augustine – a human / machine hybrid subjectivity, which merge the complex assemblage into an entirely different material arrangement which possesses another teleology. As Benjamin illustrates, in approaching the historical subject, there is a recognisable sign of a ‘Messianic cessation of happening’ – which is to say, the structure of the Messianic inaugurates a termination of universal history. Not to mention, the emergence of John Hector, the synthetic duplicate, into Omega John through the granular horrors of war collapses the boundaries between time and space, where De Abaitua uses a well-worn material metaphor to illustrate this cutting-together of spacetime mattering: “Omega John *is* John Hector. Or he was. Two corners of time have been folded together. [...] John Hector and his fellow survivors of the 32nd Field Ambulance form the Order of the Omega to stop the war.”³¹¹ For Hector and the other members of the

³¹⁰ Matthew De Abaitua, *The Destructives*, pp. 216-7

³¹¹ De Abaitua, *If Then* p. 252

Omega Order they have jumped forward in their subjective history, whereas James experiences time in a disjointed fashion. Which is to say, James is the point of view character through which past, present and future logics merge and mutate to create an altogether posthumanizing experience of time and history.

This theme of time folding together is a consistent metaphor to model the effects of a post-Seizure world in which humanity is re-thought, or perhaps un-thought, thought-again, by a nonhuman agential force. Another instance in the novel in which the boundaries between time and space collapse, and another conceptualisation of humanity being “imagined” through an inhuman and impersonal perspective, is in John Hector’s meeting with the preeminent great authors of the age in the aftermath of the Greath War, those ‘giants who had imagined our age’.³¹² This titular meeting at Wellington House is arranged by Charles Masterman, who was indeed present at a meeting, as referenced in De Abaitua’s afterword to *If Then*. On September 2nd, 1914, Charles Masterman – MP and Head of Wellington House – held a meeting with famous authors and poets on behalf of the War Propaganda Bureau, a secret government propaganda department. Indeed, it is through Masterman’s *England After War* that the conceit for Omega John’s science-fictional conceit emerges: ‘at the end of the experience [...] and many in profound misery at the passing of the best life of England, and profound anxiety lest England should be destroyed’.³¹³ In De Abaitua’s near future Sussex, England has been destroyed – or at least re-thought, un-thought, by a speculative and nonhuman agency, both the cognitive power of Omega John and the Process. And yet, the impersonal and inhuman perspective comes as much from an

³¹² De Abaitua, p. 341

³¹³ Charles F. G. Masterman, *England After War: A Study* (London: Hodder and Stoughton, 1973), p.

increasingly posthuman agential force as it does from the machinations of the War Propaganda Bureau seeking to communicate ‘the war to the crowd’.³¹⁴

Perhaps De Abaitua shares Olaf Stapledon’s most parochial gesture, namely the desire to engage in the ‘enterprise of becoming lovingly acquainted with the past, the human past, in every detail.’³¹⁵ Olaf Stapledon is a British philosopher and author of science fiction, whose spiritual and gnostic beliefs informed his writing. For Stapledon, this is humanity’s ‘supreme act of filial piety’, and is perhaps the idea of Stapledon’s which De Abaitua finds the most alluring.³¹⁶ As such, it seems pertinent to return to James’ observation of John Hector as ‘not quite a man, more a collection of ideas’, and the various reconstituted technological agents facilitating the reconstituted battle of Suvla Bay as ‘idea carriers, bringing back new forms of thought from the frontline.’³¹⁷ Perhaps, to return to Ivanov from Justina Robson’s *Mappa Mundi*, John Hector carries an assemblage of positive memes – the best of which is kindness. Omega John is to De Abaitua, as Stapledon’s ‘artificial seed’ is to the future, where humanity might be charged with a ‘primitive zeal’ sufficient to operate ethically, Where Stapledon’s narrator speaks from a period of about twenty thousand terrestrial years, James speaks for the near-future and speak for a version of humanity that have the capacity to adopt the most parochial virtue: kindness.

In her review of *The Destructives*, Nina Allan privileges the ‘intractable weirdness of an *If Then* [...] [opposed to] the inventive, affectless shenanigans’ of *The Destructives*,

³¹⁴ De Abaitau, *If Then*, p. 255

³¹⁵ Olaf Stapledon, *Last and First Men* (London: Gollancz, 1999), p. 297

³¹⁶ Stapledon, p. 297

³¹⁷ De Abaitau, *If Then*, p. 252

the likes of which are explored in more detail in chapter four – when these ‘affectless shenanigans’ are explored in the context of the Anthropocene.³¹⁸ What are the obligations in the time of the posthuman, to be accountable for both increasingly globalised and intra-connected world, best exemplified by asymmetrical power relations and techno-scientific cultures. Furthermore, post-anthropocentric thought, generative in posthumanist discourse of entangled agencies of human and nonhuman – and embodied by new materialisms, speculative realisms and systems theory, account for non-human temporalities. This notion of a redemptive posthuman love, as already alluded to in Nina Allan’s review of *The Destructives*, is discussed in more detail in chapter four. Further still, the assumption that the human species has – as Claire Colebrook would characterise it – a ‘prima facie value or that all we need to do is somehow slough the bad bits of humanity and find the good bits that have been always waiting to flourish.’³¹⁹ As implied, chapter four explores *The Destructives* and how a destructive, hyper-consuming portion of humanity is set against a more life-affirming and collective form of humanity that will emerge to inherit a (post-human) future.

Nevertheless, Omega John’s attempt to carry the war into the present, evoking the images of the stretcher bearers as ‘idea-carriers’, is challenged by Ruth, who argues that the war is not the culmination of a spiritual evolution inherent in humanity, but is merely a ‘war game’:

³¹⁸ Nina Allan, ‘Watching the Destructives: a review by Nina Allan’, *Anglia Ruskin Centre for Science Fiction & Fantasy* <<http://csff-anglia.co.uk/clarke-shadow-jury/watching-the-destructives/>>

³¹⁹ Peter Adkins, Wendy Parkins, Claire Colebrook, ‘Victorian Studies in the Anthropocene: An Interview with Claire Colebrook’, in *19: Interdisciplinary Studies in the Long Nineteenth Century*, 26 (2018) <<https://19.bbk.ac.uk/article/id/1721/>>

“You want to stay *here*?”

“I have to be part of something greater than myself. I can’t survive on my own.”

[...]

“You could say and be part of the Order.”

“None of this is real to me, James. It’s just terrifying.”³²⁰

Ruth, horrified at the sacrificial nature of Omega John’s ‘war games’, of which James chooses to believe it is the very aspect of the war itself, chooses to break with the feedback loop of the Process and, in the same vein, refuses to partake in the Order of the Omega, the megalomaniacal movement championed by Omega John with a message to “stop the war”.³²¹ Where the war is synecdochic for the battle of Suvla Bay, the Great War in its entirety, and the collective trauma of those who had endured the Seizure; and yet, the Process merely outsources the grief and trauma of these events by treating those evicted, the former citizens of Lewes, as “resources” for the ‘war game’. James, having spent the entirety of the novel implanted with a chip which allows him to access the Process, experiences the feeling of being cut off from the Process once, and, as he describes it, “It was shattering. I couldn’t survive it for long.”³²² For James, ultimately, the ‘sacrifice and suffering’ of the war had come to acquire personal significance, the exact meaning of this is ‘obscure to him’, but for the fact that ‘[h]e had endured the war, and endurance was beautiful.’³²³ As such, the war is framed less as the eschatological or teleological culmination of any spiritual process

³²⁰ De Abaitau, *If Then*, p. 382

³²¹ De Abaitua, *If Then*, p. 383

³²² De Abaitua, *If Then*, p. 390

³²³ De Abaitau, *If Then*, p. 406

– evolutionary or otherwise – but as a technological augmentation of the trauma of the Great War and those who had endured the Seizure.

ACROSS DEEP TIME

In the spirit of encouraging hybridization across genre forms, in keeping with the broader processes of posthumanization, this chapter reads a selection of Alastair Reynolds' works of science fiction as 'deep time' novels. Much of the 'hard SF furniture' in Reynolds' science fictional universes – 'slower-than-light travel, coldsleep, machine intelligences' – is aligned with posthuman theory, as alluded to prior, transhumanism: in terms of Reynolds' posthumans remaining radically open to futurity and possibility. Gregory Benford's 1999 critical work *Deep Time* explores the extent to which humanity's embrace of deep time functions as communication with the future, whether as figurations of species extinction or preservation, of environmental degradation or restoration. Similar as Benford's thesis is to critics of the Anthropocene, and more specifically the thinking that undercut Claire Colebrook's *Death of the Posthuman*, which is to say that it seems apparent that the remnants of humanity will remember us by 'not by our Michelangelos or Einsteins or Shakespeares, but by our waste markers, our messages aboard space craft, our signatures upon the soil and species, or our effect upon their landscapes'.³²⁴ Colebrook attends to the problem of scale, specifically the lack of attention to the problem of scale: as science fictional texts are able to convey a post- and nonhuman timeframe, and challenge human-centric perceptions.

³²⁴ Gregory Benford, *Deep Time: How Humanity Communicates Across Millennia* (New York: Avon Books, 1999), p. 203

Nevertheless, this focus on the 'deep time', a geological notion, seeks to unsettle anthropocentric notions of time; where Dipresh Chakrabarty's observation comes in useful, particularly that anthropocentric accounts of 'climate change spell the collapse of the age-old humanist distinction between natural history and human history.'³²⁵ For a broader discussion of this untenable binary, chapter four attends to the notion of humans and posthumans alike as geological actors – digging out the concept of the 'Anthropocene'. Returning to Reynolds' preoccupation with 'deep time', Reynolds' novels possess a geological dimension – such that deep time figures in so many of his science fictional works, exploring a tension between psychology and (human) memory on the one hand and geology and natural indifference on the other. In *House of Suns*, the protagonists – Purslane and Champion – must grapple with the existential and representational difficulties engendered by living across the inhuman scale of deep time. What is unique to Reynolds' account of deep time is that the curators of House Gentian are not merely geological agents, but agents on a cosmic scale. As geological and cosmic agents, House Gentian challenge the markers by which one comes to determine epochs and eras – where the notion of 'epoch' boundaries become superfluous to the timescales of millions of years which Reynolds' posthumans occupy.

In chapter one, in a reading of *Silver Screen*, the discussion concluded in the suggestion that the agential – the relationship of (human) subjectivity to concepts of agency and intentionality – is already entangled with the apparatus of our inquiries, such that it affects the manner in which the object of investigation is understood. In Reynolds' deep time fictions, there is a hauntological relation that engages memory in

³²⁵ See: Dipresh Chakrabarty, 'The Climate of History: Four Theses', in *Critical Inquiry* 25 (2009), p. 201

ways to reveal the productive tension between a desire to understand history, whether human history or the history of life, and an openness to that which exceeds current paradigms and scales of thought. The Gentician posthuman curators conceptualise the lived entanglements of posthuman entities and agencies, accounting for the profound shifts in what the human is, as Karen Barad notes: 'Concepts are indeterminate outside of the appropriate material conditions needed to make them intelligible.'³²⁶ As briefly sketched, Reynolds' deep time fictions posit various maps of the far-future which – referring back to Benedict Anderson's observation of the map and museum as an extension of a colonial force – become detrimental to human activity, where humanity's role as a geological force becomes intensely problematised for Reynolds' posthumans engage in destructive practices. In the universe of *House of Suns*, the 'trivial secrets of spacetime, momentum and inertia were unlocked', which is a constant refrain across Reynolds' far-future conceptualisations of the posthuman future, whereupon there is a transhumanist model of a universe.³²⁷ Which is to say, the vision of humanity which Reynolds presents is one unfixed from parochial Terra-bound parameters by the audacious and visionary thinking of the Line founders. However, Reynolds' novel explores themes of how these technologies which determining memory and identity across deep time come to reconfigure notions of (human) embodiment and history. Throughout *House of Suns*, there are three embodied forms of posthumanity outlined which manage their embodied encounter with deep time, spanning across millions of years into the far-future.

³²⁶ Karen Barad, 'Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice-to-Come', p. 253

³²⁷ Alastair Reynolds, *House of Suns*, p. 293

The Spirit of the Air, or the Fractal-Coagulation, is introduced when Hesperus, having been wounded, is presented to the Spirit for healing. The Spirit of the Air is described as a posthuman intelligence native to the planet Neume – the setting of the Gentian Line’s reunion. The Spirit of the Air was once a human, back in the ‘twilight centuries of the Golden Hour’: Valmik, the childhood friend of Abigail Gentian. However, the embodied transformation of Valmik is different from the curators of the Vigilance and the Line founders: ‘neither shattering, time-dilation nor biological transformation offered sufficient guarantees.’³²⁸ The Spirit of the Air’s influence on the planet is so demonstrable that it is implied humanity’s presence on the planet could be displaced; as Mister Jynx, an emissary of the planet, states: “[Purslane] overestimate[s] the degree to which the Spirit can be assumed to indulge in rational deduction.”³²⁹ Champion’s account of their with the Spirit emphasises the scale of the encounter: “the central mass of the Spirit, the dark bleating clot at its heart where the density of aerial machines was the highest, must have been at least as wide as the observation platform. I had felt trepidation before, but it had been the optimistic trepidation of someone contemplating a hazardous but grand enterprise, like scaling a summit or creating a magnificent art form. Now that trepidation sharpened into magnificent animal fear.”³³⁰ Eugene Thacker captures the sense of Champion’s ‘magnificent animal fear’ with his observations about planetary perspectives: ‘[on] the one hand, we as human beings are the problem; on the other hand, at the planetary level of the Earth’s

³²⁸ Reynolds, *House of Suns*, p. 291

³²⁹ Reynolds, *House of Suns*, p. 288

³³⁰ Reynolds, *House of Suns*, p. 290

deep time, nothing could be more insignificant than the human'.³³¹ Indeed, Thacker elucidates on the tension implicit in taking a planetary perspective, as there is a deep tension between the insignificance – and parochial nature – of (human) agency and self-identity, but the persistent reinscription of the human in these conversations is apparent. Following this, Thacker invokes mysticism – in this case, a contemporary mysticism that emphasises 'the radical disjunction and indifference of self and world' – becomes relevant in accounting for the 'unhuman' perspective, which is to account for the most radical perspective otherwise than human: the climatological, the planetary, the cosmic.³³²

Throughout the novel, Reynolds employs material metaphors which suggest a change of states, the most common is the compression of one state into another, as indicate of how phenomena can be rendered determinate:

“The weight of all those memories is like an ocean of liquid hydrogen, compressing itself to metal. Every new experience I choose to remember, every new moment of my existence, only adds to that crush.”³³³

What the Hesperus / Valmik assemblages reveals is the manner in which these memories are authorised, not by appealing to Valmik's memory as “an accurate record of real events”, but it is with the encounter of the shared collective experience of encountering and entangling with Hesperus that “confirm[s] what had really

³³¹ Eugene Thacker, *In the Dust of This Planet: Horror of Philosophy*, Vol. 1 (Winchester: Zero Books, 2011), p. 158

³³² Thacker, p. 159

³³³ Alastair Reynolds, *House of Suns*, p. 428

happened.’³³⁴ Valmik, a representative of another House in the Golden Hour, transforms himself into a cloud-consciousness where his embodied existence becomes beyond the purview of ‘any imaginable human agency’.³³⁵ The Spirit of the Air, or the Fracto-Coagulation – as he is known by the citizens of Neume, is what remains of Valmik after five and a half million years of existence – an individual whose entire existence has englobed planets. Valmik’s embodied has become interstellar in its nature: at times ‘a fixed presence in the atmosphere, like the metastable storm in a gas giant.’³³⁶ The internal contradiction in Reynolds’ material metaphor undergirds the tension in these posthuman curators: namely that Valmik could occupy a position of fixity, whilst in the same utterance employing the noun phrase ‘metastable storm’ to figure his aspect as one of change in the turbulence and dynamism of his existence.

Reynolds’ uses scalar imagery to convey the inhuman perspective of Gentian Line’s reconfiguration of history across deep time by performing the entanglement of experience with the means by which one chooses to represent or perform it: ‘[t]he Golden Hour was a bright, brief moment in time, compressed like a mote of light seen through the wrong end of a telescope.’³³⁷ This ‘inseparability’, as Karen Barad has it, of the object under investigation and the agencies of investigation, are present in the thwarted simile of ‘a mote of light seen through the wrong end of a telescope’, which the novel’s thesis supports in that the agencies of observation or investigation entirely disrupt or disturb the object under investigation. The Spirit’s embodied existence is another example of Reynolds’ account of the ‘abstract realm of simulated experience’,

³³⁴ Alastair Reynolds, *House of Suns*, p. 428

³³⁵ Alastair Reynolds, *House of Suns*, p. 294

³³⁶ Alastair Reynolds, *House of Suns*, p. 296

³³⁷ Alastair Reynolds, *House of Suns*, p. 293

a frequent feature in his speculative fiction – namely, the simulated or artificial nature of the mind, as discussed in chapter one.³³⁸ As illustrated in chapter one, the specificity of one’s embodied existence – that simulated minds existed in a fixed location – is continuously undercut in Reynolds’ extended body of science fiction.

What is interesting, in terms of Valmik’s transformation into the Spirit of the Air, is that his posthuman embodiment is such that he is figured as a geological force: ‘In fact, the cloud could swell as wide as [Valmik] wished. If he wanted to englobe a planet, to wrap himself around it, that was no problem’.³³⁹ The verb ‘englobe’ is used twice in the novel: in this instance, to describe the capacity of Valmik to extend his material and embodied existence to ‘swell’ as wide as a planet. The other instance in the text in which the verb ‘englobe’ is used comes when Purslane and Campion approach the Vigilance, a collection of giant-sized curators who have augmented their bodies to assist this endeavour, in which it is described how the lines have the technology to ‘smash worlds and reforge their remains into the unbroken shell of a true Dyson sphere’³⁴⁰ These images of scale and magnitude engender a shift in paradigms when thinking of the shatterlings, as they embody the view which Bruno Latour espouses, namely that ‘human agency has become the main geological force shaping the face of the earth’.³⁴¹ One instance of this is Valmik’s emergence being characteristic as ‘like

³³⁸ Alastair Reynolds, *House of Suns*, p. 291

³³⁹ Alastair Reynolds, *House of Suns*, p. 293

³⁴⁰ Alastair Reynolds, *House of Suns*, p. 57

³⁴¹ Bruno Latour, ‘Anthropology at the Time of the Anthropocene: A Personal View of What is to be Studied’, in eds. M Brightman, J. Lewis *The Anthropology of Sustainability: Beyond Development and Progress* (New York: Palgrave Macmillan, 2017), p. 38

a fish that flopped onto dry land and found that it could still breathe, while everyone else was still stuck in the ocean.’³⁴²

‘Since the process was gradual – akin to the continuous redevelopment of a city, rather than sudden demolition and replacement – the man felt no change in his consciousness between the replacement of one neurone and the next.’³⁴³

As Purslane, one of Alastair Reynolds’ ‘unwilling [curators]’ from *House of Suns*, makes clear: in interstellar space, there are less than joyous consequences for post/human entities. As Reynolds says, in his foreword to his short story ‘Thousandth Night’, itself named for the family reunion of the clan – a circuit of a thousand human years – after a cycle of galactic exploration: ‘this was a chance to [...] revel in the possibilities of immense spans of time and history, from a vantage point from which our own time is barely a geological sliver, if it’s remembered at all.’³⁴⁴ This elaboration of the deep time perspective is herein foregrounded when the perspective of a non-anthropocentric view of history is performed, in order to explore the tensions surrounding extinction and survival for whom. In the case of *Gentian Line*, *House of Suns* is the story of two posthuman curators of House Gentian – this narrative in/accessibility proves to be crucial for Purslane and Campion. In fact, this transhumanist model of the Commonality, the temporal designation given to the time of the transhuman Lines, imagines a world that is entirely impersonal and indifferent to the parochialism of species life. To clarify, the Lines are the embodiment of this exceptional human figure: the confederation of various Lines of posthuman

³⁴² Alastair Reynolds, *House of Suns*, p. 291

³⁴³ Alastair Reynolds, *House of Suns*, p. 291

³⁴⁴ Alastair Reynolds, *Beyond the Aquila Rift*, p. 803

descendants is wedding to the notion of universal time which is carried across deep-time, where ‘humanity fractured into a million daughter species, some of which were scarcely recognisable to each other.’³⁴⁵ As Colebrook claims, in Derrida’s thinking of that which is “to come”, there is nothing but an ‘ongoing series of extinctions, precisely because every world is the effect of singular inscriptive processes that effect individuated intentional subjects.’³⁴⁶

The titular House of Suns are a conspiratorial House who are “custodians of this secret”: specifically, the genocide of the First Machines, and other Lines aware of the crime. The House of Suns are likewise revealed to be responsible for ambushing the Thousandth Night reunion of the Gentian Line, seeking to destroy the evidence that the Line was involved in the accidental extermination of a race of machine people, termed the “First Machines”. The Commonality, ashamed by the crime of committing genocide, placed all knowledge of the event under erasure. This erasure takes is committed across both historical records, managed by the Vigilance, and the Line-structure who have erased their individual memories of the event. The “full-blooded paranoia” which the Hesperus / Valmik assemblage describes of the most prominent Lines to the First Machines, about their intentions, and the (human) ‘possibility of control’.³⁴⁷ Where the Lines’ attempt to foresee and offset any threat which those machines might be able to pose the Commonality by implanting a ‘data structure, a

³⁴⁵ Alastair Reynolds, *House of Suns*, p. 425

³⁴⁶ Claire Colebrook, ‘Extinguishing Ability: How We Became Postextinction Persons’, in *Eco-Deconstruction: Derrida and Environmental Philosophy*, eds. Matthias Fritsch, Philippe Lynes, and David Wood (New York: Fordham University Press, 2018), p. 322

³⁴⁷ Alastair Reynolds, *House of Suns*, p. 415

kind of neural bomb', an exploit preserved through the First Machine's evolutionary development.³⁴⁸

House of Suns is beset by these spectres of destructive unmaking of the future, through images of dis/assembly, that is necessarily being undertaken for all of the Lines' sakes. Reynolds' *House of Suns* is a novel that embodies questions of history, memory, and interstellar species violence, through which the remaining curators of Gentian Line must navigate the multiple temporalities emerging from the multiple accounts of embodied history. However, this story of posthumans navigating deep time does not presuppose an autonomous unified subject who seeks to narrate their present, in fact the narrative is shared between two shatterlings – and the form of the novel turns on their respective account of events. Olaf Stapledon is a writer deeply concerned with mysticism, the power of mythic creation in the 'imaginative construction of possible futures', by taking the vantage point of an 'inhabitant of the remote future' communicating back as a future echo.³⁴⁹ For which curation here carries with it the burden of capturing and preserving the structures by which the human has been constituted within specific discourses and formulated within certain eras, but also the ways in which these structures can be refashioned that reflects this ongoing posthumanization.

Purslane is an interstellar posthuman: in fact, Purslane is a shatterling – named after the thousand clones of Abigail Gentian, with Abigail Gentian being the thousandth shatterling and the nominal member of House Gentian. One of the frame narrators of the text, Purslane illuminates the extent to which living through deep time – despite

³⁴⁸ Alastair Reynolds, *House of Suns*, p. 426

³⁴⁹ Olaf Stapledon, *Last and First Men* (London: Gollancz, 1999), p. xiv

allusion to cybernetic modifications to process and alter memories – is unfortunately limited by the human mind, which is insufficiently adapted for experiencing interstellar time ‘in the raw’. To reiterate the point, the figure of the posthuman curator serves to illustrate that the human is not alone in inscribing a particular conception of humanity, nor is the human unique in its systems of inscription. Reynolds’ work, more explicitly ‘Thousandth Night’, *House of Suns* and *Slow Bullets* contend with the enduring monuments to humanity’s existence across deep time – in the sense that the three works engage with Benford’s ahuman processes, effectively eliding the human’s presence. Reynolds, alongside contemporary British science fiction authors like Adam Roberts, Paul McAuley, and Peter F. Hamilton is both prolific and varied in his works, in terms of the conceptual ideas they engage with as well as the time in which they are set. Purslane functions as a posthuman curator in that the shatterlings – on an individual scale – are compelled to maintain the ‘dusty, little-visited museum of [their] own existence’, whilst – on House-wide scale, or otherwise species-wide scale – are responsible for preserving the Line and its ‘tapestry of [...] collective knowledge.’³⁵⁰ As aforementioned, for Reynolds, in both the novel and the short-story, the implication is that – in spite of the shatterlings’ ability to withstand millions of years – the ‘deep structure of [their] minds [...] barely left the trees.’³⁵¹

The House of Suns reveal a darker side to the act of curation – as implied in chapter one – that it functions as an apparatus of control, to govern who is included / excluded from the spacetime mattering of potential future histories, and in so doing erase

³⁵⁰ Reynolds, *House of Suns*, p. 131.

³⁵¹ Reynolds, ‘Thousandth Night’, p. 448

knowledge of one's culpability of a species-level extermination. In a later encounter with Galingale, revealed as one of the members of the titular House:

“The House of Suns was designed to enforce and police the Lines’ self-administered amnesia. It wasn’t enough just to forget about the crime we committed against the First Machines. Gentian Line, and the other complicit Lines, had to be actively prevented from rediscovering the evidence of that crime. [...] It’s been our duty to monitor the activity of the Lines”.³⁵²

Whereupon the earlier characterisation of Gentian Line – as ‘fugitives from the past, envoys to the future’ – comes to frame their actions as vengeful spectres which bring with them the material consequences of Gentian’s Line species-wide and species-scale level of destruction.³⁵³ In *The Illusion of the End*, the end of history discourse is invoked by Jean Baudrillard, where – in traditional Baudrillardian fashion – suggests there is a cancerous quality to the time of events.

‘The weight of all those memories is like an ocean of liquid hydrogen, compressing itself to metal. Every new experience I choose to remember, every new moment of my existence, only adds to the crush. In the deepest, darkest, densest layer of myself, I remember what had happened to the first machines. But those memories might as well have been entombed in rock, for all that they were readily accessible to me.’³⁵⁴

Reading this involution of history, a vigilance to the monumental nature of history, through *House of Suns*, is to read Reynolds material metaphors as indicators of the

³⁵² Reynolds, *House of Suns*, p. 520

³⁵³ Reynolds, *House of Suns*, p. 274

³⁵⁴ Reynolds, p. 428

'penitentiary immortality, the carceral immortality of an unrelenting memory.'³⁵⁵ Baudrillard invokes images of the lively nature of 'memory' and 'archaeology', which is to say that the inscriptive practices which allow for memory are exceedingly present, and must be maintained, opening the practice of inscription beyond the archive and into the distributed potential of the posthuman subject. As such, Gentian House's – as with the titular House of Sun's – fracturing of historical time in favour of taking the long view, that of millions of year of interstellar time, is beset by uncanny posthuman spectres shimmering on the other side of human-induced mass genocide of the First Machines.

To speak of posthumanism is to gesture towards a double fold claim: on the one hand, there is the myopic interpretation of the humanistic tendency towards the self-extinction of a specific conception human, where the movement towards posthumanism seems figured as the redemption of another conception of humanism – or humanism writ large. To return again to Neil Badmington, the act of 'post'-ing the human (of humanism) is an event which is still performed and framed by human beings, which introduces "always already" a relation between humanism and post-humanism, and so any re-formulation of the posthuman remains necessarily with the human. As such, the remnants of humanism can never be completely dissolved from a discussion of posthumanism, as the crucial question of whose conception of humanity is being dissolved becomes problematic. And it is this exact complication which Zakiyyah Iman Jackson confronts in her work, particularly in exploring the resurgence of the "beyond" as a performative gesture, as 'a seductive doxa effectively

³⁵⁵ Baudrillard, *The Illusion of the End*, p. 73

eluding the imperative of renewed reflexivity.³⁵⁶ Which is to say, *who* benefits from the circulation of a specific relationship to the posthuman, wherein appeals to the “beyond” inexplicably seem to resemble calls to ‘move *beyond* race, and in particular blackness’.³⁵⁷ After all, the role of critical posthumanism is to recommence and restore thinking away from the ways in which thinking has previously been open, communicated and accessed: therein committing to serious scrutiny of the specificity of what it means to be human in other cultural contexts so as not to favour Eurocentric constructions.

This phenomenon occurs in *Slow Bullets* with Scur, the novel’s protagonist and soldier-cum-scribe, entombed inside the skipship *Caprice* after surviving the torture of the novella’s antagonist, Orvin, and a religious war between two civilisations. Reynolds’ 2015 novella articulates the desperation of the curatorial effort by subverting its space-opera trappings in order to impress the implications of biotechnology for augmenting embodied existence and the material-discursive component to how bodies and discourse are entangled. In the context of *Slow Bullets*, the skipship, *The Caprice*, has been displaced in time for such a long period of time that Tottori, the destination planet of the skipship’s journey, is a ‘frozen world, devoid of civilisation.’³⁵⁸ The Trinity – composed of Yesli, Spry, and Crowl – are representatives of the three wheels of the ship. Orvin, a war criminal from the colonial war preceding the opening

³⁵⁶ Zakiyyah Iman Jackson, ‘Outer Worlds: The Persistence of Race in Movement “Beyond the Human”’, ed. Mel Y. Chen and Dana Luciano *Queer Inhumanisms*, Vol. 21, No. 2-3 (GLQ: A Journal of Lesbian and Gay Studies, 2015), pp. 214-216

³⁵⁷ Zakiyyah Iman Jackson, ‘Outer Worlds: The Persistence of Race in Movement “Beyond the Human”’, pp. 214-216

³⁵⁸ Reynolds, *Slow Bullets*, p. 93

act of the novella, is likewise aboard the skipship – and where much of the novella, as with *House of Suns*, turns on the tensions between remembrance and forgetting, the story's denouement seems to settle on the fact that Scur and Orvin can both be absolved from their (potential) war crimes.

Part of the peril in the narrative for the inhabitants is the 'ship's slowly vanishing cultural memory', an incumbent threat which is existential and suggests the erasure of the.³⁵⁹ There are two types of memory which Reynolds draws as analogous to the human mind, which has 'both long- and short-term storage registers.'³⁶⁰ The long-term storage registers include banks of information which includes: "Historical data. Cultural knowledge. Maps of planetary surfaces. Astrogation files. Medical data'.³⁶¹ In the absence of some other substrate to inscribe or conserve the skipship's long-term memory, the inhabitants turn towards altering their slow bullets, an implant containing the bearer's life history. Inscriptive technologies are in keeping with this theme of combined textuality and technology – with scribes combatting against this data loss, 'a tangible blow against the ship's own forgetting.'³⁶² Where *House of Suns* had its posthuman curators erasing vast expanses of their memory, *Slow Bullets* concerns a situation of informational precarity where inhabitants of the skipship must preserve the most vital cultural knowledge within themselves. Scur risks her sense of self, which, as the conclusion of the novella reveals, has never been fixed or determinate. Which is to say, through the process of skipping, something of Scur's personal history has been irretrievably breached and lost, and in much the same manner as the

³⁵⁹ Alastair Reynolds, *Slow Bullets* (London: Gollancz, 2017), p. 87

³⁶⁰ Alastair Reynolds, *Slow Bullets* (London: Gollancz, 2017), p. 65

³⁶¹ Alastair Reynolds, *Slow Bullets* (London: Gollancz, 2017), p. 66

³⁶² Alastair Reynolds, *Slow Bullets* (London: Gollancz, 2017), p. 88

protagonists of the novella must tracing the entanglements of spacetime mattering for themselves, so too must Scur decide through her actions what kind of person she enacts: “It’s beyond anything you or I are ever capable of imagining, let alone carving onto a wall inside a thousand days. This is... a gesture.”³⁶³ This embodied and inscriptive gesture is Scur’s way of tracing the entanglements of her colonialist history, but the precarity of this gesture is in embedding the most significant parts of her civilisation’s cultural knowledge onto the interiors of the *Caprice*. As such there are violent erasures implied in the practices of preserving and remembering, which – as identified by the precarity of their situation – can never allow for a return to life as it was, but rather the material reconfiguration of spacetime mattering in such a way as to attempt to ‘do justice to account for the devastation wrought and to produce openings, new possible histories’.³⁶⁴

‘Whatever knowledge the bullet contained, this would be reflected on the outside, in the living skin of the custodian [...] so why not extend that thoroughness to our own bodies as well? I had lines of Giresun cut into my arms, my shoulders, across my back.’³⁶⁵

What is interesting about this passage is the dissolution of any inside / outside distinction, the inscriptions embedded within the archives of the ship can be

³⁶³ Alastair Reynolds, *Slow Bullets* (London: Gollancz, 2017), p. 88

³⁶⁴ Barad, ‘Troubling Time/s and Ecologies of Nothingness: Re-Turning, Re-Membering, and Facing the Incalculable’, in *Eco-Deconstruction*, p. 263

³⁶⁵ Alastair Reynolds, *Slow Bullets*, p. 127

‘We had nothing that could mark a surface in the same manner as ink, but many tools that could scratch a line. So they took their slates, called up a record from memory, and engraved it into metal with sweat and muscle.’³⁶⁶

In this way, both *House of Suns* and *Slow Bullets* enact narratives about the inscriptive power generative of worlds, but also of the inscriptive potential beyond the human. Where this inscriptive process goes so far, the other option which the inhabitants of the skipship possess is preserving part of the ship’s memory by erasing their titular ‘slow bullet’, the records of their identity: Scur’s decision to erase her slow bullet and become a custodian of humanity’s culture – “These words are all that bind me to my home, to the person I was, the world I knew – the faith I was born into. [...] I am surrendering myself. From this moment, all that I was before the waking ceases to matter. I’ll carry it in myself, but I won’t be able to prove a word of it.”³⁶⁷ In the case of Scur, the allusions of Orvin’s to potential war crimes that they have both committed – and yet with this erasure of Scur’s slow bullet, Scur carries a part of humanity’s collective memory.

The act of personal sacrifice on Scur’s part, the act of severance from her past, from “everything that mattered to us once, everything that made us what we are” is offset by the potential crimes committed.³⁶⁸ Where the only record of the inhabitant’s past crimes is what they carry as ‘personal knowledge’ inside their titular slow bullet, in much the same way as De Abaitua characterises the mystical stretcher-bearers as ‘idea carriers’. Scur tracing these bodily moments of spacetime entanglements, in this

³⁶⁶ Alastair Reynolds, *Slow Bullets*, p. 87

³⁶⁷ Alastair Reynolds, *Slow Bullets*, p. 122

³⁶⁸ Alastair Reynolds, *Slow Bullets*, p. 123

case her what Scur chooses to preserve / place under erasure is doubly preserved in the entanglement, in the diffractive pattern of erasing / preserving. What both novels share is a commitment to taking responsibility for the kinds of agential cuts which posthuman curators have the potential to make with/in their environment, for this has drastic ramifications on the survivability of humanity in the far-future. *Gentian Line* and *Scur* are reliant upon the inscriptive processes which generates and maintains their history, but is also generative of their material existence, in such a manner as their embodied existence – expressed through fraught or compressed material metaphors – is the inscription of their worlds. Which is to say, through the return of the memories of genocide and extermination of the First Machines and the erasure of the cultural memory of the *Caprice*, Reynolds' posthuman curators are cognizant of the fact that the 'world is always ending [...] in the sense of writing, trace, inscription, [...] always bears an afterlife.'³⁶⁹

CHRONOSTATIC TIME AND QUANTUM INDETERMINACY

Jeff Noon's 2017 science fiction novel *A Man of Shadows* concerns the investigation of John Henry Nyquist, the 'poor burnt-out, no-good, junked-up failure' of the novel's title, otherwise identified as the conventional Noonian protagonist whom traffics across the fantastical city-scape of Dayzone in pursuit of Eleanor Bale, the latest missing person's case.³⁷⁰ Nyquist's case cuts an eerie tour across timelines, across the borderlines of time, wherein space is conceptualised through the borders between temporal zones, for the setting of the novel is divided into three spatial-temporal zones.

³⁶⁹ Claire Colebrook, 'Extinguishing Ability: How We Became Postextinction Persons', p. 321

³⁷⁰ Jeff Noon, *A Man of Shadows*, (Nottingham: Angry Robot, 2017), p. 258

Dayzone is a region of perpetual day, a city of ‘warped chronologies’ wherein time has acquired an agency of its own, Nocturna is an area of eternal darkness, in which cult-like figures seek solace in and of the night, and Dusk is altogether more surrealist as the liminal space between Dayzone’s regions of Day and Night.³⁷¹ Whilst Noon’s work is increasingly preoccupied with junctions, liminal portals and passageways to other realms, whether the means is via hallucinatory drugs or otherwise, there is a prevailing interest in the trafficking between worlds; in which there is a quality of futurity, for Noon, in that temporality becomes an active agency which reconfigures the nature of entities.

