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Mapping Human-Nonhuman Biopolitics

in Classic Gothic Science Fiction

By

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Abstract.

If we take seriously Brian Aldiss's argument in *Trillion Year Spree* that science fiction, as it develops in its crossings with the Gothic, is essentially about "man in relation to his changing surroundings and abilities" (Aldiss 1986, 34), we can understand the Gothic science fiction as a privileged cultural corpus to explore what the human is, and the ways in which it is defined, questioned, negotiated and re-defined. More recent scholarship continues to work with this premise, but emphasizes in particular the potentials of more recent and contemporary sci-fi to critically question the human and go beyond the human-centric politics, in relation to current issues such as animal ethics, overuse of technologies, pandemics or climate change.

In this project I am interested to look at the ways in which the early, 19th century Gothic science fiction novels by Mary Shelley and H.G. Wells set up a framework for staging and interrogating the human. I argue that the classic Gothic science fiction sets up key cultural scenarios of biopolitical relations between the human and the nonhuman: predominantly positing and affirming the human against various nonhuman threats, but also allowing for some critiques of human exceptionalism to surface. These critiques raise issues around the treatment of nonhuman animals, the relationship with the environment, and the uses of technology, and when approached through the intersection of posthumanist/environmental/animal studies, they are seen to fall back on certain humanist assumptions. I identify five key scenarios through which the human-nonhuman biopolitics of the classic Gothic sci-fi is staged (and which persist to unfold in contemporary cultural imagination): technological creation of the non/human, wonder/terror/horror at the nonhuman, alienation from (human) nature, disastrous extinction of the human species, and biological invasions of the human self.

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Introduction

The impetus behind this PhD project is twofold: comes from both critical theory and popular culture, and more particularly, the ways in which they can help us think through what is meant by the human and humanity always in relation to that which is understood to be nonhuman, be it animals, environment or technology. I wish to bring together the current theoretical investigations into 'the human' and the popular genres of science and Gothic fiction, and propose that they can mutually illuminate one another, in order to examine how the relations, i.e., politics, between humans and nonhumans can be imagined and thought through.

Critical theory has in the last few decades in the context of climate change, factory farming, pandemics or the uses of biotechnology, increasingly turned to the issues of ethics towards nonhuman animals, human treatment of the environment, as well as human relationship to advanced technologies. Theoretical inquiries of biopolitics, animal studies, environmental humanities and posthumanism have been interrogating what Jacques Derrida already in late 1960s referred to as "the ends of man,"[1] i.e., they have been chipping away at the humanist assumptions behind the politico-philosophical conceptualization of the human in the Enlightenment tradition: the highest political value of human life and the primary agency on the planet of the human species.

On the other hand, in western popular culture since the Enlightenment, certain modern genres have developed specifically around imagining and interrogating the place and role of the human species on the planet – particularly that of science fiction – which, according to Brian Aldiss, emerged in the early 19th century developing from and transforming the earlier Gothic

1. Jacques Derrida, "The Ends of Man", a lecture given in New York in October 1968 at an international colloquium. Translated by Alan Bass in *Margins of Philosophy* (Chicago: University of Chicago Press, 1972).

tradition. For Aldiss, Mary Shelley's *Frankenstein* (1818) can be considered the historical point in which the earlier Gothic tradition, that crucially utilizes terror and mystery, depicting isolated castles and landscapes, becomes transformed into an encounter with modern science: "science fiction is the search for definition of mankind and his status in the universe which will stand in our advanced but confused state of knowledge (science), and is characteristically set in the Gothic or post-Gothic mode."[2] Though it seems notoriously difficult to attribute the emergence of a particular discourse to one key source, within the scope of this project I wish to work with Aldiss's premise, not to pinpoint the definite origin of a genre but rather to propose that science fictional and Gothic tropes indeed fruitfully crisscross and transform one another since the beginning of the 19th century till present day. Furthermore, I wish to suggest that this Gothic science fictional imagination is best read alongside the mentioned critico-theoretical "ends of man", as a cultural corpus that crucially pushes at the "limits of the human", to use Gerald Alva Miller's term. As Miller argues, science fiction is a space which allows for asking the fundamental questions around the human: "Where have we been? Where are we now? What else might there be? Who are we? And what might we become?," and "examines these questions in a manner akin to critical theory; that is, it generates its own theoretical concepts that center upon what I term 'the limits of the human,' the various facets, characteristics, social forms, and ideologies that comprise, attempt to define, and delimit the human experience."[3] Starting from this understanding of the key concern of science fiction, this project sets out to investigate the re/definitions of the human in the emerging 19th century crossovers between science fiction and Gothic, the classic works of Mary Shelley and H.G. Wells: *Frankenstein* (1818), *The Last Man* (1826), *The Time Machine* (1895), *The Island of Dr Moreau* (1896) and *The War of the Worlds* (1898).

2. Brian Aldiss and David Wingrove, *Trillion Year Spree: The History of Science Fiction* (London: Paladin Grafton Books, 1988), 30.

3. Gerald Alva Miller Jr, *Exploring the Limits of the Human through Science Fiction* (New York: Palgrave MacMillan, 2012), 2-3.

The emergence of science fictional tropes with the crucial focus on the human species at the turn of the 19th century can be situated in Michel Foucault's history of western knowledge, as he intriguingly claims that the concept of 'man' as an epistemological category did not exist before the end of the classical period. Foucault's archaeology suggests that an overall epistemological consciousness of man, as the very subject as well as the object of knowledge, crystallizes only in the 19th century, ushering the new, human sciences. To quote him: "Before the end of the eighteenth century, *man* did not exist – any more than the potency of life, the fecundity of labour, or the historical density of language. He is a quite recent creature, which the demiurge of knowledge fabricated with its own hands less than two hundred years ago."[4] But furthermore, what emerges at the same time as the human consciousness of itself as both a scientific subject and object, is what Foucault in his later work, *The History of Sexuality,* terms 'biopolitics' or 'biopower', and defines as "nothing less than the entry of life into history, that is, the entry of phenomena peculiar to the life of the human species into the order of knowledge and power, into the sphere of political techniques."[5] For Foucault then, the knowledge of the human species is intricately connected with the power over human lives in the development of the modern nation-states which manage populations. The modern nation-state biopolitics revolves around 'making live' certain lives and 'letting die' other lives, either literally or through social inclusion, and we can argue that, following from Foucault's arguments, these biopolitical distinctions are deeply entangled with delineating the norms of what is proper humanity and human (and therefore such life is fostered) and that which is not properly or is less than human (and therefore can be made expendable). Now, as science fiction emerges at the turn of the 19th century in an intersection with the Gothic by crucially staging the definitions of the human species, I wish to argue in this project that the Gothic

4. Michel Foucault, *The Order of Things: An Archeology of the Human Sciences* (London and New York: Routledge, 2002), 336.

5. Michel Foucault, *The History of Sexuality, Volume I: An Introduction* (New York: Pantheon Books, 1978),142.

science fiction is in fact the key discourse of modern biopolitics for the production of hierarchical relations between the human and the nonhuman.

Relatedly, I wish to suggest that the Gothic science fictional discourse around the human commonly unfolds along the lines of a number of very prominent plots, which I propose to refer to in the project as 'scenarios', and which I will analyse in the works of Mary Shelley and H.G. Wells. These biopolitical scenarios, in the sense of generic plot lines that stage the human-nonhuman relations, have since the classic novels persistently continued to unfold in the 20th and 21st century science fiction, but also in popular culture more widely. The scenarios that I identify in this project and according to which the subsequent chapters are organized are the following: technological creation of the non/human, wonder/terror/horror at the nonhuman, alienation from (human) nature, disastrous extinction of the human species, and biological invasions of the human self. In each chapter I analyse Shelley's and Wells's novels through a particular scenario, applying close reading, which leads me to a two-folded conclusion: on the one hand, the human-nonhuman biopolitics operates as to assert the highest value and the exceptional agency of the human, undervaluing the animal/ized, mechanized forms of life, or that which is figured as natural; on the other hand, human exceptionalism is questioned, by raising the issues around ethical diet, animal vivisection, environmental pollution or the uses of technology, which anticipates current important discussions around animal ethics, environmentalist and posthumanist politics. Therefore though the overall framework for understanding the novels in this project is biopolitical theories, it is necessary and very fruitful to engage in the biopolitical crossovers with the fields of animal studies, environmental humanities and posthumanism.

I argue that while the classic novels remain firmly within a humanist frame of reference, they also explore the issues, more particularly – begin to question human exceptionalism as the primary value and agency of the human on the planet – that anticipate some of the key

questions of posthumanism. While these important historical critiques of the human anticipate the current posthumanist questions, from the posthumanist frame of reference readily available to us but not so easily to the historical audiences, the critiques can be read as humanist in argumentation. A possible direction for further research that my project prepares a solid ground for would be to examine how the human-nonhuman biopolitical scenarios that I identify here unfold in some contemporary Gothic science fiction, and whether the current incarnations of the genre set up a posthumanist frame of reference or remain tied to the humanist assumptions. Working thus across a few fields of scholarship, my research aims to contribute: on the one hand, to the sci fi and Gothic studies, by offering a new reading of the classic novels as the key discourse of human-nonhuman biopolitics; on the other hand, to biopolitical theory/animal studies/environmental humanities/posthumanism, by suggesting that the classic Gothic sci fi anticipates the current discussions around ethics towards nonhuman lives.

Gothic Science Fiction as Affective Biopolitics

As stated above, in this project I wish to explore the idea of Gothic and science fictional intersections, for which I started from Aldiss's premise that science fiction develops from and transforms the earlier Gothic fiction in "the search for definitions of mankind". While we might be able to see that science fiction stages biopolitical relations between humans and nonhumans, I also wish to suggest that the Gothic elements should be kept in mind, as they add another, important aspect to it: that of how these relations might frequently be delineated through affective responses. Fred Botting defines the Gothic literature as that of "passion, excitement and sensation," and its aesthetics as "based on feeling and emotion."[6] As he

6. Fred Botting, *Gothic* (London and New York: Routledge, 2005), 2.

argues, "Gothic figures have continued to shadow the progress of modernity with counter-narratives displaying the underside of enlightenment and humanist values. Gothic condenses the many perceived threats to these values."[7] I propose to approach the emotional aesthetics through which the Gothic stages threats to the humanist values with the notion of affect. In Silvan Tomkins's psychological conceptualization, affects are the primary physiological mechanisms of living beings, of which he identifies nine, and which underlie what we have come to understand as feeling (an awareness of an affect), and emotion (a combination of an affect and the memory of previous experience of that affect).[8] For my purposes here, it is useful to read the Gothic tropes as staging and provoking affects in Tomkins's sense, rather than emotions, which are entangled with the memories of very particular, situated experiences. This is so because I wish to suggest that the Gothic emotional landscape operates by activating the various mixtures of primary affective responses of fear and wonder, and in Shelley and Wells these are repeatedly, in different situated instances, activated when the borders of what is 'human' need to be reasserted, or on the other hand, made more porous. While recently there has been a significant body of scholarship that explores affect theory, within the scope of this project presently I will not engage extensively with this specific approach. Rather, I wish to explore how within the biopolitical thought as well as animal and environmental studies themselves the notion of affect frequently finds its way, sometimes only implicitly, and can be brought to light in a productive way for my project here.

It should be noted at this point that contrary to Aldiss, some sci-fi scholars have seen science fiction to be at odds rather than compatible with the Gothic. One of the early influential critics, Darko Suvin, who defines science fiction as "the literature of cognitive estrangement,"

7. Ibid., 1.

8. Silvan S. Tomkins, *Affect Imagery Consciousness: The Complete Edition* (New York: Springer Publishing Company, 2008), xiv.

argues that it takes a fictional hypothesis and develops it with a scientific rigour, which is opposed to the Gothic that deals with the irrational or supernatural forces.[9] Furthermore, while Shelley has been commonly associated with the Gothic tradition, H. G. Wells is not obviously so. However, Judith Wilt endorses the view that sci-fi and Gothic intersect, which I take in this project, and she in fact locates their historical blend in Wells' *The War of the Worlds*. For her, the novel, which takes "pains to emphasize the un-humanness of the encountered monster, is the truest of all Victorian gothic forms, that is Victorian, or classic, science fiction."[10] I follow such an understanding of Wells's early scientific romances, and propose that both those and Shelley's works are the classic historical points in which sci-fi and Gothic crisscross their forms. This trajectory however, continues till the present day, as the recent edited collection *Gothic Science Fiction 1980-2010* (2011) by Sara Wasson and Emily Alder exemplifies, which focuses on the recent thirty years of cultural production. In this collection, Aris Mousoutzanis puts it succinctly when he writes that "the two genres have therefore always found themselves in a dialectic relationship of reciprocal influence, which consists largely in a combination of references to contemporary technoscientific formations and a simultaneous focus on the corporeal, the monstrous and the grotesque."[11] I agree with this approach, and propose that this persistent focus on the corporeal, monstrous and grotesque in Gothic science fiction is staged through affect. Thus at this point I will tentatively propose the notion of 'affective biopolitics' as a lens through which I read the novels, to capture the idea for the project that Gothic science fiction is the key mode of modern biopolitics for the production of human-nonhuman relations, which relies significantly on affect.

9. Darko Suvin, *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre* (New Haven and London: Yale University Press, 1979).

10. Judith Wilt, "The Imperial Mouth, the Gothic and Science Fiction," *The Journal of Popular Culture* Volume 14, Issue 4 (1981): 621.

11. Aris Mousoutzanis, "'Death is Irrelevant': Gothic Science Fiction and the Biopolitics of Empire," in *Gothic Science Fiction 1980-2010*, ed. Sara Wasson and Emily Alder (Liverpool University Press, 2011), 58.

Such affective biopolitics around the human explores the two elements that Mousoutzanis identifies, the technoscientific and the corporeal formations, but there is certainly the third element which comes into play – that of modern nation-state. We should indeed strongly bear in mind John Rieder's argument that the emergence of science fiction at the beginning of 19th century is crucially situated in the western colonial state and entangled with racial theories.[12] The 19th century Gothic science fiction thus can be said to channel the anxieties around nation-state sovereignty, colonialism, race, technological advancement, corporeality, degeneration etc., as it responds to, to quote Mousoutzanis, "the formation and entanglement of modern discourses of knowledge and power, and particularly those that participated in the emergence of what Michel Foucault has termed 'biopower'."[13] He focuses on the late 20th century Gothic science fiction from a biopolitical perspective, but also emphasizes that particularly the Victorian Gothic sci-fi, in the period of high imperial sovereignty, manifests a biopolitics of the British Empire. In this project I focus on the biopolitics of the Empire throughout the 19th century, from the emergence of the Gothic sci-fi and through its classic tropes, in the novels of Shelley and Wells. Close readings will show us how through what I term an affective biopolitics of human-nonhuman relations, the highest value of human life, the primary agency of the human species, and the proper form of human embodiment is affirmed in relation to technology, environment, or animality. On the other hand, we will look at how the affective biopolitics also allows for critiques of human exceptionalism to be articulated, as the issues are raised such as vegetarianism, animal vivisection, environmental pollution and destruction, overuse of technologies, vulnerability to disease, or natural disasters. These issues are precisely those that will prove key in the recent, posthumanist

12. In John Rieder, *Colonialism and the Emergence of Science Fiction* (Middletown: Wesleyan University Press, 2008).

13. Mousoutzanis, "Death is Irrelevant," 58.

deconstructive angle to humanist assumptions though, as we will see, the novels themselves in their historical context operate within a humanist frame of reference.