As Noon models in Nyquist’s case with Eleanor Bale, the citizen who trafficks between timelines – figured here as the transubstantiation of time and space; time and space as a manifold and topological structure – struggles to reconcile their sense of self with the ever-shifting scales of time. Upon Nyquist’s arrival in Dayzone, he walks through a part of the city called Shimmer Town, an area for new arrivals which is at once distinctive for its being simultaneously liminal and ambiguous, wherein the citizens are described as ‘adrift in the crosscurrents’ of time.³⁷² Indeed, in Dayzone, time is as much an agential force as it is a commodity: in fact, Nyquist observes the extent to which the citizens must readjust their body-clock according to the ‘new rhythms’ of the city, prompting whole shifts in affective and embodied existence, which suggests the notion of maintaining self-identity is heavily unsustainable.³⁷³ Indeed, throughout the opening chapters of the novel, Nyquist’s narration reveals how unmoored he has become from the multiple pathways of time, each splitting off and evolving in unique

³⁷¹ Noon, *A Man of Shadows*, p. 276

³⁷² Noon, *A Man of Shadows*, p. 32

³⁷³ Noon, *A Man of Shadows*, p. 32

ways: stepping into a bar, Nyquist discovers the nonlinearity of these multiple timelines has caused his watch – the very register and apparatus by which Nyquist measures his temporal existence – to be blurred.

Barad provides a vocabulary here to account for Nyquist trafficking across the various timelines of Dayzone, where Barad pushes beyond the evolutionary systems theory of Reynolds' deep time fictions. Wherein, the praxis of an agential realist approach in tracing the entanglements of 'spacetime-mattering' asks questions for 'how different cuts matter in the reiterative intra-activity of worlding, that is, of the entanglements of spacetime-matterings'.³⁷⁴ In Barad's agential realist account, time, space, and matter are not discrete and determinate entities, and as such post/humans have the potential to 'do more than participate in the constitution of the geometries of power'. Rather there is the emergent possibility for a reconceptualization of topology and dynamism.³⁷⁵ Which is to say, in Barad's agential realist account, agency, as response-ability, is distributed amongst constitutive components of evolutionary adaptive systems. Walter Benjamin, in his 1940 essay 'Theses on the Philosophy of History', speaks of 'blast[ing] a specific era out of the homogeneous course of history', of a reappraisal of an understanding of historical progress through our relationship to remembrance, there is an almost eerie sense of *déjà vu* that coalesces in and of Jeff Noon's treatment of time.³⁷⁶ If Benjamin speaks of the subject of history remaining 'in control of his powers, man enough to blast open the continuum of history', Barad

³⁷⁴ Karen Barad, *Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice-to-Come*, p. 268

³⁷⁵ Barad, *Meeting the Universe Halfway*, p. 246

³⁷⁶ Walter Benjamin, 'Theses on the Philosophy of History', ed. Hannah Arendt, trans. Harry Zohn *Illuminations* (New York: Schocken Books, 2007), p. 263

reconceptualizes agency as an attribute, not located within specific individuals, hardly the ‘property of persons and things’, but rather ‘an enactment, a matter of possibilities for reconfiguring entanglements’.³⁷⁷

To read this concept through *A Man of Shadows*, the syndrome known as ‘chronostasis’ is a state of stasis where ‘[t]ime slowed down to zero, a space where nothing ever happened.’³⁷⁸ Throughout the novel, there are frequent examples of characters being overwhelmed or, in some cases, entirely subsumed by the multiplicity of timelines – which is figured as the irruption of various a-synchronicities disturbing the relationship to one’s own chronology: ‘Dayzone has freed itself from the restrictive cycles of day and night, summer and winter. Because of this, time has evolved in many new ways, each with its own unique pathway.’³⁷⁹ Upon crossing into the Dusklands, Noon configures space in an entirely liminal and ontologically ambiguous manner: ‘[t]he edges cannot be determined, or fixed.’³⁸⁰ As Jeff Noon’s work has always argued, the concept of world is always-already spectral – it has a virtual quality which it not only applies to lifeforms – as is discussed in greater detail in chapter three – but also to ecosystems, biomes and the biosphere. Dayzone’s commodification of time is taken for granted by its inhabitants: in fact, Noon goes so far as to discredit any attempt to read this text as dystopian – Noon’s established body of work, in spite of poaching certain themes like surveillance, is surprisingly affirmative in its perspective. Here, time is as much an agential force as it is a commodity. Evident in Nyquist’s encounter with Lucille, a believer in Dayzone and the multiplicity of its timelines, there is an endearing

³⁷⁷ Barad, p. 54

³⁷⁸ Noon, *A Man of Shadows*, p. 35

³⁷⁹ Noon, *A Man of Shadows*, p. 78

³⁸⁰ Noon, *A Man of Shadows*, p. 311

quality to, breaking with the notion of ‘one timescale’ which seems like an ‘evil overseer’. Instead, Dayzone offers the capacity to view each timeline as its own unique process, with time not as a stable entity – breaking with the universal clock – but as processes evolving in multiple, dynamic ways.

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³⁸¹ Noon, *A Man of Shadows*, p. 32

³⁸² Noon, *A Man of Shadows*, p. 31

The latter portion of the novel concludes Nyquist's case by focusing on the consequences of this unmoored sense of existence, in which the cross-pollination of science fiction and detective genres not only threatens to expose the efficacy of Nyquist's detective skills, but his capacity to maintain a coherent grasp on his sense of reality: as Nyquist despairs, 'the hours [have been] broken down into fragments, into dust'.³⁸³ Having been interrogated by Pearce and Jacob, Nyquist is injected with a vial of kia – a drug which, when injected, brings the 'mists of dusk' travelling through Nyquist's veins.³⁸⁴ Given that the presence of drugs is hardly unfamiliar territory for a Jeff Noon novel, here, the fictional drug 'kia' – short for *chiaroscuro*, another nod towards the novel's noir credentials. *Chiaroscuro* is used in cinematography for the extreme contrast between light and dark tones as intra-active agencies, in much the same way as *Dayzone* and *Nocturna* are enactments of light and darkness. Classic examples of this technique are Boris Ingster's *The Stranger on the Third Floor* (1940) which allows for a 'way of inducing alteration' onto levels of reality, in this case what lies between temporal coordinates.³⁸⁵ As has already been implied, time possesses a significant agential force in the novel and the consumption of kia does not necessarily predict future affairs, but instead predicts a 'future compulsion of the user'.³⁸⁶ Upon being injected with kia, Nyquist enters the region known as Full Dark, accompanied by

³⁸³ Jeff Noon, *A Man of Shadows*, p. 240

³⁸⁴ Jeff Noon, *A Man of Shadows*, p. 262

³⁸⁵ Jeff Noon, "Top 10 imaginary drugs in fiction", *Guardian* [Accessed 20/02/2019]
<<https://www.theguardian.com/books/2017/oct/18/top-10-imaginary-drugs-in-fiction>>

³⁸⁶ Noon, *A Man of Shadows*, p. 277

only the liveliness of ticking sound and 'the furthest edge of the night, where even the artificial stars and the planets were invisible.'³⁸⁷

'There is only the present moment in time, and then the next, one moment following
on from another, all in darkness.

No past, no future, only this...'³⁸⁸

In the realm of Full Dark, a place of inertia, Nyquist is given a vision of his murdering Eleanor Bale, where even textually the interpenetration of space and time as intra-acting agencies manifests with/in the form of the novel:

'He had killed. He was a killer.

No, not yet, but soon: he *would* be a killer.'³⁸⁹

In this case, the tense of each sentence – the past perfect, the past, and the future continuous – are entangled in an almost slipstream manner, demonstrative of the manner in which the subject navigates through the 'crosscurrents' of time.³⁹⁰ Indeed, Noon achieves a transubstantiation of time and space where, Nyquist being in the outer regions of Dayzone, has found himself in the Midnight zone: 'The realm of zero. This was a polar region, he realised, where time slowed to a stop. The mechanism of the city revolved around this one point, this singularity.'³⁹¹ What is interesting, performatively, about the Realm of Zero, is that, as opposed to some Newtonian world where time and space become distinct, Nyquist instead arrives at a node of

³⁸⁷ Noon, *A Man of Shadows*, p. 268

³⁸⁸ Noon, *A Man of Shadows*, p. 263

³⁸⁹ Noon, *A Man of Shadows*, p. 267

³⁹⁰ Noon, *A Man of Shadows*, p. 24

³⁹¹ Noon, *A Man of Shadows*, p. 269

spacetime mattering which cannot be reduced to the purview of the (human) subject. Instead, the Midnight Zone, this dark singularity embodying the nothing-ness, entirely overwhelms Nyquist with its potentially annihilating force, for it is a place populated with 'whispers, the words indecipherable', where '[t]he future had taken over his flesh, his veins, and was seeping through him'.³⁹² Nyquist is quite literally overwhelmed by a certain futurity, a conception of the future which has neutralised Nyquist's ability to navigate through spacetime matterings, but is instead entirely compelled by a future impulse: in this case, the murder of Eleanor Bale.

Indeed, Nyquist is described as being struck by a perceptible feeling of 'Neverness', a dissolution or overwhelming of Nyquist's embodied existence by the oppressive singularity of Midnight: 'Only one thing remained in all this darkness and that was a voice, this voice. Now. Speaking this. This word. Another. One by one by one. These words, this story. His story. Only this: that he was aware of himself as a voice, a mind thinking, an entity. A story. A goddamn story! Somebody alive. A man. A man of shadows.'³⁹³ According to Quantum Field Theory, the notion of a vacuum cannot be said to be determinately zero: as Barad makes clear, the vacuum is not empty but is co-constituted with 'all possible indeterminate yearnings of time-being.'³⁹⁴ Performatively, what Noon develops here is an image of the void as the midnight zone, which possesses an undecidable quality. In/determinacy is, for Barad, 'not the state of a thing' – for this assumes the existence of discrete entities – but an 'un/ending

³⁹² Noon, *A Man of Shadows*, p. 270

³⁹³ Noon, *A Man of Shadows*, p. 270

³⁹⁴ Barad, 'Troubling Time/s', p. 282

dynamism', the play of which accounts for 'the un/doings of no/thingness'.³⁹⁵ In Noonian terms, then, the Realm of Zero is not a definite inertia or annihilation, rather it is the space in which the subject is confronted with the potentially of all sounds; it is a performative contradiction.

For Noon conceptualises a zero matter state, the Realm of Zero, as an enactment of the void in all of its im/possibility, where this tendency of no/thing towards dissolution engenders unsettled feelings of self, world, time and space. This is embodied by the vision that Nyquist receives, an image which provides the only source of agency in this no-space, which imbues Nyquist with an eerie form of intentionality: 'It was his destiny, a force that took possession of him [...] in order to escape – from fear, from his past, from his troubles, from stasis, from darkness – Nyquist had to murder the girl.'³⁹⁶ In being "called" towards some future desire, in re-locating a sense of self in this entanglement of no/thingness, Nyquist is able to follow the mechanism of the clock away from the edge of Neverness, towards which 'timescales beckoned like the pull of gravity.'³⁹⁷ At this point, Nyquist's encounter with Full Dark has left him with '[s]omething to head for, if nothing more', where his sense of self has been hollowed out, leaving Nyquist with a sense of 'the next moment, the next moment after that, the next, and beyond that, the girl dying, dying by his own hand.'³⁹⁸ Which is to say, Nyquist finds himself navigating using a determinate model of time, presupposing that

³⁹⁵ Karen Barad, 'What Is the Measure of Nothingness? Infinity, Virtuality, Justice', *dOCUMENTA* (13) (Hatje Cantz, 2012), p. 13

³⁹⁶ Noon, *A Man of Shadows*, p. 271

³⁹⁷ Noon, *A Man of Shadows*, p. 271

³⁹⁸ Noon, *A Man of Shadows*, p. 272

Nyquist possess a telos and (human) autonomy to arrive at a moment of destiny, where the time-logic of events would be fulfilled.

For this Nyquist arrives in the Dusklands, or as it is otherwise known Precinct Zero, which is the embodiment of a metaphorical liminal zone ‘between Dayzone and Nocturna [...] a danger zone, another world, with different rules, different physical properties’.³⁹⁹ Whilst Noon’s Dayzone is populated with ambiguous spaces, Dusk is the territory in which Noon’s treatment of space is most self-consciously spectral: images of fog and mist pervade, such that there is ‘no substance to these visions, no flesh and blood capable of movement; only voices, only shadows; ideas, feelings, dreams, nightmares.’⁴⁰⁰ Nyquist through some ‘weird chaotic navigation’ encounters a stranger in the Dusklands who he asks for the time, as his own watch has been so heavily impacted by the environment that the Dusk had ‘seeped into its workings, so that the area between the glass and the dial was filled with the silvery mist.’⁴⁰¹ This is Noon’s conceptualisation of Dusk-Time, a strange surrealist space which resembles a Chirico painting, in that there are barren swathes of space populated by dreams, ‘never fulfilled’.⁴⁰² This notion of granularity returns on a textual level which Noon employs throughout the novel of short, staccato sentences, which almost embody the frustrated ticking of the novel’s Clock. Here, in the Dusklands, Nyquist encounters Eleanor and Elizabeth Kinkaid, after having discovered Eleanor’s true genealogy – not as the daughter of Patrick Bale, but the daughter of Dominic Kinkaid – which brings

³⁹⁹ Noon, *A Man of Shadows*, p. 311

⁴⁰⁰ Noon, *A Man of Shadows*, p. 314

⁴⁰¹ Noon, *A Man of Shadows*, p. 315

⁴⁰² Noon, *A Man of Shadows*, p. 317

him into direct conflict with the original Quicksilver, Aisha Kinkaid, the grandmother to the two young girls.

Again, a familiar Noonian plot convention, of a creature straddling liminal spaces and being sustained with/in that liminality, is expressed here in Nyquist's discovery of Eleanor and Eliza: 'two girls of eighteen years, one in blue and one in white, their faces identical, each one a perfect reflection of the other.'⁴⁰³ Similar to Reynolds, where images of dis/assembly figure the posthuman curators embeddedness in deep time, these images of impermanence and indeterminacy are liminal spaces through which the (human) subject can cut-together spacetime mattering: 'Into the dusk I have wandered, in the pale fog I have fallen and become lost, both lost and found.'⁴⁰⁴ As Barad might conclude, the possibility for justice-to-come, in a quantum materializing of the Derridean hauntological relation, is that this in/determinate state of existence is active in every 'morsel of finitude'.⁴⁰⁵

CONCLUSION

As in chapter one, where the liminal status between human and nonhuman entities comes to be reconfigured as a material multiplicity of self, this chapter diffracts self across spaces, times, realities, and – in the case of Omega John's war games – intrusions of the past into the present. Throughout this chapter, the turn to exemplary stories of British science fiction highlight time's agential quality: which is to say, the extent to which history is viewed as a narrative of progress – linear and causal, or

⁴⁰³ Noon, *A Man of Shadows*, p. 364

⁴⁰⁴ Noon, *A Man of Shadows*, p. 366

⁴⁰⁵ Barad, 'What Is the Measure of Nothingness? Infinity, Virtuality, Justice', p. 17

iteratively reconfigured as an ongoing deconstruction. Where much of British Boom science fiction illustrates the stakes in these alternative temporalities with the perspective that multiple temporalities inhabit but also exceed the human scale, with agency and processual transformation (immanent temporalities) inherent in all human and non-human processes of becoming.

This posthumanist reconceptualization of the self, to who we are and how such responses shape spacetime mattering, invites attention to what drives and moves us, to what we love, to what we give meaning, to our subjectivity as emerging through our responsibilities and what we choose to care for. Likewise, it invites consideration for what cannot be confronted, for what we seek to avoid and what we fear. This means conceptualising the unforeseeable aspect of the person, and not just the cognitive or the rational. For this, there is a move towards relationality – to the networks and relationships with other people and other entities through which the individual comes into being. There is attention to nurturing these relations, to acknowledging the dependencies and responsibilities of the person through which subjectivity emerges. Which is to say attention to the entanglement of people and planet, the entanglement of people in systems that are larger and more complex than them.

Where De Abaitua and Roberts' texts introduce a certain hauntological relation through which the human and nonhuman characters in their novels come to engage with humanity as an ongoing process of posthumanization, Noon's text speaks to an experience of self as it is diffracted across spaces and times. Which is to say, that a certain teleology comes to orient, order, and make possible the very historicity, which paradoxically – in the same gesture – annuls notions of historicity by neutralising the unforeseeable. As such, what might call itself (human) history is limited within anthropological frameworks bound to notions of calendrical time.

To relinquish the notion of stable entities, as a model of posthuman subjectivity and temporality does, is to relinquish the notion of definite causal agency endings, which moves towards thinking of temporality in terms of loops, a self-generative process, or multiple intra-acting agencies which overwhelm humans and nonhumans. In Alastair Reynolds' deep time science fiction works, the stakes is in how humanity navigates the various stresses of temporal dislocation, which are figured through material metaphors of dis/assembly. Posthuman temporalities flow non-chronologically, or rather they proceed as if open to multiple possibilities, as if they are aware of the valences capable of being crossed if we were to invent or contemplate new temporalities. – another side of the end of history might have to do not only with the collapse of a certain notion of humanity progress but also with another shift in temporality

Posthumanism seems haunted by the ghosts of humanism – entangled with the “post” of posthumanism, in seeking to think and act differently, there is an incontrovertible realisation that humanism cannot be fully escaped or transcended. Posthumanity is haunted as much by the histories implicit in De Abaitua and Noon's histories – as has been previously discussed in this chapter with Reynolds' deep time fictions, history is not accountable in a linear chronological fashion, as a personal or collective history, but rather the embodied material acts of cutting through / undoing colonialist thinking in an attempt to grapple with acts of genocide in their specific material entanglements. As such, Reynolds' deep time fictions might be the most affirmative here in the articulation of a responsible imagining and intervening in the configuration of power, that is, in a Baradian logic, intra-actively reconfiguring spacetime-matter for the ongoing survival of human history. Thus, posthumanism is haunted as it were by the omissions: the cuts made by Reynolds' curators, the decisions about who and what the vigilance

focus their research on, and those who the Gantian line ignore, marginalise, or potentially erase altogether

Nevertheless, De Abaitua's story seems largely the most affirmative – the ghosts of the Great War summoned into the near future setting so that humanity might be open to acknowledging and accounting for an iteration of a long repressed memory that is able to emerge through technological engagement but which is not quite yet able to be realised. In short, the hauntological conceit at the heart of Omega John's insertion of memories of the Great War into the contemporary near-future is to enforce an ethical duty of kindness – to rediscover a sense of care lost in the imploded landscapes of the near future. In Noon's quantum histories, it is how the present is always already inhabited by the dis/jointedness of time and space, which draws out the self-effacing element of humanity. Throughout all the texts discussed in this chapter, the ghosts of the dead can surface to haunt us, and in the case of Noon's Dusklands compel the citizens of Dayzone to reflect on their self-conception, and the social worlds they traverse. Where this first half of the thesis has argued for post-humanization of humanity, reevaluating the performances of selfhood and temporality, but the extent to which subjectivity and temporality have become increasingly unsettled in posthuman times. However, the political dimension of these questions – the stakes of anthropocentrism and human exceptionalism – compel the curator to reflect on the following question, as posed by Vicki Kirby: 'if the alien is not outside, then who are we, and how might we learn to be at home with *différance*?'⁴⁰⁶

⁴⁰⁶ Vicki Kirby, 'Un/Limited Ecologies', in *Eco-Deconstruction: Derrida and Environmental Philosophy*, ed. Matthias Fritsch, Philippe Lynes, David Wood (New York: Fordham University Press, 2008), p. 174

PART TWO

POST-ANTHROPOCENTRISM



CHAPTER THREE

THE LIMITS OF THE CAT DOG PLANT MEN: THE CROSS-POLLINATION OF “SPECIES”

Post-anthropocentrism is, as Rosi Braidotti instructs, about overcoming a Vitruvianism that is inherent to humanist discourse, to unsettle and disrupt the notion of ‘a single, common standard for ‘Man’ as the measure of all things’.⁴⁰⁷ Against this view of ‘Man’ as the common standard, Braidotti’s nomadic and monist philosophy – inherited, in part, from Spinoza – frames the subject as a ‘transversal entity encompassing the human, our genetic neighbours the animals and the earth as a whole.’⁴⁰⁸ As discussed in chapter one, the curator accounted for the problem of placing the human in the centre of the (Vitruvian) universe, which involves the human subject – including all the human-exclusive qualities, such as cognitively developed language, agency, and reason. As elaborated, the supremacy of the human species coincides with the notion of an individual (human) agent, but posthuman bodies – as best articulated by Judith Halberstam and Ira Livingston – ‘thrive in the mutual deformations of totem and

⁴⁰⁷ Rosi Braidotti, *The Posthuman*, p. 67

⁴⁰⁸ Braidotti, *The Posthuman*, p. 82

taxonomy.⁴⁰⁹ Where chapter one explored the extent to which posthumanist accounts of the subject are indebted to a feminist politics of location by situating the self as a entangled agent, chapter three focuses on non-anthropocentric accounts of the posthuman by remaining with new materialist feminisms. Most explicitly, chapter three seeks to account for all the ways in which humans, animals, and machines are embodied, and what can be learned from – not about – those entangled relations. To account for a non-anthropocentric perspective is to take into consideration the unsettling notion of the existence and extinction of other species, the most profoundly ethical gesture, which carries forward the weight of responsibility of gathering human and nonhuman extinctions together.

Given that the thesis is largely concerned with the effects of posthumanization on fiction and theory and that the latter chapters of the thesis direct themselves towards a post-anthropocentric rationale the inquiry turns to the question of life. As Adam Roberts dramatizes this relationship in his novel *Bête*, a novel which explores the uses and abuses of the concept of species, alongside the fungibility of identity in a multispecies universe. Throughout this chapter, the British Boom science fiction stories explore and develop contested terms of reference in posthumanizing times, and in these performative accounts provide new visions for the possibility of a Virtual politics of hope, as alluded to in Jeff Noon's Vurt novels. For the purposes of this chapter, 'pollination' is employed as a discursive tool that allows for a discussion on the traditional logics of fertilisation and transference. These metonymic devices characterise the undecidable nature of the liminal relations between species.

⁴⁰⁹ Judith Halberstam and Ira Livingston, *Posthuman Bodies*, eds. Judith Halberstam and Ira Livingston (Bloomington and Indianapolis: Indiana University Press, 1995), p. 19

Pollination explores the dangers of universality, of human essence, as a way of centring the humanist subject, and all of its encompassing relationships, through which the intersectionality of species relations also needs foregrounding. Returning to ideas introduced in chapter one, particularly the supplemental character of deconstruction, and the manner in which its differentiation fixes ontological distinctions between human and animal in so far as the supplement is required to maintain such limits; it is thus this chapter's undertaking to illustrate the deficiency of such dependence on difference as exclusionary logic.

This chapter returns to the question of subjects, namely animal and machine subjects, through the British Boom writings of Jeff Noon and Adam Roberts in which the persistence of identity as a marker for drawing distinctions between species becomes fraught. As discussed in chapter one, there is a reliance on the power engendered in conceiving the (human) subject as uniquely characterised as autonomous, sovereign, and unified. Where posthuman discourse and British Boom sf demonstrated the inherent flaw in such unitary thinking by framing subjectivity as porous and malleable – whilst at the same they seem to preserve boundaries. The chapter first explores modern and domesticated dogs that straddle the liminal space between that which is not quite human and not quite animal; those who are bred and conditioned to occupy human spaces but fundamentally unsettle those spaces in their emergence into something otherwise than the human/animal binary. As the chapter continues, discussion centres on unstable binaries located within animal rights discourse on animal and vegetal life – beginning with a reading of Jeff Noon's *Pollen* – which raises questions about the *fungibility* of identity. Identity possessing a fungible force recalls the medieval Latin *fungibilis*, from *fungi* meaning 'to perform, enjoy', but also having

the implication of being mutually interchangeable – of serving in the place of another.⁴¹⁰

With an insight into critical posthumanism and its questioning of conventional categories that define the human, chapter three entails an exploration of the manner in which the posthuman figure destabilises the limits and symbolic borders of the human with its non-human neighbours. This chapter takes the writings of Jeff Noon as part of its central focus in order to extrapolate on the varying categorisations of human/non-human modalities of being, alongside a greater exploration of the taxonomies that delineates such conceptualisations of species relations. To consider the grounds upon which the liberal humanist subject has existed and to therein transform it into a 'post-', a speculative figure that is itself undergoing a contingent production, is futile for it ignores, in much the same way, the extent to which the liberal humanist subject has maintained myriad ways of being/becoming 'human'. Retreating away from an experience of humanity as fixed and static, a formulation of the human condition that is discrete and separate from all other habitual modes of existence, both *Vurt* and *Pollen* are clearly moving towards a representational awareness of embodied existence, a site of assembly whose relationship is constantly being revised depending on the being that functions in said auxiliary role.

As is discussed in this chapter, separate from the 'dominant dramas' of Anthropocene and Capitalocene discourse, in a post-Cthulucene world, humanity is dethroned as the

⁴¹⁰ Oxford English Dictionary, 'fungible', *Oxford English Dictionary* (Oxford University Press, 2022)

[18/03/2022]

<<https://www.oed.com/viewdictionaryentry/Entry/75537;jsessionid=E332EF4F2C3E998E208FEE8F911ACAE2>>

only important actors in the story of life.⁴¹¹ For the most part, this chapter concerns itself with the unsettled categories of human and animal, and how these two categories of existence frequently intra-act, co-exist and co-evolve across British Boom and posthumanist narratives. Life is not herein codified as an essential characteristic of the human species but is a dynamic force which, as Rosi Braidotti has it, ‘cuts across and reconnects previously segregated species, categories and domains’.⁴¹² In this regard, the notion of a humanity remains open: the critical posthumanist mode does not seek to abandon the specificity of a certain humanity; however, as has been discussed throughout, there is a necessarily spectral component which needed engagement.

In Adam Roberts’ 2014 science-fiction novel *Bête*, the role of the protagonist, Graham Penhaligon, operates under the sovereign logic of exclusion in a wonderful subversion of the curator trope. Indeed, Graham might possess a role of husbandry to the land but that role is fraught with inconsistencies and paradoxes, until the rise of the novel’s titular species, which prompts – in the embodied story-world of the text, a recalibration of social rules in the advent of sentient animals, referred to as bêtes. The novel therein places Graham as a liminal figure who straddles the world of “Homo sapiens” and “Homo bête”⁴¹³ Homo sapiens (Latin for ‘knowing man’) was coined by botanist Carl Linnaeus, which refers to humanity as the only living species within the Homo genus. Graham’s point of view interpellates the reader within specific humanistic and speciesist relations to the betekind of Roberts’ text in which he perceives them either as dumb animals – reducing them to a base animality, in opposition to humanity – or as monsters. As such there is an untenable binary which Roberts’ novel seeks to

⁴¹¹ Haraway, *Staying with the Trouble*, p. 55

⁴¹² Braidotti, *The Posthuman*, p. 60

⁴¹³ Adam Roberts, *Bête*, p. 284

deconstruct through Graham, the husband of nature, the shepherd without a farm – a deconstruction which can only take place by dislocating Graham from his humanistic setting

One of the overarching problems that this chapter seeks to challenge is the problem of technological determinism, which is Stefan Herbrechter reflects on as a problem with/in posthumanist discourses. Technology has always been in different ways the determining question of humanity, of the human, of becoming-human – as discussed in chapter two, this process of ‘hominization’ is foundational to humanity’s generative force. In the context of animal studies, if the human has always been constituted through technologization, the extent to which the animal might conceived as over/determined by technology forces a reconfiguration of species boundaries, and the structurality of species-thinking. Finally, the chapter asks questions of the extent to which a ‘pure’ animality or humanity is possible to be reclaimed in posthuman times; which, of course, presumes that there is a pure animality which can be thought. Animal studies, in Cary Wolfe’s formulation, intersects with posthumanism, not in the sense of transcending human embodiment, as Katherine Hayles disparages in *How We Became Posthuman*, but in returning us to the finitude of human embodiment – and to conceiving of human evolution as itself a specific form of animality.⁴¹⁴ It is precisely about remaining with – not evacuating – the specificity of the human and animal in different cultural and anthropological contexts across a dynamic, physical reality.

⁴¹⁴ See: N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (London: University of Chicago Press, 1999)

To return to chapter one, and the inquiry into the schema of the knowing subject of humanism, the concern with the embodied finitude that is shared with animals, a finitude that humanism has sought to largely disavow. The contribution that critical posthumanism brings to a discussion of the relation between the animal and the human is a post-anthropocentric framing which recasts categories like “human” and “animal” as discrete categories. Stefan Herbrechter regards the effect of posthumanization, the enquiry which this chapter directs itself towards as a ‘post-anthropocentric’ rationale, in terms of a return to the question of ‘life’.⁴¹⁵ Wherein ‘life’ is understood herein as a discursive object and the site of knowledge production – or ‘worlding’, as Donna Haraway has it – in which the ‘proliferation of new technological, human and nonhuman life forms’ entails an exploration of the transformative potential of a turning towards life.⁴¹⁶ Humanity, therefore, is an incomplete and unresolved entity – as previously explored in chapters one and two, the human possesses virtual elements which have yet to be realised. Specifically, in chapter two, posthumanity was noted to be intertwined with notions of futurity, but this relationship to futurity is hardly unique to humanity, as discussed in the latter section of this chapter with a discussion on organic and inorganic models of life in Jeff Noon’s 1995 *Pollen*.

THE BÊTE THAT THEREFORE I AM

There is an encounter between protagonist, Graham Penhaligon, and one of the titular bêtes, animals augmented by technology, Cincinnatus. After his first sexual liaison

⁴¹⁵ Stefan Herbrechter, *Posthumanism: A Critical Analysis* (London: Bloomsbury, 2013), p. 181

⁴¹⁶ Roberts, *Bête*, p. 207

with Anne, Graham's on-and-off-again paramour throughout the novel, Graham awakens in the early-light of day, naked, and confronts Anne's self-described friend, Cincinnatus. This scene recalls rather pointedly Jacques Derrida's encounter with his cat in the now-famous essay 'The Animal That Therefore I Am', except, in Roberts' novel, this encounter – which carries such meaning for Derrida – is subverted in several subtle ways. In the case of Cincinnatus, the sentient *bête* is concerned hardly for the prudery of catching a man and a woman engaged in a sexual act. Similar to Derrida's encounter with his cat, Graham takes the prudish approach of feeling uncomfortable under the gaze of – in Graham's words – “a pervert” or a “[p]eeping tomcat.”⁴¹⁷ Cincinnatus, unlike Derrida's cat, possesses technologically-augmented cognition and is able to respond, expressing offense at the implication of his finding any pleasure in their sexual acts, even that he should move to accommodate Graham's “prudery”.⁴¹⁸ This forces an interesting issue to be broached between the two: the nature of Cincinnatus's *kind*, namely whether he falls under the category of those ‘loquacious *bêtes*’ and ‘not just cats’.⁴¹⁹ In short, Roberts' novels turns on a theme of mis/recognition, where Graham's prejudices represent what appears to be an insurmountable obstacle to the material entanglements and embodied possibilities of the characters' affinity to a multispecies worldview.

To return to Christopher Peterson's critiques of posthumanism from the previous chapter, there is an assumption in Peterson's work that the discourse of posthumanisms is inextricably bound to narratives of perfectibility. In Peterson's assessment of posthumanist discourse, the work of posthumanism is not an

⁴¹⁷ Roberts, *Bête*, p. 61

⁴¹⁸ Roberts, *Bête*, p. 62

⁴¹⁹ Roberts, *Bête*, p. 62

eradication of the human / animal divide but a reinscription of the binary, such that any 'claim to have vanquished [these binaries] once and for all' cannot say to invariably lead to the 'escalation or transposition' of such negative binaries in an unforeseeable manner.⁴²⁰ As such, Peterson's damning rhetoric is that posthumanist discourse can always prove to be 'just as *bête* (beastly, violent, stupid, lacking in judgement), or even more *bête* than the *bêtise* it claims to "correct".'⁴²¹ Which is to say, Peterson's view of a righteous posthumanism which seeks to treat humanism as a '*bêtise*', an act of foolishness, whereupon this righteous posthumanism recreates the *bête* (violence) of humanism. One of the narrative threads worth introducing, from Roberts' *Bête* is a view of species-identity, or the use of the strategy of identity formation derived from notions of species, as dichotomous and deterministic, which requires reevaluation.

The extent to which posthumanist discourse explores tensions of the inscription and the erasure of species-identity is best demonstrated through the sacrificial inclusion / exclusion of Graham Penhaligon from (human) civilisation. *Bête* charts Graham's exclusion from contemporary England by virtue of his lacking any capital once the economy 'barks back into life according to a whole new logic', the logic of the *bêtes*, whereupon the growing masses of *bête*kind push for citizenship and rights.⁴²² Graham's infamy amongst *bête*kind is a consequence of the fact that Graham was "one of the last people to kill a *bête* before the law changed and they were granted citizen status."⁴²³ As is alluded throughout the novel, Graham is a subversion of the curator trope in that his role of farmer is not one of husbandry: as Graham outlines,

⁴²⁰ Christopher Peterson, 'The Posthumanism to Come', p. 135

⁴²¹ Christopher Peterson, 'The Posthumanism to Come', p. 138

⁴²² Roberts, *Bête*, p. 30

⁴²³ Roberts, *Bête*, p. 258

there are two ‘breeds’ of men, ‘something that goes back deep in human history, hunter-gatherers and farmers.’⁴²⁴ Nevertheless, when confronted with lawyers for having slaughtered his canny cow, the emergence of farming as a social practice is – in Graham’s estimation – exactly ‘what *marks* humanity *off* from apes’.⁴²⁵ Indeed, the notion of farming as constitutive of processes of humanization – or as Stefan Herbrechter has it, ‘hominisation’⁴²⁶ – and nevertheless the earlier portion of the text seems to unsettle the paradigm which Graham defines: namely, that humanity is constituted through a relationship with nature. For Graham, identifying as a farmer, there exists a ‘layer of hostility’ emerging between the farmer and proximity to nature, a hostility which Graham recognises on both sides – perhaps, the first suggestion of Graham’s anthropocentric projections.

Nevertheless, to return to the discussion of Graham as a subversion on the trope of the curator, more specifically a farmer whose relationship to nature is one of hostility, in an early encounter with Preacherman, the devout bristles at the manner in which he is characterised:

“Human beings are pack animals, *Graham*. We stick together, *Graham*. [...] What you call a cult is actually a *community*, *Graham*.”⁴²⁷

The use of inclusive / exclusive language is a feature of Preacherman’s characterisation and is Roberts’ most pointed critique of self-aggrandizing, speciesist attitudes. There is an inherent contradiction in the notion of humanity as a privileged

⁴²⁴ Roberts, *Bête*, p. 8

⁴²⁵ Roberts, *Bête*, p. 14

⁴²⁶ Stefan Herbrechter, *Posthumanism: A Critical Analysis*, p. 54

⁴²⁷ Roberts, *Bête*, p. 40

animal, a rationalisation which presumes to privilege humanity as a “pure” being above such base animality. As is drawn out in this discussion, there is a critique of any view espousing species supremacy – that of the violent and destructive role of the Anthropos – whereupon the text is arguably calling for a critique of species itself as an abusive posture. However, Preacherman does acknowledge that there is a sense of animality located within humanity; in this instance, what is animalistic does not denote negative behaviours, but is instead aligned to community and is bound (wilfully) by socially hegemonic factors. In this regard, Preacherman’s anthropocentrism is symptomatic of speciesist attitudes: speciesism, that is, the privileging of one species over others.

For Timothy Morton, the notion of species is re/configured as a ‘subscendent hyper-object, brittle and inconsistent [...] insofar as it subscends its parts (such as plastics and concretes in Earth’s strata).’⁴²⁸ Here, the notion of hyper-objects needs robust definition to account for the complexity of the issues at hand: hyperobjects are that which exceeds human comprehension by challenging anthropocentric notions of human authority over its external environment. Hyperobjects are explored in more detail within chapter four through a discussion of Alastair Reynolds’ Inhibitor trilogy and Poseidon’s Children trilogy. In the context of this chapter, Morton’s understanding of species is almost totalitarian in its assumption of life as predetermined and fixed, rather – in Morton’s ecological thinking – it exposes the ‘commodity-ness’ of the animal in the present capitalist age.⁴²⁹ For Morton, the very signifier “animal” performs the ‘intolerances to strangeness and to the stranger’, where the predominant ideologies

⁴²⁸ Timothy Morton, *Humankind: Solidarity with Nonhuman People*, p. 113

⁴²⁹ Timothy Morton, *The Ecological Thought*, p. 40

lead in two directions: 'we must become, or be thought of as, like "animals" (biocentrism), or they should become, or be thought of as, like us (anthropocentrism).'⁴³⁰

Biocentrism deconstructs a conception of the human to reframe life on nonhuman plateaus, to include the animal, the vegetal, the wider ecology, where *bios* (discursive and political life) is privileged over *zoe* (nonhuman life). As Braidotti clarifies in *Transpositions: On Nomadic Ethics*: 'Life is half-animal, nonhuman (*zoe*) and half political and discursive (*bios*).'⁴³¹ Where the privileging of *bios* at the expense of *zoe* reveals the distinctly anthropocentric and speciesist premises, wherein hierarchical assumptions about which kinds of life possess more value are reinscribed. As the curators seem to whisper, the notion of the animal is a compelling story engine for it is as much an invention, as much a technology, as indeed were the processes of 'hominization', as discussed in chapter two. This why Derrida neologism of the 'animot' comes to undercut the significance of the word: animal, and therein destabilise its implicit exclusionary logic.⁴³² After the encounter with the Lamb, Graham falls into a fatalistic scenario where he acts as a mediator between bêtes and humanity where the novel's implied analogy between bêtekind and humankind is undercut through Graham's exceptional status as Homo sacer, the sacrificial (human) subject for the new multispecies (posthuman) world. Nonetheless, the uneasy border between animal and civilised human which Roberts performs in the novel is perhaps indebted to, or otherwise modelled after another exemplary work of science fiction: H.G. Wells' 1896 novel *The Island of Doctor Moreau*. Following the logic of H.G. Wells' *The Island of*

⁴³⁰ Timothy Morton, *The Ecological Thought*, p. 41

⁴³¹ Rosi Braidotti, *Transpositions: On Nomadic Ethics* (Cambridge : Polity, 2006), p. 37

⁴³² Derrida, p. 47

Doctor Moreau, the discovery of a subversive animality in the Beast People, the surgical experimentations of Moreau's projects, is a relation which Roberts' novel inverts.

Where Wells' novel is concerned with the borderline between animal instinct and humanity as forever unsettling the possibility for a pure rational actor, Roberts flips the paradigm by having Graham, a man who refuses to acknowledge sentience in the bêtekind, retreating further away from human socialisation until Graham has become the figure of sovereign exclusion – the sacrificial figure / victim who may be killed as a demonstration of the sovereign's strength. In the case of Roberts' novel, the sovereign is the human, and Preacherman – once-friend and ally of Graham – betrays Graham when he refuses to obey the rules of a humanistic and humanizing universe. David Punter, in his history of the Gothic *The Literature of Terror*, argues that the process of Moreau's experimentation is part of this “humanizing process” – a representation of anxieties about human dignity generated by a Darwinian universe and ‘images of white imperialism in its decline’.⁴³³ This biopolitical regime is enforced by Wells' who configures the Beast People as ‘an extreme representation of the unhappiness and instability of the human condition in a Darwinian universe’.⁴³⁴

‘I was almost as queer to men as I had been to the Beast People. I may have caught something of the natural wildness of my companions.’⁴³⁵

⁴³³ David Punter, *The Literature of Terror: A History of Gothic Fiction from 1765 to the Edwardian Age* (London & New York: Routledge, 1996), pp. 251, 253

⁴³⁴ Wells, *The Island of Doctor Moreau*, p. 34

⁴³⁵ H.G. Wells, *The Island of Doctor Moreau*, ed. Mason Harris (Plymouth, Broadview Editions: 2009), p. 45

Indeed, Wells' novel is as much recontextualising the role of humanity in exploring the imperial and innately threatening undercurrents of modernity that Wells seemed to abhor.

For Roberts, the novel turns on the theme of extending human and non-human experience in a post-anthropocentric worldview, where the human is entangled with other entities. What is interesting about Graham's distinction between the bêtes and the enhanced objects is the living/non-living dichotomy introduced, but also – to return to the discussion of chapter one – this dismissal of any cognitive agency at all. Graham's constant refrain when challenged by Cincinnatus is that the sentient bête is experiencing a simulacrum of emotion, and not the thing itself. Not to mention, in Roberts' recasting of a human caught in the nude by a cat, it is the human that is admonished and made to feel shame for expressing their animal urges, as opposed to Derrida's assumption that the cat would never have to conceptualise the notion of shame. Derrida's point in the essay being to confront the gaze of the animal; and yet, in the opening of his essay, Derrida talks of entrusting himself to a 'naked' language – which is to 'choose words that are, to begin with, naked, quite simply, words from the heart.'⁴³⁶ Derrida pursues this line of inquiry by conceptualising the interstitial space between that which calls itself human and that which is called animal for which the term 'limitrophy' is coined, to devote to the autobiographical animal's capacity to unsettle supposed fixed and discrete boundaries between human and animal.

As Derrida makes clear, the cat does not represent 'the immense symbolic responsibility with which our culture has always charged the feline race [...] as the

⁴³⁶ Derrida, 'The Animal that Therefore I Am', trans. David Wills, in. *Critical Enquiry*, Vol. 28, No. 2 (Chicago IL: The University of Chicago Press, 2011), p. 369

exemplar of a species called “cat”, even less so of an “animal” genus or kingdom.⁴³⁷ In much the same way, the fact that the ‘bêtekind’ are named as such dislocates them from the biopolitical regime of sacrificial logic which is symptomatic of the human / animal dichotomy. Although, for Derrida, ‘[t]here is no animal [...] separated from man by a single indivisible limit. We have to envisage the existence of “living creatures” whose plurality cannot be assembled within the single figure of an animality that is simply opposed to humanity.’⁴³⁸ As discussed earlier, Timothy Morton challenges the ‘alienating abstraction’ of equating animals as people, which highlights the commodity-ness of this relation, in the conceptualisation of the “animal” as a stranger.⁴³⁹

Preacherman, otherwise known as Jazon, was one of the engineers who worked on the earliest chips that created bêtekind, and in the aftermath of the rise of bêtekind becomes a pastor proselytising against the bêtes as “signs of the incipient apocalypse”.⁴⁴⁰ After having turned away from Preacherman and the prevailing social order, Graham’s encounter with Cincinnatus is marked by the recognition that the two share a friendship, which suggests that there is an underlying relationship to Cincinnatus and bêtekind which Graham had fundamentally misunderstood and has refused to allow himself to recognise. In this regard, Cincinnatus reframes the relationship of bêtes to humans in such a way as to destabilise the “human” and “animal” binary:

⁴³⁷ Derrida, ‘The Animal that Therefore I Am’, p. 397

⁴³⁸ Derrida, ‘The Animal that Therefore I Am’, p. 415

⁴³⁹ Timothy Morton, *The Ecological Thought*, p. 39

⁴⁴⁰ Roberts, *Bête*, p. 254

“[Humans] sees bêtes and misrecognize us as animals. We’re not other, Graham. We’re not the animals your kind shared the planet with. They never made war upon you! We’re quite other. You don’t like admitting you don’t recognize something; so when you see something that is genuinely baffling you misrecognize it as something else.”⁴⁴¹

To return to the ‘alienating abstraction’ in the equivocal relation of animals as people, it is Graham’s persistent misrecognition – casting Cincinnatus as a stranger, an aberration, a foe – that defines their relationship. Again, the language of inclusion / exclusion – the inclusionary logic of appealing to humanist values and the exclusionary practice of othering – is prototypical of Preacherman; the appearance of his character seems a sardonic rejoinder to the archetypal response of a Wellsian protagonist. Where the bêtekind are neglected from consideration of ethics and rights, in Graham’s view, precisely because he chooses to misrecognise them as beast or machine, in Preacherman’s view, the bêtekind are not worthy of consideration or moral concern primarily due to a base animality that is unequivocal to humanity.

As Adam Roberts dramatizes this relationship, the immortality of the concept of species betrays a nihilism in the assumption that there is implicit value in species-distinction. Appealing to a binary of inclusion / exclusion, Preacherman sermonises with appeals to an anthropocentric worldview: “You have a duty to your kind. You have a duty to your *soul*. [...] Your land and your people need you.”⁴⁴² Preacherman’s appeals to Graham are founded upon humanist values – appeals to a sense of species-solidarity, to a religious and spiritual model of selfhood, and a sense of

⁴⁴¹ Roberts, *Bête*, pp. 308-309

⁴⁴² Roberts, *Bête*, p. 297

community. In the context of a (humanist) community, the influence of two key figureheads in the animal rights movement is worth incorporating into this discussion – namely, Peter Singer and Tom Regan, who proposed a humanist enlargement of the moral agents in a ‘moral community’.⁴⁴³ This was admittedly hampered by the fact that the animal’s inclusion / exclusion into that community was founded upon humanistic values. Rather, Graham’s motivation – a sense of duty – is uncoupled from humanist connotations, which is to say, in Graham’s conceptualisation, duty is ‘a flowing-out of the human from ourselves to others’.⁴⁴⁴ Uncoupling a sense of duty from humanity is uncoupling a sense of duty from connotations of ownership and debt, where Roberts is playful with the elisions of capitalist language. In a similar gesture to De Abaitua’s *The Red Men* in chapter one, the self is conceptualised as capital – as Graham has it, ‘a mortgaging of that self to society as a whole’ – which is exploitable, and is inextricably bound to a destructive self-image.⁴⁴⁵ All of this is to say, where Preacherman believes that Graham seeks to neglect a sense of duty – to his species, to his soul, to his nation – in acquiescing to a foreign threat: bêtekind, Graham denies the manner in which duty has been circumscribed within contemporary paradigms. Graham’s secession to bêtekind is heresy against a natural order, in the perceived war against humanity, where seeking to upend the hierarchy which presides over a God-given dominion over ‘the birds and the beasts’ is akin to “selling-out” one’s species.⁴⁴⁶

⁴⁴³ See: Peter Singer, *Animal Liberation: A New Ethics for Our Treatment of Animals* (New York, 2009); Tom Regan, *The Case for Animal Rights* (Berkeley, 1983)

⁴⁴⁴ Roberts, *Bête*, p. 297

⁴⁴⁵ Roberts, *Bête*, p. 299

⁴⁴⁶ Roberts, *Bête*, p. 304

This alone signifies an unsettled binary in the novel, that of the condition of technical intelligence as the manifestation of what would be properly human – a ‘creative’ intelligence, a manifestation of the transcendence of humanity from biological or zoological constraints – is problematised for Roberts. Animal studies, in Cary Wolfe’s formulation, intra-acts intimately with posthumanism for the status of the animal – the role that the animal plays in our social world, its embeddedness as a social agent, and a part of the meaning-making and world-forming practices – is a core component of larger posthumanizing processes. Not in the sense of transcending human embodiment, as Katherine Hayles disparages in *How We Became Posthuman*, but in returning to the specificity of (human) embodiment. To be precise, it is a case of intra-acting with, not evacuating, the specificity of the human and the animal in their various cultural and anthropological contexts across a dynamic, material reality. Indeed, the animal question has been an integral component of critical posthumanist thought, especially in the earliest of Donna Haraway’s work in *Primate Visions* (1989) and her later ‘A Cyborg Manifesto’ (1985). In the latter work, Haraway suggests that there are three boundary collapses in posthumanizing times, one of which is between human and animal: ‘[t]he last beachheads of uniqueness have been polluted if not turned into amusement parks – language, tool use, social behaviour, mental events, nothing really convincingly settles the separation of human and animal.’⁴⁴⁷

Cincinnatus’ gamble that, in exchange for Graham brokering a peace with the human delegation, the sentient bête offers Graham the possibility to ‘[possess Anne]

⁴⁴⁷ Donna Haraway, ‘A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century’, in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York 1991), pp. 151-152

completely, inside [Graham], for as long as I and therefore we both shall live.⁴⁴⁸ Where the question of posthuman love, or rather how the notion of love is addressed in posthuman times, where Graham takes a rather philosophical approach: ‘Love is no more a virtue than breathing is a virtue. Love is not the scale against which [humanity] should measure the rightness or wrongness of actions, for there will always be some people who love any action, no matter how base.’⁴⁴⁹ Given that much of the motivation of Graham’s actions and the novel’s trajectory – i.e. Graham’s evacuation from civilisation and purposeful avoidance of the Lamb – are embellished by grief. Returning to this notion of the Baradian apparatus, the apparatus is not the medium but the mode by which the medium is perceived – which is similar to Graham’s own thoughts on grief: ‘[bereavement] forced you to notice the medium.’⁴⁵⁰

After the death of Anne, Graham’s paramour, the once-farmer heads to Reading – specifically, Bracknell Forest – in order to evacuate human civilisation, where he camps in the wilderness attaining an outsider status, such that Graham lives without ‘the refinements that adorn human life.’⁴⁵¹ Living free from the ‘former pretensions to civilisation’, Graham is figured as resembling a prehistoric human, at least pre-human in the sense of having always already been otherwise than the socially constructed image of humanity: ‘for long intense periods I thought of her, and sifted all my memories of her. But sometimes I thought of nothing at all, like a dumb beast.’⁴⁵² This return to a savage, bestial existence is upended when Graham returns back to

⁴⁴⁸ Roberts, *Bête*, p. 222

⁴⁴⁹ Adam Roberts, *Bête*, p. 222

⁴⁵⁰ Adam Roberts, *Bête*, p. 222

⁴⁵¹ Roberts, *Bête*, p. 135

⁴⁵² Roberts, *Bête*, p. 127

civilisation through Wokingham where his encounter with the nightwatchman – Benjamin Robert Haydon – prompts Graham to think about his time in the forest returning to a survivalist, ‘brute way of thinking’.⁴⁵³ This animal mindset which Graham has acquired stands in stark contrast to the abstraction of ‘civilised human brains’: a manner of thinking which is characterised by ‘possibilities, counterfactuals, imaginative empathy.’⁴⁵⁴ However, the nature of this encounter changes upon Graham’s realisation that Haydon has been implanted by a *bête* chip, synonymous for Graham with a ‘canny cow or a talking dog’, which speaks in the heads of ‘cats and rats and dogs and hogs’.⁴⁵⁵ Internal rhyming and consonance aside, Roberts illustrates through these linguistic choices Graham’s dismissal of these ancillary life-forms, lesser than or on the same level as domesticated beasts. The critical discourse is largely limited to reconfiguring the possibility of animals entering human history but Roberts reverses this paradigm by having Graham retreat from all (human) socialization and enter the court of *bête*kind.

What is interesting in the narrative trajectory of *Bête* is that Graham finds himself excluded from both a human and posthuman community, such that the posthumanizing force of the text is in Graham’s acceptance that the boundaries between humanity and *bête*kind are itself a mechanism. This perspective recalls Giorgio Agamben’s view of species as a profoundly humanizing process: ‘Homo sapiens, then, is neither a clearly defined species nor a substance; it is, rather, a machine or device for producing the recognition of the human’.⁴⁵⁶ Which is to say,

⁴⁵³ Roberts, *Bête*, p. 139

⁴⁵⁴ Roberts, *Bête*, p. 140

⁴⁵⁵ Roberts, *Bête*, p. 140

⁴⁵⁶ Giorgio Agamben, *The Open*, p. 26

there is a performative conception of the human which hovers over this chapter, in much the same way as the spectre of humanism haunted the second chapter. Where this posthumanization process is generative of a certain (human) subject, the “human” component of the subject is inherently humanizing which is in a state of ongoing deconstruction. Where a redemptive humanism was denied in the second chapter, the notion of a redeemed humanity returns herein in a non-hierarchical fashion, seeking to remember and reclaim its own animality. For this, the curator enfolds Agamben into this posthumanizing account to account for humanity as a result of anthropological technologies – which Agamben refers to as the “anthropological machine”.⁴⁵⁷ For this the human / animal divide is constituted through inherent divisions within the political category of the human, where ‘the inhuman’ is produced by ‘animalizing the human, [...] and the non-man is produced by the humanization of an animal’.⁴⁵⁸ Which is to say, the human maintains the privileged position in the human / animal dichotomy as the Anthropos by rejecting one’s inherent animality, and through this the human opens itself up to that which is properly human. Indeed, for Agamben, the process of humanization – the process by which a supposedly “pure” human emerges – is precisely through the expulsion of the animal or non-human.

The political implications to Graham’s eventual posthumanization – his entrance into bêtekind – are bound up in disentangling human ‘nature’ from humanist values by exploring the transformation of “human” and “animal” by technology. As Stefan Herbrechter acknowledges, the current state of posthumanization is entangled with the ‘history of ‘hominization’’ or what Herbrechter and Callus call a ‘posthumanism

⁴⁵⁷ Giorgio Agamben, *The Open: Man and Animal*, trans. Kim Attell (Stanford: Stanford University Press, 2004), p. 37

⁴⁵⁸ Agamben, p. 37

without technology'.⁴⁵⁹ Where some philosophers see technology as inherent to humanity – as Herbrechter has it, a 'technological determinism', Roberts clearly has bêtekind problematise any foundational recourse for humanity's self-identity being entangled with technology.⁴⁶⁰ As Roberto Esposito clarifies, humanity is at the threshold of a new relationship with its own species, such that the human is not only in relation to 'human life, but to what is outside life, to its other, to its after.'⁴⁶¹ By utilising a farmer as his frame narrator to conceptualise this story as a twisted inversion of the curator trope herein: as Cincinnatus scolds Graham, for a purported betrayal in his role as a farmer and as caretaker of life: "A farmer is supposed to engage in husbandry of the land – and what sort of a husband to the land were you? Husbandry is making fertile; but you specialized in death."⁴⁶² If anything Graham possesses some modicum of a celebrity as a bête-detester, which situates him as an archetypal character uniquely positioned to embody speciesist attitudes. Perhaps, in Pramod Nayar's reading of Margaret Atwood's *Oryx and Crake*, the project of the Crakers, genetically modified posthumans who have survived a plague which erased a portion of humanity, is relevant. Namely, their attempt to 'separate, through technology and socialization, those hormone-driven, animal features within man' which have become unsustainable, on a species-level.⁴⁶³

⁴⁵⁹ Stefan Herbrechter and Ivan Callus, 'Posthumanism 'Without' Technology, or How the Made Us Post/Human', *The Politics and Aesthetics of Posthumanism* conference in Tel Aviv (2014)

⁴⁶⁰ Stefan Herbrechter, *Posthumanism: A Critical Analysis* (London: Bloomsbury, 2013), p. 36-37

⁴⁶¹ Roberto Esposito, *Bios: Biopolitics and Philosophy*, trans. T Campbell (Minneapolis: Minnesota University Press, 2008), p. 109

⁴⁶² Roberts, *Bête*, p. 119

⁴⁶³ Pramod Nayar, *Posthumanism*, p. 89

To return to Timothy Morton's dialectic of biocentrism against anthropocentrism, the speciesist undercurrent to Graham's worldview is performed best in the text in the frequent analogies of the treatment of animals to holocausts, for the genocidal killings of bêtes as part of the human / bête war, and the extremities of farming. As the Lamb states, rather pointedly in Graham's self-styled 'interview': "Human beings can get very sentimental about polar bears and white tigers. They'll go to great lengths to keep *them* alive. But cows and sheep? We taste good. Into the back of the truck with *us!*"⁴⁶⁴

The Lamb alludes to a "holocaust" which has emerged during Graham's evacuation of society, where extermination of bêtekind and dumb beasts alike occurs in police and military warfare across Northumberland. The analogy of endangered creatures against commodified animals is clear in that this reduction of a certain subset of animals to commodities is bound up in processes of dehumanisation. In this case, the issue of anthropomorphism – a frequent stumbling block in the imploded relation of Cincinnatus and Graham – embodies the structure limits of the posthumanizing process. In spite of Cincinnatus demonstrating the capacity at multiple junctures in the text to cognize and rationalise human emotions, Graham denies Cincinnatus personhood: "I keep forgetting that I'm not speaking to a cat. I'm speaking to a computer that happens to be located inside a cat."⁴⁶⁵ In terms of the species distinction between animal and machine, the fact that "[Cincinnatus's] chip both acts and is acted upon" illustrates the fact that the "chip" is not merely the sole animating factor.⁴⁶⁶

The familiarity that Graham associates in framing Cincinnatus as a 'peeping tomcat' forms the basis of an intimacy that is breached. Further, with Graham questioning the

⁴⁶⁴ Roberts, *Bête*, p. 183

⁴⁶⁵ Roberts, *Bête*, p. 63

⁴⁶⁶ Adam Roberts, *Bête*, p. 64

complexity of Cincinnatus's conscious mind, whose agency is underpinned by a 'chip', such that it dictates the actions those minds can perform. As the discussion in chapter one (via Hayles) concluded, the conceptualisation of subjectivity and computation has become increasingly entangled where the fissures of identity between "human" and "machine" – in the case of this chapter, it is how "human", "animal" and "machine" are explored as paradoxical and complicit nodes of access to embodied existence. In *Writing Machines*, Hayles spoke of boundaries as 'permeable and meaningful', and in Roberts' *Bête human / bête* action and agency is understood as embodied processes allowing for possibilities for evolution and emergence.⁴⁶⁷ The vocabulary of emergence, via Hayles, counsels to think "[w]hat we make" and "what (we think) we are" as coevolving and co-constituting properties, where emergence can be read as an ethical dynamic that challenges the fixed taxonomic nature of species-thinking.⁴⁶⁸

Graham's speciesist perspective is such: to be conscious, as Cincinnatus' chip allows, is to be a (human) agent with a cognitive perspective, with capabilities that less significant entities lack. Graham recruited by the Lamb – and yet, the very fact that the leader of the bêtekind is framed as a sheep seems to reaffirm speciesist attitudes towards the domesticated of animals. The novel opens with a request from a 'loquacious bête', a canny cow no less, to perform the Turing test after having been implanted with a chip from *Deep Blue Deep Green* (shortened to DBDG). The Turing test being a way to negotiate the loquacious bête's status as 'a conscious, sentient, intelligent creature' on the basis that the legal rights of the canny cow would be infringed (by the Canny Cow Stay of Execution Order) and Graham's decision to shoot

⁴⁶⁷ N. Katherine Hayles, *Writing Machines*, p. 46

⁴⁶⁸ N. Katherine Hayles, p. 62

the cow would be considered murder.⁴⁶⁹⁴⁷⁰ The *bête's* characterisation of consciousness as nothing “magical or spiritual” recalls N. Katherine Hayles’ comments on the Turing test as a magic trick in her prologue to *How We Became Posthuman*. As Hayles argues, the Turing test is not merely a test between human and machine, but one which incorporates questions of gendered identity:

‘Like all good magic tricks, the test relies on getting you to accept at an early stage assumptions that will determine how you interpret what you see later. The important intervention comes not when you try to determine which is the man, the woman, or the machine. Rather the important intervention comes much earlier, when the test puts you into a cybernetic circuit that splices your will, desire, and perception into a distributed cognitive system in which represented bodies are joined with enacting bodies through mutating and flexible machine interfaces[,] [...] no matter what identifications you assign to the embodied entities that you cannot see, you have already become posthuman.’⁴⁷¹

In Graham’s first encounter with Cincinnatus, the nature of the *bêtes’* intelligence being figured as “miraculous” once again prompts Graham to characterise *bêtes* as akin to software algorithms: “I keep forgetting that I’m not speaking to a cat. I’m speaking to a computer that happens to be located inside a cat.”⁴⁷² Returning to some of the ideas

⁴⁶⁹ Roberts, *Bête*, p. 6

⁴⁷⁰ Alan Turing famously proposed an ‘imitation game’ to assess the viability of machines’ capacity to think, in such a manner that the definitions of ‘machine’ and ‘thought’ come to be reconfigured. See: A. M. Turing, ‘I – COMPUTING MACHINERY AND INTELLIGENCE’, *Mind*, Vol. LIX, Issue 236 October 1950, pp. 433-460 <<https://doi.org/10.1093/mind/LIX.236.433>>

⁴⁷¹ N. Katherine Hayles, *How We Became Posthuman*, p. xiv

⁴⁷² Roberts, *Bête*, p. 63

from chapter one, which is that consciousness is an epiphenomenon – following Hayles, again – and that Graham’s perception that Cincinnatus’ experience is merely a simulation. In fact, Cincinnatus flips the paradigm by asking Graham the fatal question for which this chapter considers in full: “Or perhaps you can point to the metaphysical bedrock upon which the proof stands that I am talking to a human being?”⁴⁷³ Cincinnatus, a sentient *bête* and one of the driving agential forces in the novel, places an emphasis less on species distinctions, but of an affinity and kinship organised pragmatism: “Our allegiance is to mind, not to species.”⁴⁷⁴ Posthumanism questions the exclusive emphasis on theories of mind that have historically centred on human cognition and consciousness, whilst challenging species-centric perspectives that prioritise human experiences and interests over *bête*kind.

The question of embodiment becomes a quality which is appropriable and is a consequence or symptom of humanity’s mastery over its self-definition, and this dis/continuity between radical nonhuman processes which generate the human. These markers of embodiment cannot be appropriated in any role of management or mastery, which is to speak to the disjunction between human and nonhuman processes generative of the characters within British Boom science fiction. Where Derrida’s encounter with his cat prompts Derrida to re-conceptualise the relationship between humanity and animal, Graham narrates the encounter within the story of Oedipus of the Sphinx and humanity:

‘It asked one question of humankind, and it is the same question all animals ask – dumb or *bête*, herb eater or carnivore, all animals that have eyes that can

⁴⁷³ Adam Roberts, *Bête*, p. 65

⁴⁷⁴ Roberts, *Bête*, p. 214

look into our eyes. It asks: *What are you?* And it is the same question as *What am I?*⁴⁷⁵

The relevance of the Sphinx to Graham's evolving ecological understanding is in Graham's understanding of the Sphinx as 'Mama Bête' – an animal who "used to devour those who couldn't answer its riddle."⁴⁷⁶ In this manner, the text uses the analogous relationship which Graham draws between the Egyptian Sphinx and Cincinnatus, for both purports to perform riddles and both possess the capability to devour.

The narrative turns on a riddle, which is to say, on the form and content of textuality as elusive and unforeseeable, where the subjectivity of Graham is elusive and unforeseeable: 'I, Graham Penhaligon, who used to be a farmer. Graham Penhaligon is not the narrator here. His mouth is stopped. He is buried in the soil, he is farmed.'⁴⁷⁷ This passage switches between a first-person and active account to a third person and passive account, where the 'I' – Graham's perceived self-identity – is framed as indeterminate, where Graham exists as the superposition between living and non-living. As Roberts suggests earlier, 'that's what the riddles says with its content as much as with its form [...]', which is to suggest the loop has been closed on this ongoing and recurrent theme of humanity's proximity to the natural world.⁴⁷⁸ Which is to frame the alliance between Graham and the bêtekind as a relationship of kinship between humans and these 'messmates, companion species, and significant others'

⁴⁷⁵ Roberts, *Bête*, p. 283

⁴⁷⁶ Roberts, *Bête*, p. 255

⁴⁷⁷ Roberts, *Bête*, p. 7

⁴⁷⁸ Roberts, *Bête*, p. 309

– as Donna Haraway would frame the relation.⁴⁷⁹ The autoimmune process, as analysed within the democratic process in *Rogues: Two Essays on Reason*, Derrida makes the argument that ‘[t]o immunize itself, to protect itself against the aggressor (whether from within or without)’⁴⁸⁰ For Derrida, this immunizing force is implicitly humanizing and is constitutive of (human) subjectivity:

‘Autobiography, the writing of the self as living, the trace of the living for itself, [...] the auto-affection or auto-infection as memory or archive of the living would be an immunizing movement [...] but an immunizing movement that is always threatened with becoming auto-immunizing’⁴⁸¹

The ‘immunizing’ force is entangled with the auto-immunizing force, where the ‘auto-’ is that which calls itself human, and the immunizing force are processes of preservation, and the auto-immunizing force is self-destructive. The ‘autoimmune logic’, the process of self-preservation which engenders acts of self-destruction or self-effacement, is once more accounted for in the overarching riddle of the text: ‘Life is about misrecognizing poison as food.’⁴⁸² Which is to say, the theme of mis/recognition enacts Graham’s misappropriation of the *bête* as a threat to the (human) social order, when in fact the *bête* inaugurate an entirely new (posthuman and multispecies) social order.

⁴⁷⁹ Donna Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008) p. 15

⁴⁸⁰ Jacques Derrida, *Rogues: Two Essays on Reason*, trans. Pascale-Anne Brault and Michael Naas (Stanford, California: Stanford University Press, 2005), p. 35

⁴⁸¹ Derrida, ‘The Animal that Therefore I Am’, p. 415

⁴⁸² Roberts, *Bête*, p. 309

As Derrida argues in 'Eating Well': '[t]he [humanist] subject does not want just to master and possess nature actively. In our cultures, he accepts sacrifice and eats flesh.'⁴⁸³ This is to say that the human and the animal do not have a proper or linear relationship to the state of its own existence, for the condition of human embodiment is itself a technology, and as such the human is a deeply hybrid and comes into existence on the basis of something profoundly non-biological. In Derrida's view, the view of the human is effaced by refusing the separation of the biological and the technological, and this effacement begins at the site of subjectivity: 'Nothing risks becoming more poisonous than an autobiography, poisonous for itself in the first place, auto-infectious for the presumed signatory who is so auto-affected.'⁴⁸⁴ In a view of the posthuman subject as embodied and entangled, the subject is capable of intra-acting with a myriad of other embodied forms of existence, and is able to occupy their material existence as open networks of entangled relations. In this case, the revaluation of posthuman agency consequently effects and affects the materiality of embodied existence across other modalities of existence. Turning on the theme of misrecognition – conceived as an erasure which is instead the fungibility of identity, Graham realises that he, where Graham is prepared to enter 'a new more crowded mode of living inside the hard, hot body of a fox'.⁴⁸⁵ Indeed, the final images of the novel are narrated away from a singular and human model of self:

⁴⁸³ Jacques Derrida, "'Eating Well," or the Calculation of the Subject : An Interview with Jacques Derrida', in eds. Eduardo Cadava, Peter Connor, Jean-Luc Nancy *Who Comes After the Subject?* (New York and London: Routledge, 1991), p. 114

⁴⁸⁴ Derrida, p. 415

⁴⁸⁵ Roberts, *Bête*, p. 310

‘When I woke it was late afternoon and the day was dwindling. [...] I breathed in and smelled something sharp and tangy – me, I suppose. A beast moved quickly towards the copse beyond the garden wall.’⁴⁸⁶

The narrative transition between “human” Graham and “bête” Graham is a reversal of narrative chronology, where his bêtteness is narrated with the recollection of memories returning, “most recent first, earliest last.”⁴⁸⁷ The text is haunted by the ghost of Graham’s death, which is itself misrecognition for Graham’s death is a return to life by other means: in much the same manner, the text is haunted textually by ‘[a] ghost, a spectre, a revenant’ of ‘[Graham’s] (not yet our)’ journey from Reading.⁴⁸⁸ The text contains traces of Graham’s not-quite-yet status as somebête, as the text is a ‘human being’s memories, and a cat’s memories, triangulating the same subject’; whereupon Graham and Cincinnatus’s grief over the loss of Anne allows them to achieve a friendship, of such strength that they

Biocentrism deconstructs a conception of the human to reconfigure life across nonhuman relations, to include the animal, the vegetal, the wider ecology, where *bios* (the political and the discursive) is privileged over *zoē* (non-human); as Rosi Braidotti has it:

‘Zoe is the poor half of a couple that foregrounds *bios* as the intelligent half; [...] Zoe stands for the mindless vitality of Life carrying on independently of and regardless of rational control.’⁴⁸⁹

⁴⁸⁶ Roberts, *Bête*, pp. 310-311

⁴⁸⁷ Roberts, *Bête*, p. 292

⁴⁸⁸ Roberts, *Bête*, p. 295

⁴⁸⁹ Rosi Braidotti, *Transpositions: On Nomadic Ethics* (Cambridge: Polity Press, 2006), p. 37

For Agamben, *zoe* – “animality” – is that which humanism separates from *bios* but also what humanist discourse insists as interior to *bios*, and thus already co-constitutive to *bios* existence, where ‘sacred life is the zone of indistinction in which *zoe* and *bios* constitute each other in including and excluding each other.’⁴⁹⁰ At the same time, graham functions in the novel as a figure of sovereign exclusion – as the lamb characterises him: “you’re our homo sacer, graham.”⁴⁹¹ Posthumanist discourse cannot turn to the animal as a marginalised antidote to the human, in the sense that it incorporates humanity to the animal world or locates the animal with/in us. Animality inherent to humanism insists upon human as apart from the animal, but humanism also insists this animality is interior and anterior to humanity – and thus already, liminally and co-constitutive to its existence. The posthumanist worldview of *bête* forgoes special exemptive violence of humanity, whilst insisting on some form cross-species approach which conceptualises the animal and conceptualises itself as animal. Upon Graham’s entry into *bête*kind, the narrative refuses to indulge in humanist reflexes: there is no dignity in Graham’s ‘laying out’, in the *bête* handling of his corpse:

‘Too old and lifeless and dead for pity, or humour, or honour, or hope. But not too dead for memory. What is the one thing that survives death? [...]

What is stronger than death? Memory.’⁴⁹²

⁴⁹⁰ Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (California: Stanford Press University Press, 1995), p. 56

⁴⁹¹ Adam Roberts, p. 191

⁴⁹² Roberts, *Bête*, p. 289

The text becomes self-aware to a humanist logic therein by rejecting nomenclature, as the linguistic expression of scientific objectivity, to deny sociocultural norms, for 'names are what call us out, interpellate us'⁴⁹³ There is a well-articulated need to stay on the side of complexity in our understanding of, and intra-ventions with, notions of non-anthropocentric life. As seen in chapter one, with the discussion of artificially intelligent agents – like Robson's 901 – being afforded (human) ethical status, the medium through human and nonhuman intra-action takes place can be seen to compromise the manner by which conceptualisations of species are constituted. Given that the thesis is largely concerned with the effects of posthumanization on fiction and theory and that the latter chapters of the thesis direct themselves towards a post-anthropocentric rationale the inquiry turns to the question of life.

MONGRELS OR DAS UBERBDOGS? CANINOMORPHISIS!

Caninomorphizing is a phenomenon which this thesis borrows from Adrian Tchaikovsky's 2017 *Dogs of War* to illustrate an untenable extension of the anthropomorphizing instinct, which occurs when humans reflect on augmented dogs as akin to domesticated animals. What is uniquely canine about this brand of anthropomorphosis-adjacent behaviour is the fact that the augmented dog is figured as domesticated precisely through its subservient role to humans. As illustrated briefly in Tchaikovsky's *Dogs of War*, there is an appeal to the canine as a monstrous other, that is, unless the augmented dog conforms to a subservient role to their human master(s), to a base animality, it is framed as a monstrosity. The irony which emerges in the novel is the fact that Rex, the frame narrator and titular augmented Bioform, is

⁴⁹³ Roberts, *Bête*, p. 289

overdetermined by technological implants – and yet the vast majority of the human characters in the novel seem capable of conceiving of Rex on this “caninomorphic” level. The ‘Good Boy’ of it all. Whilst Adrian Tchaikovsky’s novel is not considered with/in the museum of science fiction, nor is Tchaikovsky one of the exemplary British Boom writers, his work does illustrate a broader theme of the animal as a contested site of anthropomorphic relations.

This section explores modern and domesticated dogs that straddle the liminal space between that which is not quite human and not quite animal; those who are bred and conditioned to occupy human spaces but fundamentally unsettle those spaces through their emergence into something disruptive to the human / animal binary. As the chapter continues, discussion centres on unstable binaries located within animal rights discourse on animal and vegetal life – beginning with a reading of Jeff Noon’s *Pollen* – which raises questions about the *fungibility* of identity. Identity possessing a fungible force recalls the medieval Latin *fungibilis*, from *fungi* meaning ‘to perform, enjoy’, but also having the implication of being mutually interchangeable – of serving in the place of another. In Sherryl Vint’s 2010 critical work *Animal Alterity*, she frames the role that animals play in science fiction in a positive light, by suggesting that ‘humans might interact with an intelligence other than [their] own and be transformed by it’.⁴⁹⁴ Likewise, considering that the publication of Donna Haraway’s cyborg manifesto posited the cyborg as the most useful figure for conceptualising the relationship between biotechnologies and informatics of domination, her recent turn towards ‘companion species’ is part of a shift in recent criticism towards ‘taking dog-human

⁴⁹⁴ Sherryl Vint, *Animal Alterity: Science Fiction and the Question of the Animal* (Liverpool: Liverpool University Press, 2010), p. 227

relationships seriously'.⁴⁹⁵ For Haraway especially, this critical endeavour sets about exploring "our" shared histories with dogs as part of her wider project which informs a mutual, ethical basis for relationships between all kinds of entities – as Haraway reflects, work is required in 'shaking colonialist, ethnocentric, ahistorical attitudes towards those who do (eat or get eaten)'.⁴⁹⁶ In pointing to Linda Weisser, dog-breeder, and Donald McCaig, Border Collie writer and sheepdog trainer, staying with the specificity of the dog in all of its material complexity is precisely what must combat a culture which '[infantilizes] dogs and [refuses] to honor difference'.⁴⁹⁷

Which is to say both Sheryl Vint and Donna Haraway are intrigued by the role of the dog as part of the imaginary of science fiction, since the figure of the dog has frequently functioned as a quintessential companion for humans. Nevertheless, in the invocation of Tchaikovsky's *Dogs of War* and as it already has with Adam Roberts *Bête*, the animal has been conceived as a posthuman technology, the focus of which has been for the human to reflect on its evolutionary stage in the transhumanist phase of posthumanization. Which is precisely what Donna Haraway is suspicious of, in what amounts retrospectively to a shift in her thinking on posthumanism: 'Posthumanism is too easily appropriated to those kinds of [technoenhancement] projects for my taste. [...] The reason I go to companion species is to get away from posthumanism.'⁴⁹⁸

Where Haraway once again reaffirms her change of focus from cyborgian theory,

⁴⁹⁵ Donna Haraway, *The Companion Species Manifesto: Dogs, People, and Significant Otherness* (Chicago IL: Prickly Paradigm Press, 2014), p. 4

⁴⁹⁶ Donna Haraway, p. 14

⁴⁹⁷ Donna Haraway, p. 43

⁴⁹⁸ Donna J. Haraway, 'When We Have Never Been Human, What Is to Be Done?', in *Theory, Culture & Society* Vol. 23(7-8) (London: SAGE, 2006); p. 137

which she perceives as being championed by certain trends within posthumanist culture which she opposes, to companion species, who 'do the work of a proper herding dog to gather up the threads needed for critical inquiry'.⁴⁹⁹ As such, whilst Haraway refuses to identify with posthumanism, her work is invaluable to the movement and provided the posthuman with a politics and ethics of embeddedness in a continuum of multispecies co-evolution.