Theoretical Framework

To closely examine how the classic Gothic science fiction, through particular scenarios of affective biopolitics, at the same time invents and destabilizes human exceptionalism, this project utilizes the scholarly fields of biopolitical theory, animal studies, environmental humanities and posthumanism, as they mutually crisscross and enhance one another. The main framework is biopolitical, following the Foucauldian understanding of the politics of life as making live certain kinds of life and letting other kinds of life to die. In as much as the project engages with the other mentioned scholarly fields, it does so through their productive conversations with the biopolitical approach. Here I will give an overview of the key thinkers and approaches, while particular concepts which I use in the close readings of the novels will be further elaborated on in each particular chapter.

Michel Foucault historically situates the emergence of modern biopower at the turn of the 19th century, as entangled with the modern nation-state apparatuses. At this turning point, the way in which the sovereign governs life changes: "One might say that the ancient right to *take* life or *let* live was replaced by a power to *foster* life or *disallow* it to the point of death."[14] The biopolitics of making live and letting die is further linked with governing at the level of population, or indeed the human species, rather than disciplining individual bodies. This is why it frequently deploys discourses of the hierarchy of races and the idea that getting rid of the members of certain races leads to the purification of the whole human race, and thus the improvement of humanity. As the modern biopolitical sovereign primarily governs through

14. Michel Foucault, *The History of Sexuality, Volume I: An Introduction* (New York: Pantheon Books, 1978), 138.

establishing the norm, therefore what is means to be "human" or a full-fledged member of the human race comes to be defined in different normative ways, excluding those that do not fit in.

One way in which I will approach the normative biopolitical delineations of the human is by drawing on Agamben's theory of bare life. It should be noted though at this point that, while Agamben draws on Foucault's approach to biopolitics as a specifically modern phenomenon, his own concepts tend to slip into ahistorical thinking, as he conceptualizes bare life drawing on the Roman figure of *homo sacer* or the banished man. Bearing in mind this difference between Foucault and Agamben when it comes to historicization, what is nevertheless fruitful to explore in my project is Agamben's conceptualizion of bare life as a relationship between humanity and animality within the human: "a zone of indistinction and continuous transition between man and beast, nature and culture."[15] In *The Open: Man and Animal* Agamben sees this indistinction as the production of what he calls the anthropological machine, and he distinguishes its two inflections, the ancient and the modern: "If, in the machine of the moderns, the outside is produced through the exclusion of an inside and the inhuman produced by animalizing the human, here the inside is obtained through the inclusion of an outside, and the non-man is produced by the humanization of an animal: the man-ape…"[16] The modern machine works in such a way that since Linnean taxonomy, *Homo sapiens* defines itself by recognizing itself not to be a nonhuman animal, in analogy to the nation-state giving itself legality in relation to some supposed state of nature where men are wolves to each other and which needs to be exited by signing a social contract. Within the framework of Foucauldian biopolitics as the modern state management of the human species, I consider useful to utilize Agamben's understanding of the modern anthropological machine as

15. Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (Stanford: Stanford University Press, 1998), 109.
16. Ibid., 37.

animalizing the human, and being entangled with the philosophical, scientific and political humanisms. This approach offers us analytical tools to look at how a modern biopolitical state is invested in attributing the highest value to a "properly human" form of life, which supposedly extricates itself from animality and nature, while a slippage into those turns it into expendable life.

While Agamben is emphasizing that the animalization of the human by the modern anthropological machine is entangled with racialization of the human (such as in the case of Jews), Kelly Oliver from the perspective of animal studies very importantly asks what the position of nonhuman animals is in such anthropological production – to which Agamben does not pay attention. In other words, Oliver argues that any biopolitical approach to life cannot pay attention to how racially marked lives are valued less without simultaneously paying attention to how the lives of nonhuman animals are undervalued and mistreated. She further suggests that the notion of the machine itself should be considered as playing part in the production of bare life by making distinctions between organic and technologized lives, which will be indeed be very useful in my close readings of the Gothic sci-fi biopolitics.

Another thinker, who does not associate himself with biopolitical thought, but has been discussed in relation to and aligned with critical insights into biopolitical governmentality by scholarship, particularly by Cary Wolfe, is Jacques Derrida.[17] It should be noted here, that Derrida in fact distances himself from biopolitical theory, and particularly from Agamben, whom he sees as misreading Foucault, in *The Beast and the Sovereign* Vol. 1. First of all, Derrida challenges Foucault's definition, and Agamben's follow-up, that biopolitics is a particularly modern phenomenon, which is not to say that he does not think there is "a specificity in the relations between the living beings and politics, in what these authors so

17. In Cary Wolfe, *Before the Law: Humans and Other Animals in a Biopolitical Frame* (Chicago: The University of Chicago, 2013).

calmly call 'modernity.'"[18] But more critically, he objects to Agamben's conceptual strategy of seeing an indistinction between bios and zoē as the defining characteristic of modern biopower, which he sees as absolutely ancient. Also, Derrida points out that Agamben is in fact quite inconsistent in the matters of periodization (unlike Foucault), as I already noted. On the one hand, his conceptualization of how sovereignty attaches to life reads as ahistorical, and on the other hand, he distinguishes between the ancient and the modern anthropological machine, while not positing a clear rupture between them but seeing them rather as different inflections, when he says that bare life "in the classical world was (at least apparently) clearly distinguished as zoē from political life (bios)."[19] Bearing in mind the tensions in periodization between Foucault, Agamben and Derrida, in this project which analyzes the 19th century materials, I wish to rely on the Foucauldian notion of biopolitics as tied to the emergence of the nation-state at the end of the 18th century, but also acknowledge that its apparatuses have a much longer historical trajectory, which goes to ancient politics, as both Agamben and Derrida discuss in their different ways. Within such framework I am able to draw on all three thinkers, following Wolfe's suggestion that Derrida's concepts are in very fruitful dialogue with the field of biopolitical theory.

When discussed at the intersection of biopolitics and animal studies by Wolfe, Derrida's concepts of the logic of carnophallogocentrism, and of the auto/immunitary logic of democracy are seen as particularly useful. In contrast to Agamben, who as I noted does not pay attention to the position of animal life in the anthropological machine, Derrida criticizes the humanist carnophallogocentric politics of eating, which entails a tacit sacrifice of animal flesh and violent practices towards animals, and which since the introduction of industrialized meat production has grown to massive proportions. Furthermore, Derrida conceptualizes the

18. Jacques Derrida, *The Beast and the Sovereign,* Vol. 1 (Chicago and London: University of Chicago Press, 2009). 434.

19. Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (Stanford: Stanford University Press, 1998). 126.

notion of auto-immunity to think democracy itself, according to which the state is defended from external threats, as well as internal ones, but also can turn against its own protective mechanisms. In this way, with Derrida we are able to see how the political vocabularies are frequently indistinguishable from biological and biomedical registers, when we analyse the politics of modern western nation-state. For this project this will be further fruitfully connected to another thinker of biopolitics, Roberto Esposito, who understands the paradigm of modern biopolitics as an immunization of proper race. In opposition to such racial politics, Esposito offers to think 'affirmative' biopolitics, which would value all life without making hierarchical distinctions between proper and improper kinds of living beings, thus pushing us to think biopolitics beyond human centrism. However, as Wolfe points out, such affirmative view does not acknowledge that distinctions between different kinds of lives, say a virus and a human, need to be and are being constantly made.

When understanding modern biopolitics as intricately entangled with humanism, as I suggest in this project, and the making of distinctions between human and nonhuman kinds of lives (animal-machinic, which intersects with racially marked, as discussed above), it is further illuminating to look at how what is understood as human agency is figured in relation to nonhuman agencies. That is, I find it useful in this project to put the idea of modern human-nonhuman biopolitics in dialogue with Bruno Latour's understanding of modern scientific-political worldview in *We Have Never Been Modern* (1993). He argues that ever since the 17th century, what he calls the "Modern Constitution" has associated political agency exclusively with humans, while all forms of nonhuman materiality, "things, or objects, or beasts, and the equally strange beginning of a crossed-out God, are "relegated to the sidelines,"[20] and understood in strictly mechanistic terms of cause and effect relations (rather than political agents). Latour considers such a modern scientific and political worldview to be

20. Bruno Latour, *We Have Never Been Modern* (Cambridge: Harvard University Press, 1993) 13.

anthropocentric, and proposes an alternative model in which what is understood as political agency is not located specifically in human actions, but rather in human-nonhuman actor networks, in what he calls political ecology. In this project on 19th century Gothic science fiction, it is useful to examine such Latourian distributions and redistributions between human and nonhuman agencies, and approach this through the notion of affect, i.e, look at how the re/distribution is performed through the affects particular to the Gothic sci fi genre. Rather than going extensively into the affect theory field, here I look at how specific affects can be seen to already play a role in the biopolitics of Agamben's bare life, on the one hand, and on the other hand, in the approaches of political ecology and environmental humanities, more particularly of Jane Bennett and Claire Colebrook. This allows us to see how specific affects add another layer to the human-nonhuman biopolitics: by either rejecting the threatening nonhuman agencies or welcoming them into the human.

One way in which Agamben's bare life as an indistinction between animality and humanity is delineated in the Gothic sci-fi is through Kristevan abject, a mixture of fascination and disgust. In this way, I wish to suggest, Kristeva in fact biopolitically undervalues what she conceptualizes as animality within the human, the agency of which needs to be banished. On the other hand, Jane Bennett articulates a theory of enchantment through affect, a mixture of disturbance and wonder, to discuss the ways in which agents in a Latourian non-humanist political ecology, influence and impact on (affect) other agents. From this, she proposes that nonhuman agencies, be it animals, plants, objects or environment, can affect human beings in such a way as to provoke their more sustainable and ethical actions towards other beings and the surroundings. A wish for redistribution between human and nonhuman agencies and for a challenge to the humanist worldview through affect, is suggested by Claire Colebrook when she asks whether human extinction can be thought beyond the mourning for human survival. She suggests that decentering human agency in the narratives of species extinction would

entail challenging the mourning and reading the wider environmental processes as not always already tied specifically to the human life. In this project I suggest that particular affects, which I analyse in the Gothic sci-fi genre, find their distinct place within the biopolitical theory, animal studies and environmental approaches, as I look at how they in the novels negotiate the human-nonhuman relations by either rejecting or welcoming nonhuman agencies, be it of animality or nature.

Finally, the theoretical intersections of biopolitical theory, animal studies and environmental humanities not only offer analytical tools for an analysis of humanist values inscribed in the modern state politics, but also aim at offering posthumanist alternatives that go beyond human-centric biopolitics. This entails rethinking animal and environmental ethics, as well as the human relationship to advanced technology, and Cary Wolfe connects all these threads well together when he argues that posthumanism

> comes both before and after humanism: before in the sense that it names the embodiment and embeddedness of the human being in not just its biological but also its technological world, the prosthetic coevolution of the human animal with the technicity of tools and external archival mechanisms… all of which comes before that historically specific thing called 'the human' that Foucault's archaeology excavates. But it comes after in the sense that posthumanism names a historical moment in which the decentering of the human by its imbrication in technical, medical, informatics, and economic networks is increasingly impossible to ignore, a historical development that points toward the necessity of new theoretical paradigms.[21]

Although the last fifty years of economic and scientific developments have particularly challenged what was thought as the exceptionality of the human, the human species has also always been imbricated in the wider biological and technological networks, and in this project indeed I look at how the classic Gothic sci-fi contains kernels for decentring human exceptionalism, in ways that anticipate the current issues of animal and environmental ethics, which have become recently some of the key questions of posthumanism.

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

Overview of the Crossovers of Gothic and Sci-Fi Studies, and Biopolitics, Ecocriticism, Animal Studies and Posthumanism

Scholarly literature on science fiction and Gothic fiction has since the 1980s been very extensive and versatile, and for the purposes of this project, I wish to give an overview of those scholars and arguments that are directly relevant for my framework here. Thus I focus on more recent scholars who have explored compatibilities and productive engagements between biopolitics, ecocriticism, posthumanism, animal studies, and Gothic and science fiction.

Sherryl Vint proposes that the genre of science fiction crucially tackles the increasing biopolitical management and control of all aspects of human biological life, when she writes that "understanding the speculative discourses of biopolitics is imperative, and sf is in a privileged position to help us think through its anxieties and contradictions."[22] She particularly has in mind the anxieties around reproductive technologies, pandemics, bioterrorism, or patented life. In another volume, *Animal Alterity: Science Fiction and the Question of the Animal* (2010), Vint establishes a firm link between sci-fi, biopolitics and animal studies, emphasizing that species difference is fundamental to the biopolitical capitalist regimes, and asking whether and how sci-fi might stage resistances to the governmentality that utilizes the species difference to make live and let die. Vint suggests that "sf and human-animal studies have much to offer one another – sf has a long history of thinking about alterity and the limits of the human which is precisely the terrain explored by much has, while has offers new and innovative ways to think about sf's own engagement with such issues, situating it within a material history in which we have always-already been living

22. Sherryl Vint, "Introduction: Science Fiction and Biopolitics" in *Science Fiction Film and Television* Volume 4, Issue 2 (2011):161.

with 'alien' beings.“[23] In this project I build on this perspective that suggests an intricate link between science fiction, biopolitics and animal studies, as they mutually inform and enhance one another in thinking about and challenging the constructions of alterity.

While Vint predominantly focuses on the 20th and 21st century fiction, Evie Kendal crosses historical periods in her approach to science fiction and biopolitics when she puts side by side *Brave New World* (1931), *Frankenstein* (1818) and *Gattaca* (1997). She reads them as technophobic cautionary tales, staging the threats of science and technology to what it means to be human and to humanity's freedom. These fictions are seen to stage a Foucauldian biopolitical control over the species' reproductive functions, which raises the question of who has the power to control human biology. She adds that science fiction has predominantly been preoccupied with the negative prospects of biopolitics: "sf has a distinct role to play in biopolitics but one that has only been fully exploited by one side of the technoscience political divide. As such, there exists an opportunity for engaging the public with more positive representations of future reproductive biotechnologies."[24] While thus frequently *Frankenstein* is explored as Shelley's representative sci-fi staging of biopolitical concerns, some scholars have also looked into her less known *Valperga* and *The Last Man* from a biopolitical perspective, and I explore the latter in this project. More particularly, reading these novels as staging the processes of biopoliticization through contagion, Ranita Chatterjee[25] argues that they anticipate Agamben's theory of the state of exception, where bare life is the fundamental principle of sovereignty, included through an exclusion, in the modern sovereign.

23. Sherryl Vint, *Animal Alterity: Science Fiction and the Question of the Animal* (Liverpool University Press, 2010), 2.

24. Evie Kendal, "Utopian Visions of 'Making People': Science Fiction and Debates on Cloning, Ectogenesis, Genetic Engineering, and Genetic Discrimination," in *Biopolitics and Utopia: an Interdisciplinary Reader*, ed. Patricia Stapleton and Andrew Byers (Palgrave McMillan, 2015), 108.

25. In "Our Bodies, Our Catastrophes: Biopolitics in Mary Shelley's *The Last Man"* in *European Romantic Review*, Volume 25, Issue 1 (2014): 35-49.

Recent scholarship has also brought attention not just to the compatibility of reading Romantic sci-fi through biopolitical approaches, but also of reading the Victorian Gothic sci-fi through the perspectives of biopolitics/animal studies. Mario Ortiz-Robles[26] argues that the monster figures of late Victorian Gothic authors, such as Bram Stoker, H.G. Wells and R.L. Stevenson, crucially represent the threat of animality in the post-Darwinian Victorian society. The figure of the monster occupies an indeterminate zone between the human and the animal, which draws attention to the biopolitical management of life and the creation of social categories such as race, and I follow on this suggestion in my close readings of Wells.