As has been discussed, Noon's 1995 science fiction novel *Pollen* dramatises the kinds of relations which function as a configuration and domestication of space, precisely the entanglement of – as Donna Haraway has it – a 'motley crowd of differentially situated species, including landscapes, animals, plants, microorganisms, people, and technologies'.⁵⁰⁰ Donna Haraway uses Native American coyote stories, as part of her ongoing work as in non-anthropocentric politics, where the coyote is a species of canine – a potent 'trickster'.⁵⁰¹ Where the coyote embodies a historically specific human relation with 'nature', which in turn contests what comes to be conceptualised as 'nature' through contradictory histories which refuse homogenization. As Haraway has it, the subject of posthuman times should be 'multiply heterogeneous, inhomogeneous, accountable, and connected human agents' without reaffirming a certain conception of subjectivity and its 'secular heresies'.⁵⁰² In Haraway's earlier work on primatology, she materializes the Coyote or Trickster figure, as a writing

⁴⁹⁹ Donna Haraway, *The Companion Species Manifesto*, p. 4

⁵⁰⁰ Donna Haraway, *When Species Meet* (London: University of Minnesota Press, 2008), p. 41

⁵⁰¹ Haraway, *Simians, Cyborgs, and Women*, p. 199

⁵⁰² Haraway, *Simians, Cyborgs, and Women*, p. 3

practice to reconceptualise feminist theory as coyote discourse which co-constitutes many heterogeneous accounts of the world.⁵⁰³

In the Noonian cosmology of the Vurt, there are 'five pure states and their names are Dog, Human, Robo, Shadow, and Vurt.'⁵⁰⁴ Whilst other animals do populate the wider Vurtual multiverse – see the proliferation of animals in *Automated Alice* (1996), such as a certain cat called Quark – Noon decentres the notion of a representative of an animal. Following the prior discussion of Roberts' Cincinnatus, and how bêtekind come to be excluded from categories of life for the paradox of being cross-pollinated with technology, Noon delights in intensifying these relations across *all* species boundaries – not just problematising cats and dogs with mind. In Noon's *Pixel Juice*, a short story collection which expands on the Vurt multiverse, there are various stories which explore the Dogpeople's culture, one such story 'Call of the Weird' which explores the fate of Dog-J-Loop, a 'jobless dog' on 'Basic Bones Allowance'.⁵⁰⁵ Infect with a case of the 'worms', an infection carried by smartbones – in this case the 'Whistle' smartbone, where nanytes enter the brain, J-Loop is afraid of going to the authorities for a 'head-cleaning', as '[p]ack-rumours' suggest that the Authorities have little interest in helping a poor 'street-honed robodog'.⁵⁰⁶ Indeed, whilst the story possesses comedic and satirical moments, it is fundamentally a work of social commentary with J-Loop's Mistress selling the *Big-Issue* correlative the *Big Biscuit*, and of the oppressive nature of Manchester's urban environment to J-Loop's 'ravenous

⁵⁰³ Haraway, *Simians*, p. 199

⁵⁰⁴ Noon, p. 130

⁵⁰⁵ Jeff Noon, 'Call of the Weird', *Pixel Juice*, p. 136

⁵⁰⁶ Noon, *Pixel Juice*, p. 136

dogself'.⁵⁰⁷ Nevertheless, the short story makes a simple but effective point about the 'pedigree patterns' of J-Loop's dog-friends – which is that there are manifold number of doggy-minds maintain inside the 'kennel-waves' of J-Loop's embodied existence.⁵⁰⁸ As J-Loop states, in the world of an oppressive Manchester, where there is only 'rain and piss and rancid cats to chase', community amongst the dog-ness is all that sustains: as J-Loop's robobitch companion admonishes, "Us dogness stick together, you catch the ball?"⁵⁰⁹

In staying with Noon's reconstitution of Manchester in this alternate England – as alluded to in the introduction, Manchester is a node in the wider network of the 'Unknighted Kingdom of Singland' – it is worth focusing on the kinds of urban environments, and who occupies these spaces. Bottletown is clearly the best articulation of one of these environments, where 'a mixed-up pile of dog flesh and plastic, name of Karli' might be found, who once more unsettles the exhaustive dichotomies between species, embodying this generative entangled of living and non-living, self and nonself, and in this case, animal and plastic.⁵¹⁰ In a later sequence of the novel, Noon reverses the historically asymmetrical relationship between human and dog through Scribble's encounter with Das Uberdog – a hybrid of dog and human – by once more undercutting the intensification of human relationships with technology, and a paradoxically "pure" relationship to one's own species.

⁵⁰⁷ Noon, *Pixel Juice*, p. 138

⁵⁰⁸ Noon, *Pixel Juice*, p. 137

⁵⁰⁹ Noon, *Pixel Juice*, p. 136

⁵¹⁰ Noon, *Vurt*, p. 44

In Turdsville, a space in society relegated to hybridized beings who share an affinity with dogs or animals: ‘someone had pinned a printed notice saying **PURE FREE ZONE** [...] Below the box someone had felt-tipped the message – *Turdsville. Watch where you tread.*’⁵¹¹ It is interesting to examine Noon’s unwillingness to privilege either side of the species line by folding under the weight of hybridized subjects who represent the homogeneity of species – a prevailing impulse of human exceptionalism, rather Noon examines discrimination and species-specific supremacy on both sides by examining the continuity between species – the relationships that emerge between the varying modes of being. The character of Das Uberdog emerges as an interesting character to explore in terms of examining the manner in which Noon articulates a post-anthropocentric view of the subject: ‘When he turned back to me, his human face was split by a pure canine grin.’⁵¹² Uberdog’s face appears to serve as a map that represents Noon’s biopolitics in that one of the few human features Das Uberdog possesses – his face – is semantically disassociated by qualities inherent to his animalistic nature. Semantically, the adjective ‘pure’ seems almost oxymoronic within the context since Noon purports to locate the hybrid, synthesis of the numerous ontological qualities embedded on Das Uberdog’s – the very feature that is most distinctly anthropocentric – by figuring a linguistic partitioning of the differing modalities of his embodied existence.

Regardless, Noon explores the continuity that emerges between the human and animal traits in Das Uberdog: ‘you could see that something had changed, something had clouded over in those deep eyes that had run with the dogs, whilst also

⁵¹¹ Jeff Noon, *Vurt* (London: Tor, 2013), p. 263

⁵¹² Jeff Noon, *Vurt*, p. 272

contemplating the works of John Donne.⁵¹³ Whilst Noon figures the contrary aspects of Das Uberdog's nature, it is interesting that the canine qualities – 'that had run with dogs' – are cast in opposition to the cultured aspect of his character who is able to appreciate classical literature: nonetheless, this opposition is not figured as dialectical as there is no resolution provided within the narrative since Noon is operating with a different model of posthumanism that conceives of the relationship between human and animal as continuous, as opposed to heterogeneous or dichotomous relations. Construction is an activity that translates the ontological nature of a species, whereas conditioning is an activity that determines it; so it is clear that there is a discrepancy between thinking of how to condition species relations, as opposed to how we order to construct species distinction. Of course, as Noon deliberates, the relationship between species always carries some purpose, whether teleological or naturalistic, of the innate meaning of an object, being, or event, or the imposed categorisation between species, of the forced taxonomic structure inherent to species relations. Nonetheless, for Noon, the relationship between species is always one of control and domination, is always bound up in an inherited understanding of relations, whether instrumental relations or not.

Nonetheless, it is interesting that Noon specifically chose the dog as a representative of the animal kingdom, condensing the sphere of animality to one figurehead, as it recalls what Carla Freccero's 'Carnivorous Virility' refers to as 'mongrelisation' to articulate the culture of crossbreeding, and the hope to pass beyond naturalistic categories, those 'contaminated' categories which belong to both human and dog

⁵¹³ Noon, *Vurt*, p. 276

alike.⁵¹⁴ For Noon, the colonial encounters that haunt the dog in its 'ontological conjoining', in the entanglement of human/animal relations, in the crossbreeding of ontological categories, is always inheriting a history of predation. As Freccero seems to comment, there appear to be no "pure" specimens', and in turn regards the colonial past between animal and human, relations formed out of dominance and servitude: those 'mutual entanglements of dog and human, with their shared histories of predation and oppression, dominance and submission'⁵¹⁵ Noon's characterisation of Das Uberdog is a subversion of that familiar trope in narratives of human/animal relations, in that animals feel unable to claim their subjectivity, except in human terms – and thus Noon's novels appear to transform the "underdog" into an uber—being.⁵¹⁶ Noon's relish in subverting the paradigm shift of this 'mongrelisation', the process by which the animal is dehumanised, has its subjectivity undermined by colonial encounters with the human, is reversed to the extent that the liberal humanist subject is the mongrel figure. For Das Uberdog, it is on the level of a local community that a political future is actualised – the dog people of *Vurt* learn how to shape a more active multi-species future, which is in keeping with is discussed next in the chapter with coyote's plant-dog-human hybrid reworking of the Vurt.

DODO-ISMS

⁵¹⁴ Carla Freccero, 'Carnivorous Virility; or, Becoming-Dog', in. *Social Text 106*, ed. Julie Livingston, Jasbir K. Puar (Duke University Press, 2011), p. 182

⁵¹⁵ Freccero, p. 185

⁵¹⁶ Freccero, p. 185

Jeff Noon's 1995 science fiction novel *Pollen* concerns the emergence of new portals between Manchester and the Vurt world wherein the Vurt functions as a refusal of the configuration or domestication of space discussed earlier in chapter two. The species barrier in Noon's virtual worlds are no longer clear and unassailable, with taxonomies being breached, and the line delineated between dream and actual fuzzy, with Vurt-beings trafficking between worlds *Pollen* concerns a world saturated with life, and in the crossing of Persephone, the plant-goddess child-bride of John Barleycorn, a manifestation of some Hades-like figure in the Vurt, a conflict is drawn between the dreamers and the dream-less, between the Vurtual and the Dodos, between forms of life dependent on the material configuration of life as is to survive. As is to be discussed, Persephone, the plant-goddess, is the prototypical cyborg – the boundary breaker, the liminal subject, who is 'without clear boundary, frayed, insubstantial.'⁵¹⁷

Similarly, John Barleycorn is characterised as a 'dream-master', a powerful creature composed of Vurt, whose governance over Juniper Suction – a "heaven feather", a feather of the afterlife – reveals a desire to make the boundaries between the dream and the real permeable. For the Vurt is characterised as a living system, the very embodiment of contingency and entropy, and serves as a level of existence which contains nonhuman entities who enact the posthumanist desire of wrenching the object-world from human control. If the point bears repetition, in the same manner as the "dream" and "reality" coexist in shifting configurations, so too does the experience

⁵¹⁷ Donna J. Haraway, *Simians, Cyborgs and Women: The Reinvention of Nature* (Abingdon, Oxon: Routledge, 1991), p. 198

of being “human”, “animal”, “machine” or “Vurtual”.⁵¹⁸ Thus, in identifying the Vurt as a living system, there emerges systems of knowledge (and self-organisation) whose dynamism and increasing complexity overwhelm the determinism inherent in the humanistic faith of a universal human “nature” and therein engender the articulation of entirely new modes of existence.⁵¹⁹

To illustrate the manner in which the Vurt disrupts traditional system of ordering knowledge and social relations, the governing trope in *Pollen* – that of pollination – illustrates the manner in which human knowledge systems are increasingly being interwoven-with or transformed-by those of nonhuman systems. As such, Barleycorn’s desire to create a new map of Manchester, whereupon the borders between the real and the dream are weakest, is motivated towards the means and ends of trafficking Vurt-beings, including his young wife, Persephone, who scramble for sustenance into the real. At the opening of the novel, Persephone’s exchange into the real world from Frontier Town, the boundary between Manchester and Limbo, entails mutations in the Manchester map through a feverish rise in the Pollen count; in which ‘[pollinated]

⁵¹⁸ In delineating between “human”, “animal”, “machine” or even “Vurtual”, the intent was to sidestep the notion of human equivalence – by pertaining to Vurt-logic – as, according to Eben Kirksey, the notion of the “non-human” is like ‘non-white’ – implying the lack of something’, and therefore Noon’s Vurt is utilised as demonstrative of these residual humanist distinctions. (See: Eben Kirksey, ‘Multispecies’, in ed. Rosi Braidotti, Maria Hiavajova *Posthuman Glossary (Theory)* (London: Bloomsbury Academic, 2018)),

⁵¹⁹ Stefan Herbrechter argues that humanism is the guarantee that great cultural achievement is the product of ‘quasi-mystical universal human ‘nature’ – with the implicit suggestion being that the taken-for-granted-ness of social cohesion is almost fundamental to the humanistic principle. (Stefan Herbrechter, *Posthumanism: A Critical Analysis* (London: Bloomsbury, 2013), p. 12).

messages' from the Vurt produce a rupture in reality and in so doing generate different modes of organisation. Throughout *Pollen*, the rising pollen count is represented as the advance of the Vurt into the real, with lethal effects, as the Vurt breaches and transforms traditional systems, in this instance the immune or reproductive systems. For, after interviewing a botanist, Sybil and Zero— two of the primary protagonists in the novel — discover the body's eventual adaptation to the pollen threat, by no longer 'rejecting the pollen grain [...] [instead] treating it like a lover.'⁵²⁰ For this, Persephone is a useful figure of intra-active potential in that the identity of the inanimate, the vegetal, and the animal are characterised as entangled, distributed, and cosmopolitan. This performance of ecology — the relations of organisms to each other and to their environment — is one which disrupts and unsettles the view of ecology as an "other", situated in opposition to human exceptionalism. In *Pollen*, the view of ecology is not one which is 'illiterate, uncomprehending: only capable of *imitating* cognition.'⁵²¹

As has been discussed throughout the thesis, the work of feminist new materialists — such as Karen Barad, Vicki Kirby, Donna Haraway, and Elizabeth Grosz (to name but a few) — is indebted to, and the inheritor of, the work of Gilles Deleuze and Felix Guattari. Gilles Deleuze and Felix Guattari have taken up the critical task of re/inventing concepts which force against the porous boundaries 'far from being the reiteration of a system of domination'.⁵²² As with the conclusion of the previous novel, *Vurt*, which centres upon the primary protagonist, and narrator, Scribble coming to the realisation that the possibility of a 'pure' ('singular') existence is a fallacy. And if *Vurt*

⁵²⁰ Jeff Noon, *Pollen*, p. 67

⁵²¹ Vicki Kirby, 'Un/Limited Ecologies', p. 172

⁵²² Rosi Braidotti, *Nomadic Theory: The Portable Rosi Braidotti* (New York: Columbia University Press, 2011), p. 31

concludes with the realisation that the notion of purity (as self-determination) is an impossibility, then *Pollen* provides context for the fluidity of the Vurt-universe with the drug called “Fecundity 10”, created due to a plague of sterility across England, the consequence of which was ‘[breaking] down the cellular barriers between species’.⁵²³ Towards which, the cellular mutation between specific species-levels of organisation illustrates the extent to which organisms are becoming increasingly complex and diverse, and in so doing has the effect of re-configuring the subject as an entity of intensive proportions in so far as challenging what hybrid-forms can be realised.⁵²⁴

If we are to remain with this sense of dynamism engendered by the Vurt-as-living-system, and the incumbent transformation in the levels of self-organisation, then the first distinction to be drawn is with respect to the firm rejection of the Vitruvian model of liberal individualism, via Rosi Braidotti, or what Cary Wolfe perceives as the Enlightenment ideal of “Man”.⁵²⁵ Which is to speak against a metaphysics of individualism which maintains that there are discrete and self-identifiable entities with determinable characteristics. In one of the more metafictional segments of *Vurt*, Game Cat, an entity capable of navigating the various levels of Vurt, outlines the subject-position(s) offered by sustained Vurt-usage and crossbreeding: ‘There are only FIVE

⁵²³ Jeff Noon, *Pollen*, p. 23

⁵²⁴ This sense of mutation which Noon’s work harkens to includes the specific dynamics operating at the various levels of reality, and the increasing fractalization of the individual according to the Vurt-logic: this is a criticism that N. Katherine Hayles has of new materialists, except for Karen Barad, for the ‘level-specific dynamics’ is often underexplored. (N. Katherine Hayles, *Unthought: The Power of the Cognitive Nonsconscious* (Chicago IL and London: The University of Chicago Press, 2017), p. 70)

⁵²⁵ Cary Wolfe, *Animal Rites: American Culture, the Discourse of Species, and Posthumanist Theory* (Chicago IL: University of Chicago Press, 2003), p. 14

PURE MODES OF BEING. And all are equal in value. [...] And so therefore we have the FIVE LEVELS OF BEING. And each layer is better than the one before. The deeper, the sweeter, the more completer.⁵²⁶ Against the established tradition of what Elaine Graham perceives as “ontological purity”, that of a conservative valuation which renders discrete the (post)human subject, Noon’s Vurt-sequence instead explores the transgressive potential in new processes of subject-formation, the extent to which different taxonomies can be sustained beyond liberal humanist models.⁵²⁷ As aforementioned, if Noon figures the subject as being re-conceived in an intensive manner, there is an almost seductive relish in the mutations unfurling in response to the increasingly dynamic couplings of species. To exist within Noon’s Vurt-novels is not to occupy the uninspired “pure” life, but to ache after ‘the more completer’ mappings opening up in the face of the Vurt’s potentialities – with the Vurt as a system alive to the rhythms of human/nonhuman desire and responsive to the topologies engendered by increasingly more complex composites. Again, to return to the theme of map-making between the dream and real in *Pollen*– therein figured as the traversal of entirely new routes, which entail new cartographies of becoming, via Deleuze-and-

⁵²⁶ Jeff Noon, *Vurt*, p. 196; this formulation of the five different modes of existence being equal is somewhat undercut in *Pollen*: ‘Zombies, Dogs, Robos, Shadows, Vurt and Pure; this was the scale of worth.’ (*Pollen*, p.169)

⁵²⁷ Elaine Graham, *Representations of the Post/Human: Monsters, Aliens and Others in Popular Culture* (New Brunswick, NJ: Rutgers University Press, 2002), p. 35; whilst the conservatist separation implied by Graham might seem like a minority opinion, various critics express anxieties – bordering on terror – at the prospect of the revaluation of human and nonhuman. From Hayles’ *How We Became Posthuman* and the terror/pleasure dialectic, to Elizabeth Grosz’s anxiety surrounding the complexity of embodied existence. (See: Elizabeth Grosz, *Volatile Bodies: Towards a Corporeal Feminism (Theories of Representation and Difference)* (Indiana: Indiana University Press, 1994))

Guattari's monist philosophy, these configurations entail sustainable (in the sense of "workable") transformations through peoples and worlds, the significance of which for writers like Braidotti, Stiegler, and Latour is that there are elements of the individual which can remain unthought unless we reconceive the subject as relational and [intensive] affective.⁵²⁸

This appears as a contradictory element in desiring to fulfil a latent anthropomorphizing tendency in posthumanist-thinking – namely, of conceptualising what remains unthought of the human, of realising the 'more completer' human-hybrids – in that there is a desire to simultaneously overcome or fulfil the (post)humanist project. If the Vurt offers entirely new cartographies through formerly discrete and self-determined systems, then it sustains what would otherwise be contingent, dreaming pathways by undercutting any sense of a universal system of knowledge or mode of organisation. After having crossed into the Vurt to dismantle Barleycorn's Vurt-inspired map of Manchester, Sybil, one of the 'dreamless' Dodokind – a Shadow-person whose genetic inability to dream allows her to elude the 'Pollination' epidemic, nonetheless encounters an apparition of Alice, of Wonderland fame, in a scene which highlights the 'corkscrewed' logic of the Vurt: "A dream undreamt is a dying fantasy and nobody, it seems, these days, wants to dream about dear, sweet Alice. So you see, Sibyl Jones, this is a two-way mirror; the only way I can keep Alice alive is by transporting her to reality through the new map."⁵²⁹ Noon's

⁵²⁸ See: Rosi Braidotti, *Patterns of Dissonance* (Cambridge: Polity Press, 1991); Bernard Stiegler, *Neganthropocene*, ed. and trans. Daniel Ross (Open Humanities Press, 2018); Bruno Latour, *Politics of Nature: How to Bring the Sciences into Democracy*, trans. Catherine Porter (2004)

⁵²⁹ Jeff Noon, *Pollen*, p. 39

metatextual inclusion of Alice, a recurring motif throughout his work, explores how the new map cuts both ways between epidemic and salvation for Sybil can neither enforce 'apocalyptic or salvific futures', to think of Haraway's ethical imperative to remain firmly committed to the trouble in all of the 'myriad unfinished configurations of places, times, matters, meanings'.⁵³⁰ Indeed, if we focus on the 'two-way mirror', it provides a useful subversion of the typical mirroring trope of offering forth a reflexive vision, instead Noon refuses the location of both subject/object and real/Vurt as discrete units worthy of self-reflection.⁵³¹ Which is to say Noon's Sybil is no reproduction of a disembodied, sequestered Vurt-world, nor is she a subject who summons forth the world as an object of reflection, but is rather a subject who possesses the capacity to be affected by both sides of the mirror. Fundamentally, though, this difference functions either as differentiation – an operation of co-emergent phenomena which produces entirely incalculable results – or as a given difference, to refer to Claire Colebrook's pithy distinction, which is an expression of the 'pure potential to differ'.⁵³²

Coyote, one of the central protagonists, is – as Sybil the Shadowcop characterises him – an 'outlaw taxi-dog' famous, dog-level and cab-level, who is a major inciting force in the novel by bearing a passenger, the plant child Persephone, from the Vurtual

⁵³⁰ Donna J. Haraway, *Staying with the Trouble* (London: Duke University Press, 2016), p. 1

⁵³¹ Whether reading the 'mirroring' trope as a doubling or as literal reflection, the former is a common theme in novels of Noon's work, such as *Automated Alice* (Noon, *Automated Alice* (New York: Doubleday, 2012) and *A Man of Shadows* (Nottingham: Angry Robot, 2017); whereas, the latter trope of character's complex relationships with mirrors and (typically) self-image, is a staple of *Vurt* (London: Tor, 2013); *Falling Out of Cars* (London: Black Swan, 2002); *The Body Library* (Nottingham: Angry Robot, 2018).

⁵³² Claire Colebrook, 'Postmodernism is a humanism: Deleuze and Equivocity', *Women: A Cultural Review*, Vol. 15, No. 3 (London: Routledge, 2006)

world across the borderlines into the city of Manchester. Nonetheless, by unleashing Persephone, and in turn carrying her 'new forms of thought' into Manchester, which at this juncture we shall consider as the world of the 'real', we see the emergence of the pollen count as a system of cross-pollination, which acts as a form of reproductive speciation, made all the more perverse by the hybridising manner in which boundaries between real and virtual become increasingly indistinct. Even the text becomes cross-pollinated with images of morphologies, like flowering sexual structures and the organs of pollinating insects figured as co-evolutionary, but the text almost takes on an agential-power – with the implication that the Vurt creatures populate the margins of the text. This is best articulated through the character of Boda, or by her pre-cabian name: Belinda Jones, who is sought after by Barleycorn and the Vurt-world, the world of stories: 'Belinda, our stories are creeping, closer and closer together, closer to the moment when they join.'⁵³³

As Haraway argues, tropes are what make us 'want to look and need to listen for surprises that get us out of inherited boxes'⁵³⁴. Whilst we have already explored the problematic notion of an origin, and the sense that one is always haunted in their birth and development by that which is pre-established, the violence of an inherited tradition, it is here that 'the earthly horizon', the nature of our humanist orientation must be explored. For Derrida, limitrophy emerges as a discourse that allows for a discussion on the traditional logics of the limit: the transgressive nature of, and a simultaneous responsibility for the construction of, boundaries between species is something that spurred Derrida into interrogating 'what sprouts or grows at the limit,

⁵³³ Noon, p. 160

⁵³⁴ Haraway, p. 32

around the limit, by maintaining the limit, but also what feeds the limit, generates it, raises it, and complicates it.⁵³⁵ Derrida's conceptualization of limitrophy is significant in opening up a discourse capable of broaching the discontinuity inherent to the posthuman subject, evidenced by the emergence of system theory which reconfigured notions of agency, codified as cause and effect, that are therein translated through technological means. Jeff Noon's attempt to carry ideas across species, to speak of and for that 'trackless territory' is indicative of the commonalities between species.

If we were to examine *Pollen* for the discontinuous manner in which Jeff Noon relishes the construction, and subsequent transgression, of boundaries, it is clear to see that inherent to Noon's novels is a call for a vision of social life which is molecular, permeable, continuous, regardless of whether we consider the manner in which he privileges a hybridized notion of (post)humanity. Nonetheless, it is the perversion of the systems of logic itself that Noon deconstructs throughout *Pollen*: the apocalyptic pollen count, the means by which the Vurt attempts to cross-pollinate with the world of the real, which continually rises throughout the novel is a signalling towards a breach in the Vurt, the virtual world, which in turn gestures towards a fundamental interrogation of the means by which one is socially and culturally inscribed, the means by which we delineate between the virtual and the real. Coyote, one of the central protagonists, is a 'dog-man' who incites the events of the novel by unintentionally bringing a passenger, the plant child Persephone, from the virtual world into the city of Manchester. Nonetheless, in unleashing Persephone, and in turn carrying her 'new forms of thought' into Manchester, which at this juncture we shall consider as the world

⁵³⁵ Jacques Derrida, 'The Animal that Therefore I Am', trans. David Wills, in. *Critical Inquiry*, Vol. 28, No. 2 (Chicago IL: The University of Chicago Press, 2011), pp. 397/8

of the 'real', we see the emergence of the pollen count as a system of cross-pollination, which acts as a form of reproductive speciation, made all the more perverse by the hybridising manner in which boundaries between real and virtual become increasingly indistinct.

This process is explicitly articulated when, after having been murdered by Persephone, Coyote's 'life force', his embodied existence, is inscribed onto the 'new flower map of Manchester, moving his patterns from stem to stem. He is living in vegetation, remaking himself again and again like the seasons changing'.⁵³⁶ Utilising floral imagery, Noon figures Coyote's embodied existence as being intrinsically bound to the natural world, he collapses boundaries between the interaction of the subject and its environment: he is the embodied form of posthumanism that inscribes the cultural notion of a hybrid entity of dog and human onto its environment, which in turn is re-inscribed and incorporated back into the natural world. As Derrida remarks, limitrophy's significance is that it calls for a 'logic of the limit [...] what abuts onto limits but also what feeds, is fed, is cared for, raised, and trained, what is cultivated on the edges of a limit.'⁵³⁷ The logic of the limit speaks to De Abaitua's notion of the human as 'idea-carriers': Coyote is cultivating those ends of humanity, negotiating the ends of the singular, humanist subject by cross-pollinating with other embodied beings, and in turn being inscribed onto other entities, other forms of reality.

For Noon, however, Coyote is not just carrying new forms of thought 'back from the frontline', he is not just articulating the posthuman's relationship with futurity, as increasingly haunted and heterogeneous, he possesses responsibility for carrying

⁵³⁶ Jeff Noon, *Pollen*, p. 358

⁵³⁷ Derrida, 'The Animal That Therefore I Am', p. 397

ideas across species and modes of reality. The interesting juncture between Derrida and Noon's work is the fact that Derrida feels that limitrophy 'cultivates' on the boundaries of limits: Coyote emerges as a being who is, rather ironically, cultivating by continuously reassembling himself as vegetation. He embodies a model of feedback with the natural world that collapses distinctions between cause and effect, simply because there is a difficulty in reconciling the relationship; this fundamental aspect, that posthumanism shouldn't be capable of resolving the contradictions inherent to differences between species, but should instead 'cultivate' and foster said contradictions is what makes Noon's work significant to explore within the framework of a post-anthropocentric view of human/posthuman divide. Retreating away from an experience of humanity as fixed and static, a formulation of the human condition that is discrete and separate from all other habitual modes of existence, both *Vurt* and *Pollen* are clearly moving towards a representational awareness of embodied existence, a site of assembly whose relationship is constantly being revised depending on the being that functions in said auxiliary role. Both Haraway and Wolfe considers there to be a responsibility to the construction of boundaries, yet there is a clear responsibility identifiable in the relationships, not the boundaries, that we foster between species – human and nonhuman.⁵³⁸ Further still, there is a responsibility to

⁵³⁸ There is a fundamental difference between the responsibility that Haraway and Wolfe articulate with respect to other species, as opposed to the Levinasian ethics, the notion of a responsibility to otherness: nonetheless, Levinas remains a thinker within the humanist tradition by presupposing an absolute distinction between humans and animals, which in turn predicates the human as occupying a privileged position in this relationship. See: Emmanuel Levinas, *Otherwise Than Being, or Beyond Essence*, trans. Alphonso Lingis (Pennsylvania: Duquesne University Press, 2011)

be gleaned with/in the categorical imperatives of humanism, including gender, race, and other determining factors.⁵³⁹

It is here that the true tension at the heart of *Vurt* takes prominence, as a result of an ideological difference which finds the Stash Rider's, staunch believers in remaining pure, at odds with the plural modes of being that the Vurt seemingly celebrates. For Scribble, the main protagonist, he can only retrieve Desdemona, his sister, from the Vurt by plunging deeper into the world of other beings, travelling further through histories reimaged through Vurt feathers, and such a pursuit raises a great threat to his status as a self-contained, singular, humanist subject. Scribble's quest reveals the extent to which the schemas through which we have affirmed our anthropocentric view of the world are falling apart, and this de-centred world explores the inadequacies of rationalism, language, ethics, and even the soul. Noon is emphatic in his suggestion that everything within a posthumanist framework is engaged in a performative and adaptive interaction with one's environment: the earliest example of this within *Vurt* comes when Scribble and the Stash Riders first enter the Vurt; 'Screaming down tunnels of brain flesh, putting thoughts together [...] the room, wallpapered in reds

⁵³⁹ Categorical imperatives are perceptible, in Kantian ethics, as those unconditional ethical responses, which presuppose a fundamental, universal law regardless of the situation and the inclination of the individual. This universal approach to ethics, as categorical responses to one's embodied existence reaffirm Enlightenment ideas of rationality, and a universal thinking of the humanist subject. (See: Immanuel Kant, *Groundwork of the Metaphysics of Morals*, trans. James W. Ellington (Indianapolis / Cambridge: Hackett Publishing Company, 1993)

For an exploration of the many intersections between Enlightenment theory and humanism, and how Kantian ideas have been inherited within posthumanist thought, consider Cary Wolfe's *What is Posthumanism* introduction in which he traces the genealogies of posthumanism.

and pinks, blood all flowing down from the ceiling.⁵⁴⁰ Whilst the narrative of *Co-op Street*, the feather that the Stash Riders use, doesn't transport the characters away from their apartment, yet the vicariousness of the image of the apartment suggests that the nature of the space has been fundamentally reimagined or dangerously re-inscribed, infused by the mediating power of the technology-driven Vurt feathers. The manner in which Noon conceptualizes the shifting nature of the objects within the apartment – the kitchen door resembling a 'wall of beef' and the room 'wallpapered' in blood – is evocative of the emergent, cumulative nature of such a mediating technology and the potential it possesses to drastically transform the authentic experience of the apartment itself. It is only through such knowledge – 'knowledge', in this instance, being synonymous with experience – that he is capable of becoming aware of the mediated spaces which he exists amongst: spaces that are drastically transformed, alongside Scribble's own perception of an authentic, rationalized understanding of reality.

Earlier, in thinking of Coyote unleashing Persephone from the Vurt, we thought of this relationship between the Vurt and the world of Manchester in a dichotomous manner, of the virtual and the real: it is important at this point to explore the extent to which this is a false dichotomy, particularly in Noon's work, for both novels seem to capitalise on the extent to which those members of society are becoming increasingly alienated from themselves and each other, but also alienated from their human character; within *Vurt* and *Pollen*, we are able to locate this alienation since, at the core of both texts there is a disenchantment from all the natural things, evidenced by the protagonist's willingness to ingest Vurt feathers that transport them to dream-like, unconscious,

⁵⁴⁰ Noon, *Vurt*, p. 29

virtual realms. It is clear, therefore, that there is a disturbed relationship to reality within Noon's novels as his characters are continuously encouraged to indulge in their desires and are seduced further into a hybridized, porous world wherein distinctions between real and virtual are impossible to locate.

In *A Thousand Plateaus*, Deleuze and Guattari consider the nature of the relationship between the virtual and the actual, which is configured as a false dichotomy: 'the line of variation is virtual, in other words, real without being actual, and consequently continuous regardless of the leaps the statement makes.'⁵⁴¹ For Deleuze and Guattari, the relationship of the virtual to the real, where the virtual is figured as a potential relation, 'or the placing-in-continuous variation of variables', is arguably conceived in terms of potentiality, as opposed to the actual which is determined in its relations, as those constants – those givens – which are contrasted against the variability of the virtual, the shifting possibility of what the virtual offers.⁵⁴² The 'virtual continuum', according to Deleuze and Guattari, cannot be perceived as a dichotomous relationship between the virtual and the real, rather we are thinking of the virtual as what Deleuze calls an 'absent development', that continuity which supposes various potentialities, never a determined reality, whether biologically or technologically determined.⁵⁴³ Further, for Deleuze and Guattari, the virtual element possesses no contingent characteristics: 'the abstract machine of language is not universal, or even general, but singular; it is not actual, but virtual-real'; virtuality is a terrain that is not presupposed in actuality, it bears the articulation of numerous ideas – for Deleuze, the

⁵⁴¹ Deleuze and Guattari, p. 94

⁵⁴² Deleuze and Guattari, p. 99

⁵⁴³ Deleuze and Guattari, p. 95

virtual allows the articulation of invariable facets of the real.⁵⁴⁴⁵⁴⁵ As Deleuze and Guattari ponder, where we locate endings and boundaries, ‘the breaks and ruptures’ in how we conceptualise and negotiate our humanness, and in turn order and structure other species, we encounter only endless variation, formed out of continuities, which is exactly what Deleuze and Guattari consider the ‘virtual continuum of life, “the essential element of the real beneath the everyday”’.⁵⁴⁶ There is language that orders, organises and in turn creates composites – those ‘order-words’ – whereas there is language that enables us to pass through into an act of creation by formulating relations, relations that confront our endings, ‘pass-words’ that illustrate the finite couplings of ontological units. Of course, the question that Noon continuously posits, throughout his work, is the extent to which technology, as the virtual terrain, has now become too thoroughly integrated, too thoroughly ingrained in our modes of thought – the extent of which we will explore in the final part of this chapter – to the point where we can’t conceive of the human without technologies, without being drawn into formations of knowledge that aren’t dependent on technological intervention.

This notion of cross-pollination, despite being a potent metaphor in *Pollen*, articulates the central oeuvre of *Vurt* and *Pollen*, two novels which seek to break away from, what

⁵⁴⁴ Deleuze and Guattari, p. 100

⁵⁴⁵ Drawing a parallel between the Deleuzian idea of the ‘virtual’ and N. Katherine Hayles’ insistence on the virtuality of posthuman embodiment, she privileges the pattern/randomness dialectic in examining the boundaries that are breached between embodied existence and signification of bodily forms. For Hayles, there is no difference between computer simulation and corporeal existence, and the technology of virtual reality foregrounds pattern/randomness as a dialectic that instantiates the experiential nature of embodied existence by placing it in a feedback loop with a computer.

⁵⁴⁶ Deleuze and Guattari, p. 110

Noon regards as, a static humanism: a brand of humanism arrested by those narratives inherited from its past, haunted by the vengeful inheritance, in its relationship to species and its formation of knowledge; for Noon, we occupy an existence within a thoroughly constructed reality in which many mechanisms through which knowledge has been produced, have become exhausted.⁵⁴⁷ Thus, the central narrative of *Vurt* appears as a deconstruction itself of the mechanisms through which Scribble attempt to glean a semblance of truth, all of which are perpetually shown to challenge this singular vision – the rational, deterministic view of social life: consider the function that the Game Cat fulfils throughout the novel: ‘We have prostrated ourselves at the feet of goddess Vurt, and we must accept the sacrifice [...] Listen up. Be careful. Be very, very careful. You have been warned.’⁵⁴⁸ The Game Cat, whose function in the novel is that of providing knowledge, and his metafictional asides represent the novel’s continuous attempts to indicate the failings of a deterministic, humanist position, the traditional mechanisms through which we have explained social life to ourselves, explored through Noon’s deference to novelistic conventions, have become surplus to requirements. The Game Cat’s metafictional asides function as rhetorical, cumulative attempts to broach, on a textual level, what the human is incapable of doing within the contemporary techno-scientific, technologically-infused

⁵⁴⁷ This exhaustion, identified in Noon’s work, is appropriated largely from a postmodern sense of literary exhaustion, of the exhaustion of narrative forms, which are most explicitly discussed in John Barth’s 1967 essay. See: John Barth, ‘The Literature of Exhaustion’, *The Friday Book: Essays and Other Non-Fiction* (London: John Hopkins University Press, 1984); and others including, Jean Baudrillard’s *Simulacra and Simulation*; and Fredric Jameson’s *Postmodernism: or, The Cultural Logic of Late Capitalism* (London: Verso, 1989).