Ever since its emergence in the 1990s, the field of ecocriticism has paid special attention to Angloamerican Romantic literature and what they saw as the emerging Romantic ideas of ecology and nature. More recently the interest spread to Victorian writers as well, but also to the more specific genres of sci-fi and Gothic. Michael R. Page in *The Literary Imagination from Erasmus Darwin to H.G. Wells: Science, Evolution, and Ecology* (2012) points out a productive intersection of Green Romanticism and science fiction criticism, which informs also this project. As he argues, ecocriticism has since the 1990s showed the ways in which Romantics embraced the contemporary sciences and contributed to the developing cultures of science (rather than being averse to those, as it was thought by previous scholarship), and he proposes that, "at its core, science fiction is a form of Romanticism."[27] Page shows in his study that the issues of ecology and evolution that ecocriticism centered on in Romantic literature, can be engaged with productively in the sci-fi throughout the 19th century. Other recent scholarship focuses particularly on the Gothic from an ecocritical perspective, and Andrew Smith's and William Hughes's edited volume *EcoGothic* (2013)[28] is the first study to

26. Mario Ortiz-Robles, "Liminanimal: The Monster in Late Victorian Gothic Fiction" in *European Journal of English Studies*, Volume 19, Issue 1 (2015):10-23.

27. Michael R. Page, *The Literary Imagination from Erasmus Darwin to H.G. Wells: Science, Evolution, and Ecology* (Farnham: Ashgate Publishing Limited, 2012), 12.

28. Andrew Smith and William Hughes, *EcoGothic* (Manchester: Manchester University Press), 2013.

systemically look at this intersection. The authors point out that the images that ecocriticism has been exploring, that of wilderness, nature, or post-apocalypse, are also frequently constructed in the Gothic tradition, e.g., the images of North Pole in *Frankenstein,* etc., and my close readings will build on this suggestion.

Importantly for approaching Shelley's creature's vegetarianism, the novel has also recently been the focus of Jackson Petsche from the joint perspective of ecocriticism and animal studies.[29] More particularly, he proposes that the creature should be understood as a by-product of meat eating, as he is constructed partly from the nonhuman animal remains in the slaughterhouses. The fact that the creature is vegetarian becomes key for Petsche, and what is Gothic about the novel is not the staging of the supernatural, but rather challenging the tacit social acceptance of carnivorism.

Scholarship on posthumanism has engaged extensively with the genres of science fiction and Gothic. Elaine L. Graham proposes that in the age of the advanced digital, cybernetic and biomedical technologies, there are two crucial discourses that deal with and challenge our understandings of human identity and what it means to be human (and potentially posthuman): "Western technoscience (such as Human Genome Project) and popular culture (such as science fiction)."[30] Manuela Rossini argues similarly when she uses the notion of "imagineering" to refer to both bio and other technological developments and the imaginative work of science fiction. She proposes that science fiction is a mode crucial for "imagineering the post/human"[31]. With the term posthumanism, Rossini differentiates between popular and critical versions of it. Popular posthumanist discussion and representations reinscribe the

29. Jackson Petsche, "An Already Alienated Animality: *Frankenstein as a* Gothic Narrative of Carnivorism," in *Gothic Studies,* Volume 16, Number 1 (2014): 98-110.

30. Elaine L. Graham, *Representations of the post/human: Monsters, aliens and others in popular culture* (Manchester: Manchester University Press, 2002), 1.

31. Manuela Rossini, "Figurations of Posthumanity in Contemporary Science/Fiction – all tooHuman(ist)?," in *Revista canaria de estudios ingleses*, No.50 (2005).

liberal human subject through fantasies of the technological escape from embodiment, while critical posthumanist imagineerings aim not to reduce human identity to a single norm and see it always in its social and cultural context. Rossini explores the potentials of contemporary science fiction to critically stage human identity, i.e., to go posthumanist.

Ursula Heise in the essay "The Android and the Animal" proposes the same, but also situates contemporary sci-fi into a longer historical tradition of examining and challenging human identity, which is the route I take in this project. As she writes, ever since E.T.A. Hoffmann's *Sandman* (1816), through Shelley's and Wells's nonhuman creatures up till present day, science fiction has questioned what it means to be human in relation to android, alien or animal. As she points out, recently this questioning has found its theoretical trajectory in the fields of posthumanism, as "the philosophical questioning of the centrality of the human,"[32] as well as animal studies, as a reinvestment in how to rethink human identity in relation to the nonhuman animal, but relatedly also the cyborg in the context of advanced technological cultures.

As we see from the above brief overview, the existing scholarship has so far seen sci-fi and Gothic fiction studies as intersecting productively with the inquiries of biopolitics, posthumanism, as well as animal studies and ecocritical approaches. I will take from and build on the approaches this scholarship takes in my close readings of Shelley and Wells.

Outline of the Chapters

The following chapters are organized according to what I refer to as the Gothic sci-fi scenarios of human-nonhuman biopolitics, and understand as prominent, most representative

32. Ursula Heise, "The Android and the Animal" in *PMLA* (2009*)*: 504.

plot lines through which the relationships between humans and nonhumans are staged. I use the notion of scenario in the sense of generic plot lines particular to Gothic sci-fi, but also to suggest they have spread more widely throughout popular culture, and persist to unfold in contemporary fiction, film and other cultural production. I identify five key classic biopolitical scenarios around "the limits of the human": a technological creation of human life, the experience of horror/terror/ wonder at nonhuman agencies, human alienation from (human) nature, a disastrous extinction of the human species, and a biological invasion of the human self.

Chapter 1 looks into the scenario of the technological creation of non/human life in Shelley's *Frankenstein* and H.G. Wells's *The Island of Dr Moreau.* I suggest that this classic scenario is best read as setting into motion Agamben's anthropological machine, which produces a zone of less than human, racialized bare life. This life is delineated relatedly as animal/ized and mechanized form instead of a properly human life, as Oliver's insights help us analyze. While the human-nonhuman violent politics between Frankenstein and the creature, Moreau and the Beast-Folk drives the plots, the novels also stage points of critique of the production of bare life, which combine anti-colonial with vegetarian and anti-vivisectionist perspectives in *Frankenstein* and *Dr Moreau*, respectively. The novels can thus be considered as early articulations of concerns over un/ethical treatment of nonhuman animals. At the same time, these strategies end up reinscribing human embodiment as the measure for valuing nonhuman forms of life, as well as reinforcing the ideas of what is properly human.

Chapter 2 follows closely on the preceding chapter, looking at the scenario in which the production of Agamben's bare life as well as its critique in the two novels, is fuelled by the peculiar affects in the Gothic tradition, of horror/terror/wonder. By suggesting that bare life is delineated through abjection as conceptualized by Kristeva, I show how in both novels, horror and disgust signal an expulsion of a nonhuman threatening abject from human autonomy, be

it monster in *Frankenstein* or animal in *Dr Moreau*. I further suggest that the staged affective expulsions are entangled with affirming the modern scientific, and more particularly, mechanistic worldviews. On the other hand, the combinations of wonder/terror/horror also induce the alternative positions of vegetarianism and anti-vivisectionism, working in the manner that Jane Bennett proposes. That is, in *Frankenstein* the creature's wonder at the spirited and sentient nature, constructed as a non-scientific, non-Christian belief, is linked to his decision not to kill animals for food, while in *The Island of Dr Moreau* a surprising disturbance experienced by the narrator Prendick at the voice of animal pain leads to an anti-vivisectionist position.

In Chapter 3 I continue the thread of looking into affect, focusing this time on Shelley's *The Last Man*, Wells's *The Time Machine* and *The War of the Worlds* to argue that they stage alienation as an affect of loss of some authentic human attachment to either external (environment) or internal (embodied) nature. This scenario is imagined through either a disorientation of the human species in particular spaces, or a technological prosthesis on the human body, which I analyse utilizing concepts by Kelly Oliver and Claire Colebrook. Both Shelley and Wells situate the planet Earth and the human species on it in relation to wider cosmos, as well as imagine postapocalyptic deserted spaces, in order to disorient the human species from its assumed earthly home. In addition, Wells also imagines the possibility of future human bodies becoming so merged with their machinic prostheses that they alienate themselves from the supposed organic authenticity. The novels for the most part through alienation invest in reasserting the survival and centeredness of humans, and proper humanity, while still allowing for moments of destabilisation to surface. These issues anticipate contemporary concerns such as the overuse of digital technologies at the expense of face-to-face communication or the human pernicious effects on the environment.

In Chapter 4 I analyse Shelley's *Last Man*, and Wells's *Time Machine* and *The War of the Worlds* as a scenario of disastrous extinction, and thus anticipating contemporary concerns around climate change. I argue that they stage a nation-state ordering of human survival against the agency of nature, but also questioning nation-state politics in the face of a nonhuman threat. I explore the link between Agamben's state of exception and Ruth Miller's understanding of natural disaster by showing the ways in which a disastrous extinction posits the relations between humans and nature in terms of war, as well as exposes a constant drawing of boundaries between the so called state of nature and modern state. The issue at stake here is how to frame human violence, as the foregrounding of disastrous extinction raises the question of whether humans, due to their violence, have in fact deserved to be obliterated as a species. In response to this, the novels challenge nation-state politics and refashion a state citizen into a global citizen under the nonhuman threat. However, if we follow Colebrook's arguments, such cosmopolitanism invests in the human politics and form of life above everything else, rather than possibly opening politics towards nonhuman forces.

Chapter 5 builds on the previous insight into the vocabulary of human-nonhuman war in Shelley's and Wells's three novels, and looks at how it intersects with biomedical discourses. I look at the novels as a scenario of biological invasion in order to argue that they construct the biomedico-political borders of the human self against the biological other figured as invader. The discourses of immunity-as-defense against disease are entangled with figuring non-white bodies, and non-western spaces as the sources of counter-colonising infection. The link between the immunitary paradigm of western biopolitics and racialization, which Esposito identifies in his theories, also includes drawing distinctions between species. Wells' novels are read through the lens of the Derridean auto/immunitary protection, as well as the tacit acceptance of the sacrifice of animal flesh in the logic of carnophallogocentrism. On the other hand, Shelley's narrative of biological invasion manifests a possibility of what Wolfe

understands as a necessary movement between an affirmative biopolitics towards other and a closure through which an organism sustains itself, i.e., between unconditional and conditioned hospitality, in Derridean terms. The 19th century sci-fi scenario of invasion anticipates the current concerns around pandemics or ecological im/balances. Let us look now more closely into the outlined five key Gothic sci-fi scenarios of human-nonhuman biopolitics in the following pages.

Chapter 1: Technological Creation of the Non/Human

Introduction

Modern western science fiction has since the beginning of the 19th century till the present day been populated with androids, i.e., technologically produced creatures that possess humanoid consciousness, who have persistently blurred the assumed boundary between what is human and what is nonhuman, and questioned what is considered authentic humanity. Not only have they questioned, but indeed threatened humanity, as the plots commonly lead to violent relations and the necessity to defend human uniqueness from what is delineated as a nonhuman element. In this chapter I wish to look at this scenario as it emerged in the early sci-fi works, Mary Shelley's *Frankenstein* and H. G. Wells's *The Island of Dr Moreau*, by relying on biopolitical and animal studies approaches. Utilizing these theories, I argue that the classic scenario of a technological creation of the non/human stages a human-nonhuman biopolitics by setting in motion Agamben's anthropological machine, which produces a zone of less than human, expendable bare life, which is delineated as animal and mechanized forms instead of a properly human life.

The scenario of the technological creation of man marks, according to many science fiction scholars from Brian Aldiss in 1973 up to Michael Page in 2012, the beginning of the modern sci-fi itself,[33] as Mary Shelley is seen to rework the earlier Gothic literary tradition and the biblical creation story into an encounter with modern science. She subtitled her novel *The Modern Prometheus,* reframing the ancient figure of Prometheus who in Ovid's *Metamorphoses* attempts to animate a man of clay, and in Aeschylus's version steals fire from the gods, within a myth of modern scientific progress. The literary fiction both channelled and

33. See Brian Aldiss, *Trillion Year Spree: The History of Science Ficton* (London: Paladin Grafton Books, 1986), Michael R. Page, *The Literary Imagination from Erasmus Darwin to H. G. Wells* (Farnham: Ashgate, 2012).

contributed to the shaping of this cultural myth. The Prometheus figure of a creator and a defier of authority was throughout the 19th century, which saw the institutionalization and legitimization of science from Shelley (1818) to Wells (1896), cast as a natural scientist who was able to create life through scientific method and practice. Also, as science fiction scholar Darko Suvin argues, modern Prometheanism should be read not only as a scientific-secular, but also political narrative in which the scientific animation of human life stands metaphorically for emancipatory politics of the lower and oppressed classes in the European post-Revolutionary context.[34] We can thus read Shelley's and Wells' novels as staging science and politics in crisis: the technologically produced creatures end up as botched experiments, the "non-humans" who threaten humanity proper and can be killed with impunity, as the key issues become how to manage and control technological creation and how to value the autonomy of such created life. While the human-nonhuman violent politics between Frankenstein and the creature, Moreau and the Beast-Folk can be said to drive the plots, the novels also stage points of critique of the production of bare life, which combine anti-colonial with vegetarian and anti-vivisectionist perspectives in *Frankenstein* and *Dr Moreau*, respectively. These novels can therefore be considered early articulations of the concerns around un/ethical treatment of nonhuman animals, in a sci-fi trajectory which continues to unfold in contemporary popular films. To analyse Shelley's and Wells's human-nonhuman politics, I utilize biopolitical and animal studies insights, and more specifically, Giorgio Agamben's concept of the anthropological machine which produces human/animal distinctions, Kelly Oliver's take on Agamben which emphasizes the role of the machine in the biopolitical binaries, Haraway's views on animal and cyborg politics, as well as Derrida's views on vegetarianism and animal suffering.

34. Darko Suvin, *Metamorphoses of Science Fiction* (New Haven and London: Yale University Press, 1979), 128-9.

Before I examine the novels closely, let me briefly outline the 19th century intersecting trajectories of the legitimisation of science, emerging views in the life sciences, and the evolutionary and anthropological theories, which co-construct the classic scenario of modern Prometheus. As Martin Willis has shown,[35] science was throughout the 19th century gaining legitimacy and becoming increasingly institutionalized only in the 1870s. Simultaneously, popular interest in science was rising and the 1890s saw the early emergence of a literary market and generic expectations for the so called scientific romances. Science was forging itself as respectable by drawing the lines of amateurism/professionalism, magic/naturalism, science/pseudoscience. In such a yet unstable context, views and practices developed that fuelled the literary imagination of a technological creation of life. Shelley's story marks a turn towards the possibility of creating a biological organism rather than a mechanical automaton, which the 18th century builders were constructing. Her creature is based on the principles of chemistry, physiology and the understanding of electricity as a possible 'spark of life'. Luigi Galvani, whom she references in the novel's Introduction, speculated at the time whether a corpse could be brought back to life with electricity, and experimented with running electrical charges through dead frogs. Frankenstein relied as much on electricity as on anatomy, and collected cadavers from both dissecting rooms and slaughterhouses. By the end of the century, Dr Moreau vivisects live animals in order to create humans, and his scientific method is that of a surgeon and physiologist, and additionally a hypnotist. The scientific practices in the novels are represented as controversial. Frankenstein's practice negotiates with the older European traditions of alchemy, which was being delegitimized as magic, while in the 1890s Wells's novel reflects on the public discussion in Britain about the cruelty of animal vivisection.

35. Martin Willis, *Mesmerists, Monsters and Machines: Science Fiction and the Cultures of Science in 19th Century* (Kent: Kent State University Press, 2006).

The 19th century science/fiction of creating life was also informed by evolutionary theories. Linneaus's view of a coherent order in which each species is determined and fixed in its place gave way to Lamarck's dynamic view of species development from simpler towards more complex forms and the passing on of the acquired characteristics. Erasmus Darwin, who influenced Shelley, argued in the 1790s for the mutability of humans and placed them within the system of sexual selection. Instead of the Newtonian idea of universe as a giant clockwork set in motion by God, Darwin endorsed a view of sentient organic interconnections spread throughout the living nature.[36] Erasmus's ideas anticipated those of his grandson's in *The Origin of Species* (1859), who gathered abundant evidence to support them. Evolutionary theories displaced the biblical creation, but Darwin still saw human morality and natural evolution as interlinked in the trajectory of progress. On the other hand, his staunch supporter T. H. Huxley, who was H. G. Wells' teacher in the 1880s, saw the natural processes as amoral and separated from human consciousness, which strives for moral progress.

Since the Enlightenment, racial theories were interconnected with the views on the development of humanity. In the context of the European overseas travel and colonisation of the Amerindians, Rousseau proposed a rather ambivalent theory of human development from the primordial, through the primitive towards the civilized state. Civilization was seen as progressive but also had corrupting effects, as he painted pre-civilized humans as naturally good. The Enlightenment views shifted post-Darwin into the emerging anthropological theories, such as E.B. Tylor's in the 1870s, which posited a progressive development of humans from savagery through barbarity towards the European civilized man. These categories frequently underpinned the European imperialist practices, which channelled into the emerging genre of scientific romance. Sci-fi scholar John Rieder argues that Wells's representation of the Beast People "darwinizes" Shelley's depiction of the creature in the

36. In Edward S. Reed, *From Soul to Mind: The Emergence of Psychology from Erasmus Darwin to William James* (New Haven and London: Yale University Press, 1997), 57.

trajectory of racial concerns around creating life.[37] It is racial, but also class issues, that contributed to shaping the modern Prometheus myth. The (botched) creation of (non)human life unfolds around the Malthusian concerns of how to control species reproduction. Malthus was critical of William Godwin's (Shelley's father) views on progress and argued in *An Essay of the Principle of Population* (six editions, 1798-1826) that, due to the scarcity of economic resources, the population needs to be kept in check, either through wars, famine, or birth control, and he thought that particularly the working classes need to be controlled. Such concerns by the end of the century transmuted into eugenicist thinking.

The briefly outlined threads of the institutionalization of science, the developments in life sciences, evolutionary and racial views, and the anxieties around population control, all co-constructed the classic sc-fi scenario of android creation. How and why this scenario so persistently till today keeps ending up in a botched production of a nonhuman life which needs to be eliminated is what I propose to examine next.

Keep the Anthropological Machine Running

From the moment of reanimating the assembled pieces of corpses in his workshop throughout the rest of the novel, Victor Frankenstein refers to the life he has created by the terms of creature, devil, insect, daemon, monster or fiend, which are intended to signal its non- or not enough humanity and therefore a failure of the experiment. The creature is indeed repeatedly socially rejected by humans, initially by Frankenstein, but subsequently by everyone he encounters, even in the case when he saves somebody from drowning. Everybody he meets is simply horrified by his looks, as he is stitched together from dead bodies, but beyond disgust,

37. John Rieder, *Colonialism and the Emergence of Science Fiction* (Middletown: Wesleyan University Press, 2008), 106.

tries to attack and harm him with a complete sense of impunity even before the creature attempts to speak. This is why he eventually decides to revenge for his miserable isolation and kills the family members and friends of Frankenstein. The violent scenario between Frankenstein, other people, and the creature is based on the socially accepted norms of human embodiment, which work to delineate distinctions between no less than a member of the human species and that which is not. The creature voices this distinction, and the resulting violence, himself when he keeps re-asserting that on the inside, he is in fact a human being:

> Believe me, Frankenstein: I was benevolent; my soul glowed with love and humanity: but am I not alone, miserably alone? You, my creator, abhor me; what hope can I gather from your fellow creatures, who owe me nothing?[38]

> I am malicious because I am miserable. Am I not shunned and hated by all mankind? You, my creator, would tear me to pieces, and triumph; remember that, and tell me why I should pity man more than he pities me? You would not call it murder if you could precipitate me into one of those ice-rifts, and destroy my frame, the work of your own hands.[39]

The creature asserts that he is indeed a human being, but due to the repeated acts of social rejection and abhorrence at his looks, he has become an outcast from the human society and actually rendered "nonhuman". That is, he understands that he is delineated as "nonhuman" by other humans, who would attempt to kill him and not consider that a murder. It is illuminating to approach such delineation, which polices who/what counts as authentically human and who/what does not, with Agamben's concept of the anthropological machine. We could argue that Frankenstein's scientific creation and the subsequent visual delineations of the creature's non/humanity, do the work of the anthropological machine, as Agamben understands it. The less than human creature embodies Agamben's bare life, which can be killed with impunity. Let us look closer into these biopolitical conceptualizations.

38. Mary Shelley, *Frankenstein* (Hertfordshire: Wordsworth Editions, 1999), 78.
39. Shelley, *Frankenstein*, 111.

Agamben builds on Michel Foucault's concepts of biopolitics, defined in the first volume of the *History of Sexuality* (1976), as the modern ways of governmentality developed towards the end of the 18th century which increasingly aim to manage what is understood as the natural or biological life.[40] The modern state becomes interested in managing not just individual bodies through disciplinary techniques, but also in managing a state population through various regulatory mechanisms such as birth and mortality rates. Drawing on Foucault's understanding of biopolitics, Agamben in *Homo Sacer* (1998) looks at the legal ways through which life is included in a sovereign, drawing a historical trajectory from the Roman figure of *homo sacer* up to the modern biopolitical citizen. Agamben refers back to Pompeius Festus, who wrote of *homo sacer* as someone who could be banished from the Roman city-state: "the person whom anyone could kill with impunity was nevertheless not to be put to death according to ritual practices."[41] In this way the figure was, as Agamben argues, included in the legal order through a double exclusion – included in the human law through a possibility to be killed but not murdered, and included in the divine law through an impossibility to be sacrificed. This relation of "included exclusion" is what Agamben reads as the fundamental operation through which sovereign law attaches itself to life – ban or abandonment.

> *The sovereign sphere is the sphere in which it is permitted to kill without committing homicide and without celebrating a sacrifice, and sacred life – that is, life that may be killed but not sacrificed – is the life that has been captured in this sphere.* [42]

40. See Michel Foucault, *The History of Sexuality: Volume 1, An Introduction* (New York: Pantheon Books, 1978).

41. Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (Stanford: Stanford University Press, 1998), 72.
This figure is then both similar and different from the Greek figure of *pharmakos* or scapegoat whose political function in the Greek city Derrida discusses in "Plato's Pharmacy" (In *Dissemination*, London: The Athlone Press, 1981, 130): "The *evil* and the *outside*, the expulsion of the evil, its exclusion out of the body (and out) of the city – these are two major senses of the character and of the ritual." While Greek *pharmakos* and Roman *homo sacer* are similar insofar as both can be killed with impunity, the difference is that *pharmakos* can be ritually sacrificed, as Derrida discusses, while *homo sacer* cannot, as Agamben discusses. For Agamben, the detail of unsacrificability is crucial because it leads him to conceptualize sacred or bare life as defined through an included exclusion, from both human and divine laws – as I explain further in the text above.

42. Agamben, *Homo Sacer*, 83. Italics in the original.

This legal abandonment produces what Agamben calls the zone of sacred or bare life, life which can be legally killed, and this is why he reads western biopolitics essentially as thanatopolitics. For him, modern state is marked by an increasing relentless inclusion of bare life as a biopolitical citizen, which is manifested most forcefully through biological racism.

The ways in which bare life is produced as an included exclusion in *spatial* terms as a relation between life and polis, correlates for Agamben with an *anthropological* relation – of an included exclusion of a nonhuman element within the human. The *homo sacer* figure is thus also that of a wolf-man or werewolf (wargus), that is banished from the city into nature, and considered supposedly closer to a "state of nature". As Agamben argues, this kind of life is neither human nor animal, man nor wolf, but rather a zone of constant shifting between the two, which a sovereign decision produces by rendering *homo sacer* less than human: "Yet this life is not simply natural reproductive life, the *zoē* of the Greeks, nor *bios*, a qualified form of life. It is rather, the bare life of *homo sacer* and the *wargus*, a zone of indistinction and continuous transition between man and beast, nature and culture."[43] In *The Open* (2004), Agamben uses the term "anthropological machine" to refer to these political operations through which a sovereign renders some life less than human, closer to animal or nature, and therefore expendable or "bare". Again, he traces this in western thought historically, going back to Aristotle's divisions between vegetative, animal and human forms of life, which pass as shifting boundaries within the human. In the historical trajectory, Agamben distinguishes between the ancient and the modern anthropological machine. While the ancient machine works through an inclusion of the outside and humanizes the animal (his examples are slave or barbarian as figures of an animal in the human form), the modern machine works through an exclusion of the inside (from both the human and the polis), animalizing the human (the examples of Jew, or a comatose patient). What the constant spatial and anthropological

43. Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (Stanford: Stanford University Press, 1998), 109.

articulations produce is an element suspended between humanity and nonhumanity, and rendered expendable as less than human, while the human is considered the highest political value in the modern philosophies and politics of humanism. For Agamben, the crucial political question is how to stop the anthropological machine of humanism, i.e., stop the production of a less than human bare life.

Agamben further argues that the modern anthropological machine since the time of Linneaus in the 18th century defines humans as the biological species *Homo Sapiens* through nothing else but a sheer ability to recognize itself as human in order to be human – through self-knowledge. Rather than being clearly defined as some substance or essence in opposition to the animal in the biological discourse, the human emerges through "a machine or device for producing the recognition of the human." This device for producing human mis/recognition in the animal crucially operates through vision: "It is an optical machine constructed of a series of mirrors in which man, looking at himself, sees his own image always already deformed in the features of an ape."[44] This means that historically, since Linneaus's taxonomy and developing in the 19th century evolutionary discourses, the human is distinguished from the ape on the basis of its own visual mis/recognition as human, which is therefore a continuously negotiating operation.

Frankenstein manifests Agamben's understanding of the modern scientific anthropological machine as optical. That is, the botched scientific production of a human is very tightly coupled with the acts of visual perception, through which Frankenstein and other humans repeatedly throughout the novel reject the creature from human society. Mis/recognizing the creature visually as a non/human is what is unbearable and delineates him instantly as a member of a monstrous nonhuman species, regardless of his utterances or actions:

44. Giorgio Agamben, *The Open: Man and Animal* (Stanford: Stanford University Press, 2004), 27.

> […] by the dim and yellow light of the moon, as it forced its way through the window shutters, I beheld the wretch – the miserable monster whom I had created. He held up the curtain of the bed; and his eyes, if eyes they may be called, were fixed on me. His jaws opened, and he muttered some inarticulate sounds, while a grin wrinkled his cheeks. He might have spoken, but I did not hear; one hand was stretched out, seemingly to detain me, but I escaped and rushed downstairs. I took refuge in the courtyard belonging to the house which I inhabited;[45]

In this scene of the anthropological production, which takes place in the night of the creature's animation, Frankenstein cannot bear to "behold" the life he has created and therefore rushes out of the room in horror completely dismissing the creature's attempts at communication. In an Agambenian way, he can be said to simultaneously recognize the creature as human, and therefore similar to himself; *and* misrecognize it as nonhuman monster, thereby affirming his own unique difference. In other words, the optical anthropological machine is set in motion to reassert Frankenstein's humanity as he stumbles out of the room having recognized his own deformed reflection in the creature's face. As there is no clear-cut definition of essential humanity in the biological understanding of species, Frankenstein performs the knowledge of self as human by visually mis/recognizing a member of a monstrous species.

A trajectory of the optical function of the anthropological machine continues in *The Island of Dr Moreau.* Here Dr Moreau, expelled from London to a Pacific island due to his controversial practices, vivisects live animals in order to, through grafting, create human beings out of them (and thereby speed up the evolutionary process, as he understands it). Moreau's scientific practice is unsuccessful as it repeatedly produces non/humans, i.e., human/animals, but it is also coupled tightly with an optical operation by the narrator Prendick, who keeps mis/recognizing the humans on the island for animals while he is not yet aware what Moreau is actually doing. It is through Prendick's acts of visual perception that

45. Mary Shelley, *Frankenstein* (Hertfordshire: Wordsworth Editions, 1999), 46.

the reader is first introduced to the ambivalence of the Beast Folk, i.e., the human-animal confusions on the island:

> Suddenly, as I watched their grotesque and unaccountable gestures, I perceived clearly for the first time what it was that had offended me, […] Each of these creatures, despite its human form, its rag of clothing, and the rough humanity of its bodily form, had woven into it, into its movements, into the expression of its countenance, into its whole presence, some now irresistible suggestion of a hog, a swinish taint, the unmistakable mark of the beast.[46]

Prendick in this scene performs a visual mis/recognition of his own humanity in the "humanimals" in front of him, by finding it "offensive" that the boundary between humans and animals is so porous and unstable. In other words, this suggests that the boundary constantly needs to be re-asserted and policed. The scene occurs before he is yet aware of Moreau's actual practice, and afterwards he will first assume that Moreau is animalizing humans, before finding out that it is the other way around. The humanization of animals and the animalization of humans are in fact blurry throughout. It turns out that Moreau's persistent attempts to sculpt a human being out of animal bodily parts keep failing and end up in populating the island with the bare lives of reject Beast Folk, as the produced specimen quickly "revert" back to their animal roots. In the ensuing violence on the island, Moreau is killed by one of his experimental subjects, while Prendick eventually manages to escape the island. His mis/perceptions of humanity in animality could be then understood as specific to the particular context of the island, but more interestingly from an Agambenian point of view, is that he keeps seeing animals in the London citizens when he eventually returns back to England:

> I would go out into the streets to fight with my delusion, and prowling women would meow after me, furtive craving men glance jealously at me, weary pale workers go coughing by me with tired eyes and eager paces like wounded deer dripping blood, old people, bent and dull, pass murmuring to themselves and all unheeding a ragged tail of gibing children.[47]

46. H. G. Wells, *The Island of Dr Moreau* (London: Penguin Classics, 2005), 68.
47. Wells, *Dr Moreau*, 150.

The novel in fact ends on this note, of Prendick's visual mis/recognition of the human in the exhibited range of presumably animal characteristics and behaviours, which is deeply unsettling for him. Such Prendick's optical delineations are based on Wells' particular take on Darwin's evolutionary theory as a possibility of reversion of the human species back to animals/ity. It is not only Moreau's rejects, carved out of animal tissue, who quickly revert to their roots on a contained island, but it is also "proper" members of the human species, London citizens, who are similarly at a constant peril from the lurking inner animality.

Besides vision, another crucial element of the anthropological machine which produces bare life is space, in the sense that bare life frequently populates very specific spaces. As we saw above, *homo sacer* is expelled to the outskirts of the Roman city-state, where he, supposedly closer to animality himself, is spatially within the space of nature (which supposedly is not included in the human law, but in fact is, through the very exclusion from the properly social space). In modernity, for Agamben, the paradigmatic biopolitical space where the racialized bare life is produced on a massive scale is the concentration camp in the Nazi regime. However, we could also easily think of the spaces of a detention or refugee camp, where bare life might not be directly killable (as it was for Nazi), but often it can be said to be "let to die", to use Foucault's expression.