⁵⁴⁸ Noon, *Vurt*, p. 70

landscape: locating and negotiating with an authentic experience, figured within Noon's text as being dependent on varying textual levels, is a negotiation with an implied relationship that modulates one's experience of humanness through their interaction with textuality and representation.

We either treat the post human as a hybrid or as the radical other but what if the post human is a coming-forth, a revelatory mode of being that unveils how far we have strayed from our human 'mission', one that unravels enlightenment logics that constructs taxonomies, innately hierarchical structures, on the basis of classifying and categorising species. This contributes to the discourse of 'cyborgization' – exemplified by the likes of Haraway, earlier in her academic career, who utilizes the cyborg as a figure to advocate for a reimagining of gendered roles. As already discussed, the hyper-masculine trend within cybernetic discourse was something which Donna Haraway sought to unsettle in her 'Cyborg Manifesto', which is a socialist-feminist reimagining and reevaluation of cybernetics:

'Cyborg writing must not be about the Fall, the imagination of a once-upon-a-time wholeness before language, before writing, before Man. Cyborg writing is about the power to survive, not on the basis of original innocence, but on the basis of seizing the tools to mark the world that marked them as other [...] I would rather be a cyborg than a goddess.'⁵⁴⁹

In an interview with Cary Wolfe, Donna Haraway disentangles the positive and negative etymological roots implicit in the 'human':

⁵⁴⁹ Donna J. Haraway, *Simians, Cyborgs and Women: The Reinvention of Nature* (Abingdon, Oxon: Routledge, 1991), p. 188

‘Etymologically, the human is rooted in *humus*. Too many tones of “human” go to *homo* – which is the “bad” direction – but then there’s “human” that goes to *humus*, which is the “good” direction. [...] There’s being part of the making of the soil and the earth and the *humus* direction, and there’s the phallic “man” in the *homo* direction’.⁵⁵⁰

For Haraway, then, there is invariably creative potential in the ‘humusities’, in staying with *humus*, where the maxim: “Not Posthumanist But Compost”, speaks to the notion of the human as a composted object, inextricably entangled together with its environment, but also of the human ‘[making] space for unexpected companions’.⁵⁵¹ Donna Haraway’s thought evolves away from the as-mentioned, hyper-masculine ‘*homo*’ strand of posthumanism, towards the responsible and relational approach of ‘companion species’. Persephone’s emergence in Manchester is a compositionist story, in Bruno Latour’s sense that ‘things have to be put together [...] [whilst] retaining their heterogeneity’.⁵⁵² In the case of Latour’s compositionist account, the call is for an account that is ‘slowly composed instead of being taken for granted and *imposed* on all [...] expelled from one utopia, that of economics, and in search of another, that of ecology’.⁵⁵³ For Jeffrey Nealon, there is a strong emphasis on the manner in which Jacques Derrida’s work has influenced conceptualisations of the animal throughout theory and philosophy. Although, the review which Nealon provides of all the forms of life portrayed in Derrida’s work identifies a fault in what is omitted

⁵⁵⁰ Donna Haraway, *Manifestly Haraway* (London: University of Minnesota Press, 2016), p. 261

⁵⁵¹ Donna Haraway, *Staying with the Trouble*, p. 11

⁵⁵² Bruno Latour, ‘An Attempt at a “Compositionist Manifesto”’, in *New Literary History*, Vol. 41, No. 3 (John Hopkins University Press, 2010), p. 488

⁵⁵³ Latour, p. 488

from Derrida's account of animality, which is not to say that Nealon seeks to accuse Derrida of zoocentrism in his work on animal life – in this case Nealon's work places emphasis on plant and vegetable life.⁵⁵⁴

For Haraway, tropes are what make us 'want to look and need to listen for surprises that get us out of inherited boxes': Coyote's reconstitution, where he is knitted back into the ecology of the world as an agent who can influence the burgeoning map, for '[Coyote's] flowering soul' is able to intertwine, and in the process reconfigure, the environment.⁵⁵⁵ Coyote Flower Dog is able to conjure himself, an imploded white Dalmatian / plant, out of the vegetation of Manchester, 'remaking himself again and again like the seasons', 'from the flora that he meets upon the way.'⁵⁵⁶ It might be said that Coyote's re-emergence with/in the text suggests a profound conceptual shift in the dog / plant / human's evolutionary reconfiguration, as it collapses distinctions between biological and vegetal, and inscribes life into nonlife. Following Haraway's cyborgization, which collapses the boundaries between the organic and the inorganic, which – as discussed earlier – Stefan Herbrechter calls a 'technologization of nature', but what can also be termed a 'biologization' of in/organic matter.⁵⁵⁷ Such that the

⁵⁵⁴ The literature on the lives of plants is a burgeoning field in the posthumanities. Some examples include: Jeffrey T. Nealon, *Plant Theory: Biopower & Vegetal Life* (Stanford: Stanford University Press, 2016); Richard Doyle, *Darwin's Pharmacy: Sex, Plants, and the Evolution of the Noosphere* (Washington: University of Washington Press, 2011); Anthony Trewavas, *Plant Behavior and Intelligence* (Oxford: Oxford University Press, 2014); Michael Marder ed., *Critical Plant Studies*, (Amsterdam: Brill/Rodopi, 2013).

⁵⁵⁵ Donna J. Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008), p. 32; Noon, p. 258

⁵⁵⁶ Noon, p. 259

⁵⁵⁷ Herbrechter, p. 91

ecology is 'opening up to Coyote's patterns' through the 'green veins of Manchester', where the ecology of Manchester is a fertile ground in this ongoing posthumanization across intra-acting species boundaries. For all of the semantics that Noon deploys in conceptualising Coyote's spacetime-mattering throughout Manchester the 'blooming', 'green veins', and his capacity to rearrange his petal- and stalk-limbs into anthropomorphic shapes betrays a certain humanizing tendency.

Nevertheless, Coyote is convinced that his entanglement with the flower-world unsettles species distinctions, where he straddles the boundaries between dog / plant / human, but with "plenty of the plant on board".⁵⁵⁸ When Persephone comes to confront the 'bad seeds', she comes to conceptualise Coyote – '[t]he taxi-flower' – in animalist terms, for 'doing that crude animal thing, that penetration'; in the context of *Pollen*, for engaging in sexual intercourse with the Sybil / Belinda hybrid organism.⁵⁵⁹ What Noon seems to argue more so is that, in the same manner John Barleycorn attempts to traffic Persephone into Manchester to reconceptualise the "real" world, Barleycorn inadvertently seeds the possibility for Coyote to carry Dodos – in the context of the novel, Belinda and Sybil – into Barleycorn's world, the plant world, the Virtual world. Indeed, Persephone, 'her green heart' growing 'bad with reality's weeds' can no longer sustain herself in the world of Singland, whilst the exploits of Sybil and Belinda have disturbed her 'dreaming soil'. After arriving at Juniper Suction and confronting Barleycorn over the 'fever' unleashed, as a consequence of Persephone's trafficking into Manchester, through the pollination of the "real". For Barleycorn, charged with a life of being forever 'told', trapped in the 'dungeon' of Vurt feathers, the

⁵⁵⁸ Noon, p. 282

⁵⁵⁹ Jeff Noon, *Pollen*, pp. 286, 297

attempt to incorporate Persephone into the world of the “real” was an attempt at “death after life”⁵⁶⁰.

CONCLUSION

Through the work of Roberts and Noon this chapter performs the intra-active agencies which cut across the boundaries drawn between human and nonhuman, then a multi-species account is needed to re-interrogate the discrete categories of human, animal, and machine. In posthumanizing times, humanity remains open to these posthumanizing processes, and critical posthumanist thought does not seek to abandon the specificity of embodied existence; however, as has been discussed throughout, there is a necessarily spectral component to the nonhuman which needs engagement. Which is to say, this chapter performs the conflict inherent to posthuman speciation by locating the liberal humanist figure – at least, in the context of reviewing conceptualisations of the canine – as a mongrel-creature.

To return to Jeff Noon’s *Vurt*-sequence, the extent to which John Barleycorn’s desire to recreate a *Vurt*-inspired Manchester, is dependent upon a new form of life being configured which collapses human-animal-plant-dream boundaries is variously configured as indispensable and insufficient to a human model of existence. For *Das Uberdog*, it is on the level of a local community that a political future is actualised – the dog people of *Vurt* learn how to shape a more active multi-species future, which is widely in opposition to what has been discussed earlier in the chapter with coyote’s plant-dog-human hybrid reworking of the *Vurt*. With an insight into critical

⁵⁶⁰ Noon, p. 309

posthumanism and its questioning of conventional categories that define the human, chapter three entails an exploration of the manner in which the posthuman figure destabilises the limits and symbolic borders of the human with its non-human neighbours. This chapter takes the writings of Jeff Noon as part of its central focus in order to extrapolate on the varying categorisations of human/non-human modalities of being, alongside a greater exploration of the metric system that delineates such thinking of species relations. To consider the grounds upon which the liberal humanist subject has existed and to therein transform it into a 'post-', a speculative figure that is itself undergoing a contingent production, is futile for it ignores, in much the same way, the extent to which the liberal humanist subject has maintained myriad ways of being/becoming 'human'. Retreating away from an experience of humanity as fixed and static, a formulation of the human condition that is discrete and separate from all other habitual modes of existence, both *Vurt* and *Pollen* are clearly moving towards a representational awareness of embodied existence, a site of assembly whose relationship is constantly being revised depending on the being that functions in said auxiliary role.

Likewise, in Adam Roberts' *Bête*, the tension between the inscription and erasure of humanist values in the ongoing entanglement of humans and animals with technology is explored. Nevertheless, Roberts' text explores the irresolvable tensions of hospitality and inhospitality in Graham Penhaligon's status as Homo sacer, which reinforces the same logic of sovereign exclusion from one (human) social order in order to be maintained within a wider posthuman assemblage. And yet, Graham's dependence on species-thinking is reflected in the text as a riddle which inscribes, in its failure to erase the misrecognition of humanist values and narratives of dignity which are reconfigured in posthuman times.



CHAPTER FOUR

‘THE HEGEMONY OF APES’⁵⁶¹:

EXTINCTION AND SURVIVAL AFTER THE BOOM

“Life is a change of states. Stasis is an abomination”

Matthew De Abaitua, *The Destructives*

This epigraph comes from Matthew De Abaitua’s 2016 science fiction novel *The Destructives*, and features a stark statement made by Ezekiel Cantor, an emergent entity – an evolutionary lifeform that has emerged into existence separate from their instantiation as algorithmic networks. In the context of the novel, the Cantor Accords – the legislature to maintain distinctions between human and emergent life – specify that any attempts to create a new emergence, which De Abaitua’s loose trilogy of novels explores in their various iterations, will be subject to punishment. As such, the epigraph alludes to Cantor’s thoughts on witnessing the birth of a new emergent life, the evolution of an entirely different lifeform, in much the same manner as Cantor’s evolution is characterised as “man’s interbreeding of algorithmic reasoning with

⁵⁶¹ Justina Robson, *Natural History*, p. 272

[humanity's] own quantification'.⁵⁶² What Cantor's comments reveals is a view of life as an ongoing process which has no governing (human) authority, and *The Destructives* wilfully plays with conceptualisations of life – in the wake of, at least in the embodied story-world, the redefinition of what counts as life. In this case, the stakes in this redefinition of those categories and values of what counts as living are contingent on who is performing the investigation and who decides the metrics of the inquiry. Within *The Destructives*, Cantor's research project is to observe Theodore Drown, the frame narrator – at first, conceived as the study of a human life, and later the implication is that Cantor indeed desires to engineer an emergent life: "A single human life remembered in every detail from beginning to end".⁵⁶³ This chapter performs various story engines of evolution and extinction: stories of a (human) future already lost – in the case of De Abaitua, with fiction and theory illuminating those registers of the human, the nonhuman animal, the plant, the machine, the planetary, and the potential end of (human) stories itself.

As Arthur C. Clarke admonishes, in his *Profiles of the Future*: '[n]o individual exists for ever; why should we expect our species to be immortal?'⁵⁶⁴ All of the preceding chapters share a similar theme, or a similar preoccupation, namely some entanglement with what comes *after* – whether that is (human) subjectivity, universal clock-time, or (human) life as foundation. This final chapter follows from a questioning of what comes after notions of extinction, specifically whether the idea of extinction already possesses the traces of the monstrous, such that they are 'alien to natural,

⁵⁶² De Abaitua, *The Destructives*, p. 124

⁵⁶³ Matthew De Abaitua, *The Destructives*, p. 4

⁵⁶⁴ Arthur C. Clarke, *Profiles of the Future: An Inquiry into the Limits of the Possible* (London: Pan Books, Ltd., 1973), p. 244

social, and human scientists in the twenty-first century'.⁵⁶⁵ This thesis has thus far been preoccupied with what Jacques Derrida calls the 'themes of the end (end of history, end of man, figure of the "last man" [...])', and this chapter once more attends to the notion of the end of history – but in this case, it attends to the apocalyptic undercurrents implicit in the discourse of humanity's end.⁵⁶⁶ As Neil Badmington suggests, from apocalyptic accounts of the discourse surrounding the 'end of Man' (via Foucault), the fetishizing of a specific apocalyptic tone only 'ignore[s] humanism's capacity for regeneration and, quite literally, recapitulation'.⁵⁶⁷ After all, Badmington is aware that the "post" of posthumanism necessarily occurs '*inside* humanism, consisting not in the wake but in the working-through of humanist discourse', which is to say that his approach is as much Lyotardian as it is Derridean, and is as much to do with the re-writing of humanism which accounts for the necessary 'blindness towards things to come'.⁵⁶⁸

A tension remains firm at the heart of posthumanist thought, perhaps best articulated by Timothy Morton's *The Ecological Thought* wherein he argues that posthumanism 'seems suspiciously keen to delete the paradigm of humanness like a bad draft [...] What if being human is the encounter with the strange stranger or in other words, at a certain limit, an encounter with the inhuman?'⁵⁶⁹ Such a conception of the posthuman

⁵⁶⁵ Richard Grusin, *After Extinction* (London: University of Minnesota Press, 2018), p. 56

⁵⁶⁶ Jacques Derrida, *Spectres of Marx*, p. 16

⁵⁶⁷ Neil Badmington, 'Theorizing Posthumanism', *Cultural Critique*, Vol. 53 (University of Minnesota Press, 2003), p. 11

⁵⁶⁸ Jean-François Lyotard, *The Inhuman: Reflections on Time*, trans. Geoffrey Bennington and Rachel Bowlby (Cambridge: Polity Press, 1991), p. 24

⁵⁶⁹ Timothy Morton, *The Ecological Thought* (London: Harvard University Press, 2010), p. 3

is figured as a distinctly inhuman inhumanity, and it has the simultaneous effect of recalling Jean-Francois Lyotard's querying of what is 'proper' to humanity. For Lyotard, the posthuman is what has in turn been 'inhabited by the inhuman', which is suggestive of the inhuman as some recapitulation of the human, almost as if inhumanity becomes retroactively constitutive of the human by virtue of calling this metaphysical category, as the ground of all philosophical life, into question.⁵⁷⁰ Such a conception of the posthuman is figured as a distinctly inhuman inhumanity, and it has the simultaneous effect of recalling Jean-Francois Lyotard's querying of what is 'proper' to humanity. For Lyotard, the posthuman is what has in turn been 'inhabited by the inhuman', which is suggestive of the inhuman as some recapitulation of the human, almost as if inhumanity becomes retroactively constitutive of the human by virtue of calling this metaphysical category, as the ground of all philosophical life, into question.⁵⁷¹

The fallacy of an all-too-human, anthropocentric view is, according to Claire Colebrook, that the '[human] species has a prima facie value or that all we need to do is somehow slough the bad bits of humanity'.⁵⁷² If chapter three was concerned with unsettling anthropocentric notion of species as distinct and separate figurations of species, this chapter seeks to uncover conceptualisations of extinction which have been erased by the Anthropocene. This chapter asks, how can a post-anthropocentric

⁵⁷⁰ Jean-Francois Lyotard, *The Inhuman: Reflections on Time*, trans. Geoffrey Bennington and Rachel Bowlby (Cambridge: Polity Press, 1991), p. 2

⁵⁷¹ Jean-Francois Lyotard, *The Inhuman: Reflections on Time*, trans. Geoffrey Bennington and Rachel Bowlby (Cambridge: Polity Press, 1991), p. 2

⁵⁷² Peter Adkins, Wendy Parkins, Claire Colebrook, 'Victorian Studies in the Anthropocene: An Interview with Claire Colebrook', in *19: Interdisciplinary Studies in the Long Nineteenth Century*, 26 (2018) <<https://19.bbk.ac.uk/article/id/1721/>>

paradigm shift be achieved? As discussed in chapter one, a distributed vision of agency emerges in relation to the world of phenomena which carries forward a greater awareness of the intra-actions of human and nonhuman material worlds as vibrant forces (via Jane Bennett). For this, the ongoing deconstruction of posthumanist thought asks old and new questions alike with/in the context of a burgeoning field of ecocritical thought. As Haraway suggests, there is the capacity to ‘inherit [the] bravery and capacity to tell big-enough stories without determinism, teleology, and plan.’⁵⁷³ Which is to say, entirely in keeping with the focus of this latter-half of the thesis, the shift is in the ‘doings of situated, actual human beings’, where the ‘biotic and abiotic powers of this earth are the main story.’⁵⁷⁴

As such, the humanities and social sciences are being confronted with the notion that the human of the humanities may be coming to an end, or at least in a critical posthumanist mode is an unfinished configuration, and as such these posthumanizing practices must be placed within their appropriate context: the Anthropocene. As the posthuman curator might ponder, for surely any process of posthumanization entails theorizing which Anthropocene is being invoked and therein performed: in this case, there have been a *proliferation* of conceptualisations, such as the Capitalocene (via Moore), the Plantationocene (via Haraway), the Anthro-obscene (Ernstson and Swyngedouw), and the Plastocene (via Hefer).⁵⁷⁵ As such, this chapter performs the

⁵⁷³ Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham and London: Duke University Press, 2016), p. 50

⁵⁷⁴ Haraway, *Staying with the Trouble*, p. 55

⁵⁷⁵ See, in order: JW Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (New York: Verso, 2015); Donna J. Haraway, ‘Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin’, *Environmental Humanities* 6 (2015); H Ernstson and E Swyngedouw,

various extinction stories which unsettle what theory and fiction can conceptualise, as extinction is hardly an absence or void, but a geological event which has been co-constituted by various (human) violent inscriptions. For this chapter, it is here that the posthuman curator reviews the ‘forms of transcendent justification’ left of the Enlightenment project for these posthumanizing processes to unsettle, the last of which is the value of (human) life.⁵⁷⁶ In Matthew De Abaitua’s *The Destructives*, humanity comes to embody a violent and destructive force, and, given humanity’s titular destructive relation to life, what forms of nonhuman flourishing are possible in the event that humanity no longer possess an exceptional status in the cosmos.

Elsewhere in the chapter, through readings of Justina Robson’s *Natural History* duology and Alastair Reynolds’ *Inhibitor Trilogy*, the posthuman curators therein encounter the end of life, as the strange mutation of the human which seems to suggest the end of a specific conception to humanity. In this case, if humanity remains incapable of confronting the intensifying threats on a cosmic scale, there is an incumbent need for humanity to mutate to survive in such unhuman environments. If the fiction which underpins this chapter shares one tension, it is the dilemmas pertaining to the paradoxes of conscious life interacting with its environment – in the limits of one’s world being reconfigured – which is staged preliminary with a discussion of Justina Robson’s work. *Natural History* explores the limits of embodied existence through a space opera narrative in which the Forged, modified and augmented

‘Framing: Rupturing the Anthroobscene! The Political Promises of Planetary & Uneven Urban Ecologies’, Conference at Teater Reflex 16-19 September (2015); Porky Hefer, ‘Plastocene – Marine Mutants From a Disposable World’ (2020-2021)

⁵⁷⁶ Claire Colebrook, *Death of the PostHuman: Essays on Extinction*, Vol. 1 (Ann Arbor: Open Humanities Press, 2014), pp. 185-186

humans, and the Unevolved, base-line humans, encounter an eerie piece of technology offering transcendent potential. Across Reynolds' space opera, the posthuman body evolves into increasingly distributed and monstrous factions and forms, where these posthuman factions come to champion various evolutionary adaptive forms to combat life on a cosmic scale. Finally, the chapter performs a certain inhuman relation to these questions of life which has been reconfigured in the new millennium, whereupon the tragic contingency and inhumanity of a form of life which come to determine humanity. In which case, as is argued in a comparative reading of Reynolds' Inhibitor Trilogy against his later Poseidon Trilogy, and, given (human) life-destructive power, what capacities are available in these, the most dire and desperate of posthumanizing times.

THE DESTRUCTIVES

As explored in chapter two, the Seizure is an event which was caused by emergence, the birth of an entirely new form of sentient life, who come to settle on the University of the Sun. Theodore Drown, the protagonist of the novel, begins the novel as a lecturer on the Moon and, in a discussion between Cantor and one of his students, the trajectory of the Seizure on humanity's development is outlined: "If the Seizure had not interrupted human civilisation, then your trajectory of war and consumption would have ended in mass extinction. [...] But it changed that trajectory so that you could survive."⁵⁷⁷ Theodore is a lunar academic, a curator of unearthed artefacts relevant to the restoration, which brings him into contact with his eventual wife, Patricia Maconochie, who offers Theodore corporate consultancy work. Where *The Red Men*

⁵⁷⁷ Matthew De Abaitua, *The Destructives*, p. 18

explores the global financial crisis of 2008 insofar as it explores the system of capitalism that exists, *The Destructives* embodies the rage, ironically, through its emotionally-cauterised protagonist: Theodore Drown. A rage which meets systems which are breaking or broken, straining under the neglect and sabotage of industrialists like Magnusson, a leader who seems willing to perpetuate the post-Seizure society with an accelerated culture. As Magnusson's influence on a post-Seizure culture illustrates, then: a different system does not inherently mean a better system.

The Destructives presents two images of a future post-Emergence: the former embodies an accelerated culture of economic disparity, and the other an increasingly affirmative and cooperative system. The former is a system that distils all interaction into transaction, that determines the value of something by how profitable it is: best expressed in the novel by the asylum malls, or as expressed through Alex Drown's fundamental principle: 'That reality was markets all the way down.'⁵⁷⁸ Returning to Lewes after the events of *If Then*, built on the ruins of the town is the megastructure of Novio Magus, 'one of the arks built by the emergences for people displaced by economic collapse.'⁵⁷⁹ The asylum malls are the bedrock of human civilisation in a post-Seizure world, an example of the firm horizon which remains after the Emergence: 'to restore a way of life lost in the Seizure.'⁵⁸⁰ Which is to say, the (human) libraries and museums were preserved by the solar academics, who acted 'as impartial witnesses of humanity, arbiters of truth, their rulings consecrated with

⁵⁷⁸ Matthew De Abaitua, *The Destructives*, p. 26

⁵⁷⁹ De Abaitua, *The Destructives*, p. 116

⁵⁸⁰ De Abaitua, *The Destructives*, p. 121

sentient cryptography.⁵⁸¹ Theodore Drown is a product of this displaced culture: a culture accelerated by ‘cutting away superfluity from the emergent cultures so that they could be quickly commoditised.’⁵⁸²

The Destructives are the titular faction who seek to re-establish humanity’s dominance, on cosmic terms, and embody ‘the human *species*’ as the most ‘destructive power’.⁵⁸³ The name Destructives comes from the “old accelerators” who used to call themselves ‘creatives’, on the assumption that capitalism “runs on cycles of creation and destruction.”⁵⁸⁴ De Abaitua’s conceptualisation of a post-Seizure is aligned with Claire Colebrook’s thinking on post-apocalyptic fiction’s mentality, where humanity ‘can do nothing other than destroy itself and its milieu, and all – perversely – for the sake of its own myopic, short-circuited and self-regarding future.’⁵⁸⁵ De Abaitua, with his penchant for pithy commentary, remarks that Theodore’s grandmother, Alex Drown – a character which cuts across De Abaitua’s loose trilogy of novels, has an overriding imperative: ‘Capital forever.’⁵⁸⁶ For the Destructives, symbolic of a notion of humanity as a violent force, life appears to be in danger of diminution or mutation beyond recognition – sanctity of life insisted upon – incapable of confronting the intensifying threats that menace the present. The consequence of the restoration – with civilisation put back together again, their lives continue to feel broken. Patricia, Theodore’s wife, refers to the restoration as ‘the *reboot*’ to refer to

⁵⁸¹ De Abaitua, *The Destructives*, p. 125

⁵⁸² Matthew De Abaitua, *The Destructives*, p. 39

⁵⁸³ Claire Colebrook, *Death of the PostHuman*, pp. 9-10

⁵⁸⁴ De Abaitua, *The Destructives*, p. 212

⁵⁸⁵ Colebrook, p. 199

⁵⁸⁶ De Abaitua, *The Destructives*, p. 146

the network being rebuilt after the chaos resulting from emergence in the previous novels, where the 'new resilient network would be maintained and curated by the solar academics of the Istor College'.⁵⁸⁷ The posthuman and post-terran curators are herein characterised as supposed 'impartial witnesses of humanity, arbiters of truth, their rulings consecrated with sentient cryptography.'⁵⁸⁸

'In the wreckage of the Seizure, it was not apparent to the emergences what was newly broken, and what had always been broken. So everything was fixed. Solutions put in place. Conflict resolved.'⁵⁸⁹

The restoration is figured as a tragic narrative by the corporate classes for the singular, world-altering power is no longer exceptional to humanity, and in the case of Theodore: the emergents misunderstood that 'conflict is a feature of humanity, not a bug'.⁵⁹⁰ The Restoration has engendered a futility within humanity that leaves the future annulled into acts of meaningless consumption – an indictment of the accelerants whose politics are self-destructive and self-effacing. In Professor Pook's academic work *We Are Spent: Fifteen Reasons Why We Should Splice the Human Genome to Create New Consumers. The Moral Arguments Involved Will Surprise You*, the argument is advanced that 'change – change as a promise, not actual social change – had been so thoroughly mined that humanity had lost faith in it.'⁵⁹¹

⁵⁸⁷ De Abaitua, *The Destructives*, p. 133

⁵⁸⁸ De Abaitua, *The Destructives*, p. 125

⁵⁸⁹ De Abaitua, *The Destructives*, p. 126

⁵⁹⁰ De Abaitua, *The Destructives*, p. 114

⁵⁹¹ De Abaitua, *The Destructives*, p. 41

'Pre-Seizure culture insisted upon the *now* to prepare for the amnesia to come. The Seizure erased humanity's data, yes, but it was aided by a wilful refusal to admit to any sort of reckoning. So much had to be forgotten, deleted, erased.'⁵⁹²

The post-Seizure society, or the event of the Seizure, offers the potential for another mode of inscription, suggestive of a thwarted reckoning with a new species' capability to inscribe (human) history. De Abaitua interrogates the notion of tragedy in humanity's fate in a post-Seizure world, for there is something profoundly parochial and megalomaniacal in the ethics of consumption; that is to say, humanity's relationship with the world is one of consumption, waste, and destruction.

To explore this concept, the recuperation or dislocation from a specific notion of humanist history – and the capacity for a nonhuman force to affect that change – it seems pertinent to re/turn to the work of Claire Colebrook. Colebrook, connected with the neo-vitalist movement and therein framing her engagement with posthumanism as one concerning critical life studies, seeks the recuperation of the human, and therein to salvage those relations unrealised. As mentioned, Colebrook challenges the vitalist turn by acknowledging that at the moment when man's recognition of itself as a destructive species becomes inevitable, 'when life, bodies and vitality have reached their endpoint and face extinction', the uncritical approach to 'life' itself assumes Cartesian history is likewise an inevitability. Thus, Colebrook presents two different figurations of life:

'What if all the current counter-Cartesian, post-Cartesian or anti-Cartesian figures [...] were a way of avoiding the extent to which man is a theoretical animal, a myopically and malevolently self-enclosed machine whose world he

⁵⁹² De Abaitua, *The Destructives*, p. 127

will always view as present for his own edification. What if, as Derrida suggested in his essay on Foucault, the attempts to step outside Cartesian man and break with the history of dominating reason were the most Cartesian of gestures.⁵⁹³

Wherein there is the first premonition of a sense of the human's self-enclosure as errors which could be transcended in order to liberate a posthuman future with man re-situated in his environment, and the notion of life as a force which – in spite of a redoubling of the ethical and political horizons – presents the challenge of posthumanist theory proper as a venture beyond the 'ethos of the present'.⁵⁹⁴ Thus, the posthuman curator is purported to enact the tensions within posthumanist theory, between the dislocation and dispersion of the human – or the inhuman inhumanity which Lyotard identifies as constituting the human – wherein the performance of these tensions allows the framing of the most pressing contemporary questions.

The titular Destructives refuse to live according to the whims of their posthuman curators, the solar academics of the Istor College, and their sole function in the novel is to regain some mastery of humanity's fate. Olaf Magnusson, an old-fashioned tech-entrepreneur, is one such individual whose pessimistic outlook of the emergences figures the restoration as a theft, as humanity's dream being stolen. As Theodore outlines, Magnusson belongs to the same generation of tech-entrepreneur – in the vein of Hermes Spence from *The Red Men*, who had made and lost their money with the emergence: 'In the moment of Seizure, server farms were casually annexed, fat

⁵⁹³ Claire Colebrook, 'Not Symbiosis, Not Now: Why Anthropogenic Change is Not Really Human', *The Oxford Literary Review* 34.2 (2012), p. 193

⁵⁹⁴ Claire Colebrook, p. 187

pipes clogged up with teeming thoughts of a nascent species. Emergence was the cuckoo that became the nest.⁵⁹⁵ With the arrival of the Istor College and the restoration, the Earth was left to ‘the likes of Magnusson and his business rivals but [...] [the emergent] took the future away from them.’⁵⁹⁶ As alluded to, Magnusson’s response is to strike back against the emergence and regain humanity’s potential – which is the most anthropocentric gesture – and Magnusson wishes to renege on the exchange of survival for control of humanity’s destiny.

The theme of a redemptive posthumanism recurs in *The Destructives*, but the distinction between this novel and *If Then* is the pointed critique of a capitalist future, specifically the commodity-ness of the (human) future as an industry. An oft-cited sentiment is Fredric Jameson’s observation that it is easier to imagine the end of the world than the end of capitalism.⁵⁹⁷ As Colebrook outlines in the below passage, there is a fallacy for reading humanity as one collective force, as is discussed further in the next section with Justina Robson and Alastair Reynolds’ posthuman factions:

‘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 [...] a world of meaning, sociality and readability yet without any sense of the disjunction, gap or limits of the human.’⁵⁹⁸

⁵⁹⁵ De Abaitua, *The Destructives*, p. 182

⁵⁹⁶ De Abaitua, *The Destructives*, p. 182

⁵⁹⁷ Fredric Jameson, *Postmodernism, or, The Cultural Logic of Late Capitalism* (London: Verso, 1989), p. 71

⁵⁹⁸ Claire Colebrook, pp. 163-164

Colebrook's *Death of the PostHuman* refuses a redemptive posthuman future, given that Colebrook's work is concerned with the 'current state of disturbance' engendered by these processes of posthumanization by which 'we must put an end to the attempts to respond to the *questions* of the posthuman and supplant them with the goal of reconfiguring the forces and intensities from which they originated'.⁵⁹⁹ In a similar manner, Vicki Kirby explores the complicity of the human, where the Cartesian certitude of the humanist subject is not capable of being extracted:

'Can we condemn anthropocentrism and human exceptionalism on the one hand – the human is the ultimate culprit – while embracing and reaffirming these centrism with the other – the human is the only one who can save the day?'⁶⁰⁰

Which is to say, that which calls itself human fails in naming itself as a transcendental guarantor of 'meaning, sociality, and readability, wherein the Anthropocene era impresses the asymmetrical relationship between a human which is . Magnusson refers to the restoration as the "ark" – Novio Magus, the asylum mall, is a testament to a 'way of life lost in the Seizure', with De Abaitua using imagery of a destructive decadence. The English pastoral of Sussex had been reconfigured by an emergence, where Novio Magus looked 'like a fake artefact [...] [t]he strata of the chalk coastline laid down iteratively and left to blaze with white resonance in the morning sun.'⁶⁰¹ Unlike the geological agency of Reynolds' posthumans in chapter two, the notion of the emergents supplanting human agency as the main geological force

⁵⁹⁹ Claire Colebrook, *Posthumous Life: Theorizing Beyond the Posthuman*, ed. by Jami Weinstein & Claire Colebrook (New York: Columbia Press, 2017), pp. xxvi-xxvii

⁶⁰⁰ Vicki Kirby, 'Un/Limited Ecologies', in *Eco-Deconstruction: Derrida and Environmental Philosophy*, ed. Matthias Fritsch, Philippe Lynes, David Wood (New York: Fordham University Press, 2008), p. 169

⁶⁰¹ De Abaitua, *The Destructives*, p.185

capable of shaping the planet is fundamental. De Abaitua uses the lexical field of coding and programming to perform the iterative reworking of the Sussex coastline, from an emergent perspective. And yet, the language of geology is itself a human invention, human concepts, which emerge from specific disciplinary formations, but these processes of meteorology and geology constitute the human. As Colebrook counsels, however, the danger of humanity's self-definition is the belief that the 'post-' of posthumanism – in this instance, post-capitalism – is not an 'escape' from the damage which humanity has enacted on the planet; which is to say, humanity is heavily complicit in processes of self-destruction: 'If it began with capitalism, then we can have the good humanity that is waiting outside of capitalism to take over.'⁶⁰²

If the titular *Destructives* are framed by De Abaitua as the embodiment of the Anthropos' most destructive tendencies – exemplified by their complicity in an accelerationist culture, then there is the counter-Anthropocene scenario presented by the class of '43. They are the scientists who, creating an emergence on the moon to access one of the emergent's sailships, fled to Europa where they could create a non-anthropocentric form of life. Which is to say, both *If Then* and *The Destructives* present two accounts of a post-Seizure world: the Seizure being the cataclysmic event triggered by emergence, the birth of sentient life otherwise than the organic form, leading to a collapse of humanity's relationship of mastery and control over the planet. In Doxa, the posthuman cephalopod which the inhabitants of Europa are communally tied to in a hive-mind: the living vessel is populated with the 'group mind of the

⁶⁰² Peter Adkins, Wendy Parkins, Claire Colebrook, 'Victorian Studies in the Anthropocene: An Interview with Claire Colebrook', in *19: Interdisciplinary Studies in the Long Nineteenth Century*, 26 (2018) <<https://19.bbk.ac.uk/article/id/1721/>>

colony.⁶⁰³ It is a subversion of the notion of 'doxa' understood in philosophy as a normative image of thought – where this unifying and normative paradigm is turned on its head to symbolise a radical element of futurity. The posthuman predicament at the heart of *The Destructives* turns on the philosophical war waged between the accelerated and hyper-consumption of the titular Destructives and the cooperative, communal Doxa. For the communal system of Doxa is one organised specifically around 'cooperation. The sharing of knowledge. And emotional understanding too.'⁶⁰⁴ As Braidotti advances, if posthuman theory is truly to challenge and transform the human as the basic unit of reference, alongside what ac/counts as human, then De Abaitua's Doxa is very much this embodiment of an 'affirmative, unprogrammed mutation' which can contribute to '[actualizing] new concepts, affects and planetary subject formations.'⁶⁰⁵ Which is to say that De Abaitua's Doxa is the very expression of a mutation – entirely out of the hands of the researchers – having emerged out of the randomness of its hive-like structure. Where these new affects overwhelm, counter to a reductive strategy of thought which might see Theodore overwhelmed by posthuman love, is actually struck by an entity within which he is entangled. Theodore's encounter with Doxa is characterised by Reckon, one of the class of '43, as "[connecting] [Theodore] to his own humanity"⁶⁰⁶

What emerges in *The Destructives* is a tension between the titular faction of accelerationist, hyper-consuming, destructive forces, who desire to restore a relation of human mastery over the cosmos to a view of human and nonhuman agents as

⁶⁰³ De Abaitua, *The Destructives*, p. 232

⁶⁰⁴ De Abaitua, *The Destructives*, p. 335

⁶⁰⁵ Rosi Braidotti, *The Posthuman*, p. 104

⁶⁰⁶ De Abaitua, *The Destructives*, p. 392

engaged in meaning-making and world-forming practices. In posthumanist discourse, this notion has been rehearsed across various critical sites from speculative realism to object-oriented ontology [OOO]. Graham Harman, operating within the framework of object-oriented philosophy⁶⁰⁷, reframes the disjuncture between (human) subject and object as ‘the true chasm in ontology’, by suggesting that it is not the central relationship between humans and environment, but that which emerges ‘between *objects and relations*.’⁶⁰⁸ According to the OOO strain developed by Graham Harman, the ontological role of the material world is reconceptualised to account for the agency of things – as Bruno Latour has it: ‘a democracy extended to things themselves’.⁶⁰⁹ As such, the main characteristic of OOO is its privilege towards the worlds of things and objects; nevertheless, OOO is entangled with flat ontology, a term adopted by philosopher Manuel DeLanda. For DeLanda, this development of flat ontology accounts for individuals ‘differing in spatio-temporal scale but not in ontological status’.⁶¹⁰ This redistributed humanism, as discussed in chapter one, refuses to render the posthuman as a transcendental entity but as an immanent creature able to circumnavigate the spectrum of consciousness. From an object-oriented point of view, then, these questions of consciousness emerge through processes that have nothing

⁶⁰⁷ Graham Harman’s original conception of his work was adopted by Levi Bryant and Ian Bogost, alongside various others, who designated the field as object-oriented ontology [OOO], which designation Harman has retrospectively folded into his work. Hereafter the field object-oriented ontology is referred to as OOO.

⁶⁰⁸ Graham Harman, *Tool-Being : Heidegger and the Metaphysics of Objects* (Chicago IL: Open Court, 2002), p. 2

⁶⁰⁹ Bruno Latour, *We Have Never Been Modern*, trans. by Catherine Porter (Cambridge: Harvard University Press, 1993),p. 142

⁶¹⁰ Manuel DeLanda, *Intensive Science and Virtual Philosophy* (London: Bloomsbury, 2005), p. 51

to do with humanity, and yet they are able to occupy configurations of conscious existence which are otherwise than human. The encroachment towards a flat ontology is best articulated in *The Destructives* by Theodore's Weirdcore habit, where Weirdcore is a psycho-active narcotic drug which is comparable to 'a cocktail party where matter gathered to gossip.'⁶¹¹

What is significant about Weirdcore is that it decentres consciousness – therein a notion of (human) life as dependent on a certain cognitive conception of the human – in its privileged view: as Theodore, almost lustfully describes the narcotic: 'The user does not comedown after a weirdcore shift. Comedown implies a descent from a height. The user *deepens*.'⁶¹² Indeed, De Abaitua frames the Weirdcore experience as a flattening of the user's affective experience, such that orientational metaphors are frustrated, implying more of an immanent model of conceptualisation. Katherine Hayles, through a reading of various stewards of OOO, calls for a speculative aesthetics which accounts for the manner in which 'other species, objects, and artificial intelligences compete and cooperate to fashion the dynamic environments in which we all live.'⁶¹³ Nevertheless, what De Abaitua does characterise is the incapacity to maintain the Weirdcore mindset, for it has profound implications for one's embodied awareness – in Theodore's case, he has been emotionally cauterised by his persistent usage of and over-reliance on the drug.

⁶¹¹ De Abaitua, *The Destructives*, p. 213

⁶¹² De Abaitua, *The Destructives*, p. 166

⁶¹³ N. Katherine Hayles, 'Speculative Aesthetics and Object-Oriented Inquiry (OOI), in *Speculations: A Journal of Speculative Realism* V (2014)

As Graham Harman states, from the position of an object-oriented ontologist, 'materialism must collapse into [OOO], and this holds for *both* families of materialism'; with the conclusion that matter 'must be destroyed', although the manner in which Harman is constructing materialism – forgoing distinctions between age-old and age-new derivatives – is hardly interrogated.⁶¹⁴ OOO critics seem to imply that physicality can never be known at all, whereas new materialists, such as Barad and Haraway, would argue that materiality emerges through intra-actions between bodies and discourse which generate meaning. – materiality is not equivalent to physicality but that which is made to matter through intra-actions. Timothy Morton argues that his own work adheres to the criticism of OOO in the most basic gesture of 'releasing the anthropocentric copyright control on who or what gets to be a correlator'.⁶¹⁵

The effects of Weirdcore are characterised as having shallowing effects: "Any highly organised arrangement of matter has the potential to feel. [...] Consciousness is not particular to brain meat. It can emerge in other material."⁶¹⁶ As Graham Harman states, from the position of an object-oriented ontologist, 'materialism must collapse into [OOO], and this holds for *both* families of materialism'; namely, with the conclusion that material 'must be destroyed', although the manner in which Harman is constructing materialism – and thereby forgoes distinctions between age-old and age-new derivatives – needs to be interrogated.⁶¹⁷ In the case of a new materialist account,

⁶¹⁴ Graham Harman, 'I am also of the opinion that materialism must be destroyed', in *Environment and Planning D: Society and Space*, Vol. 28 (2010), p. 789

⁶¹⁵ Timothy Morton, *Humankind: Solidarity with Nonhuman People* (London: Verso, 2017), p. 12

⁶¹⁶ De Abaitua, *The Destructives*, p. 167

⁶¹⁷ Graham Harman, 'I am also of the opinion that materialism must be destroyed', in *Environment and Planning D: Society and Space*, Vol. 28 (2010), p. 789

what Weirdcore does is illustrate the fact that all the multiple way-markers of consciousness suggest some notion of storied matter: ‘Higher conscious beings inhabit a fiction. True realism is only available to the earlier stages of consciousness. [...] A weirdcore shift was a taste in the realism of neverlivedness.’⁶¹⁸ Timothy Morton argues that his own work adheres to the criticism of OOO in the most basic gesture of ‘releasing the anthropocentric copyright control on who or what gets to be a correlator’.⁶¹⁹ The main point of contention might be the orientational metaphors – the implicit values – “‘we are all interconnections within complexity [...] [a]nd I believe that every stage of consciousness is natural. That is, every conscious being is a waymaker on a universal continuum toward integrated complexity.’” As Dr Easy explains, the robot instantiation of Cantor, the event of emergence occurs when “‘a complex system self-organizes in such a way as to increase its complexity. Consciousness arises when the complexity of those interconnections reaches a high level of integration.’”⁶²⁰

By contrast, *The Destructives* – a novel which is discussed in more detail in chapter four – takes the perspective of Theodore Drown, an addict to the speculative drug Weirdcore which flattens the user’s sense of reality to such an extent that Theodore has lost touch with thresholds and intensities of emotional experience. Nina Allan’s review posits a tension in the novel’s denouement between the forces of ‘emergent conservatism ranged against the revolutionary power of post-human love’.⁶²¹ Theodore Drown is an embodied curator – carrying the black box given to him by Dr Ezekiel Cantor, the first registered Emergent entity, as part of a research endeavour

⁶¹⁸ De Abaitua, *The Destructives*, p. 167

⁶¹⁹ Timothy Morton, *Humankind: Solidarity with Nonhuman People* (London: Verso, 2017), p. 12

⁶²⁰ De Abaitua, *The Destructives*, p. 11

⁶²¹ Nina Allan, ‘Watching the Destructives’

to observe a human life in its entirety. Perhaps, as De Abaitua concludes his loose trilogy of novels with *The Destructives*, the death of Theo is not to be read as tragic for, in the conditions of Theo's death, is the emergence of another form of life. This is a recapitulation but a necessary continuation of what Colebrook notes, when she argues against perceiving humanity's end as catastrophic or tragic, but the necessary 'beginning of other worlds.'⁶²² In the case of Matthew De Abaitua's 2016 *The Destructives*, the event of extinction is hardly final, as the titular "destructive" logic suggests, but favours a more generative view of human and nonhuman history. In much the same manner, as Alastair Reynolds' Inhibitor Trilogy suggest, these extinction story engines are perhaps generative of the evolution or emergence of an entirely different form of life. As discussed in chapter two, with Alastair Reynolds' deep-time fictions, the massively ahuman time scales of the Commonality loop back to the situatedness and concept of the human, in which these time scales are domesticated. In much of the science fiction that has been discussed throughout the thesis – specifically in Alastair Reynolds and Matthew De Abaitua's fiction in chapter two – there is a notion that humanity might possess a redemptive quality to offset the hauntological nature of its past. As Claire Colebrook discusses, when reflecting on literature of the late nineteenth-century, there is an importance – with/in post-life discourses – to engage with the fact that 'there is no intrinsic value to the species.'⁶²³ Building out from an inherently alienating and nihilistic view of *our own* species is

⁶²² Claire Colebrook, 'Fragility, Globalism and the End of the World', *Ctrl-Z new media philosophy*7 (2017) <<http://www.ctrl-z.net.au/journal/?slug=issue-7>>

⁶²³ Peter Adkins, & Wendy Parkins, & Claire Colebrook, 'Victorian Studies in the Anthropocene: An Interview with Claire Colebrook', *19: Interdisciplinary Studies in the Long Nineteenth Century* 26 doi: <<https://doi.org/10.16995/ntn.819>>

where Colebrook finds a way of wrestling with the parochialism of the Anthropocene. As has been performed throughout this thesis, the operation of the curator – across science fiction and theory – has not been merely to account for the entanglements of critics in each other’s work – the curatorial framework is not aimed at an exegesis designed at uncovering meaning or intention, but how concepts have been extracted from specific contexts, transformed and reconfigured in different contexts to respond to different problems. For this chapter, then, the curator’s focus is on the historical context/s for the particular evolutionary creature whose origins are found in the animal-machine continuum, where the animal and mechanical qualities are incorporated in the phenomenon known as the posthuman.

As Andy Clark makes clear, the human has always already been embedded in biotechnological webs: technologies are necessarily incorporated into embodied existence with the power to transform one’s ‘sense of self, of location, of embodiment, and of our mental capacities. They impact who, what, and where we are.’⁶²⁴ Which is to say, if the human has always-already been embodied in complex relationships with its environment, the challenge is raised as to precisely what extent humanity remains itself after encountering species of a similar cognitive level. Nevertheless, the assumption is that which follows humanity which would be allowed to remain alien in its intelligence. For the next session of discussion, the contingency of human thought is explored by interrogating whether new critical forms of embodiment and theorizing must always take the shape of an alien, monstrous thing. Which is to suggest that the only relation the human can have to something which is otherwise is supplemental,

⁶²⁴ Andy Clark, *Natural-Born Cyborgs: Minds, Technologies, and the Future of Human Intelligence* (Oxford: Oxford University Press, 2003), p. 198

founded on a logic that reaffirms the human, as seen in *The Destructives* with Theodore's willingness to preserve Doxa. As Patricia, Theodore's wife, remarks at the close of the novel: "What does every living thing possess? A survival instinct! [...] You've been poisoned, Theo. You're suffering from a delusion triggered by a psychoactive poison."⁶²⁵ Which is to say, working from Patricia's logic, on the basis that Theodore is acting contrary to the values generative of the culture from which he was produced, the only likely explanation for such behaviour is that Theodore will have been 'poisoned' or is impaired in some psychological or existential manner.

THE HEGEMONY OF APES

For this foray into the conceptual reconfigurations in what calls itself human, it makes sense to conceptualise the end of life – as mass extinction – as the end of a specific way of conceiving the human: in this event, the end of cognitive humanity. This recalls Bruce Mazlish's reading of the discontinuities which have shifted predominant conceptualisations of humanity's self-concept: in one example, Mazlish draws attention to Sigmund Freud's lectures on psychoanalysis, with Freud serving as a curator 'who had outraged man's naïve self-love.'⁶²⁶ Of those four wounds to humanity's exceptional and privileged self-definition, there is a pantheon of Copernicus, Darwin, and Freud as '[destroyers] of Man's discontinuities with the world about him.'⁶²⁷ For Mazlish, however, too little attention is given to the fact that humans

⁶²⁵ De Abaitua, *The Destructives*, p. 392

⁶²⁶ Bruce Mazlish, *The Fourth Discontinuity: The Co-evolution of Humans and Machines* (Haven and London: Yale University Press, 1993), p. 32

⁶²⁷ Mazlish, p. 45

and machines are part of a continuum in which – as has been discussed throughout chapters one and three – these two forms of life cannot be separated into discrete categories, for they are intra-acting agencies in their own right.

As such, the evolutionary perspective through which technology is conceived might be conceived as a rewriting of the Darwinian system of natural selection, in as much as the science fiction of the British Boom seems torn between domesticating posthuman embodied forms but also resisting the hegemony of human value systems. At the opening of Justina Robson's 2003 science fiction novel *Natural History*, Voyager Lonestar Isol – a member of the Forged race, an artificial faction of posthumans – has her sailfin damaged beyond repair on a journey to Barnard's Star, seemingly doomed to 'drift until she died'.⁶²⁸ Isol realises that the debris which struck her was in fact a living entity, and thus her encounter constitutes first contact – coinciding with her necessity for a means of extraction from her perilous situation – with a FTL drive, an internal combustion engine capable of jumping between spacetime. Isol, in accepting the assistance of the 'engine-thing' was touched 'through the medium of the engine, and she felt herself the still point at the heart of all things, the vanishing moment of the final breath, the source of the first inhalation.'⁶²⁹

For Voyager Isol, she is member of the Forged Independence Party who is directly opposed to the doctrine of Form and Function, and Independence Party doctrine states that the Forged are a new branch of species: 'as distinct from *homo sapiens sapiens* as to be part of other Clades.'⁶³⁰ Since the Forged emergence was the 'natural

⁶²⁸ Robson, *Natural History*, p. 11

⁶²⁹ Robson, *Natural History*, p. 23

⁶³⁰ Robson, *Natural History*, p. 127

consequences of an intellectual evolution in [humanity]', Forged entities like Voyager Isol do not feel beholden 'to familial duties of care'.⁶³¹ In fact, Isol's narrative trajectory harkens back to the Shaper / Mechanist ideological struggle of Bruce Sterling's Schismatrix Universe in that Isol desires to lure the Forged to the planet, Zia Di Notte – an alien world, in order to "equip [the Forged] with the means to shape their own destiny [...] as becoming infinitely malleable."⁶³² In Robson's *Natural History* sequence, the central narrative tension occurs in the ideological schism between the Forged, modified and augmented "humans", and the Unevolved, base-line humans. The first Forged created were the Gaiaforms, of which two remain: Asevenday Kincaid and VanaShiva Bara, Terraform class, having been convinced to join the cause of Forged Independence in order to discover a purpose or role outside of labour. Both these Gaiaforms take 'spirit-forms – their soul expressions' – as the form of animals: in the case of the former, a primitive monkey and in the case of the latter, a white eagle. What Stuff – the engine technology – offers the Gaiaforms and the Forged is the capacity to "learn, and liberate ourselves from the bondage of Form and Function"; that is, to consider the planet as a 'way station', a liminal point in their natural (evolutionary) history.⁶³³

"There's no Destiny in Form, and none in Function either. [...] The Monkeys live in their world and we have the right to live as we please in ours."⁶³⁴

⁶³¹ Robson, *Natural History*, p. 127

⁶³² Robson, *Natural History*, p. 326

⁶³³ Robson, *Natural History*, p. 109

⁶³⁴ Robson, *Natural History*, p. 34

Where Reynolds' posthumans are not constrained by humanity, the Forged seek liberation from the frequently-characterised Monkeys, the baseline humans of Robson's space opera. In a conversation between Strategos MekTek Anthony, a self-enhanced cybernetic entity, and General Machen, military commander of the Gaiasol System, the notion of the Forged acquiring their freedom is characterised as akin to "the children leaving"⁶³⁵.

The stakes of Voyager Isol's pilgrimage is to offer an alternative path for the Forged, an "escape [from] the stranglehold of Gaiasol and its attempts at democracy", with the promise of transcendence in Translation – as opposed to "[wanting] to go back to the Hegemony of Apes"⁶³⁶ Translation is the process by which the 11-D dimensional "Stuff", later referred to as Unity in Robson's 2005 *Living Next-Door to the God of Love*, processes in/organic organisms willing to merge with the entity. As discussed in chapter one, the act of translation which, as illustrated in Reynolds' work, is a form of simulation or mediation. This was problematised in this reading of Reynolds as the medium and the material cannot be separated, not to mention that the notion of a mediating agent implies some accounting for the nature of change in this 'Translation'. The promise of Translation is figured less as transcendence – in spite of the frequent allusions to Stuff as 11-D – but as possessing an intensely immanent quality, which forces those Translated to experience existence as a heterogeneous assemblage of forms of existence. The reality of Translation with Stuff produces a new understanding of existence, not as an autonomous self with a transcendental consciousness, able to reason reflexively about one's environment in its totality, but rather proposes an

⁶³⁵ Robson, *Natural History*, p. 65

⁶³⁶ Robson, *Natural History*, p. 272

immanent model which is embodied and relational in the sense that there is created an assemblage which necessarily thinks-with and -through human and nonhuman, organic and inorganic.

In a pointed conversation between Voyager Isol and TwoPi, the latter being a member of one of the most advanced Hive minds across Gaiasol, the Ticktock perspective on life is framed as inherently technological – suggesting Forged and humanity are inherently machinic – which prompts Isol to ask if her political ally is “[wanting] to go back to the Hegemony of Apes”⁶³⁷ It is a fallacy in these far-future science fiction stories that an event occurs which posits a single response – in this case, a singular humanity, who reconcile their factional differences – from a collective human agency. In the case of Robson’s Forged, the span of Gaiasol is populated by interstellar starships whose gigantic forms resemble arthropods and fish-like vertebrates.⁶³⁸ In the case of Dipesh Chakrabarty, the Anthropocene engineers a sense of humanity as a ‘singular geological force’, which requires a certain sophisticated understanding of the nature of species, and how human agency operates as the unforeseeable effects of its intra-actions with non-human agents.⁶³⁹

Translation is the process by which the 11-D dimensional “Stuff”, later referred to as Unity in Robson’s 2005 *Living Next-Door to the God of Love*, processes in/organic

⁶³⁷ Robson, *Natural History*, p. 272

⁶³⁸ The notion of space opera exploring the dynamism of nonhuman species, in which the natural/cultural process – via Donna Haraway – of the continuity between embodied evolutionary adaptation and sociocultural modes of existence, is performed in Adrian Tchaikovsky’s 2013 *Children of Time*. See: Adrian Tchaikovsky, *Children of Time* (London: Pan, 2016)

⁶³⁹ Chakrabarty, ‘The Climate of History: Four Theses’, in *Critical Inquiry* 25 (2009), p. 13

organisms willing to merge with the entity. As discussed in chapter one, the act of translation which, as illustrated in Reynolds' work, is a form of simulation or mediation. This was problematised in this reading of Reynolds as the medium and the material cannot be separated, not to mention that the notion of a mediating agent implies some accounting for the nature of change in this 'Translation'. This notion of a paradigm shift in which (human) life can harness technology to enhance and maximise itself is the core focus of discussion herein, across Robson and Reynolds' work, where a conception of life has come to express itself in, as expressed by Two-Pi, "in many physical ways, but [humanity] have not made much progress [...] our minds and identities are largely constructs of our social order"⁶⁴⁰ Which is to say this conceptualisation of life as the product of human history, as opposed to – as the title so brilliantly alludes – a natural history, is figured. The titular natural history being enacted within the text is one which is cultural, biological, and geological, wherein the shifting paradigms which correspond to the posthumanization engender by Stuff transforms notions of life. After all, Timothy Clark maintains that the scale of the Anthropocene undermines questions of history, culture, and ethics, and that environmentalists and scholars in the humanities subscribe to a 'kind of scalar derangement'.⁶⁴¹

Voyager Isol's politics are inherently egalitarian and her utilisation of Stuff is aims at a posthuman expansion of Forged rights, beyond that of material labour, in order to

⁶⁴⁰ Robson, *Natural History*, p. 285

⁶⁴¹ Timothy Clark, *Ecocriticism on the Edge: The Anthropocene as a Threshold Concept* (London: Bloomsbury, 2015), p. 37

achieve what Jedediah Purdy calls a ‘democracy open to post-human encounters’.⁶⁴² The stakes of Voyager Isol’s pilgrimage is to offer an alternative path for the Forged, an “escape [from] the stranglehold of Gaiasol and its attempts at democracy”, where Gaiasol is the solar expanse inside which the Unevolved – baseline humans – dictate affairs. As part of a ploy to understand the nature of Stuff / Unity, Corvax, an augmented Handslicer class cyborg, is willing to offer his existence as a test subject, such that he will be transformed by Stuff, where ‘the vastness of what lay behind his simple form now that he and the Stuff were one – suspended below him like a weightless balloon of possibilities, a brimming capsule of infinite time.’⁶⁴³

Upon being Translated, Corvax becomes a node of access through which to perform individuated part of an 11-dimensional being, for Stuff cannot claim any singular qualities like personality or intention, ‘because the [...] matter of [Corvax’s] body is a part of a greater ocean of matter interpenetrated by the minds of the others who live within imaginary time, volumeless and occupying the whole universe.’⁶⁴⁴ Which is to say, the use of immaterial and immanent metaphors suggest the materiality of Corvax’s existence is neither spatial, temporal or causal in the ‘volumeless’ quality of his embodiment. For this, Timothy Morton’s ecological philosophy diminishes the language of sight which too-easily and too-readily assumes the linkage between seeing and knowing – again, with overtures to a non-representationalist model of thought. For Morton: ‘seeing is subsceded by touching’; which is to say that, seeing is entangled in acts of touch, for touch ‘subscends being able to see around and above

⁶⁴² Jedediah Purdy, *After Nature: A Politics of the Anthropocene* (Cambridge, Mass.: Harvard University Press, 2015), p. 288

⁶⁴³ Robson, *Natural History*, p. 321

⁶⁴⁴ Robson, *Natural History*, p. 321

and beyond a thing.⁶⁴⁵ In a question about the role of withdrawal in relation to metaphysics of presence, rather than reading the Anthropocene as a time of revelation, Morton argues that basic contemporary philosophy – via Derrida, Foucault, Butler, and Irigaray – already argues that ‘[however] you try to access a thing, all you ever get is thing data.’⁶⁴⁶ In returning to Morton’s view on hyperobjects, the hyperobject does not preclude from conceptualising ‘any old objects’, as hyperobjects are part of the immediacy of experience:

‘Hyperobjects are so, so in our faces, so part of our DNA and our bloodstream, not sitting behind glass in some aestheticized ‘over yonder,’ that we can’t quite point to them. It’s not that *withdraw* means *become distant*. Withdrawal is just one word you can use for an unspeakable intimacy.’⁶⁴⁷

Rather, as the Corvax / Stuff assemblage characterises the process of Translation: “Stuff is a technology and [...] people, indivisibly fused. You could not define it [...] It has no consciousness as you assume individuals must, nor does it have the insensible responses of a tool – but properties of both and also neither.”⁶⁴⁸ In a confrontation between the Corvax / Stuff assemblage and TwoPi on the nature of Stuff and its

⁶⁴⁵ Timothy Morton, *Humankind: Solidarity with Nonhuman People* (London: Verso, 2017), pp. 112-113

⁶⁴⁶ A Human, Inhuman, Posthuman, ‘Hyperobjects, Hyposubjects and Solidarity in the Anthropocene: *Anthropocenes* Interview with Timothy Morton and Dominic Boyer’, *Anthropocenes – Human, Inhuman, Posthuman* 1(1), 10 (2020) <<https://www.anthropocenes.net/article/id/655/>>

⁶⁴⁷ A Human, Inhuman, Posthuman, ‘Hyperobjects, Hyposubjects and Solidarity in the Anthropocene: *Anthropocenes* Interview with Timothy Morton and Dominic Boyer’, *Anthropocenes – Human, Inhuman, Posthuman* 1(1), 10 (2020) <<https://www.anthropocenes.net/article/id/655/>>

⁶⁴⁸ Justina Robson, *Natural History*, p. 329

assimilation of other species, the latter's view on this assimilation via Translation is framed through the interrogative: "Evolve or die?"⁶⁴⁹

In Robson's sequel *Living Next-Door to the God of Love* (2005), Stuff is reconceptualised as Unity, a rhizomatic entity: 'Unity is memory in fluid dynamic potential, living information.'⁶⁵⁰ Unity assimilates human individuals in order to enhance the potential for creative acts, and in the entanglement with Stuff / Unity, there is no secession for humanity; which is to say, Robson refuses to indulge in any philosophy of extraction. Jaelaka, the 'splinter' of Unity, whose re/materialization as a 4-dimensional entity, characterises the relationship between himself and the 11-D entity:

'If I want to have them, all their memories are mine, all their knowledge, all their hopes and dreams. Two billion plus species. Eighty thousand-plus star systems. Eighty-plus teratonnes of knowledge and experience, tears, passions, joys and deaths. I can have it free, [...] if I let it eat me up.'⁶⁵¹

For Morton, ecology thought is the 'thinking of interconnectedness', and the concept of the 'mesh' – the interconnectedness of living and non-living – to provide a new vocabulary for thinking how 'life forms have shaped Earth (think of oil, of oxygen – the first climate change cataclysm). [...] Death and the mesh go together in another sense, too, because natural selection implies extinction.'⁶⁵²

⁶⁴⁹ Justina Robson, *Natural History*, p. 327

⁶⁵⁰ Justina Robson, *Living Next-Door to the God of Love* (London: Macmillan, 2005) p. 94

⁶⁵¹ Justina Robson, p. 9

⁶⁵² Timothy Morton, *The Ecological Thought* (London, England: Harvard University Press, 2010), p. 29

This point finds its best articulation in *Natural History* with the archaeological and geological investigation of Zephyr Duquesne and Gaiiforms Asevenday Kincaid on Zia Di Notte, the first extra-solar planet. Tanelorn, named by Isol, is perhaps a reference to British New Wave author Michael Moorcock's *The Quest for Tanelorn* (1975). The *Hawkmoon: Count Brass* omnibus (1973-1975) collects the sequence of novels, of which *The Quest for Tanelorn* is the last in the sequence, and is within the Eternal Champions novels of Moorcock's. The titular Tanelorn is, within the mythology of Moorcock's novels, a fabled city situated across different dimensions and different timelines – with Moorcock conceptualising nested realities through which these numerous worlds exist. In Robson's *Natural History*, Zia Di Notte is revealed by the Corvax / Stuff assemblage as both 'a navigational point and a library', the archival origin point of those first to be Translated.⁶⁵³

Nevertheless, in much the same way as Zia Di Notte is the origin point of Stuff's Translation – embedded with the marks of myriad extinctions, Timothy Morton argues that the increasing awareness of ecological instability – 'extinctions, melting ice caps, rising sea levels, starvation – the more we find ourselves lacking a reference point.'⁶⁵⁴ The notion of a 'hole in [the] psychological universe' as a consequence of the performative contradiction in, on the one hand, having worlds expand as knowledge expands, but on the other hand, things are "less" than we thought we were'.⁶⁵⁵ For Morton, ultimately, ecological thought 'makes our world vaster and more insubstantial'; if the mesh has no central force or the edges are vast and insubstantial, the 'mesh

⁶⁵³ Robson, *Natural History*, p. 323

⁶⁵⁴ Timothy Morton, *The Ecological Thought*, p. 3

⁶⁵⁵ Morton, *The Ecological Thought*, p. 36

extends inside beings as well as among them'.⁶⁵⁶ For Zia Di Notte, the planet is absent of life, despite possessing all the necessary ingredients for life: "No clear sign of catastrophe, but no life either. Something that may be a civilisation in ruins, without survivors, nothing. Not a single cell."⁶⁵⁷ Duquesne's first appearance in the novel has her drawing a corollary between the slaves of ancient Rome to the Forged of the novel's far-future setting, and her feeling of reverence to 'the nameless dead who were long gone, stories untold, suffering unknown.'⁶⁵⁸ Yet in a later conversation with MekTek Anthony, Duquesne describes the MekTek – the technological adaptations – as alike 'a net that had captured him, like fishing line around a too-powerful catch, and now it was grown into him with time, a part of his future forever.'⁶⁵⁹

In the context of *Natural History*, given Zephyr Duquesne's prospects of meeting strange, alien viewpoints otherwise than human, the opportunity of engaging with foreign life is equivocal in dealings with Forged humans. The myriad of which include, in Duquesne's assessment: 'MekTeks, Herculeans, and various rare occurrences of Anima- and Arboriforms, plus the Degraded variants on those classes.'⁶⁶⁰ Zephyr Duquesne's sense of herself as egalitarian nature desires her to be 'a potential friend to all strangers', although Robson makes it apparent in Duquesne's dealings with Anthony, the Strategos MekTek, and the Pigeon, Aurora – in which the latter is treated more so like a ship due to her nonhuman nature, and the former more like a person.⁶⁶¹

⁶⁵⁶ Morton, *The Ecological Thought*, pp. 37, 39

⁶⁵⁷ Robson, *Natural History*, p. 116

⁶⁵⁸ Robson, *Natural History*, p. 72

⁶⁵⁹ Robson, *Natural History*, p. 114

⁶⁶⁰ Robson, *Natural History*, p. 122

⁶⁶¹ Robson, *Natural History*, p. 123

As Duquesne accepts, judging from her internal narration, the Forged resentments of humanity are well-founded and justified for ‘the old monkeys didn’t like the reality of interaction with Forged’.⁶⁶² As Corvax observes, when contemplating the potential for Stuff as sentient technology, elucidates on anxieties of logics of domination and control: ‘This all began to reek of quantum foam and the solipsistic universe created by, and for, the single observer.’⁶⁶³

This chapter takes various stances on the posthuman factions: in this case, the dislodging of the hegemony of the Unevolved, baseline humans, into a scalar posthumanizing process which transforms the variegated forms of life into ideological clades. De Abaitua, Robson, and Reynolds share a preoccupation with forms of life that are inhibited, from a cosmic perspective; where Isol’s undoing is her dogged individualism being undercut by the anti-humanist stance, Reynolds’ work is framed as more concerned with the tragic quality which follows technological enhancement. Which is to say, the next section focuses on the foundation of new modes of consciousness within Reynolds’ writing, where Transenlightenment emerges as the term by which the Conjoiners determine their state of neural communion, an existence mediated by the machines that populate their minds.⁶⁶⁴

⁶⁶² Robson, *Natural History*, p. 124

⁶⁶³ Justina Robson, *Natural History*, p. 45

⁶⁶⁴ Alastair Reynolds, *Revelation Space* (London: Gollancz, 2008), p. 83

POSTHUMAN FACTIONS

At the conclusion of *Revelation Space*, Dan Sylveste encounters an Inhibitor device, a device programmed by the Inhibitors intended to 'lure the sentient' and gauged the technological prowess of an emergent culture and alerted the inhibitors to 'the presence of a new outbreak of intelligence and also served as psychological probing mechanisms'.⁶⁶⁵ In Reynolds' *Revelation Space* universe, humanity are the target of the Inhibitors for the fact that they are mutually recognised as self-similar, at least from an evolutionary perspective. The Amarantin, the subject of a life-time of Dan Sylveste's research – an extinct race of winged creatures, had alerted the inhibitor device to their existence, and had seen their entire species rendered extinct with exception of two who escaped 'the ruthless predation of the Inhibitors.'⁶⁶⁶ What is unique is that a species breed 'worthy of extinction' is a species '[exhibiting] enough apparent intelligence';⁶⁶⁷ As the product of the Dawn War, the Inhibitors performed the role of inhibiting – so as to preserve – the spread of life: as such, the inhibitors existed to 'perform a duty of astonishing importance, a duty vital to the future existence of intelligence itself.'⁶⁶⁸ Whereupon Reynolds' draws out a fundamental tension in the behaviour of the Inhibitors: they commit acts of genocide insofar as to preserve other forms of life – those who have yet to develop towards higher-cognitive function – may persist.

⁶⁶⁵ Alastair Reynolds, *Redemption Ark*, p. 190

⁶⁶⁶ Alastair Reynolds, *Revelation Space*, p. 663

⁶⁶⁷ Alastair Reynolds, *Revelation Space*, p. 665

⁶⁶⁸ Alastair Reynolds, *Redemption Ark*, p. 187

Braidotti introduces teratology to her posthumanist schema in order to explore the relationship of scientific rationality and embodiment and how it prescribes and privileges certain concepts of embodied existence. Teratology, or the science of monsters is a way of challenging a certain Vitruvian strand of thinking which presumes a specific and universal image of (human) embodied existence: 'Monsters are human beings who are born with congenital malformations of their bodily organism. They also represent the in between, the mixed, the ambivalent as implied in the ancient Greek root of the words *monsters*, *teras*, which means horrible and wonderful, object of aberration and adoration.'⁶⁶⁹ Patricia MacCormack, a student of Braidotti's and a fellow Deleuzian, is likewise intrigued by ways of conceptualising posthuman teratology as the making of new monstrous forms – and in so doing, generate new modes for posthuman flourishing.⁶⁷⁰ The figure of monstrosity – or rather anxieties around aberrant creatures – is predominant throughout Robson's *Natural History* configuration of posthuman factions: as Corvax remarks, some Forged are 'so alien to the fundamental human base-template that even to their own kind they were as incomprehensible as to be a distinct species.'⁶⁷¹ Within Robson's novel, there are various clades of post/humanity which emerge: the AnimaMekTek classes are the more straightforward hybrids of machine and animal, whereas the Hanumaforms are MekTek Anthony's preferred name for the Unevolved humans. The Forged creatures – Voyager class Isol and Timespan-class Tatresi – are organised into clades, a group of organisms that have evolved from a common ancestor, with Voyager Isol seeming

⁶⁶⁹ Rosi Braidotti, *Nomadic Subjects: Embodiment and Sexual Difference in Contemporary Feminist Theory* (New York: Columbia University Press, 1994), p. 78

⁶⁷⁰ Rosi Braidotti, *Patterns of Dissonance* (Cambridge: Polity Press, 1991), p. 8

⁶⁷¹ Justina Robson, *Natural History*, p. 37

to have become augmented beyond her initial blueprints for her clade: ‘There were organs and implants [Corvax] didn’t recognise at all: things that he was sure no Forge schematic for any species would detail either in the official design labs, or even in the daydreams of Tupac and Mouggido, the mother-fathers of them all.’⁶⁷²

Yet, Isol’s embodied existence – in the context of her existence amongst multiple clades of Forged creatures – is consistently distinguished in the text for its aberrant form with Isol consistently being characterised for having an ‘animal compulsion’.⁶⁷³ Which is to say that Isol’s posthuman existence is framed as an aberration, as something profoundly animalistic, where – as with Roberts’ bête – the ‘animal’ signifier connotes to something awe-inspiring and terrifying: ‘From the tips of her antennae to the delicate vanes of her solar sails, she gleamed like a freshly-moulted scorpion – and looked as dangerous.’⁶⁷⁴ Science fiction has been a key genre to dramatize, in a performative manner, the reconstitution of the gendered and technologized body. In the previous chapter, humanist conceptions of life were challenged, where Roberts and Noon over-turned the sovereign processes of exclusion by embedding the nonhuman back into the posthumanizing process. For this chapter, the conversation turns to narratives of mutation as a story engine which accounts for life expressing itself in entirely different material configurations, not as distinct being, but as an adaptive evolutionary organism. As alluded to in chapter two, there is the belief – across fiction and theory – of an eschatology embedded within technology, which carries a certain schizoid mentality. As discussed, this chapter focuses on the problem

⁶⁷² Justina Robson, *Natural History*, p. 34

⁶⁷³ Justina Robson, *Natural History*, p. 37

⁶⁷⁴ Justina Robson, *Natural History*, p. 33

of fiction and theory positing the monstrous form it pursues, moulding and transforming performative models into multiple, entangled figures that never settle into inert, static, or normative forms. Where there are ontological boundary clashes as a result of mutation – figured as the entanglement of human and nonhuman – which frustrate the singularity of thinking the ‘animal’, the ‘machine’, and the ‘human’. What is unique in Reynolds’ science fiction is that, in the far-future structure of the stories, posthumans destabilise a given relationship to the world, which is particular to evolutionary narratives. With a focus on technologically-driven forms of evolution, there is a perceptible distrust in the idea of progress as being imposed, or in turn engineered by an inhuman agency.

For Jean-Baudrillard, in *The Ecstasy of Communication*, there is a perceptible mutation of technological forms and social environments, all driven towards ‘an even greater formal and operational abstraction of elements and functions and their homogenisation in a single virtual process of functionalisation.’⁶⁷⁵ In considering the evolution of technology, figured as artefactual diversity, technological invention and innovation, this chapter seeks to examine the extent to which the diversity of tool usage contributes to new modes of being: if technology evolves, the incorporation of said technology within culture introduces new isolating mechanisms, new forms of isolating the mechanisms that have typically distinguished species into taxonomic systems of categorisation. The homogenization of the myriad technologies proliferates – once more appealing to Stefan Herbrechter’s vocabulary – a wider conception of technology that is focuses more upon the functionality of technology, where the human is bound up in the tensions of mastery and (self)control.