Indeed, the creature in Shelley and the Beast People in Wells inhabit very particular spaces. The repeating acts of vision through which each human the creature encounters mis/recognizes him as non/human correlate with the creature's banishment from the city. To follow Agamben's arguments, we can say that the human law of the city, i.e., Ingolstadt where the creature is created or Geneva, around which he tracks down Frankenstein, applies to the creature only through an "included exclusion". The creature is included within the city only through a possibility to be excluded from it and potentially killed with impunity by everyone else. In this sense he is banished as bare life both anthropologically (from the human

as a species) and spatially (from the city of humans). The creature is abandoned to roam the sublime Alpine scenery outside Geneva, where Victor will eventually meet him and hear about his banishment:

> The desert mountains and dreary glaciers are my refuge. I have wandered here many days; the caves of ice, which I only do not fear, are a dwelling to me, and the only one which man does not grudge. These bleak skies I hail, for they are kinder to me than your fellow-beings.[48]

The creature embodies the expulsion of *homo sacer* to the outskirts of the polis as he inhabits the natural landscapes that no other humans populate. The spatial banishment of Frankenstein's creature outside Geneva continues a trajectory into the space of a colonial island in *Dr Moreau*, on the outskirts but at the very heart of the British imperial rule. The exact location of Moreau's island, to which he relocated from London, is mysteriously unknown to the reader, but we do know that it is on a sea route from Arica, Chile to Hawaii, somewhere in the South Pacific Ocean. The containment of human/animal bare life in this particular space, which is simultaneously excluded (through its position on a far-away margin) and included in the state (which depends on the resources from the colonies) can be said to in fact prefigure the Nazi containment of racialized bare life in the concentration camp. In fact, in such a trajectory, Moreau's practices of animal vivisection, and Prendick's suspicion of human vivisection, could be said to prefigure the Nazi medical experimentation on human bare life. If for Agamben, the paradigmatic biopolitical space of the modern nation-state is the concentration camp, we could say that another paradigmatic biopolitical space which prefigures (and leads to) the 20th century wars is the colony, in which racialized bare life is contained (I discuss in more detail below how Wells' human/animal bare life is intricately entangled with racial discourses). Historically, tropical islands such as Mauritius and St. Helena for example, colonized by the European powers, played a significant role in the Enlightenment scientific experiments. That is, they were early ecological laboratories,

48. Mary Shelley, *Frankenstein* (Hertfordshire: Wordsworth Editions, 1999), 78.

microcosms in which colonial scientists could experiment with various animal species and land cultivation practices.[49] Moreau's island is precisely one such laboratory that produces bare life spatially, as an included exclusion of a colonial island within the imperial state.

Expendable Animal-Machines

While Agamben's theory shows how the scientific-political articulations of the human position primarily some humans as killable by rendering them closer to animality, scholars have also asked the question how this positions the lives of nonhuman animals. Kelly Oliver, discussing Agamben's concept of the anthropological machine in *Animal Lessons: How They Teach Us to Be Human* (2009), argues that in the trajectory of western philosophical discourses, Agamben is silent on the issue of what she terms "animal sacrifice." For this notion, she draws significantly on Derrida's views on the politics of eating in the interview "Eating Well" (1991), as well as on animal suffering in "The Animal That Therefore I Am (More to Follow)" (2008), which will be discussed later in the chapter. Oliver explicates that, "on the conceptual level *the animal* is sacrificed for *man,* and on the literal level, animals are sacrificed for the sake of men."[50] She identifies persistence in devaluing animal life and animality in the conceptualizations of the human/animal distinctions in western philosophies, and points out that Agamben does not voice this issue in his critique of bare life, thereby re-inscribing the taken-for-granted animal sacrifice in his own text. Furthermore, the philosophical devaluations of animality can be read as entangled culturally with the actual violent practices towards nonhuman animals, such as factory farming or animal

49. As Richard H. Grove has argued in *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1800* (Cambridge: Cambridge University Press: 1996).

50. Kelly Oliver, *Animal Lessons: How They Teach Us to be Human* (New York: Columbia University Press, 2009), 2.

experimentation. Therefore, she proposes that in fact slaughterhouses or animal labs are following the same biopolitical logic as the concentration camps.

Another important point Oliver raises in relation to Agamben's anthropological machine is whether the concept of the machine itself might fuel into the human/animal distinctions.[51] While Agamben discusses the machine in terms of the technological manipulations on life, such as in biomedicine or more ominously, in the concentration camp, the machine can be also understood in the sense of mechanization of life. Oliver suggests this can be closely coupled with animality, as in the Cartesian animal-machines, which were seen as merely reacting to stimulus, and not experiencing pain in the way that humans do, as they were assumed not to possess souls (and therefore minds). Descartes was among the modern pioneers of the practice of animal vivisection on the basis of such understandings. Another way of how the concept of the machine might be entangled with the human/animal distinctions is, Oliver argues, when humans and animals are understood as organic, living bodies in opposition to machines and technology.

With the above tools we can examine how the production of bare life in *Frankenstein* and *Dr Moreau* is indeed entangled with the assumptions about animal life or animality, as well as mechanized life or the machinic, as being less valuable than "proper" human life. The creature as well as the Beast People could be seen as represented in the way of Cartesian animal-machines, which could be "sacrificed", to follow Oliver's argument. As Bruce Mazlish argues, Shelley's *Frankenstein* is "straddling both biological and mechanical fears" around what is understood to be other to the human self.[52] The terms that Frankenstein uses to refer to the life he created, of monster, creature, insect, devil, and demon, shift meanings

51. Kelly Oliver, *Animal Lessons: How They Teach Us to be Human* (New York: Columbia University Press, 2009), 237.

52. Bruce Mazlish, "The Man-Machine and Artificial Intelligence," In *SEHR*, Volume 4, Issue 2 (1995). Accessed November 1, 2016. http://web.stanford.edu/group/SHR/4-2/text/mazlish.html

between biological, animal organisms and evil spirits. He is imagined as a product of technological innovation, and not of sexual reproduction, which continues on the 18th century tradition of building mechanical automata and showcasing them around the European cities. All of the above meanings come together in the making (sense) of the creature: an animation by a vital spark of electricity of a sentient, living organism (which is attuned to Erasmus Darwin's organicist view of nature), but coming out of a longer trajectory of building mechanical toys (on the principles of Newtonian physics, and a Cartesian view of body as a machine, which is infused with soul in the case of humans).[53] We can read this from Shelley's description of the famous dream which inspired the story in the 1831 Introduction to the novel: "I saw the hideous phantasm of a man stretched out, and then, on the working of some powerful engine, show signs of life, and stir with an uneasy, half-vital motion."[54] In this description the created being is described as a biological organism, but also phantasm or ghost, while he is also twitching mechanically powered by an engine rather than through organic motion. The desired "humanity" is never achieved as Frankenstein considers his experiment a complete failure. The way in which Frankenstein understands the experiment to be a failure, I suggest, is by seeing the product as a Cartesian animal-machinic body, infused with an evil spirit. Seeing the creature as machinic in a Cartesian sense would also mean as less sentient than humans, and this unfolds as he is repeatedly hurt physically and rejected socially by other humans, who seem to be completely oblivious to his capacities for sentience (and register only his monstrous appearance). In opposition to that, the creature consistently throughout the novel keeps reasserting his capacity to feel both physical and emotional pain:

53. According to Bellamy Foster, scientific materialism, speaking broadly, at the turn of the 19th century took two forms: of mechanism, which was often integrated with a divine spirit beyond nature; and of sentient organism, which was understood either as vitalism (emphasizing life force in nature) or pantheism (emphasizing deity). Both mechanism and vitalism tried to explain nature in strictly physical terms, and were prone to fall back on spiritual frameworks. In *Marx's Ecology: Materialism and Nature* (New York: Monthly Review Press, 2000), 26.

54. Mary Shelley, "Author's Introduction," in *Frankenstein* (Hertfordshire: Wordsworth Editions, 1999), 4.

> I had saved a human being from destruction, and, as a recompense, I now writhed under the miserable pain of a wound, which shattered the flesh and bone. The feelings of kindness and gentleness which I had entertained but a few moments before gave place to hellish rage and gnashing of teeth.[55]

The creature consistently fashions himself as a sentient, biological organism with the same capacity for pain/pleasure as human organisms, in opposition to being rendered animal-machinic, which is only supposed to react and not feel pain in the way that humans do as it is not infused with human soul.

The trajectory of figuring bare life as animal-machinic continues in *Dr Moreau.* Here what Oliver refers to as animal sacrifice is glaringly foregrounded, as Dr Moreau repeatedly performs vivisection on animal bodies. The practice is, however, considered controversial within the scientific circles in London, and Moreau is expelled from the capital and needs to continue his experiments on a remote and isolated colonial island. The animal sacrifice Moreau performs is a violent intervention into animal bodies, based on the undervaluing of animal life, which is supposed to propel scientific research (in a trajectory in which Frankenstein pursues his experiment as the vanguard of scientific research). The bodies of nonhuman animals and the created Beast People, suspended between humanity and animality, are expendable materials for and rejects of the unsuccessful experiments. These lives are technologically grafted (rather than sexually reproduced), but also mechanized when Moreau proclaims, to justify his practice to the narrator Prendick, that not all living flesh, not plants and not all animals feel pain (which echoes Descartes' 17th century views on animal vivisection):

> Plants do not feel pain; the lower animals – it's possible that such animals as the starfish and the crayfish do not feel pain. Then with men, the more intelligent they become the more intelligently they will see after their own welfare, and the less they will need the goad to keep them out of danger. I never yet heard of a useless thing that

55. Shelley, *Frankenstein*, 108.

> was not ground out of existence by evolution sooner or later. Did you? And pain gets needless.[56]

Moreau argues that from an evolutionary perspective, for which he claims to stand, in a nature understood as a "vast, pitiless mechanism,"[57] the pain of all living organisms, human and animal, eventually becomes needless. In this way he can be said to build on a Cartesian view of nature as mechanism and update it within an evolutionary framework. Wells was informed here by T. H. Huxley's views that cosmic evolution and the evolution of human morality are separate, and therefore nature could be seen as oblivious to human morals. Adding to this understanding, Wells in the novel paints nature as a remorseless mechanism, emptied of a Cartesian God who set it in motion, and oblivious to organisms' pain and pleasure, until eventually pain is erased from nature altogether. Nevertheless, for the time being, the pain of some organisms, that of nonhuman animals, is more expendable than that of others, and can be experimented on by Moreau who sees himself as a scientific accelerator of evolutionary progress. In this way Moreau performs what Oliver calls animal sacrifice on the island crucially by casting his experimental subjects as animal-machines, not by assuming that they do not feel pain, while still assuming that lower animals do not, but by casting their pain as redundant in the natural/scientific path of progress.

As we see, the production of Agamben's bare life in Shelley and Wells, as a delineation of less than human life, involves drawing boundaries between humans and animal-machines, in the way that Oliver points out. The technologically created, animal-machinic lives are devalued and can be harmed with impunity (the creature) or sacrificed for the sake of scientific progress (Moreau's guinea pigs). Similarly to Oliver, Donna Haraway has written about these distinctions as specific to modern western humanisms, and entangled with the historical practices of violence and domination towards who/whatever gets to be figured as

56. H. G. Wells, *The Island of Dr Moreau* (London: Penguin Classics, 2005), 97.
57. Wells, *Dr Moreau*, 117.

other than the defined human. She refers to the modern humanist binaries as "Great Divides", taking this notion from Bruno Latour,[58] and lists all those who have historically been figured on the "other" side of the binary to the human: "gods, machines, animals, monsters, creepy crawlies, women, servants and slaves, and noncitizens in general."[59] As she claims, this othering is entangled with divisions between the organic and the technological, and various organo- and techno- philias and phobias associated with this. In opposition to this, Haraway has continuously attempted to challenge the human/animal, human/machine, and organic/technological boundaries. In "A Cyborg Manifesto" (1985) she calls for the politics of confusion of boundaries between the human and machine, organic and technological, embodied by the cyborg figure, while in "The Companion Species Manifesto" (2003), she calls for ethics toward nonhuman animals based on the situated embodied relations between the companion species. Such politics would challenge the expendability of life figured as animal-machinic and technologically created, as articulated in *Frankenstein* and *Dr Moreau,* and I look below at the possible critical perspectives on bare life in the novels. These critiques are interlinked with a questioning of colonialism, and therefore let us first look into how the bare lives in the novels are also shaped by the colonizing/racializing discourses.

Racialized (Noble) Savages

Agamben claims that the difference between the ancient and modern politics is the increasing and ever more totalizing politicization of human biology or animality. He quotes Foucault on the difference between the politics of ancient Greece and modern state: "For millennia, man remained what he was for Aristotle: a living animal with the additional capacity for political

58. Latour argues in *We Have Never Been Modern* (1993) that western modernity, which he dates from the 17th century, is invested in two sets of practices and discourses: a purification, and a subsequent hybridization, between nature and culture, the natural and the social world.

59. Donna J. Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008), 10.

existence; modern man is an animal whose politics calls his existence as a living being into question."[60] The way in which both Foucault and Agamben understand this biopoliticization of man as a living being to happen is through modern state racism. Agamben emphasizes that the modern discourses of ethnic/racial heritage or hereditary diseases unleashed a thanatopolitics of biologically undesirable bodies, which reached its radical conclusions in the Nazi state. We can add that even before the 20th century fascist state, the European colonialisms were entangled with racial and anthropological theories, which posited a progression from a savage towards a civilized state of humanity and mapped it onto the differences between the people of colour and white people. As Haraway points out, "the discursive tie between the colonized, the enslaved, the noncitizen, and the animal – all reduced to type, all Others to rational man, and all essential to his bright constitution – is at the heart of racism and flourishes, lethally, in the entrails of humanism.[61]

The first time we encounter Frankenstein and his creature in the novel is in the framing narrative told by Captain Walton aboard his exploration ship in the icy waters around the North Pole. What is seen by the crew from afar is that "a being which had the shape of a man, but apparently of gigantic stature, sat in the sledge and guided the dogs."[62] A few paragraphs later, the ship comes across another man on a sledge, this time at close distance, and the crew decides to take him aboard: "He was not, as the other traveller seemed to be, a savage inhabitant of some undiscovered island, but a European."[63] From the very beginning of the novel, before we know anything yet about Victor Frankenstein and his creature, they are made understandable to the reader in reference to the difference between a savage of some undiscovered island and a European. Such framing drew on the racial and anthropological

60. Michel Foucault quoted in Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (Stanford: Stanford University Press, 1998), 3.
61. Donna J. Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008), 18.
62. Mary Shelley, *Frankenstein* (Hertfordshire: Wordworth Editions, 1999), 20.
63. Shelley, *Frankenstein*, 21.

views and the colonial geography of Shelley's time. The attributes of someone who was understood as savage was that they are at a lower stage of social (technological, economic) development, marked as non-white, and waiting to be "discovered" by an European, who is associated with whiteness, civilization, technological and economic progress.

The biopolitics of the racial discourses becomes full blown when Frankenstein, whom we know by now to be a Genevese scientist capable of creating life, expresses concerns about how to control the possible sexual reproduction of the life he has created. Before that the creature pleads with Frankenstein to create a female companion for him, imagining the pair of them in the manner of noble savage. He proposes that, if Frankenstein fulfils his request, he and his companion will leave Europe and go to live into the wilds of South America, feed on berries and sleep under the sun. Such understanding of the "noble savage" figure, as a naturally benevolent human with little material tools and possessions, supposedly closer to nature and freer of social artifice, was based on Rousseauian theories, which relied on the New World ethnography (more will be said about an anti-colonial and vegetarian politics of the creature as a noble savage figure in the next section). Although Frankenstein initially concedes to the request, he soon expresses biopolitical concerns about the reproduction of racially marked bodies, who would inhabit the non-European spaces of the New World:

> Even if they leave Europe, and inhabit the deserts of the new world, yet one of the first results of those sympathies for which the daemon thirsted would be children, and a race of devils would be propagated upon the earth who might make the very existence of the species of man a condition precarious and full of terror.[64]

Frankenstein collapses the threat of reproduction of racialized, savage bodies, and the nonhuman bodies of other species. The European scientist expresses the Malthusian anxieties about how the racialized/nonhuman bodies might endanger, through overpopulation, or indeed pollute, through miscegenation, the biologically desirable European state population

64. Mary Shelley, *Frankenstein* (Hertfordshire: Wordworth Editions, 1999), 127.

and relatedly, the human species population. This manifests a Foucauldian understanding of biopolitics as a management of human species, in a way in which getting rid of some members of the species purifies the entire human race. Therefore, Frankenstein exerts his control over the undesirable reproduction when he destroys the assembled unfinished female creature, whom he intended to animate. It could be argued that this action in a biopolitical trajectory long anticipates Agamben's paradigmatic example of the Nazi control of reproduction of the undesirable members of the nation-state.