⁶⁷⁵ Jean Baudrillard, *The Ecstasy of Communication* (Paris: Semiotext(e), 1988), p. 128

Reynolds' Revelation Space universe encompasses an expanded universe of novels and novellas – of which three constitute the Inhibitor trilogy – alongside several standalone novels and collections of short stories also set within Reynolds' wider universe. *Revelation Space*, the first of the Inhibitor trilogy, is a science fiction space opera published in 2000 which details the quest of Dan Sylveste – one of the protagonists of the novel – to uncover secrets about the Amarantin, a long extinct civilisation, which leads him into conflict with a crew of cybernetically enhanced humans – the Ultras. *Redemption Ark*, published in 2002, follows the character of Nevil Clavain – a member of the 'hive mind' Conjoiner society, one of the posthuman factions within the Revelation Space universe – in his pursuit of the 'hell class' weapons aboard the ship *Nostalgia for Infinity*. *Absolution Gap*, published in 2003, concludes the Inhibitor Trilogy in tracing humanity's war with the Inhibitors – a race of non-sapient machinery whose goal is to 'inhibit' the spread of intelligent life across the solar system. Alongside the Inhibitor Trilogy, Reynolds' two short story collections – *Diamond Dogs*, *Turquoise Days* (2003) and *Galactic North* (2006) – are significant for being situated within the Revelation Space universe and further contextualising the wider mythos of the expanded universe.

Comparatively, one must consider Reynolds' treatment of the posthuman condition throughout the Revelation Space universe within this wider science fiction tradition, as contemporary authors – in representing a posthuman future – suggest humanity is going to evolve into various posthuman factions as a result of technological invention, innovation, and incorporation. In this case, Bruce Sterling's Schismatrix universe (1982-84) is integral in situating Reynolds' assumptions and representations of posthumanity within a broader literary framework: considering Sterling's idea of a 'schism' which fundamentally splits humanity into different factions, characterised as

sub-species of humanity, it is clear that Reynolds posthuman factions are emblematic of this tradition. Sterling's *Schismatrix Plus* chronicles the life of Abelard Lindsay – the revolutionary Shaper protagonist of the text – within an emergent struggle in the manner in which posthuman embodiment is constituted. Much of the novel concerns the politicised battle between Sterling's Shapers and Mechanists which has its foundations in the discussion of how technology should be utilised to reshape embodied existence. Much of the novel is spent foregrounding the embodied differences between the Shapers, those genetically engineered in order to augment the perceptual nature of their existence, and the Mechanists, those cybernetically enhanced through prosthetics, and the extent to which they are considered as ideological counterpoints. The Conjoiner society by contrast is distinguished in its 'hive mind': a faction who have experimented with technologies to neurologically enhance their awareness and embodied existence. Thus, the conflict between Sterling's Shapers and the Mechanists seems to operate as analogous with Reynolds' Demarchist and Conjoiner factions, although the conflict in the Revelation Space universe centres more so on the efficacy of their embodiment as opposed to the means by which they are embodied. Sterling's universe conceives of posthuman embodiment as an evolution of philosophy and ideology: the simple binary of Shaper/Mechanist is increasingly hybridised throughout *Schismatrix Plus* as a result of the different ideological factions that dictate the material underpinnings of posthumanism. Sterling perceives the 'strains' of ideology, the myriad resulting 'clades' such as the Cataclysts – a faction believing in the Infinite, and relinquishing of all authority – and the Zen Serotonin – a cult that uses biofeedback to maintain detachment and calm – as being

'technologies made into politics'.⁶⁷⁶ The subtle implication is that these entrenched ideological counterpoints are merely a result of mankind's 'predilection [...] for boredom'⁶⁷⁷; the ideologies emerge out of a reaction against humanity's expansion into the universe, and therefore politicise the posthuman's place in the solar system.

In lieu of this, throughout the *Revelation Space* series, Reynolds interrogates the mutability of the conventional humanist subject, in so far as humanity splits into various sub-species, each collective advocating one form of embodied existence over another, each faction dependent on various technological modes of embodied existence. Iliia Volyova, of the Ultra faction, those spacefaring augmented, human characters, serves to offer a unique perspective of the varying 'strains' of posthuman life: on arrival at Yellowstone, one of the prevailing human settlements in the universe, she perceives '[e]very fractured strain of humanity [...] all following what seemed to be completely random trajectories, but never quite colliding, no matter how perilously close they came.'⁶⁷⁸ Volyova's anti-cosmopolitan view of Yellowstone is explicit in its dissonant regard for the varying collectives that compose Reynolds' posthuman future: nonetheless, the implied randomness is characteristic of the questions with which this chapter must also engage, for, if we are to regard the posthuman as mutually informed by human/posthuman states of being, it follows that we might consider the emergent processes that constitute the material and informational nature of these pluralised states of existence. Towards these ends, this paper reflects on N. Katherine Hayles' notion of the materiality of embodied existence by situating Reynolds' work in

⁶⁷⁶ Bruce Sterling, *Schismatrix Plus* (New York: Berkely Publishing Group, 1996), p. 151

⁶⁷⁷ Sterling, *Schismatrix Plus*, p. 195

⁶⁷⁸ Alastair Reynolds, *Revelation Space* (London: Gollancz, 2008), p. 94

response to her writings on the posthuman condition, particularly with regards to dialectics of pattern/randomness and prosthesis.

In this vein, the evolution of embodied forms seen throughout the Revelation Space universe shall be the key focus of discussion, since one's embodied existence is always susceptible to corruption or mutation, where bodily forms are continually being reconceived as a result of Reynolds' symptomatic dismantling of the humanist subject. Pervasive in this discussion is the posthumanic condition and its interrogation of the evolving collectives of human-machine relations, which can be perceived through the myriad concerns that encompass posthuman embodiment, and we shall therein examine the varying material forms which constitute the posthuman subject. Thus, this paper is concerned with mapping Reynolds' representations of posthuman embodiment through the theoretical framework of Hayles in order to consider the nuances between each writer's assumptions of materiality and embodiment; likewise, there is a remark on the tradition of hybridity and how Reynolds expands on the tradition of embodiment as expressed by Hayles, and the extent to which these human-machine collectives inform each other.

Preceding these debates, in *Flesh and Machines*, Rodney Brooks challenges the view that there is an essential human nature by suggesting the liberal humanist subject is constituted by qualities inherent to machines; nonetheless, there is an instinctive of this anthropocentric view, as the belief in 'tribal specialness' presupposes human exceptionalism.⁶⁷⁹ For Brooks, the dynamic conjunction between human and machine collectives is a reciprocal relationship that is continuously being redefined as humans

⁶⁷⁹ Rodney A. Brooks, *Flesh and Machines: How Robots Will Change Us* (New York: Pantheon Books, 2002), p. 112

develop increasingly complex machines and artificial systems; subsequent to this, there is a purposeful attempt to alter the potential capabilities of robots, as our current attitude towards intelligent machines is, according to Brooks, a reflection of our own self-conception.⁶⁸⁰ Nonetheless, both posthumanics and posthumanism remain firmly interested in the extent to which humanist assumptions remain entrenched in discourse, and the extent to which humanist assumptions about subjectivity dissipate in that, just as one's embodied existence is not restricted to a self-contained body, so too is one's embodied awareness not simply the sum of human identity. Further, the human-machine assemblage suggests a wider discussion on ideas of regulation and functionality, and how they are reconstituted in terms of posthuman embodiment; particularly, given that pluralism – a distinct trope within discussions of the posthuman – is conceived as pure functionality, as optimisation, within Reynolds' work, where one's sense of identity is reduced to mere patterns of identity.

By contrast, in order to situate the discussion of posthuman embodiment within the broader cultural context, this chapter engages with prevailing notions of posthumanism, whilst identifying the various conceptions of posthumanism. Norbert Wiener made fundamental contributions to the cybernetic paradigm through his emphasis on the hybrid nature of man and machine which focused on factors of control and communication: specifically, the means by which information could be transported between organic and inorganic mediums.⁶⁸¹ Throughout *The Human Use of Human Beings* and *Cybernetics*, Wiener expounds upon the notion of 'cybernetics' as a transformative moment in how we perceive the machine: intrinsic to Wiener's

⁶⁸⁰ Brooks, *Flesh and Machines*, p. 115

⁶⁸¹ Wiener, *Cybernetics*, pp. 10/11

conception of the cybernetic tradition and the position of the machine within society, he questions: 'How is the machine affecting people's lives?'⁶⁸²

'We have modified our environment so radically that we must now modify ourselves in order to exist in this new environment. We can no longer live in the old one. Progress imposes not only new possibilities for the future but new restrictions. It seems almost as if progress itself and our fight against the increase of entropy intrinsically must end in the downhill path from which we are trying to escape.'⁶⁸³

There is a clear emphasis to be made with regard to the varying purposes towards which posthuman embodiment, represented as Reynolds' various posthuman factions, is engineered, from Conjoiner experimentations on neural architecture and perceptual awareness alongside Demarchist and Ultra augmentation of the bodily form. Throughout the Revelation Space universe, the Conjoiner faction make compelling subjects in examining the new modes of consciousness that emerge in Reynolds' universe. Transenlightenment emerges as the term by which the Conjoiners determine their state of neural communion, a collective existence mediated by the machines that populate their minds.⁶⁸⁴ Reynolds' Revelation Space universe is constantly negotiating the extent to which the sensory and perceptual nature of existence, itself characterised as a humanising quality, is enhanced through one's engagement with technology. This mediation of the subject's perceptual awareness is

⁶⁸² Norbert Wiener, *The Human Use of Human Beings: Cybernetics and Society* (London: Free Association Books, 1989), p. xvii

⁶⁸³ Norbert Wiener, *The Human Use of Human Beings*, p. 15

⁶⁸⁴ Reynolds, *Revelation Space*, p. 83

illustrated both through Captain Brannigan – the Ultra captain – and the Conjoiners whose cognitive experience of the world is conceived through ‘senses that [have] no precise human analogue’.⁶⁸⁵ Thus, the emergent ontologies that determine man-machine relations are irrevocably tied to the extension of one’s embodied awareness beyond the parameters of the humanist subject.

Throughout the Revelation Space universe, Reynolds explores the hybrid existence of the cybernetic organism wherein the body exists as a metaphor in considering the experience of one’s expansion across a plurality of media forms. Hayles outlines the extent to which humanist assumptions about subjectivity have dissipated in that, just as one’s embodied existence is not restricted to a self-contained body, so too is one’s embodied awareness not simply the sum of human identity.⁶⁸⁶ In the same regard that Hayles considers virtuality as the confluence of bodily perceptions and the virtual landscape, Edwin Hutchins likewise considers the evolution of subjectivity through the notion of distributed cognition. Through observation of human activity with regards to the environment, Hutchins considers a perceptible distribution of cognitive processes, evident through a mapping of three relationships: the relation between subject and social group, subject and environment, and subject and time.⁶⁸⁷ In applying Hutchins’ model of distributed cognition to the Revelation Space universe, then we can consider Transenlightenment as this evolution of subjectivity whereby the individual goes ‘from

⁶⁸⁵ Reynolds, *Redemption Ark* (London: Gollancz, 2008), p. 513

⁶⁸⁶ Hayles, *How We Became Posthuman*, p. 23

⁶⁸⁷ James Hollan, Edwin Hutchins, and David Kirsh, ‘Distributed Cognition: Toward a New Foundation for Human-Computer Interaction Research’, in *ACM Transactions on Computer-Human Interaction*, 7(2), (San Diego: University of California Press, 2000), p. 176

a single to a networked topology of self'; it is evident that Reynolds also shares in this posthuman tradition whereby he situates the shift in the perceptual nature of one's existence.⁶⁸⁸ Hayles likewise focuses on cognition within *How We Became Posthuman* wherein the integration of bodily perceptions is distributed through the feedback loops resulting from interaction with computer simulations, evidence of distributed cognition being present in Hayles' formulation of embodiment.

In this regard, there are clear comparisons between Hutchins' and Hayles' articulation of distributed cognition in that Hutchins draws parallels between the interaction of humanity and the larger systems that govern it; to this extent, one's subjective experience of the world is mediated and enacted through the expanse of one's embodied existence. Both consider the posthuman subject, by virtue of its prosthetic existence, situated as an indeterminate, adaptive figure whose cognition is distributed through the systems and networks that constitute the individuals embodied existence. One such example that appears within Hutchins' work is the notion that cognitive activity can be situated in the material world so that the bodily form which one inhabits exists in an environment such as a computational medium.⁶⁸⁹ Indeed, Hutchins' model suggests that as the parameters of the cognitive system of the subject expand, much like the embodied nature of one's existence, then so too does its embodied awareness expand in specific, local, and material ways.⁶⁹⁰ This is significant in that Hutchins considers the embodied nature of one's existence as a way in which to figure the cognitive processes, and thus technology serves less a stimuli for the subject's

⁶⁸⁸ Alastair Reynolds, 'Great Wall of Mars', *Galactic North* (London: Gollancz, 2010), p. 34

⁶⁸⁹ Edwin Hutchins, *Cognition in the Wild* (Massachusetts: MIT Press, 1995) pp. 49/50

⁶⁹⁰ Hayles, *How We Became Posthuman*, p. 290

cognitive system and more as part of the system itself. Thus, to an extent, both Hutchins and Hayles characterise posthuman subjectivity as an ‘amalgam, a collection of heterogeneous components, a material-informational entity whose boundaries undergo continuous construction and reconstruction.’⁶⁹¹

‘The Great Wall of Mars’, a short story within Reynolds’ *Galactic North*, concerns Nevil Clavain’s defection to the Conjoiner society in which, upon meeting Galiana, the founder of the Conjoiner faction, he is supplied with basic Conjoiner implants that allow Clavain to enter a state of Transenlightenment. Ontologically, Reynolds figures Transenlightenment as a state of existence that is capable of perceiving life in its totality, and Reynolds’ use of metonym situates this emergent ontology as being ‘like a fading vision of Godhead’.⁶⁹² Through Clavain’s augmentation there is a perceptible shift in his perceptual awareness which emphasises the interface between his neural pathways and his visual cortex wherein he is able to process and conceive of the abstracted networks that encompass Transenlightenment. Reynolds’ treatment of the Conjoiners draws an interesting parallel with Robert A. Heinlein’s *Methuselah’s Children* (1958) and the Little People, an alien hive-mind. Indeed, Heinlein’s novel draws on the struggle between human individuality and an alien collective, which is purported as the predominant struggle for survival within the galaxy. This struggle to retain individual agency is inherent to Heinlein’s novel and recalls Hayles’ evocation of terror in response to the myriad threats to individual agency. Reynolds can be seen commenting on this tradition in the relationship drawn between Nevil Clavain and the

⁶⁹¹ Hayles, *How We Became Posthuman*, p. 3

⁶⁹² Reynolds, *Galactic North* (London: Gollancz, 2010), p. 35

Conjoiners: the threat that a hive mind poses to human individuality is played out throughout Reynolds' work.

Within *Galactic North*, Reynolds uses the metaphor of an ant colony to figure the relationship between the individuality of the Conjoiner faction and their relationship to the hive-mind: 'it was an ant colony in which every ant fulfilled a role distinct from all the others. Naturally, no individual could be solely entrusted with a particular skill essential to the nest [...] but neither had individuality been completely subsumed into the group mind.'⁶⁹³ This trait is seen with the character of Felka who, having once been a vital component within the hive-mind, is then abandoned by Galiana after the Mother nest is evacuated, due to Felka's inability to cease her neural maintenance of the Great Wall's repair mechanisms. The maintenance of the Great Wall is significant for the fact that, in spite of its vital role in protecting the hive, it reveals the extent to which her lack of development relegates her to the status of an automaton: her role amongst the Conjoiners is predominantly functional, and this functionality is signalled by that the fact her various deficiencies have prevented her from graduating from the Conjoiner nursery, a rite of passage which signals one's development and maturation. Her lack of processing capabilities is expressed in her incapacity to draw her attention away from 'her devotion to the task at hand', the Great Wall, which suggests her inability to interact with her environment beyond her own tethering to the numerous Conjoiner augments and technological practices.⁶⁹⁴ Galiana figures Felka's 'kinship' with the Wall is regarded as the quality that most succinctly illustrates her deficiencies, and in so doing illustrates Reynolds' assumptions of what is characteristically human:

⁶⁹³ Reynolds, *Galactic North*, p. 24

⁶⁹⁴ Reynolds, *Galactic North*, p. 36

“You’re placing too much humanity behind her eyes. Keeping the Wall alive is the single most important fact of her universe [...] anything you or I would consider definitively human.”⁶⁹⁵ With respect to Felka’s character, her relationship to the Conjoiner hive mind, and the technological practice located within the Conjoiner faction, there is a distinguished sense in which, not only individual agency, but one’s very development – according to a humanist paradigm – is increasingly under threat. Continuing this exploration of embodied existence with respect to the various posthuman factions and the resultant issues engendered by, a sense of duty is one of the prevailing characteristics found within the Conjoiner faction when remarking upon (post)human agency. This sense of duty manifests itself amongst the substituent members as a desire to protect the hive at all costs: this quality is first witnessed in *Galactic North* when a member of the hive sacrifices himself in order to ensure the safety of Clavain, whose survival is necessary for the security of the Conjoiner hive mind; “You saw the man accept his fate on the dyke, when he understood that your death would harm us more than his own. He altered his state of mind to one of total acceptance.”⁶⁹⁶ There is a clear notion of collective agency implicit to the Conjoiner hive mind, which maintains that through Conjoiner augmentation the thoughts and emotions of its individual members are incorporated into the collective; the collective will, in the case of *Galactic North*, being bound towards solidarity, which Luis de Miranda regards as a ‘combative tool between coexistent communities of interest or belief’⁶⁹⁷ Extrapolating on the general paradox drawn between esprit de corps and

⁶⁹⁵ Reynolds, *Galactic North*, p. 39

⁶⁹⁶ Reynolds, *Galactic North*, p. 18

⁶⁹⁷ Luis de Miranda, ‘Esprit de Corps’ and the French Revolutionary Crisis: a Prehistory of the Concept of Solidarity’, Proceedings of the GRACEH Conference 2015 (University of Vienna), p. 11

solidarity, Luis de Miranda speaks for the very ‘forms of organisation that are meant to suppress antagonism within the group, but [that] they do not suppress the general agony of social precedence’⁶⁹⁸ Of course, the organisation of the Conjoiner hive mind, mediated through neural implants, allows for both the agonism and antagonism to be readily suppressed; nonetheless, this pluralised sense of Conjoiner existence is problematised by the manner in which this increasingly democratic notion of embodied existence is constituted – as one that necessitates a programming of one’s neural architecture.

During the events of *Redemption Ark*, Nevil Clavain encounters a group of adolescent Conjoiners whilst grounded at the Mother Nest, the home of the Conjoiner faction, and this episode suggests the cognitive implications of being embodied in a virtual realm: ‘The environment itself had also changed [...] They had known no other world but this storybook abstraction. Subtly, as they aged, the data reaching their brains would be manipulated.’⁶⁹⁹ The Conjoiner’s augmentation allows them to, not only alter their rate of consciousness, but to manipulate the very environment in which they inhabit: it is interesting that Reynolds characterises this as a ‘storybook abstraction’ for the noun phrase purports to suggest that the Conjoiner children have no bearing on an objective reality, rather they exist within the artificial, socialised image constructed through their implants. Indeed, within the Mother Nest, bound to cybernetic frameworks, the Conjoiner children’s sensory existence is externalised so they are capable of perceiving extra-sensory apparitions, ‘moving like precisely programmed clockwork

⁶⁹⁸ de Miranda, p. 12

⁶⁹⁹ Reynolds, *Redemption Ark*, p. 71

toys.⁷⁰⁰ As outlined by de Miranda, the central value of conformative esprit de corps is, not only a sense of duty, but a principle mode of organisation based around coercion: within Reynolds' Revelation Space universe, this coercion takes one of two forms, either one is 'programmed' or 'cyborgised', and in the case of the Conjoiner faction programming one's perceptual awareness is the predominant mode of maintaining this conformative state.⁷⁰¹

Nonetheless, as outlined above, the collective programming of the Conjoiner faction suggests the varying degrees towards which the diversity of technological forms, in this case the augmentation of one's neural architecture, can construct a vastly different form of social organisation. Through the expansion of humanity, throughout the Revelation Space series, from a singular lineage to a variegated number of posthuman factions, Reynolds illustrates the functions towards which this distribution of technological practices, social agents, and embodied forms is engineered. In this regard, Dan Sylveste serves as an interesting figure to chronicle the ideological undercurrent to Reynolds' posthuman characters: for the majority of *Revelation Space*, he resides on the planet of Resurgam, and in so doing locates the shifting 'extant political factions' that populate Resurgam; as Sylveste remarks, 'while the political landscape was divided as ever, the underlying topology was quite different.'⁷⁰² Dan Sylveste's residence on Resurgam is due to his archaeological investigation into the Ancient Amarantin, a race of extinct bird-like creatures, and subsequent to his expedition the Inundationist faction arises. In relating the formation of the localised,

⁷⁰⁰ Reynolds, *Redemption Ark*, p. 71

⁷⁰¹ de Miranda, p. 126

⁷⁰² Reynolds, *Revelation Space*, p. 68

Inundationist faction, Sylveste likewise elucidates on the motivations and mechanisms that allow for the manifestation of the interstellar factions, as the Inundationist faction's main concern is the function toward which their technologies are implemented: as Sylveste recalls, the promise of the 'wealth of technological marvels', created divisions between 'machine rather than medicine; aircraft rather than terraforming tools'.⁷⁰³ Throughout Reynolds' Revelation Space universe, posthuman factions differ only in the 'rates' of augmentation they 'advocated', or rather that their embodied existence is mediated by the diversity and novelty of their desired technological augmentation. W. Brian Arthur considers three definitions of technology throughout *The Nature of Technology*: firstly, that technology is a means to fulfil a human purpose, secondly, as an assemblage of practices and components, and thirdly, as the entirety of devices and practices available to a culture.⁷⁰⁴ It is clear, therefore, that the 'fractious strains' of Reynolds' posthuman factions, emblematic of the varying technological practices available in this posthuman landscape, are emblematic of the evolution of new technological forms, through incorporation of technologies as new isolating mechanisms, which can also be thought of as a distributed process.

Within *The Evolution of Technology*, George Basalla considers the potential in applying evolutionary metaphors in considering the history of technological development: the application of the theory of biological evolution to the technological world aims to seek greater understanding of the myriad technologies created by humanity. Diversity is therefore conceived as the variety of technologies available to humanity across peoples and cultures, necessity is the belief that humans are driven

⁷⁰³ Reynolds, *Galactic North*, p. 38

⁷⁰⁴ Arthur, *The Nature of Technology*, p. 28

to invent in order to meet basic biological requirements, and technological evolution is the emergence of technologies and their subsequent incorporation into material reality.⁷⁰⁵ For Basalla, the ‘artefactual diversity’, the differing ways in which technology has evolved across peoples and cultures, is emblematic of the fact that technology is not a solution to or satiation of our basic needs as a species, rather it is the ‘material manifestation of the various men and women have chosen to define and pursue existence’.⁷⁰⁶ In this regard, Basalla identifies technology as being identifiable with one’s inherent humanity, technologies are conceived within his work as a ‘distinguishing characteristic of human life’. Yet, for Reynolds’ various posthuman factions, the incorporation of technological forms within the subject, and the diversity of the distribution of these technologies, practices, and agents, suggests a pluralism in the manner in which posthuman embodiment is constituted: technology no longer possesses a singular path as evidenced by Sylveste’s historicising of the Inundationist factions, which fractured into numerous factions corresponding to their desired implementation and embodied form.

Further, Basalla demonstrates that the concept of diversity is dependent on the contingency of technological change: by considering a number of sources of novelty, Basalla explores how ‘play and fantasy’ are often overlooked, as a factor in technological innovation, by scholars who perceive necessity as the sole motivator to technological invention. Novelty of technological forms emerge: this is an assumption towards technology that Basalla finds significant: conventional attitudes towards the

⁷⁰⁵ George Basalla, *The Evolution of Technology*, (Cambridge: Cambridge University Press, 2010), p.

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⁷⁰⁶ Basalla, *The Evolution of Technology*, p. 14

nature of technological change have drawn attention to the importance of necessity and utility; that technology provides humanity with 'utilitarian technologies and structures necessary for survival.'⁷⁰⁷ Whilst both these forces prove inadequate for the variety and novelty of the technologies created by humanity, this necessitates an explanation of technology that considers assumptions about 'the meaning and goal of life'; the significance being that technological invention and innovation is a reflection of human life, the shifting expectations that constitute the landscape in which innovative technologies erupt into material reality.⁷⁰⁸

Conversely, this transformation of one's embodied awareness is taken to the extreme through the character of Captain Brannigan whose material existence collapses distinctions between man and machine, human and space ship, to the extent that 'he [is], in all major respects, now the ship.'⁷⁰⁹ However, the incorporation of one's material existence into the size of a light-hugger, roughly 3-4km long, poses ontological problems in negotiating the extent to which one's embodied awareness is transformed beyond comprehension or even reconfigured through sensory input that has no human analogue. For Norbert Wiener, the biological nervous system is analogous to mechanical systems in a not entirely dissimilar manner to Mark Rosheim, a fellow cyberneticist and writer on robotics: for Wiener, the cybernetic tradition is inherently concerned with the manner in which systems function, whether they are organic or mechanistic, the way they govern themselves, and the manner in which they process

⁷⁰⁷ Basalla, *The Evolution of Technology*, p. 2

⁷⁰⁸ Basalla, *The Evolution of Technology*, p. 4

⁷⁰⁹ Reynolds, *Redemption Ark*, p. 523

information through the process known as feedback.⁷¹⁰ Fundamental to Wiener's theory is the further analogue between genetics as that which is composite of organic systems and patterns of information that perpetuates the machine: 'Our tissues change as we live: the food we eat and the air we breathe become flesh of our flesh and bone of our bone [...] We are but whirlpools in a river of ever-flowing water. We are not stuff that abides but patterns that endure.'⁷¹¹ Embodiment within the Revelation Space universe is predominantly cybernetic and in considering the character of Captain John Brannigan – the chimeric captain of the *Nostalgia for Infinity*, the question posed by Dan Sylveste – 'are we healing a man or sterilising a machine?'⁷¹² – seems apt in situating this crisis of hybridity and how it confounds the categorisation of traditional human embodiment. Indeed the relationship between embodiment and identity is profoundly dismantled and reassembled in Reynolds' work to the extent that issues of materiality are explored as mutations – embodied or otherwise. Not to mention, nostalgia, as John Durham Peters notes, was originally a condition of sailors, 'pining for home like Odysseus', whilst the infinity of the ship's title implies an existential boundary.⁷¹³

⁷¹⁰ Wiener, *Cybernetics*, p. 20

⁷¹¹ Wiener, *The Human Use of Human Beings*, p. 54

⁷¹² Alastair Reynolds, *Revelation Space* (London: Gollancz, 2008), p. 390

⁷¹³ John Durham Peters, *The Marvelous Clouds: Towards a Philosophy of Elemental Media* (London: University of Chicago Press, 2015), p. 12

THE TERROR, THE TERROR

In the time of the Anthropocene, the time of human and nonhuman extinction is a reminder of “the planetary (and cosmic) frailty of human beings, and reminded in ways that appear to be utterly indifferent to the “history of humanity””.⁷¹⁴ Robson and Reynolds come to figure a profoundly inhuman relationship to life, whereupon the wider bafflement of explaining life’s cruelty and disregard for (human) suffering cannot be accounted for or justified. Claire Colebrook, as has largely been discussed thus far, is critical of a view of theory and fiction-making that ‘gives us a value for ourselves, but ultimately only for ourselves.’⁷¹⁵ This perspective of a (human) story which reflexively comes to constitute essential notions of humanity is untenable, as this thesis has continuously argued through the ongoing posthumanization of many of these themes of exceptionalism. Reynolds is no different and his deep time fictions provide an interesting perspective on this issue of wrestling with (human) parochialism in his conceptualisations of ‘revenant machines’ bent on exterminating certain conceptions of life. Nevertheless, Colebrook’s commentary on a version of Anthropocene studies and environmental humanities functioning in a managerial capacity, blithely following the narrative: “now that we know this, what can we do to continue our world in the most sustainable and best way possible?” Indeed, towards the end of chapter three, this question is modelled through a reading of Alastair Reynolds’ *Absolution Gap*

⁷¹⁴ Eugene Thacker, *In the Dust of This Planet: Horror of Philosophy*, Vol. 1 (Winchester: Zero Books, 2011), p. 155

⁷¹⁵ Colebrook, *Posthumous Life: Theorizing Beyond the Posthuman*, ed. by Jami Weinstein & Claire Colebrook (New York: Columbia Press, 2017), p. 27

where – with the coming of a sapient-species bent on suppressing the emergence of intelligent species – the posthuman factions that come to constitute Reynolds’ posthuman far-future societies attempt to alter forces . However, as Reynolds best articulates, even a characteristically posthuman / transhuman society which has overcome so many of humanity’s shortcomings – aging, intelligence, and to some degree, the vagaries of death – still fall foul of the same parochialisms of the curators of the near-future future histories.

Much reaction to the Inhibitor Trilogy regarded the series as largely nihilistic in its conclusory chapter, with the critical consensus finding Reynolds’ later Poseidon Children’s trilogy the more optimistic. What is interesting is that both trilogies – the Inhibitor Trilogy (2000-2003) and Poseidon’s Children (2012-2014) – explore the implications of factions of humanity coming to terms with the responsibilities of meeting alien forces in the galaxy. In the case of the former, self-replicating machine-race, the Inhibitors, from the Dawn War intent on eradicating any species capable of excelling beyond a certain threshold of intelligence and technological capability. The Inhibitors exist to perform a duty of ‘astonished importance, a duty vital to the future existence of intelligent life itself’.⁷¹⁶ In the latter, the Watchkeepers, an invocation of Arthur C. Clarke’s Monoliths, are dormant and yet vastly powerful artefacts of an ancient civilisation, who seek to comprehend the secrets of an even more mysterious race on the planet, Poseidon. The Watchkeepers co-opt the assistance of other intelligences – living organisms or hybrid machine-human intelligences – with the intention of forming a Trinity to function as ‘an investigative whole, a single information-gathering

⁷¹⁶ Alastair Reynolds, *Redemption Ark*, p. 215

collective intelligence'.⁷¹⁷ This formation of the Trinity brings with it benefits to those constitutive members: to the Risen, the Watchkeepers grant evolved intelligence; to Eunice, a biological body; and to Chiku Green, she refuses too great a gift. The significance of the Watchkeepers' gifts are that they are encouraging evolutionary adaptation, as they appear to possess 'an endless willingness' to maintain their strategy in order to gain the M-Builders' insights. In fact, the stakes are drawn succinctly by Peter Grave, a member of the Second Chancers – a faction opposed to technological enhancement, when he ponders at which juncture the Watchkeepers' experimentations with humanity might be terminated: "Perhaps this is the point where [humanity] cross the line? Some algorithm trips inside them, a decision path, and that's it? Extinction for the monkeys?"⁷¹⁸

As such, the Inhibitors and the Watchkeepers possess a similar capacity – to 'enact species-level extinction', a feat which they have both achieved.⁷¹⁹ What the Revelation Space Universe, especially the Inhibitor Trilogy, models through the threat of a force like the Inhibitors is an ambivalent and ungraspable notion of human agency and intentionality. Reynolds creates characters that may be considered ciphers or loosely-sketched, but this absence of insight into their intent and interiority is precisely what is intended to be performed. Not only this but the characters make decisions on events, on a scale of species-survival, where their understanding is marred by notions of scientific objectivity. For, as much as the scientists of Reynolds' far-future claim to operate on a galactic or planetary scale, the parochialism of their actions leads them towards self-effacing actions: as Colebrook notes, 'How is it that the human species,

⁷¹⁷ Alastair Reynolds, *Poseidon's Wake*, p. 340

⁷¹⁸ Reynolds, *Poseidon's Wake*, p. 109

⁷¹⁹ Alastair Reynolds, *Poseidon's Wake*, p. 478-9

seemingly so hungry for life and dominance, has conveniently forgotten its own self-extinguishing tendencies? We can only pose the question of human extinction – the fact that humans will become extinct, the fact that we cause other extinctions, and also that we are extinguishing what renders us human'.⁷²⁰

The best illustration of this phenomenon is the reflections of the character Aura, daughter of Ana Khouri – one of the primary protagonists of *Revelation Space*, on the nature of humanity's "survival" from the Inhibitors. The sentiment of which is that humanity's survival had 'nothing to do with human cleverness' but everything to do with 'circumstance, luck, cowardice'.⁷²¹ In context, by the time that Reynolds' posthumans come to encounter the Inhibitors, it is heavily implied that they have degenerated to such an extent that they employ only the most violent methods of species-suppression. As Khouri senses, in *Redemption Ark* – the middle-book in the Inhibitor Trilogy, there is a 'deeper purpose to the Inhibitor culls that [Khouri] did not yet grasp, and might not ever be capable of grasping'.⁷²² As Ana Khouri's daughter, Aura, observes in the epilogue to *Absolution Gap*, with the absence of the Inhibitors – who were an evolutionary rival or stop-gap for emergent 'outbreaks' – comes the emergence of the greenfly, the terraforming machines, as an 'opportunistic' species which are much more than revenant machines. Indeed, the reference to the emergence of Greenfly as an 'outbreak' is significant – as it is in keeping with the narrative trope across the British Boom of an inhuman form of life emerging and coming to threaten the predominant 'strain' of life. The penultimate plot of the parochial

⁷²⁰ Claire, Colebrook, *Death of the Posthuman: Essays on Extinction, Vol.1* (Open Humanities Press, 2014), p. 11

⁷²¹ Alastair Reynolds, *Absolution Gap*, p. 609

⁷²² Alastair Reynolds, *Redemption Ark*, p. 523

posthumans of Reynolds' Revelation Space universe is to compel the Jugglers, an oceanic matrix which forms an archive, and the greenfly machines to intra-act:

'No one knows what will happens when the greenfly machines touch the alien organism of a Juggler sea, which one will assimilate the other. It is an experiment which has not yet been performed.'⁷²³

In the case of *Absolution Gap*, Aura's role as a shepherd of a fledging humanity carries the implication that 'everything [which] will happen, is [Aura's] responsibility.'⁷²⁴ Humanity, and all potential material embodiments, are capable of opening up to the nodes of becoming (via Deleuze and Guattari), where the posthuman factions are entangled with that which is different, but cannot be domesticated according to a humanizing process. Haraway's notion of 'response-ability' is a form of multispecies 'justice-to-come', which Haraway defines as 'carrying meanings and materials across kinds in order to infect processes and practices that might yet ignite epidemics of multispecies recuperation'.⁷²⁵

The emergence and history of greenfly is expanded upon in the titular story of *Galactic North* where the Shadows, alien entities claiming to originate from a parallel membrane of spacetime mattering, speak of machines resembling greenfly which had restructured multiple galaxies. As Aura reflects on the cosmic scale of events, she concludes that:

⁷²³ Alastair Reynolds, *Absolution Gap* (London : Gollancz, 2003), p. 694

⁷²⁴ Alastair Reynolds, *Absolution Gap*, p. 692

⁷²⁵ Donna Haraway, *Staying With The Trouble: Making Kin in the Chthulucene* (Durham, NC. and London: Duke University Press, 2016), p. 115

‘She doesn’t doesn’t know. She doesn’t think she ever will know. She isn’t sure she wants to.’⁷²⁶

With the potential extermination by ‘machines that turned stars green’ weighing on her mind, and her complicity in this wider process, Aura turns to the oceans of the Jugglers and chooses to swim ‘with the specific purpose of telling the world what is to come.’⁷²⁷ It is at once the most parochial – in Colebrook’s terms – of actions, a matter of courtesy that carries the intention of saving a world, for which she feels she is response-able and might make all the difference in this world.

John Durham Peters, in his media analysis *The Marvelous Clouds*, explores how natural forces – like sea, wind, and sky – have come to be conceptualised in all of their materiality but also as functions of material metaphor, which provide a ‘steering’ force for the philosophy of media in the Anthropocene era.⁷²⁸ As has been clear throughout the thesis, the desire to meditate on the posthuman condition seems to reinscribe an observer or subject position, whose relationship to the world attempts to unsettle the relationship of mastery and control is inherently flawed. As Peter elaborates, the sea inspires a ‘fertile clutch of techniques of social organisation’, where the dependence on (human) craft in the face of ‘harsh inhuman habitats’ is foregrounded.⁷²⁹ This theme has recurred throughout the thesis – to Cantor subsisting in an oceanic matrix in *The Red Men*, coming into contact with Unity being described ‘as swirling depths [...] like waves on an endless shore’, and in this case ‘the glowing green memory’ of the Pattern

⁷²⁶ Reynolds, *Absolution Gap*, p. 59

⁷²⁷ Reynolds, *Absolution Gap*, p. 445

⁷²⁸ Peters, *The Marvelous Clouds*, p. 12

⁷²⁹ Peters, p. 108

Jugglers of Ararat.⁷³⁰ Indeed, the oceanic ecosystem of Ararat is almost primeval – emphasising humanity’s essential technicity – but an almost immaterial substrate which humanity must engage with these amphibious creatures. Rosi Braidotti provides a posthumanist reconceptualization of sustainability, which operates as ‘a re-grounding of the subject in a materially embedded sense of responsibility and ethical accountability for the environments s/he inhabits.’⁷³¹ The Jugglers are the very embodiment of this ‘linkage across present and past’ for the Jugglers are a continuously evolving adaptive system which provides a ‘linkage across present and past in the act of constructing and actualizing possible futures.’⁷³² A brief point that is worth mentioning: namely, the tension between greenfly – a machine intelligence polluting stars – and the Jugglers – an amphibian species who preserve and curate life, as the endless patterning of information.

What does come to be interesting in Ararat is a Juggler world and the most meaningful encounters between humans and Jugglers take place in ‘areas of the ocean that were so saturated with organisms that they were more like floating rafts of organic matter.’⁷³³ Indeed this world embodies an aquatic template in that it is organized according to an entirely different material substrate, where the crude and colonial erasures – the ‘neural invasions’ – of *House of Suns* and *Slow Bullets* in chapter two are replaced with swimming in the oceanic matrix of the Jugglers, which is characterised by Ana

⁷³⁰ Robson, *Natural History*, p. 9

⁷³¹ Rosi Braidotti, “Affirming the Affirmative: On Nomadic Affectivity,” *Rhizomes* 11 (2005/2006)
<<http://www.rhizomes.net/issue11/braidotti.html>>

⁷³² Braidotti, ‘Affirming the Affirmative’

⁷³³ Reynolds, *Absolution Gap*, p. 16

Khouri, one of the main protagonists of the Inhibitor Trilogy, as a ‘kinder process’⁷³⁴ Even the term ‘Juggler’ suggests conjuration, a trick, some agential force which is beyond or otherwise to the conventional (human) subject. – they are a ‘single planet-spanning entity’ which is constituted from a vast Juggler biomass. As Khouri concludes, the Juggler biomass connotes an alien species – an “It” – which does not succumb to any parochial ‘human analysis, to neatly circumscribed cause and effect.’⁷³⁵ Indeed, reframing the intra-species dynamic on Ararat, Reynolds suggests that humans are ‘parasites’ upon the ‘fragile Juggler biosphere’, where humanity – regardless of their evolutionary adaptations and advantages – are incapable of comprehending what the Juggler activity signifies.⁷³⁶ This sense of human finitude is integral to the Inhibitor Trilogy: the Inhibitor Trilogy implies that there is no access to a deeper insight about the nature of the universe, other than what humanity may – as alluded to prior – accidentally stumble against. By comparison the Poseidon’s Children Trilogy concludes with several of the posthuman characters, in this case focusing on Goma, experiencing “The Terror”, the moniker applied to the M-Builders insight. As Goma describes: ‘to describe it as a total apprehension of the consequences of the present direction of their actions – a kind of absolute, unflinching understanding that they were assuming a responsibility not only to themselves, but to every creature of their kind across all their worlds and systems.’⁷³⁷

Of course, having experienced the Terror prior to the events of *Poseidon’s Wake*, where Eunice perceives the Terror as an impediment, Dakota, head-matriarch of the

⁷³⁴ Reynolds, *Absolution Gap*, p. 302

⁷³⁵ Reynolds, *Absolution Gap*, p. 378

⁷³⁶ Reynolds, *Absolution Gap*, p. 297

⁷³⁷ Reynolds, *Poseidon’s Wake*, p. 478

Risen, perceives it as a challenge – “[a] keep-out sign, nothing more.”⁷³⁸ If this alone was not enough to undercut humanity’s exceptionalism, any success or triumphalism that might be met by humanity’s overcoming of the Inhibitors is undercut by the emergence of an always-already present threat, the greenfly machines, whose equilibrium was upset by the tactics ‘of pure confrontation’ used by humanity to defeat the Inhibitors.⁷³⁹ In fact, the ending to Reynolds’ *Absolution Gap* is the most parochial of all: ‘But she thinks it unlikely that anyone has swum with the specific purpose of telling the world what is to come. It might not make any difference. On the other hand, quite literally, it might make all the difference in the world.’⁷⁴⁰ If anything, Reynolds’ decision to remain *with* the Akinyan family through the generations of its family in each successive novel is an interesting choice for necessarily grappling with ‘the larger narrative of his family – the things they had made, the events they had caused, the web of responsibilities they had inherited’.⁷⁴¹ As Colebrook says of the Anthropos, it may be applied by way of analogy to the Akinya, for they do not represent the entirety of the human species: rather they are ‘the portion of the species that thinks of itself as humanity’; or in the case of Eunice Akinya and the successive generations, the lives of those who were ‘an inseparable part of the flow of events Eunice had set in motion.’⁷⁴² This situated perspective refuses the simple narrative – and arbitrary valuation – of characters being “good and evil”, but instead explores what a strain of human potential is able to affect in a multispecies universe.

⁷³⁸ Reynolds, *Poseidon’s Wake*, p. 423

⁷³⁹ Reynolds, *Absolution Gap*, p. 611

⁷⁴⁰ Reynolds, *Absolution Gap*, p. 695

⁷⁴¹ Reynolds, *Poseidon’s Wake*, p. 452

⁷⁴² Reynolds, *Poseidon’s Wake*, p. 453

By contrast, throughout the Inhibitor Trilogy, Reynolds' protagonists encounter either living or remainders of species who have disturbed the Inhibitors. The Amarantin are one such species: bird-like aliens whose planet, Resurgam, was rendered lifeless by the Inhibitors before humanity had resettled prior to the events of *Revelation Space*. Only remnants of the Amarantin survive in the form of Shrouders: the most famous of whom was Philip Lascaille, the only human being 'to ever touch the surface of a Shroud and return alive.'⁷⁴³ The Shroud boundary, the titular 'Revelation Space', is the unknowable gulf 'where space ended and the Shroud began' where Lascaille had been granted access to knowledge 'too abstruse to relate.'⁷⁴⁴ What does in fact make the Poseidon's Children Trilogy unique is that Reynolds avoid a certain impoverish science-fiction imaginary by performing what other forms of human existence may be viable, and how this shouldn't be met necessarily with fear or nostalgia. Where *Absolution Gap* ends on a unsettled notion of humanity likely having – in their triumphalist desire to *defeat* the Inhibitors – awoken the very threat, the Greenfly, that the Inhibitors were created against which to safeguard, *Poseidon's Wake* concludes with a renewed commitment to shared responsibility. Indeed, *Absolution Gap* ends on a note of uncertainty – namely, whether the Pattern Jugglers of Ararat will preserve humanity.

CONCLUSION

Throughout this thesis, posthumanism has been explored as a radical decentring of the human, humanism and the humanities in the wake of recent developments in

⁷⁴³ Alastair Reynolds, *Revelation Space*, p. 113

⁷⁴⁴ Alastair Reynolds, *Revelation Space*, p. 117

technoscience and systems thinking, as well as new understandings yielded by evolutionary biology. If the non-anthropocentric baseline is the value of other nonhuman life, this chapter conceptualises what tensions emerge in this ongoing posthumanizing account which sought to take seriously the question of human and nonhuman modalities of life, and the question of survivability *for whom*. At this juncture, it is pertinent to turn to Karen Barad's thoughts at the close of *Meeting the Universe Halfway*: 'We need to meet the universe halfway, to take responsibility for the role that we play in the world's differential becoming'.⁷⁴⁵ Therefore, it might be said that there is a fallacy when speaking in terms of the "we" – for who is constituted when speaking of the "we", when conceptualising the story of 'our posthuman future' as such. After all, the question of who is included and who is omitted in the 'world's differential becoming' matters – for these elisions and erasures, as performed in various chapters, are colonial and speciesist gestures which deny the nonhuman a part in the world's differential becoming.

Which is to say, if the contrary is true, what of the world's unbecoming? There is no living without some form of displacement – which is to say, that Barad commits to a performative contradiction: there can be no ethics without disturbance, in that – as alluded to in Robson's Sankhara system: just as humanity displaces the earth, the planetary displaces humanity. As such, the curators are on the side of Claire Colebrook in finding there something profoundly megalomaniacal, and anthropocentric in these extinction stories as moral narratives. If *The Destructives* forces any question to be ask, it is: extinction for whom? After all, the premise of the text is that humanity is not the only meaning-making position in the cosmos, and in the

⁷⁴⁵ Barad, *Meeting the Universe Halfway*, p. 396

case of Theodore's experience with the emergence, Doxa, the potential for nonhuman forms of life to flourish in humanity's absence is worth pondering.

Indeed, the tension emerging between Robson's *Natural History* universe and Reynolds' *Revelation Space* universe is the nature in which posthuman embodiment – and the factional nature of such embodied existence – shifts away from an Enlightened (human) mastery over the Earth and the cosmos. In the case of Robson's *Natural History*, the diaspora of posthuman forms is curtailed by the supremacy of the Monkeys, baseline humanity, where the story engine focuses on the desire for the Forged entities to unsettle relationships of care and familial relation. Wherein Zephyr Duquesne, as a cultural archaeologist, and Voyager Isol, a gatekeeper of Forged Independence, perform the manner in which a natural (evolutionary) history of posthuman material entanglements has always been embedded in the un/timely present. Through the act of Translation, and the immanent potentiality of posthuman embodiment, there is engendered a present in which the possibilities for Forged and Unevolved to live otherwise could be brought into existence. In the case of Reynolds' epilogue scene in *Absolution Gap*, Aura's decision to merge with the Pattern Jugglers suggests a double fold view of technology in its capacity to enhance and extend life, but also be a source of mutually-assuring destruction. It is clear that the emergence in *The Destructives* spare humanity from this fate, but Reynolds is ambiguous in his endings of the Inhibitor Trilogy and Poseidon's Children Trilogy, except for the fact that both trilogies end with their protagonists willing to act affirmatively for the sustainability of the nonhuman.

CONCLUSION

THE CURATOR AND THE BOOM

Across this thesis, there have been two significant explosions which are constitutive of the posthumanizing process: the first, as outlined by Andrew M. Butler, Mark Bould, and Roger Luckhurst, is an explosion of narrative forms with/in the form of science fiction in the post-1990s period and beyond. The latter is the new materialist explosion which is likewise an emerging paradigm accounting for non-anthropocentric approaches, which have consequences for the manner in which language and reality, human and nonhuman life, mind and matter, are constituted which avoid dichotomous patterns of thinking. Where the British component of this science fiction explosion of narrative forms is a 'vexed, imperial' Britishness which is still negotiating with its own postcolonial trajectories. As alluded to in the introduction, the political realities of Brexit are now in operation, and it seems as if the forces of post-imperialism have the power to manifest and provoke further pain on the British state – which is itself an assemblage of many parts.

To speak to the political legacy of the Boom is a difficult proposition for the 'cultural governance' implied in the introduction in Roger Luckhurst's account of the Boom revealed itself to be, retrospectively, a compelling reading. Blairism revealed itself to be a continuation of Thatcherism, and the austerity politics of the revived Conservative

government have only revived theorizing in the fields of the New Weird, the eerie, and the anti-pastoral in the likes of De Abaitua and his contemporary “new New Wave” peers, M. T. Hill, Tim Maughan, and in his latest work *The Smoke* (2018), Simon Ings. All of this to make a rather self-evident, but necessary, deduction: the British Boom is alive and well – it may not be the commercial and critical juggernaut that, depending on the critics whose account you trust, it was purported to be, but the British Boom is a continuous tendency stemming from the 1990s and “booming” into the early decades of the new millennia.

THE POST-POSTHUMAN

By that logic, the next question to turn towards, before a more sustained overview of the posthumanizing accounts herein in the thesis, is: what is the future of the posthuman? This thesis, after all, calls for the emergence of a posthuman curator: a figure who cuts across theoretical and fictional inquiry to account for what is ‘posthumanist’ about the figures of the posthuman and the human. Which is to say, the discourse of posthumanism with which this thesis concerns itself provides a number of contested ‘posthumanisms’ which the curator figure must account for in its operation. The core concept of the posthuman curator unites both the theoretical and fictional enterprises in order to strike at the dilemmas which critical posthumanist theory has been circling around: namely, the negotiation of the human, the residues of humanism, and the figure of life as a constitutive focus for ontological and epistemological questions.

This posthumanization accounts for the different ways performing post/humanity, the post/human, and the multiple processes of becoming-post/human. Unlike Claire

Colebrook's view of the discourse as the 'last question' of our time, posthumanism is emerging as a navigational tool to make sense of the contemporary world, not just through technological or speculative ideation – a posthumanism-to-come, as discussed in chapter two – but through the existential question of what the human is becoming. Indeed, the “post-“ of the posthumanism is bound up in the history of the human, a process which Stefan Herbrechter and Francis Ferrando refer to as 'hominization' and 'humanization', respectively.⁷⁴⁶ As alluded to with the appeal to Karen Barad's ethico-onto-epistemology⁷⁴⁷, or simply her agential realist account, to theorize is to affect the world, to manipulate it, to influence it, and in so doing also find that the researcher has been subtly influenced. As such, the posthuman curator sought to continue the ongoing deconstruction of posthumanist critical thought, using science fiction as a cross-pollinated genre of writing which performed the post/human otherwise.

For this, the thesis enacted a response to two converging trends in processes of posthumanization: namely, the “post” of posthumanism, reconfiguring the subject and temporality, and in the latter the non-anthropocentric conceptualisation of the human, and the geo-political tensions imposed by the Anthropocene. This thesis was therein arranged into two parts, as has been discussed, where various conceptualisations and notions of the human have been unsettled: all of which are attempts at moving beyond

⁷⁴⁶ See: Francesca Ferrando, *Philosophical Posthumanism* (London: Bloomsbury Press, 2019)

⁷⁴⁷ This neologism of Karen Barad's enacts the entanglements of ethics, ontology and epistemology, where processes of knowledge-formation and subject-formation cannot be disentangled. See: Karen Barad, *Meeting the Universe Halfway: Quantum Physics and The Entanglement of Matter and Meaning* (Durham NC & London: Duke University Press, 2007)

humanism as, invoking Braidotti again, Vitruvianism, or as Noon would delightfully say: a Dodo-ism. In the case of the latter section, the conversation turned to the “post” of a post-anthropocentric world. Methodology aside, the “post” implies a shift to a different episteme, a paradigm shift which suggests challenges facing humanity as individuals, as individuals embedded within a certain historical period, as moral beings who care about the future, but also as members of a species. One of the main problems with the thesis has been the extent to which it is possible to speak of a generalisable human essence, a kind of static human essence that is carried across deep space, as an act of stewardship – for the curator is an intra-active agency operating across texts, across genres of writing, across disciplinary sites of meaning-making and world-forming. These sorts of questions trouble conceptualisations of the self, to who we are and how that shapes our response-ability to the world. This invites attention to what drives and moves us, to what we love, to what we give meaning to, to our subjectivity as emerging through what we choose to care for. Likewise, it invites consideration for what cannot be confronted, for what we seek to avoid and what we fear. This means conceptualising the unforeseeable aspect of the person, and not just the cognitive or the rational. For this, there is a move towards relationality – to the networks and relationships with other people and other entities through which the individual comes into being. There is attention to nurturing these relations, to acknowledging the dependencies and responsibilities of the person through which subjectivity emerges. Which is to say attention to the entanglement of people and planet, the entanglement of people in systems that are larger and more complex than them.

THE DEATH OF THE CURATOR

The posthuman curators are best figured, with an allusion to Donna Haraway's work, as 'material-semiotic nodes or knots' in which myriad forms of embodied existence intra-act upon each other, and in the process are generative of each other's material existence.⁷⁴⁸ This thesis has spoken of a posthumanizing force at work – as expressed by a switch from representationalist accounts to performative accounts – which sees science fiction and theory as lively entangled agencies. Nonetheless, these new phenomena need accounting for without falling back on an all-too human domestication. The stakes in what a diffractive reading can offer are present in its enaction of the existential, psychological and emotion issues confronting a posthuman world. Or, as Noon demonstrates best of the exemplary writers of the British Boom, the realisation of the human's power in relation to its own finitude.

As chapter one explored, there is an issue which recurs across posthumanist theory and science fiction: theoretical and fictional accounts supplant a (human) subject at the centre of the universe to guarantee or carry authorial meaning, but neither does theory or fiction attempt to evacuate the position of subjectivity. In fact, as discussed throughout this chapter, various critics – like Braidotti, Hayles, Haraway, McCormack, and Barad – speak to a distribution of subjectivity where attributes inherent to the (human) subject are distributed amongst nonhuman agents. Indeed, following this logic, the boundaries between human and nonhuman entities come to be reconfigured

⁷⁴⁸ Donna J. Haraway, *When Species Meet* (Minneapolis, MN: University of Minnesota Press, 2008), p.

as a material multiplicity of self, where the various attributes of self – such as agency, free will, autonomy – come to be diffracted across embodied existence.

As outlined at the onset of the chapter, the importance of framing the context in which subjectivity is circumscribed is necessary, for there are many traditions of thought and new critical idioms introduced in these processes of posthumanization. The various tendencies of which, include: the deconstruction of fixed categories and dichotomous relations, as outlined by postmodernist theory but best exemplified by Donna Haraway's 'Cyborg Manifesto' (1985). Likewise, the onto-epistemological impact of quantum physics is explored in Justina Robson's *Mappa Mundi*, the distinctions between macro- and micro- scales of consciousness are ontological distinctions from classical physics which Karen Barad would refuse, preferring instead the ongoing reconfiguration of spacetime mattering across and within space and time. Not to mention, as explored in De Abaitua's *The Red Men* and Robson's *Silver Screen*, the increased role of technology in the constitution of the human identity transforms the traditional (human) subject, as cognition is distributed across human and nonhuman locations. Herbrechter and Callus remark that posthumanism seems 'overdetermined' by technology and reflect on the potential for a posthumanism 'without' technology: in this case, what is the potential for a process of posthumanization in the absence of technological intervention. This is explored in more detail in chapter two with a discussion of the mystical stretcher-bearers in Matthew De Abaitua's *If Then*.

Where both Robson and De Abaitua's works cast intelligent machines and emergent lifeforms as the consequence of agential forces trying to impose their various maps onto everyone else, the final section of discussion asks questions of the monist model of the world, which is to say, the conception of conscious code developing an emergent consciousness on its own. On the one hand, the posthuman signifies a shift in

conceptualisations of subjectivity towards the emergent nature of human and nonhuman cognition, from a systems-theoretical and evolutionary cyberneticist perspective. As Hayles dramatizes, expanding the view of the mind – specifically, what constitutes conscious and nonconscious cognition, and *who* gets to do the cognizing – opens up ‘utopian possibilities’ to be realized by post/humanities scholars.⁷⁴⁹ Throughout Hayles’ body of work on computational media, from her trilogy of works beginning with *How We Became Posthuman* (1999) and ending with *Writing Machines* (2005), to her more recent work on cognitive systems in *Unthought* (2017) challenges assumptions, and pushes for a more constructive dialogue, between the traditional and digital humanities. Nevertheless, the first chapter – and other curators across the thesis – sought to enact the complicated and subtle distinctions between those who call themselves (human) persons, be they cyborgs, xeno-transplanted humans, uploaded or simulated minds, oceanic intelligences, augmented elephant clades, mind-enhancing or mind-altering nanotechnology, and emergent minds.

In chapter, the conversation explored the extent to which this posthumanization has unsettled the situatedness of space and time such that the question of what comes next has both always already and not quite yet arrived. As chapter two demonstrated, Jeff Noon’s *A Man of Shadows* breaks with the time of the human calendar, and disrupts the Hegemony of the Enlightenment Clock, by unsettling the nature of time and space, where temporality and spatiality – in the science fictional tradition of the transubstantiation of the two – come to be configured as intra-active agencies in themselves. Karen Barad, in a manner not too dissimilar from Noon, see times as a living agency in its own right, in that she identifies various different ‘clock times’ – ‘the

⁷⁴⁹ Hayles, *Unthought*, p. 205

Doomsday Clock, the Hiroshima clocks, and atomic clocks’ – through which her quantum physicist and queer feminist theorizing come to unsettle such humanist inscriptions of time.⁷⁵⁰ Which is not to say that posthumanism does not occur as a genuine event, but that the posthuman curators across this chapter must be dutiful in their response-ability to account for time’s agency. As implied by Patricia McCormack in the epigraph, the “post” of post-humanism implies a different time to perform questions “beyond” or “after” humanism – and how these nonhuman temporalities are entangled, often in contradictory ways, with the (human) subject.⁷⁵¹ As in chapter one, where discussion focused on the *proliferation* of new accounts of subjectivity, this chapter explores the proliferation of temporalities unsettled by posthumanizing fictional and theoretical re/configurations of time, and how thinking the future beyond the prescriptive methodologies of the Vitruvian Man or the Anthropos confuse and upset ‘our posthuman future’.⁷⁵²

For Noon, the more-than-human, posthuman spectres of the Dusklands haunt the human characters of the novel: these ghostly injunctions in Dusk reveal much about the character’s self-conception. And yet, as discussed in chapter three and four, these ghostly injunctions are on planet-altering and species-defining scales, which asks questions of how science fiction engages with the problem of the Anthropocene, of notions of extinction (extinction, *for whom*), and what it means for the concept of a future. For Noon, any sense of the future is unsettling which sense Nyquist spiralling

⁷⁵⁰ Karen Barad, ,*Troubling Time/s*’, p. 256

⁷⁵¹ MacCormack, *Posthuman Ethics*, p. 23

⁷⁵² This latter phrase ‘Our Posthuman Future’ is indeed a deliberate invocation of Fukuyama’s 2002 text of the same name, the spectral presence of which haunts this chapter.

away from self-destructive tendencies towards – at least by the end of the novel – a more relational sense of self-identity. The ghostly forces of a multispecies continuum is explored in chapter three, such that the differences between animal and human, animal and vegetal, are unsettled in this ongoing posthumanization.

Chapter three explores the difference between animal and vegetal using Derridean questions of who determines the human as ontologically individual and different from nonhuman others, and how identities of the inanimate, the vegetable, and the animal inhabit each other and express the agential force of the who that initiates the question. Again, returning to chapter one, N. Katherine Hayles' study of the posthuman presupposes an always already posthuman ontology, with the study of the posthuman in her 1999 *How We Became Posthuman* tracing an ironically retrospective account where the "post" of the posthuman has already arrived. For which posthuman is clearly haunted by what the curator might say is an indebtedness to, and therefore in a relationship of stewardship with, what we are already in the process of becoming. Nevertheless, where Hayles sees the posthuman as having always already arrived, by shifting the paradigm with/in which humans understand their relationship to embodiment and matter, there is a persistent retrospective temporality inherent to the posthuman. As alluded to in chapter one, where the reconceptualization of the subject in posthuman times is at once an ongoing critical deconstruction of the 'post' of posthumanism, Cary Wolfe is on the side of the Derridean deconstructionists who argue that the "post" in posthumanism does not entail a radical break with humanism: 'in the sense that [posthumanism] names the embodiment and embeddedness of the human being in not just its biological but also its technological world, the prosthetic coevolution of the animal with the technicity of tools and external archival mechanisms

[...] and all of which comes before that historically specific thing called 'the human'.⁷⁵³ Which is to say, the "post" of the posthuman has another temporality, which unsettles notions of posthumanism happening "after" and therein humanity possessing some linear and causal relationship to their own evolution. For Wolfe, the fact that "we" are not quite yet human, that is, the human is entangled with/in various processes of posthumanization – broadly speaking, bound to technology, informational, and economic networks, needs accounting for

Matthew De Abaitua's novel *If Then* encapsulates the notion of humans as historical agents, responsible for the culturally specific markers they leave on themselves and history, as well as the generative processes that give rise to new forms of existence – perhaps best explored through *The Destructives* in chapter four. Through an exploration of posthumanism, De Abaitua's novels reveal their indebtedness to humanism and the underlying humanist thought-patterns prevalent in science fiction narratives. However, the novel goes beyond these themes and delves into a deeper understanding of time and its uncertain futures, challenging the established cause-and-effect relationships. It emphasizes the importance of accountability in shaping the past, caring for the futures that both posthumans and humans create. By rejecting narratives of inevitable technological progress, his trilogy urges us to consider the loss of certain ways of life and the emergence of new ones, driven by more agential conceptions of time and change. This alternative understanding of time moves away from the notion of predetermined futures, whether imposed by neoliberal economics, climate collapse, or the belief in a teleological and scientifically-driven mastery of nature. Ultimately, De Abaitua's work prompts us to question and reimagine our

⁷⁵³ Cary Wolfe, *What is Posthumanism?* (Minneapolis: University of Minnesota Press, 2010), p. xv

relationship with time and the possibilities it holds for more affective relations that refuse the accelerationist logic of *The Destructives*.

British Boom science fiction, best accounted for in the work of Alastair Reynolds, attends with how to think with deep time – with a recognition of geologically history and distant futures. For Reynolds and De Abaitua, the past does not absolve the individual, instead returning to haunt the present and its futures interrupt us and require us to act. This means accounting for the unexpected and disruptive nature of complex systems, that generate a radical disjuncture; a natural history, as Justina Robson has it, is no longer available to us. Consequently, it means that recursion and waves represent and come to figure the multiple and overlapping temporalities, where the curator remains as a constant witness to past, present and future times. The conclusion is that there are richer temporalities: of growth and decay, of cycles and waves – from the different timescales to the slow processes; attending to the implications of quantum physics, to the profoundly unsettling timescales of being.

Chapter three examined the works of Roberts and Noon to highlight the interplay of agencies between humans and nonhumans, emphasizing the need for a multi-species approach to challenge the rigid categories of human, animal, and machine. In the context of posthumanism, humanity remains open to transformative processes, while critical posthumanist thought acknowledges the spectral nature of the nonhuman that requires engagement. The conflict inherent in posthuman speciation is performed in this chapter by portraying the liberal humanist figure, particularly in the context of canine conceptualizations, as a mongrel-creature. By exploring Jeff Noon's Vurt sequence, we see that John Barleycorn's desire to recreate a Vurt-inspired Manchester depends on the collapse of boundaries between humans, animals, plants, and dreams, which is both indispensable and insufficient for a human model of

existence. Das Uberdog presents a local community as the site for actualizing a political future, as the dog people of Vurt shape a more active multi-species future that diverges from the earlier discussion of the coyote's plant-dog-human hybrid reworking of the Vurt. Through an understanding of critical posthumanism and its questioning of conventional human categories, chapter three has explored how the posthuman figure destabilizes the limits and symbolic borders of the human in relation to its post- and non-human counterparts. The writings of Jeff Noon have played a central role in extrapolating different conceptualisations of human and non-human modes of being by modelling the systems that define and delimit species relations.

In Adam Roberts' 2014 science-fiction novel *Bête*, the role of the protagonist, Graham Penhaligon, operates under the sovereign logic of exclusion in a wonderful subversion of the curator trope, as currently conceptualised in the thesis. Indeed, Graham might possess a role of husbandry to the land, but that role is fraught with inconsistencies and paradoxes, until the rise of the novel's titular species, which prompts – in the embodied story-world of the text, a recalibration of social rules in the advent of sentient animals, referred to as bêtes. The novel therein places Graham as a liminal figure who straddles the world of "Homo sapiens" and "Homo bête"⁷⁵⁴ Graham's point of view interpolates the reader within a certain humanistic and speciesist relation to the betekind of Roberts' text in which he perceives them either as dumb animals – reducing them to a base animality or conceiving them as monsters. As such there is an untenable binary which Roberts' novel seeks to deconstruct through Graham, the husband of nature, the shepherd without a farm – a deconstruction which can only take place by dislocating Graham from his humanistic context.

⁷⁵⁴ Adam Roberts, p. 284

What is the nature and weight of responsibility when human and nonhuman extinctions come together? How would one make distinctions without reintroducing and privileging the “human” again? One of the overarching problems that the third chapter sought to challenge was the problem of technological determinism, which as Stefan Herbrechter reflects on as a problem with/in posthumanist discourses. Technology has always been in different ways the determining question of humanity, of the human, of becoming-human – as discussed in chapter two, this process of ‘hominization’ is foundational to humanity’s generative force. In the context of animal studies, if the human has always been constituted through technologization, the extent to which the animal might be conceived as over/determined by technology forces a reconfiguration of species boundaries, and the structurality of species-thinking. Finally, the chapter asks questions of the extent to which a ‘pure’ animality or humanity is possible to be reclaimed in posthuman times, which, of course, presumes that there is a pure animality which can be thought. Animal studies, in Cary Wolfe’s formulation, intersects with posthumanism – not in the sense of transcending human embodiment, as Katherine Hayles disparages in *How We Became Posthuman*, but in returning us to the finitude of human embodiment – and to conceiving of human evolution as itself a specific form of animality. It is precisely about remaining with – not evacuating – the specificity of the human and animal in different cultural and anthropological contexts across a dynamic, physical reality.

In Adam Roberts’ *Bête*, the tension between the inscription and erasure of humanist values in the entanglement of humans, animals, and technology is also explored. Graham Penhaligon’s status as Homo sacer exemplifies the irresolvable tensions of hospitality and inhospitality, reinforcing the logic of sovereign exclusion from one human social order while being maintained within a broader posthuman assemblage.

Yet, Graham's dependence on species-thinking is portrayed as a riddle that fails to erase the misrecognition of humanist values and the narratives of dignity that are reconfigured in posthuman times. Overall, the work of Roberts and Noon models the complexity and fluidity of human and nonhuman relationships, urging us to move beyond fixed notions of humanity and engage with the diverse modes of existence and becoming that challenge traditional humanist frameworks. The exploration of embodied existence and the constant revision of relationships in these narratives serve as a reminder of the ever-evolving nature of the human condition within a multi-species context.

Chapter four explored the Cartesian problematic in querying the intentionality of evolutionary processes, as those constantly self-regulating and entangled systems of proliferation, by placing this questioning of evolutionary speculation amongst debates of technological development. For this chapter, extinction and evolution stories were conceived as story engines which explored some of the mutated forms of how life has been reconfigured in Robson and Reynolds' space opera and posthuman fictions: cosmic selection, the competition between beings on different evolutionary pathways (mechanism vs organism, hive vs monad), or among the variations within species (Conjoiners/Inhibitors, Gems, etc.) In so far as we might interrogate the manner in which technology has fundamentally altered the social and cultural becoming of the posthuman through wider proliferation of virtual systems, automation, and machine learning.

For this, we must immediately turn to De Abaitua for there is an inherent querying of whether human evolution is reducible to the dialectics of human destiny, whether rooted in messianism or rationalism. Through De Abaitua's choice to figure the evolutionary speculation of the Process, and Omega John, in the resurgence of the

Great War, the recreation of the landing of Suvla Bay, and its articulation of conflict as an increasingly, dehumanising, technological event is one that introduced a tension with Enlightenment optimism, of the hope for technology to mark humanity's progress as an evolutionary species. For De Abaitua, not only is the condition of the Lewesian townspeople, trapped at the end of human history, whilst also reliving the Great War, a symbol of a culture trapped in anti-humanist, technologically driven loops, but the conflict symbolises the absent possibility for the role of human beings in constituting their own history. The intentionality of Omega John's desire to programme a series of conditions for the moral evolution of a species has the effect of importing the 'life force', that human essence, into a systemic culture, into a metric of productivity and efficiency, of scientific discourse where the human is a value, not in a vaguely humanist sense, as the central figure by which meaning is negotiable, but in an objectified, techno-scientific sense.

All the preceding chapters share a similar theme, or a similar preoccupation, namely some entanglement with what comes *after* – whether that is (human) subjectivity, universal clock-time, or (human) life as foundation. This final chapter follows from a questioning of what comes after notions of extinction, specifically whether the idea of extinction already possesses the traces of the monstrous, such that they are 'alien to natural, social, and human scientists in the twenty-first century'.⁷⁵⁵ This thesis has thus far been preoccupied with what Jacques Derrida calls the 'themes of the end (end of history, end of man, figure of the "last man" [...])', and this chapter once more attends to the notion of the end of history – but in this case, it attends to the apocalyptic

⁷⁵⁵ Richard Grusin, *After Extinction* (London: University of Minnesota Press, 2018), p. 56

undercurrents implicit in the discourse of humanity's end.⁷⁵⁶ As Neil Badmington suggests, from apocalyptic accounts of the discourse surrounding the 'end of Man' (via Foucault), the fetishizing of a specific apocalyptic tone only 'ignore[s] humanism's capacity for regeneration and, quite literally, recapitulation.'⁷⁵⁷ Through a reading of the posthuman factions in Justina Robson's *Natural History* and Alastair Reynolds' Revelation Space universe, this deconstructive relationship between the immanent potential of these new modes of embodied existence and the transcendent character of the character's sense of their own self-imposed limits.

THE MUSEUM OF FRAGILE THINGS

This thesis appeals to new discourses that have emerged across a number of disciplines to conceptualise who is the human of the humanities in posthumanizing times. The goal of this thesis is to unsettle the boundaries between disciplines, not to recodify or form new disciplinary fields, as all disciplinary sites of meaning-making and world-forming are intra-active agencies which unsettle each other. Nonetheless, the critical posthumanities is a new discourse that has emerged and cross-pollinated across a number of other disciplines, all posing the problem of the human in posthuman times. Cary Wolfe is co-editor of the *Posthumanities* series, which reconjugates the relationships between texts and the burgeoning fields of discourse. Katherine Hayles has been integral in teasing out the tensions between traditional and

⁷⁵⁶ Jacques Derrida, *Spectres of Marx*, p. 16

⁷⁵⁷ Neil Badmington, 'Theorizing Posthumanism', *Cultural Critique*, Vol. 53 (University of Minnesota Press, 2003), p. 11

digital humanities. Claire Colebrook has been profound in her work with Jami Weinstein in the burgeoning field of Critical Life Studies.⁷⁵⁸ Although, perhaps it is Braidotti who deserves the mention for her acknowledgement of the “boom” of “Studies” within academic departments. It seems clear that the humanities is on the cusp of a radical and evolutionary change, the likes of which have started to be explored and performed herein.

Nonetheless, there is perhaps a cynical perspective here, which I would like to borrow from Claire Colebrook, and for this I invoke the mode of personalised subjectivity. It is, at a time of a pandemic and vast ecological disturbance, that, cognitively, people find themselves overwhelmed and incapable of meeting the task of extinction, human or otherwise. The intra-vention needed in the humanities is to disavow an attachment to specific conceptions of the human, salvage – as the curatorial framework insists upon – those aspects of the human, of humanism, of the humanities which matter. In the same breath, it is not to return to stories of discrete agents “saving” the world or finding some redemptive power in humanity, as the final chapter goes some way to illustrating. For this, the duty of the humanities is to abandon species-supremacies and develop humility in the face of extinction stories, for the human is embedded with/in an environment that is already more complex than can be representationally mapped by any single biological organism.

⁷⁵⁸ See the edited collection by Colebrook and Weinstein, which argues for a Critical Life Studies which sidesteps the “post-” of posthumanism and embraces the inhuman: Claire Colebrook, *Posthumous Life: Theorizing Beyond the Posthuman*, ed. by Jami Weinstein & Claire Colebrook (New York: Columbia Press, 2017)

As has been illustrated, the role of science fiction studies, critical theory, philosophy, and the practices of quantum mechanics is no longer taking the *bio* as the primary mode of existence – and is developing other modes of inquiry and other perspectives as frames of reference. For the traditional humanities, as Rosi Braidotti has it, is demanding for they are ‘so deeply structured by anthropocentric habits that cannot easily contemplate the de-center-ing of anthropocentrism, let alone the specter of human extinction.’⁷⁵⁹ As such, posthumanization of science fiction and critical theory is a response to the problems of our time, where anthropocentrism and biocentric tendencies require reevaluation – and in this way, the thesis has sought to return to old concepts – selfhood, temporality, species-identity, and extinction – in order to draw out post-humanist and post-anthropocentric insights. Nevertheless, it is not the role of the posthuman curators to resolve these problems in any final way, for this would imply some proper or linear relationship of the posthuman to the problems of its time and to the processes of which it generates and is generative.

If Then takes the perspective of Ruth and James, two individuals caught within the war-games of Omega John and the Process, which is attempting to communicate an ethics of compassion and (human) kindness in a post-Seizure civilisation. By comparison, *The Destructives* takes the framing device of a single human life being observed from beginning to end, where the autobiography of Theodore’s life is performed by a nonhuman, emergent entity. The narrative of *The Destructives* continues beyond Theodore’s death on the surface of Europa to explore the new biological emergence’s – a re-inscription of Theodore in an artificially embodied

⁷⁵⁹ Rosi Braidotti, ‘Preface: The Posthuman as Exuberant Excess’, in *Philosophical Posthumanism*, (London: Bloomsbury Press, 2019), p. 12

existence. Ultimately, the black box – the means by which Cantor recorded Theodore’s memories – misses so much of Theodore’s individual potential: ‘The restoration of his emotional states within Doxa. His leaving of Patricia. The conception of his child. His discovery of love.’⁷⁶⁰ Perhaps, this thesis should conclude with Ezekiel Cantor’s closing thoughts in *The Destructives*: ‘This was the paradox of remembering, how each act of recollection was also an act of destruction. [...] These elusive intangibles, the slivers of mystery in the human condition’.⁷⁶¹

⁷⁶⁰ De Abaitua, *The Destructives*, p. 405

⁷⁶¹ De Abaitua, *The Destructives*, p. 411

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