The biopolitical trajectory of the racial and colonial discourses continues into *The Island of Dr Moreau*. The relations between Moreau and the Beast Folk, as between a human and the scientifically humanized animals, are staged also crucially as between a civilized European scientist and the colonial, non-white savages. Sci-fi scholar John Rieder argues that Moreau can be understood as "a colonial tyrant brutalizing his subjects," while he sees himself "like a missionary, a scientific prophet of progress."[65] Wells channelled the idea of evolutionary progression from a lower, savage to a higher, civilized state of humanity, as well as the possibility of reversal of this process. He was, following his teacher T. H. Huxley, working through the paradox that on the one hand, human civilization and culture is an outcome of the natural law of struggle for existence, but on the other, that this law should be at some point suspended because of the human cultural triumph. In the essay "Human Evolution, an Artificial Process" (1896), Wells saw human cultural evolution as "artificial", i.e., rather fragile and precarious, which can easily revert back to a more primitive, natural state. The undesirable reversion back to animality that occurs on Moreau's island is simultaneously a degeneration of civilization into the state of savagery. Wells wrote in the essay that the novel is about the process of civilization and that "what we call Morality becomes the padding of suggested emotional habits necessary to keep the round Paleolithic savage in the square hole

65. John Rieder, *Colonialism and the Emergence of Science Fiction* (Middletown: Wesleyan University Press, 2008), 108.

of the civilised state."[66] Dr Moreau, however, is not only trying to keep the round savage inside the civilised man under control, but actively trying to civilise savages, by humanizing animals. He had no fear of them overpopulating the island through sexual reproduction because, as Wells informs us, although the Beast Folk were able to bear offspring, almost none of the offspring survived.

The expendable guinea pigs, Moreau's experimental subjects, situated on a colonial island in the South Pacific, are from early on in the novel confused by Prendick with people of colour (before he finds out they are assembled from animal parts):

> They seemed to me then to be brown men, but their limbs were oddly swathed in some thin dirty white stuff down even to the fingers and feet. I have never seen men so wrapped up before, and women so only in the East.[67]

Later in the novel, when the humanized animals start to "revert" to their animal nature after Moreau is dead, thus inverting the evolutionary process backwards, Prendick's views indicate full blown racial concerns. He remarks that Montgomery, Moreau's assistant, came across similar people in Arica (Chile) since "He hardly met the finest type of mankind in that seafaring village of Spanish mongrels."[68] The bodies understood as those of mixed races are confused and collapsed in Prendick's mind with animals and savages, and come to embody an element that might threaten pure whiteness/humanity through miscegenation (contamination of the white race by other races), degeneration (of the civilised Europeans into savages) or reversion (of humans into animals). This is the way in which biopolitical state racism works, by casting the biology of some bodies as a polluting racial/nonhuman threat.

66. Quoted in Rieder, *Colonialism and the Emergence*, 105.
67. H. G. Wells, *The Island of Dr Moreau* (London: Penguin Classics, 2005), 53.
68. Wells, *Dr Moreau*, 105.

Postcivilized Vegetarian Human

The two novels articulate also criticisms of the produced bare lives as less than human, racially marked, and animal-machinic. For Agamben, a progressive politics would be to stop the anthropological machine from running altogether, and in this way stop the production of human bare life. Oliver extends the scope of Agamben's interrogation by arguing that we also need to think about the devaluation of animal life and animality involved in the anthropological machine, on both conceptual and practical levels (in factory farms, slaughterhouses, laboratories). She argues that the anthropological machine needs to stop taking for granted the animal sacrifice when she asks: "Why do we treat animals like animals? Or how does animality justify enslavement and cruelty?"[69] Both *Frankenstein* and *The Island of Dr Moreau* allow for criticisms of bare life to surface, which voice anti-colonial concerns as well as those around the treatment of nonhuman animals. In this sense the novels can be said to articulate early perspectives on the issue of ethical treatment of nonhuman animals, which in the late 20th century becomes articulated as animal welfare or animal rights. In Shelley this issue surfaces in the creature's vegetarianism, and in Wells as a controversy around animal vivisection, while both of these are further entangled with anti-colonialism. Let us look first into Frankenstein's creature's diet:

> 'I will go to the vast wilds of South America. My food is not that of man; I do not destroy the lamb and the kid to glut my appetite; acorns and berries afford me sufficient nourishment. My companion will be of the same nature as myself, and will be content with the same fare. We shall make our bed of dried leaves; the sun will shine on us as on man, and will ripen our food. The picture I present to you is peaceful and human, and you must feel that you could deny it only in the wantonness of power and cruelty.'[70]

The creature fashions himself as the noble savage figure, situated in the New World, and voices an alternative to the European axes of class, gender, race and eating practices: the

69. Kelly Oliver, *Animal Lessons: How They Teach Us to be Human* (New York: Columbia University Press, 2009), 231.

70. Mary Shelley, *Frankenstein* (Hertfordshire: Wordsworth Editions, 1999), 112.

noble savage couple is imagined to, unlike the Europeans, have little or no personal possessions but live under the sun and feed on a vegetarian diet, not wanting to kill animals. Such depiction was channelling a mix of the 18th century ideas about native peoples and their culture or closeness to nature, as well as the reliance on those ideas to criticize the European gender and sexual relations, and capitalist economy. As Sankar Muthu writes,[71] Rousseau relied on New World ethnography when he proposed that "natural humans" are benevolent, free of social artifice (the corrupting technology and civilization) and naturally vegetarian. However, in spite of such idealizations of New World inhabitants, Rousseau did not offer any systematic critique of European imperialism.[72]

The creature's decision not to kill animals for food, which could be read as a critique of animal sacrifice, was informed by a number of discourses. Shelley was strongly influenced by Erasmus Darwin's view of the sentience of and interconnections between all organisms. Timothy Morton suggests that Romantic vegetarianism could have involved a number of meanings, ranging from a bourgeois consumer style, a thread from the 17th century religious radicalism, to an extension of the Enlightenment discourses of the rights of man. He adds that the politics of vegetarianism of Percy Bysshe Shelley in *Queen Mab* (1813) was based on both ethical views on nonhuman animals and the medical arguments for a healthy diet.[73] As already mentioned, Mary Shelley also relied on Rousseau's view of benevolent humans who are naturally vegetarian, but his theories of eating were in fact more elaborate. As Oliver argues, for Rousseau, the vegetarian diet is both healthier and more natural than a diet of

71. Sankar Muthu, *Enlightenment Against Empire* (Princeton and Oxford: Princeton University Press, 2003), 52-71.

72. Unlike Diderot who, as Muthu argues, "humanized" particularly the Tahitians and granted them cultural agency precisely in order to critique the French colonial rule as well as the European sexual taboos, gender roles and personal property laws.

73. Timothy Morton, "Joseph Ritson, Percy Shelley and the Making of Romantic Vegetarianism," *Romanticism* Vol.12, No 1 (2006): 52.

meat, but it is also a sign of civilization and of moral choice not to eat meat.[74] Rousseau's views on vegetarian diet are thus ambiguous: it is both natural and civilized at the same time. This ambiguity further reflects in his views on the development of humankind, which is intricately connected with the eating practices, as Oliver explicates. The humans have developed from savages, through barbarism up to civilized man. The savage hunts their prey and is therefore wild and cruel; the barbarian is a herdsman; while the civilized man is a farmer who eats cultivated grain and can freely choose not to eat meat. The progressive moral development of humankind goes from the cruel flesh-eating savages towards gentle civilized vegetarian farmers. However, civilization is for Rousseau at the same time also a fall into corruption – which is why he praises the naturally benevolent and vegetarian man. In this way vegetarian diet is for Rousseau at the same time an attribute of the naturally good man, *and* civilized, as a moral choice not to eat animals and cultivate respect for them (as well as considered healthier than a meat diet). As Oliver argues: "Rousseau begins by arguing that the vegetarian diet is healthier, then he claims that it is more natural, and finally he makes a connections between taste and morality: vegetarianism is a moral choice that is evidence of man's freedom not to eat meat."[75]

Shelley's depiction of the creature can be said to channel such ambiguous Rousseuian view of vegetarian diet. After being initially banished by Frankenstein, the creature finds himself roaming the woods and spontaneously starts eating berries, nuts and plant roots, instead of, for example, hunting animals (which he would physically be capable of doing, being a gigantic, strong creature). In the quote above, however, his diet is also explained as a moral choice "not to destroy the lamb and the kid", as he sees other humans do. In this way, he is

74. Kelly Oliver, *Animal Lessons: How They Teach Us to be Human* (New York: Columbia University Press, 2009), 54.
75. Kelly Oliver, *Animal Lessons: How They Teach Us to be Human* (New York: Columbia University Press, 2009), 55.

figured as what Oliver proposes to term "postcivilized" man,[76] who after having acquired a European education and language, proposes to "go back to nature" – by living under the sun and respecting animal lives by not killing them. Crucially, he sees vegetarian diet as an integral part of what makes him "peaceful" and indeed, "human". It is Frankenstein now who is seen as "wantonly cruel", as a representative of the European politics of race, gender, class and very importantly, flesh-eating as a practice of animal sacrifice.

By voicing such a critique of eating practices, from a racially marked position, Shelley does not in fact stop Agamben's anthropological machine running. She rather produces an anthropological figure of the postcivilized vegetarian human, as an alternative to the European politics embodied by Frankenstein. His diet is both natural (and he is naturally noble) and a conscious civilized choice not to kill animals, but to respect them as sentient, living organisms worthy of life same as humans are (as noted above, the creature keeps emphasizing his own capacity for sentience and pain as similar to human bodies). Through this anthropological reversal, it is the European scientist who is depicted as cruel, and a representative of the civilization which continues to eat animal flesh and therefore, following Rousseau's argument, remains invested in a savage eating practice, though it can choose not to, due to the economic developments. Donna Haraway criticized such alternative politics of Shelley as humanist in her reading of the novel in "A Cyborg Manifesto". She juxtaposed her concept of the cyborg as an impossibility to make easy distinctions between nature and civilization, the organic and the technological, with the creature's organicism.[77] As she argues, the creature is

76 Ibid.

77. In contrast to this, Anne K. Mellor affirms Shelley's alternative organicist politics. In *Mary Shelley: Her Life, Her Fiction, Her Monsters (*New York and London: Routledge, 1988) she argues that Shelley criticizes the masculine scientific mastery of passive female nature, which "denies the natural mode of human reproduction through sexual procreation." (101). Extending and affirming such understanding, Carol J. Adams links the novel's feminist politics with the creature' vegetarianism, when she argues that meat-eating is a masculine symbol in the novel, and that "the maternal principle would be present in the Creature's vegetarian paradise." "Frankenstein's Vegetarian Monster," in *The Sexual Politics of Meat: A Feminist-Vegetarian Critical Theory* (New York: Continuum, 1990), 159.

invested in a "community on the model of the organic family," and in a "restoration of the garden; that is, through a fabrication of a heterosexual mate, through its completion in a finished whole, a city and cosmos."[78] Very importantly, we can also add the creature's vegetarian diet to Haraway's argument, and assume that the animals he does not want to kill for food would take part in the organic whole as well. Haraway is critical of such "organic" politics, which would attempt to purify itself from the European civilization and technology, and we could add, the cruel flesh-eating practices. From an Agambenian perspective, the question would be why it is necessary to keep carving an ever better or more moral anthropological figure of the human in order to imagine a politics that would not assume the non-criminal killing of the nonhuman for granted. Is it possible to stop the workings of the anthropological machine altogether? In such a possible scenario, the creature and Frankenstein would no more be humanist figures, of a cruel European and a postcivilized vegetarian, but rather two embodied beings who have situated relations with each other, in a way that Haraway understands the relations of companion species or cyborg politics.

This would come close to Derrida's suggestion on the politics of eating in the essay "Eating Well", where he offers no programme, no simple recipe for what to eat, but proposes instead a constant questioning of how to eat well in each particular context, in a way that respects those others we eat. Derrida is critical of the western culture of carnophallogocentrism,[79] as he calls it, which is premised upon carnivorous sacrifice, but does not want to offer vegetarianism as a simple, straightforward alternative. As Matthew Calarco elaborates, David Wood criticizes Derrida for this, proposing that vegetarianism indeed should be seen as an ethical choice aligned with deconstructive politics. Calarco argues that vegetarianism is often in similar

78. 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: Routledge, 1991), 151.

79. Jacques Derrida, "Eating Well or the Calculation of the Subject," in *Who Comes After the Subject*, ed. Eduardo Cadava, Peter Connor, and Jean-Luc Nancy (New York and London: Routledge, 1991), 113.

critiques seen as an ultimate moral ideal that challenges significantly the carnophallogocentric order and exempts its practitioners from any violence towards animals, which, as he suggests though, cannot be taken entirely for granted. That is, as Calarco sees it, together with Derrida, it is very difficult if not often impossible, to feed oneself in advanced industrial societies in ways that would not involve some kind of harm to animal but also human lives (in the production and distribution chains), or do not have negative consequences for the environment. Having that in mind, as Calarco notes, "it is necessary both to support vegetarianism's progressive potential but also interrogate its limitations."[80]

Anti-colonial Anti-vivisectionism

Shelley's threads of delineating between cruelty and gentleness, savagery and civilization in relation to the treatment of animals, and of emphasizing the sentience and pain of nonhuman organisms, as critiques of animal sacrifice, continue in *The Island of Dr Moreau*. Here, a criticism of bare life biopolitics through which the nonhuman is rendered expendable, is voiced in an anti-vivisectionist position, which is closely entangled with anti-colonialism. Ethical concerns are raised about Moreau's scientific practices towards his experimental subjects on a colonial island. The production of racially marked, savage Beast People is tightly coupled with the violence towards animals in animal experimentation. It could be argued that another key biopolitical space is the medical experimental lab. As Martin Willis writes, Wells entered the antivivisection debate at its height in the 1890s, after the Cruelty to Animals Act had been passed in 1876 and proved unsatisfactory to both antivisectionists and

80. Matthew Calarco, *Zoographies: The Question of the Animal from Heidegger to Derrida* (New York: Columbia University Press, 2008), 134.

the scientific community, and therefore provoked a wide public discussion.[81] The strategies of antivivisectionists included painting vivisection as an outrageous foreign practice which happens elsewhere, and particularly in France by the hand of Louis Pasteur. The spectre of human vivisection was raised in the popular press, as possibly happening in secret laboratories in the far corners of Europe. Wells in the novel displaces animal vivisection outside Britain as well, onto a colonial island where the narrator Prendick eventually finds out about it.

Early on in the novel, before knowing the true nature of Moreau's experiments, Prendick almost sympathizes with the doctor who has been expelled from the scientific community:

> The doctor was simply howled out of the country. It may be he deserved to be, but I still think the tepid support of his fellow investigators and his desertion by the great body of scientific workers, was a shameful thing. Yet some of his experiments, by the journalist's account, were wantonly cruel.[82]

In a trajectory from *Frankenstein*, Prendick characterizes Moreau's practice in the same way as the creature referred to Frankenstein for denying him a mate and a vegetarian life in the wilds of South America, "wantonly cruel". The creature identified cruelty at the heart of the European politics of flesh-eating, which channels Rousseau's view that a meat diet should not be the moral choice of a civilized man. But furthermore, as Oliver discusses, for Rousseau it is not only eating but other mis/treatments of animals that differentiate between savagery and civilization. Rousseau argues that mistreating other humans is fundamentally linked to mistreating animals, and that owning cattle prepares humans for owning slaves, while animal hunting prepares them for wars. As Oliver argues, for Rousseau, "Man's cruelty to other men echoes his cruelty to animals."[83] Human mistreatment of animals is an attribute of cruel savages, and not of civilized men, which is the way in which Moreau's vivisection of animals

81. Martin Willis, "H. G. Wells in the Laboratory," in *Mesmerists, Monsters and Machines: Science Fiction and the Cultures of Science in the Nineteenth Century* (Kent: Kent State University Press, 2006), 216.

82. H. G. Wells, *The Island of Dr Moreau* (London: Penguin Classics, 2005), 60.

83. Kelly Oliver, *Animal Lessons: How They Teach Us to be Human* (New York: Columbia University Press, 2009), 60.

is depicted in the novel. While in the quote above Prendick still only speculates about the wanton cruelty of Moreau's practice, later in the novel he becomes sure of it.

The criticism of Moreau's cruelty is based on both the view that vivisection is a controversial part of the civilized scientific endeavour and the acknowledgment that animal bodies feel suffering same as humans (Prendick in fact initially assumes that Moreau animalizes human beings). He describes very vividly Moreau's horrible practice:

> A startled deerhound yelped and snarled. There was blood, I saw, in the sink, brown and some scarlet, and I smelled the peculiar smell of carbolic acid. Then through an open doorway beyond in the dim light of the shadow, I saw something bound painfully upon a framework, scarred, red and bandaged. And then blotting this out appeared the face of old Moreau, white and terrible.[84]

The argument against suffering is something that Moreau repeatedly problematizes, arguing that pain is such an insignificant thing in the evolutionary process that it would eventually become redundant, and human science is in fact speeding up evolution. On the other hand, the capacity of nonhuman animals to feel suffering, in a trajectory from Shelley's view of the sentience of all organisms, was central to the antivivsectionist campaigns, as well as it has been to the late 20th century politics of animal rights and animal welfare. Central to this argument is to value animal bodies for their similarities and similar capacities to humans. However, such understanding also could be said to fall back on reinscribing humanist values. That is, as Oliver argues, "according to this logic, rights or equal consideration is deserved if one possesses certain characteristics."[85] In the approaches of thinkers such as Tom Regan, who conceptualizes animals in reference to humans as "subjects of a life", this means a further drawing of boundaries, between those animals who are similar to humans and those who are not: "the more similar these creatures are to us, the more consideration they deserve;

84. H. G. Wells, *The Island of Dr Moreau* (London: Penguin Classics, 2005), 75.

85. Kelly Oliver, *Animal Lessons: How They Teach Us to be Human* (New York: Columbia University Press, 2009), 29.

and the more different they are from us, the less consideration they deserve."[86] In the end these strategies end up reinscribing human embodiment as the benchmark for political value.

One alternative approach to the premise of shared capacities (for either thinking or sentience) is offered by Derrida in "The Animal That Therefore I am (More To Follow)". He takes up Jeremy Bentham's question in the early 19th century of whether animals suffer, but does not want to conceptualize suffering as a capacity that can be possessed, controlled or even measured, and for which human organism is a benchmark. Instead, he suggests that we are rather possessed by it, as it makes us all, human and animal, open to others, through shared vulnerability: "'Can they suffer?' amounts to asking 'Can they *not be able*?' And what of this inability [*impouvoir*]? What of the vulnerability felt on the basis of this inability? What is this nonpower at the heart of power?"[87] In this way, Derrida wishes to challenge the humanist strategies, by not basing a possibility for ethics on the question of "what": neither on what proper human morals should be, nor on whether nonhuman animals are similar to humans for their capacities of sentience (which is the key premise of animal rights politics). His considerations of ethics revolve rather around a continuous posing of the "how": how to eat and treat nonhuman animals, in the most respectful manner in various contexts. However, as Oliver very importantly points out about Derrida's strategy, we should keep in mind that the questions of "what" and "how" are normally intricately entangled, and that we constantly decide how to treat others precisely on the basis on what we think they are: if they are sentient, human, capable of suffering, if they are food, etc.[88]

Shelley and Wells can be said to rely on humanist strategies to raise issues around tr/eating animals, in the sense of affirming how a *civilized* human should /not act towards animals, and

86. Ibid.
87. Jacques Derrida, *The Animal that Therefore I Am* (New York: Fordham University Press, 2008), 28.
88. Kelly Oliver, *Animal Lessons: How They Teach Us to be Human* (New York: Columbia University Press, 2009), 106.

affirming *the similarity* of animal bodies to humans based on common suffering. In *Dr Moreau*, as Rieder argues, Wells exposes the absurdity of Moreau's argument about the uselessness of pain in the face of the agonizing suffering of the racially marked/animal bodies on the island. The Beast Folk's chanting of the refrain "Are we not men" on a colonial island alludes to the motto of the early 19th century British abolitionist movement "Am I not a man and a brother?", which calls for an acknowledgment of common suffering and humanity, and in the context after the abolitionists won, it voices the defeat of Europe by racial ideologies.[89] For Rieder, Wells's critique of the colonial/species relations works through a reversal: by locating a brutal, "savage" practice at the heart of Moreau's civilized science, i.e.,, of locating a supposedly natural instinct at the heart of culture. Although "No doubt Wells meant for us to draw from *Moreau* the lesson that humans are really animals," the strength of his critique for Rieder is in exposing how a noble enterprise can be understood as an irresponsible cruelty rather than in uncovering some sort of biological truth about humans.[90] I agree with Rieder's interpretation of Wells's anti-colonial and anti-vivisectionist strategy to paint vivisection as savage, but I would argue nevertheless that such a reversal keeps devaluing the supposed animal/savage element at the heart of the human and reinforces the nature-culture binary. That is, Wells by the end of the novel unmistakably produces a "round Paleolithic savage" within the human. We can ask at this point, as with Shelley, why it is necessary to keep producing yet newer anthropological versions of humanity (morally better or worse), as well as posit human embodiment as the benchmark against which nonhuman lives should be measured. In other words, the question we should continue asking is whether the anthropological machine could be stopped, while at the same time appreciating the situated political strategies such as Wells's reversal between the supposed civilized and savage scientific practice, and his emphasis on the common capacity for suffering shared by humans and animals.

89. John Rieder, *Colonialism and the Emergence of Science Fiction* (Middletown: Wesleyan University Press, 2008), 105.

90. Rieder, *Colonialism and the Emergence*, 108.

Conclusion

This chapter looked into the scenario of the technological creation of non/human life as it emerged in the 19th century science fiction, Shelley's *Frankenstein* and Wells' *The Island of Dr Moreau*, in order to examine a biopolitical production of distinctions between properly human and less valued nonhuman life. The classic scenario, which commonly leads to violence between the humans and the nonhumans, in an attempt to eliminate the nonhuman threat, has been unfolding further throughout the 20th and 21st century sci-fi narratives of android life. I utilized biopolitical and animal studies theories to do close readings of the novels, which show the following.

In both novels, a humanist politics unfolds which puts the highest value on human life, and delineates a nonhuman element of Frankenstein's creature and Moreau's Beast Folk as killable with impunity, and in this way as Agamben's bare life. The less than humanity of the creature and the Beast Folk is also staged as animal-machinic in a Cartesian sense: an assemblage of body parts animated by electricity and physically harmed with impunity in Shelley, and animal bodies which are, irrelevant of their pain, vivisected for the sake of scientific progress in Wells. We see how the biopolitics of bare life follows an Agambenian script of tying-in an anthropological and a spatial banishment of non-humanity from the human body and the city: as an expulsion of the creature outside Geneva and a containment of the hum/animals on a colonial island. Both the creature and the Beast Folk are also racially marked bodies, situated in the colonial space of a European state, and designated as (noble) savage, in relation to their counterpart civilized Europeans.

The texts nevertheless raise points of critique of nonhuman bare life – of the racial/colonial hierarchies and of what Oliver terms animal sacrifice – through a proposition of vegetarian politics in *Frankenstein*, and an anti-vivisectionist position in *Dr Moreau.* These critiques of

tr/eating nonhuman animals can be understood as early articulations of animal ethics, which more recently have unfolded into the animal rights and animal welfare philosophies and activism. They work, however, not by stopping the anthropological machine altogether, but rather by reasserting certain humanist values. Shelley exposes a cruel, flesh-eating practice at the heart of European civilization, fashioning an alternative postcivilized vegetarian human, while Wells exposes a cruel, savage vivisectionist practice at the heart of a civilized science. Both authors also crucially emphasize the shared embodied capacity for sentience, and particularly suffering of both humans and nonhuman animals. In this way the novels' critical strategies are to re-center human embodiment as the benchmark for valuing nonhuman lives, as well as to reinforce the idea of a "proper" human and how it should act. Possible alternative strategies that go beyond Shelley's and Wells' classic texts are articulated by Haraway and Derrida. Haraway criticized the humanist politics of the creature in *Frankenstein*, and she proposes to think instead of situated, embodied relations between various companion species. Similarly, Derrida offers no simple recipe for morally good eating, but encourages us to keep questioning how to eat in the most respectful way in different contexts. He also does not want to re-assert human capacities as a norm for thinking shared suffering with animal bodies, but encourages us to think instead of the vulnerability and finitude of all living beings as a starting point for compassion.

Chapter 2: Wonder/Terror/Horror at the Nonhuman

Introduction

The previous chapter explored the classic thread of modern Prometheus myth in *Frankenstein* and *The Island of Dr Moreau*, as a scenario of the technological creation of non/human life, which leads to violence between what is delineated as the human and the nonhuman: between Victor Frankenstein and his creature, Dr Moreau and the Beast People. I argued that such scenario sets in motion Agamben's anthropological machine, which produces bare life through the differences between human and animal-machinic, civilized and savage, white and non-white. However, as we saw, the novels also articulate criticism of racially marked and animal bare life, through the vegetarian and anti-vivisectionist positions, entangled with anti-colonialism, raising thus early concerns around the un/ethical treatment of animals. Following on this, in this chapter I wish to focus on how the production of bare life in the novels, as well as its critique, is fuelled also by the peculiar affective responses in the Gothic tradition, of horror/terror/wonder. I argue that the staging of horror/terror/wonder in the novels performs on the one hand, an expulsion of a nonhuman threat from the autonomous human (rendering nonhumans expendable) and on the other, a welcoming of nonhuman agencies into human subjectivity (inducing an ethical treatment of animal bodies).

The anxious side of the modern Prometheus myth, as a dis/belief in the scientific and technological progress, entangled with a constant political reaffirmation of the human – as it manifests itself in Shelley and Wells – can be traced well through the Gothic tropes. Shelley's *Frankenstein* was read by the sci-fi critic Brian Aldiss as transforming the previous Gothic literary tradition into an encounter with modern science, inaugurating thereby a trajectory in which Gothic and sci-fi tropes would from the early 19th century continue to intersect each

other up to the present day.[91] The Gothic as a cultural phenomenon emerged in the second half of the 18th century, and relied on excessive affects and a displacement into feudal, "barbaric" past to communicate anxieties of the rising middle classes about political revolution, industrialization, urbanisation, shifts in sexual and domestic organisation, and scientific discovery, as critic Fred Botting writes.[92] Throughout the 19th century these anxieties were increasingly understood through scientific language and practice, which were becoming institutionalized and gaining legitimacy: "Science, with its chemical concoctions, mechanical laboratories and electrical instruments became a new domain for the encounter with dark powers, now secular, mental and animal rather than supernatural."[93] This intersection of the Gothic and science draws on the affects of wonder/terror/horror to communicate ambivalence about the claims to scientific authority over, and relatedly human autonomy in relation to, the so called "dark powers", be they figured as ghosts, animality or otherwise.

The human-nonhuman relations staged through the Gothic tropes in Shelley and Wells can be understood as affective biopolitics, and I utilize in the chapter Jane Bennett's notion of affect to speak of the ways in which material entities, be it humans or nonhumans, exert agency on each other. I will suggest that Agamben's anthropological machine which produces non/human bare life runs on wonder/terror/horror, which I will bring in relation to Kristeva's theory of the abject. Analysing the novels through these theories will show how the affects of horror/terror/wonder provoke an expulsion, or indeed abjection, of what is delineated as nonhuman from human subjectivity. As we will see, keeping the autonomy of human agency (autonomous from nonhuman material forces) is entangled in the novels with centering and affirming the modern scientific worldviews, which will be approached through Latour's take

91. Brian Aldiss, *Trillion Year Spree: The History of Science Fiction* (London: Paladin Grafton Books, 1986).
92. Fred Botting, *Gothic* (London and New York: Routledge, 1999), 2.
93. Botting, *Gothic*, 8.

on modernity. On the other hand, wonder/terror/horror also induces the alternative positions of vegetarianism and anti-vivisectionism, which can be read as welcoming the nonhuman agencies and provoking compassion in the human, which I analyse through Jane Bennett's theories of ecological affect.

Before I undertake close readings, I wish to briefly outline the links between the Enlightenment processes of secularization and the discourses of the sublime, uncanny, and animism, as they intersect to shape the Gothic affective tropes. Secularization is frequently understood as a rise in scientific rationality and human political autonomy, and a disenchantment of the world from spirits and magic, particularly from pagan, non-sanctioned beliefs, ever since the processes of Enlightenment. Diane Hoeveler however understands "ambivalent secularization" as a historical possibility to believe in the realms of both supernatural and natural at the same, though uneasy, time.[94] For her, the Gothic mode signals precisely this "uneasiness" between the two, the enchanted and the disenchanted, spiritual and scientific worldviews. She draws on Charles Taylor's understanding of an interplay between the "porous self", who is open to nonlinear time and animistic forces of the cosmos, and the "buffered self", who sees cosmos in a linear fashion and as inert materiality that is subject to human reason. [95]

Precisely such shifts between the supernatural and the natural manifest in Burke's and Kant's theories of the sublime. Burke in *Philosophical Enquiry* (1757) argues that danger or pain "at certain distances, and with certain modifications, they may be, and they are, delightful."[96] For him, this occurs in magnificent natural landscapes such as mountains, which can intimate

94. Diane Long Hoeveler, *Gothic Riffs: Secularizing the Uncanny in the European Imaginary, 1780-1820* (Columbus: The Ohio State University Press, 2010), 4.

95. Hoeveler, *Gothic Riffs*, 17.

96. Edmund Burke, *A Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful* (New York: P. F. Collier & Son Company, 1914), 21.

divinity: "The passion caused by the great and sublime in nature, when those causes operate most powerfully, is astonishment; and astonishment is that state of the soul, in which all its motions are suspended, with some degree of horror."[97] Kant's interpretation in *The Critique of Judgement* (1790) is similar, but he puts emphasis on the mind of the viewer – the delightfully terrible mountaintops trigger human reason to transcend the senses and intimate the infinite totality. As Kant argues: "Hence sublimity is contained not in any thing of nature, but only in our mind, insofar as we can become conscious of our superiority to nature within us, and thereby also to nature outside us (as far as it influences us)."[98]

Burke's and Kant's theories chart a super/natural geography of nature inhabited by a Christian God, which is known through affect. In Gothic fiction delightful terror/horror often signals not just divine, but demonic forces as well, and does not occur only in the mountains. The *un/heimlich* was famously conceptualized by Freud as a feeling of strange familiarity or familiar strangeness, which evokes fear and dread, in the essay "The Uncanny" in 1919, but according to Terry Castle, it can be understood as being "invented" throughout the 18th century.[99] She understands the uncanny as a response to the Enlightenment attempts at a construction of life by building automata, but also as a cultural internalization of ghosts and spirits from the outside into human psyche. She argues that the perceived spirits started to be increasingly understood as hallucinations or products of imagination, which led finally to "Freud's barely metaphoric conception of ghosts lurking in the unconscious".[100] What underpinned Freud's theory of the unconscious was his evolutionary understanding that the human species has superseded its animal past rather precariously. That is, pre-cultural drives in Freud's theory are associated with the meanings of animality as they manifest through the

97. Ibid., 38-39.

98. Immanuel Kant, "Part One: Critique of Aesthetic Judgement," in *Critique of Judgement*, edited by Nicholas Walker (Cambridge: Hackett Publishing Company, 1987), 123.

99. Terry Castle, *The Female Thermometer: Eighteeenth-Century Culture and The Invention of the Uncanny* (New York: Oxford University Press, 1995).

100. Castle, *The Female Thermometer*, 175.

individual unconscious as the repressed sexual and death drives. Following Castle's arguments, we could understand Freud's theory as a transformation of ghosts into animal bodily drives, but he does also see the uncanny as an encounter with ghosts, as those forms of thought that have been superseded in modern western science. What he calls "animism" is a primitive, superstitious belief that material entities are animated by spirits. Freud relied on the early anthropological theory of Edward B. Tylor, who in *Primitive Culture* (1871) linked what he termed animism, as a pagan belief in the spirits of humans, animals, plants and even objects, to the savage state of human development. Any such beliefs in the civilized state, such as Victorian spiritualist séances, for Tylor meant a retrograde survival of savage superstition.[101]

The outlined historical trajectories of secularisation, the sublime, the uncanny, and animism, all intersect in the Gothic science fiction of Shelley and Wells to stage affective relations between humans and nonhumans, either through expulsion or welcoming, abjection or compassion, towards the nonhuman, and let us look closely into the novels below.

Abjecting Animality Within

In the previous chapter we looked at the delineations between the valued human and the nonhuman, animal-machinic life as bare or expendable. This is done through the work of the anthropological machine, as Agamben conceptualizes it, which creates a zone of bare life, included through an exclusion within the city and suspended between humanity and animality, and therefore valued less than properly human life. For Agamben, the modern anthropological machine is primarily an optical operation in which the members of the

101. Shane McCorristine, *Spectres of the Self: Thinking about Ghosts and Ghost-Seeing in England, 1750-1920* (Cambridge: Cambridge University Press, 2010), 83.

species *Homo sapiens* define themselves through a sheer ability to mis/recognize themselves as human in the face of a nonhuman ape. What I want to suggest here is that such optical operation of the anthropological machine is frequently accompanied by strong affects of horror/terror/wonder.

Indeed, Agamben in *Homo Sacer* (1998) refers to the ethnographic notion of taboo in relation to bare life, but only to eventually dismiss it as an explanation of what he understands to be the "sacredness" of bare life. He argues that taboo was conceptualized by the early European anthropological and psychological authors, such as Wilhelm Max Wundt, to "express precisely the originary indistinction of sacred and impure that is said to characterize the most archaic period of human history, constituting that mixture of veneration and horror described by Wundt – with a formula that was to enjoy great success – as 'sacred horror.'"[102] Agamben continues by arguing that the notion of taboo, conceptualized at the same time as something both impure and sacred, unclean and holy, to be excluded from the social order (otherwise one dirties oneself), has ever since the early discourses of anthropology and psychology been associated with the figure of outcast or banned man. As he argues: "Once placed in relation with the ethnographic concept of taboo, this ambivalence is then used – with perfect circularity – to explain the figure of *homo sacer.*"[103] For Agamben, however, the idea of originary ambivalence between religious experience (something is sacred) and human laws (it is also unclean and should not be touched) does not explain sufficiently how come the *homo sacer* is a person who can be killed without committing homicide but who cannot be sacrificed in a religious ritual (as discussed in the previous chapter). He proposes to understand the "sacredness" of this person not crucially as an indistinguishability between religion and law, but rather as a double exclusion: from both human law (not a homicide) and

102. Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (Stanford: Stanford University Press, 1998), 77.
103. Ibid., 80.

divine realm (not to be sacrificed)[104]. What is important for Agamben is that *homo sacer* be understood primarily as a political structure of abandonment (from human and divine laws) through which sovereignty encircles life, and renders it killable, rather than through anthropological and psychological discourses (of being impure and sacred, or provoking horror and veneration). "What defines the status of *homo sacer* is therefore not the originary ambivalence of the sacredness that is assumed to belong to him, but rather the particular character of the double exclusion into which he is taken and the violence to which he finds himself exposed."[105] However, for my purposes here it is significant that scholarly anthropological and psychological literature has linked the figure of banned man with the affective responses of horror and veneration. In this way we can look at how bare life might be registered affectively, and more precisely, how the delineations of nonhuman expendable life might be produced through the combination of veneration and horror. In other words, we can look at how the anthropological machine that Agamben conceptualizes as delineating nonhuman bare life primarily through vision, might also be fuelled by particular affects. In this way veneration/horror could signal a life which is caught in a ban from the social order, i.e., in a biopolitical relation. This becomes more clear if we link such affective biopolitics of bare life to Kristeva's theory of the abject. [106]

Working within the psychoanalytic framework, Kristeva in *Powers of Horror* (1982) conceptualizes abjection as a visceral reaction of disgust and horror, mixed with fascination,

104. We could say that Agamben insists that "sacredness" be understood primarily as a political relation between law and life, rather than a religious discouse (which is entangled with politics, nevertheless). In other words, life is sacred only because law applies to it – we could relate this to anti-abortion discourses where the life of foetus is frequently constructed as sacred as an argument for a legal ban on abortion.

105. Ibid., 82.
This however does not mean, as Cary Wolfe usefully explains in a footnote in *Before the Law: Humans and Other Animals in a Biopolitical Frame* (2013, 110) that *homo sacer* is not situated at an indistinction between religion and politics. He indeed is, and murder and sacrifice for Agamben follow the same essential logic – the point for Agamben is rather not to understand "sacredness" through a religious register but as a possibility to be killed but not murdered (one example I think of here is when soldiers in contemporary wars are understood to be sacrificed for their nation – what is at the bottom of this framing is that they can be legally sent to be killed).

106. Cary Wolfe in *Before the Law* (2013) refers to abjection as a humanist, biopolitical human-nonhuman relation, but he does not elaborate on the affective aspect nor references Kristeva.

at that which has been repressed in the unconscious and threatens to trouble the psychic-bodily boundaries of human subjectivity. Linking abjection to the psychological experiences of the sublime and the uncanny, Kristeva sees it as a more violent impulse, in which nothing is familiar nor recognized as kin, but needs to be expelled at all costs in order for subject to remain coherent. That which is expelled from human subjectivity is called "abject", defined neither as subject nor object, but as "that of being opposed to I", and to be "radically excluded" in a "place of banishment".[107] Among the threats which can destabilize the coherency of human subjectivity she lists corpses and death, excrement, sexuality, as well as certain foods. In a way that resonates with Agamben's take on the anthropological and psychological understandings of taboo, Kristeva understands abjection in an anthropological fashion. It is as a mechanism through which what she calls primitive societies distanced themselves from that which defiles the body and needs to be excluded from the social order, from "the threatening world of animals or animalism, which were imagined as representatives of sex and murder."[108] I want to suggest here that Kristeva's understanding of abjection slips into a biopoliticization of animality, which in turn is at the core of the production of nonhuman bare life for Agamben in *The Open*. That is, bare life is life suspended between humanity and animality, and if this is a destabilizing threat to the humanity proper, as follows from Kristeva's views, then it would need to be kept repressed in the unconscious, that is, banished or abjected from human subjectivity through the affects of disgust/horror/fascination. In this way the abject moves from the psychoanalytic vocabulary into a biopolitical register, and can be understood as a biopolitical relation between the human and an expendable nonhuman performed through particular affects. If this is so, we could look at whether Agamben's anthropological machine that produces nonhuman bare life in

107. Julia Kristeva, *Powers of Horror: An Essay on Abjection* (New York: Columbia University Press, 1982), 1-2.

108. Kristeva, *Powers of Horror*, 13.

Frankenstein and *Dr Moreau* through spatial and anthropological banishment might not be just an optical but also affective operation.

The crucial defining moment in *Frankenstein* is that of his coming to life in Frankenstein's workshop, when he is immediately rejected by his creator, which will subsequently repeat itself in all his future encounters with people throughout the novel. The moment is cast in a Gothic tone:

> It was already one in the morning; the rain pattered dismally against the panes, and my candle was nearly burnt out, when, by the glimmer of the half-extinguished light, I saw the dull yellow eye of the creature open; it breathed hard, and a convulsive motion agitated its limbs. How can I describe my emotions at this catastrophe, or how delineate the wretch whom with such infinite pains and care I had endeavoured to form?
>
> […] I had desired it with an ardour that far exceeded moderation; but now that I had finished, the beauty of the dream vanished, and breathless horror and disgust filled my heart. Unable to endure the aspect of the being I had created, I rushed out of the room, and continued a long time traversing my bedchamber, unable to compose my mind to sleep.[109]

I suggest that in this gloomy setting, an anthropological machine is set at work that is simultaneously optical (as analysed in Chapter 1) and affective. That is, Frankenstein at the same time mis/recognizes the creature as non/human, *and* feels disgust/horror at the strangeness yet familiarity of such mis/recognition, switching quickly from the earlier anticipation of a wondrous creation of life. In the same way as he reasserts his own humanity by mis/recognizing his own distorted reflection in the creature's eyes, he also feels the impulse to expel the strange yet familiar threatening element from his subjectivity in a Kristevan manner. In other words, Frankenstein can be said to perform abjection of a threatening, monstrous nonhumanity from his human self as he is running away from the scene of creation. Subsequently, every human being in the novel that crosses path with the creature reacts instantly with utter disgust and either runs away panic-stricken or attempts to harm him, even in the case when the creature saves a girl from drowning or after he is

109. Mary Shelley, *Frankenstein* (Hertfordshire: Wordsworth Editions, 1999), 45.

educated and able to speak, i.e., when his actions prove him to be worthy of inclusion in the society. The only person he manages to gain trust from is the father of the DeLacey family in whose shed he spent time hiding, but only because of the lack of vision which is entangled with affect – the man is blind. The way to interpret such repetitive abjections of monstrosity from humanity, which make the creature expendable, is as Kristevan destabilization of subjectivity where something is no longer recognized as familiar or kin but needs to be expelled in order for human subject to remain coherent.

For Kristeva, such destabilizations are manifestations of the unconscious drives, and the creature can indeed be interpreted as anticipating psychoanalytic concerns, about the "monstrosity" of repressed bodily drives, more particularly of the death drive, which needs to be kept in check but keeps erupting into consciousness. That is, the creature is literally stitched together from human and animal corpses, and embodies bodily decay and death in his appearance, in anticipation of Freud's death drive. Scholar of Gothic fiction Andrew Smith argues that Frankenstein's creature prefigures Kristevan constitution of the subject, by personifying the death drive that breaks into the symbolic order.[110] The creature can be said to cross between and destabilize the boundaries between the animate and inanimate, living and nonliving matter – while the boundary crossing is first anticipated by wonder at the possibility to animate the inanimate, the creature's embodiment leaves him suspended between life and death and provokes horror in order for the gazing human subject to "live". Such staging is to be understood through the biopolitical vocabulary of sovereignty, where abjection is aimed to

110. According to Smith, the creature stands for the death drive in a number of ways: by materializing in the magnificent Alps in front of Victor and destabilizing the sublime transcendence of materiality into a divine realm; by being an assemblage of the pieces of dead bodies that lacks corporeal unity; by being the killer of Victor's family and friends. In "Chapter 2: *Frankenstein:* Sublimity Reconsidered, Foucault and Kristeva" in *Gothic Radicalism: Literature, Philosophy and Psychoanalysis in the Nineteenth Century* (PalGrave MacMillan, 2000).

assert and guard that which is properly living and human, from the unconscious threat of bodily mortality, i.e., the sovereignty of death.[111]

The trajectory of staging threatening bodily drives to the human continues in Wells' post-Darwinian context of the 1890s, in which Freud was starting to develop his theories and inscribed animality as the main threat that can destabilize human subjectivity, and more precisely rationality, through the unconscious. Against this threat, human rational autonomy needs to be constantly reasserted, by repressing the agency of animal drives, namely that of sex and violence. The tight coupling of the anthropological machine as both optical and affective plays itself out in the novel through the gaze of the narrator Prendick. He constantly mis/recognizes himself in the Beast People, before he actually finds out that they are products of Moreau's medical humanization of animals, which is registered crucially through Freudian uncanniness:

> I had never beheld such a repulsive and extraordinary face before, and yet – if the contradiction is credible – I experienced at the same time an odd feeling that in some way I *had* already encountered exactly the features and gestures that now amazed me."[112]

This is Prendick's reaction to a "black-faced man" aboard the ship *Ipecacuanha* (which is bound for Moreau's island) to which he is taken by Montgomery, Moreau's assistant, after having experienced a shipwreck. It is a mix of amazement and repulsion, wonder and horror, at the strangely familiar intuition – yet not conscious – that humans are also to be understood as animals although they have supposedly superseded their animal past through civilization and culture. For Kristeva, the abject is "where man strays on the territories of animal,"[113]

111. Jackson Petsche has recently read the monstrosity of the creature in terms of a by-product of meat-eating, as he is assembled in part from animal remains collected from the slaughterhouses. Petsche suggests that what is crucially Gothic about the story is the threat to the social order of what was originally intended for the human table. In "An Already Alienated Animality: *Frankenstein* as a Gothic Narrative of Carnivorism," *Gothic Studies*, Volume 16, Number 1 (2014): 98-110.

112. H. G. Wells, *The Island of Doctor Moreau* (London: Penguin Classics, 2005), 40.

113. Julia Kristeva, *Powers of Horror: An Essay on Abjection* (New York: Columbia University Press, 1982), 12.

which therefore means that, in a biopolitical manner, rational man needs to be guarded from straying into animality, into a territory of "sex and murder", as she understands it. In other words, humans in the novel are to abject animality within, which is to be repressed or indeed, animality without, which can be vivisected. This is precisely what Prendick keeps performing on the island,[114] through repeated repulsion at Moreau's experimental subjects, as his suspicion of animality deepens until it is finally revealed, or we can say – released into consciousness precisely through affect: "I could hardly repress a shuddering recoil as he came, bending amiably, and placed the tray before me on the table."[115] This reaction at the black-faced man who turns out to be Montgomery's servant M'ling is to be understood in the context of Moreau's localized practice on the island, surely. However, it is also a general Wells' post-Darwinian realization that humans are not essentially different from animals, but share a common ancestor, and therefore act also on animal drives, cast primarily in a Freudian manner as sexuality and violence. Scholar of Gothic fiction Kelly Hurley has argued that Prendick performs an abjection of M'Ling, and that his disgust is "symptomatic of a particularly violent denial of his doubling relationship with M'Ling, as a particularly intense version of the recognition/repression dynamic of uncanniness."[116] Thus, when Prendick comes back to London, among the "proper humans" he keeps experiencing the same disgust and horror at everybody around as a reflection of his own animality. The animality within excluded and abjected in a colonial space turns out to be very much included in the social order, and moreover, at the heart of each human, including himself, in the metropole. The destabilizing threat of animality is so grave for Prendick that he decides to isolate himself

114. Relatedly, Elaine Showalter reads *Dr Moreau* as well as *Time Machine* as the genre of male quest romance, which flourished in England in the 1880s and 1890s, and "represent a yearning for escape from a confining society, which is rigidly structured in terms of gender, class, and race, to a mythologised place elsewhere, where men can be freed from the constraints of Victorian morality." "The Apocalyptic Fables of H.G. Wells, " In *Fin de Siècle/Fin du Globe: Fears and Fantasies of the Late Nineteenth Century*, ed. John Stokes (New York: Palgrave Macmillan, 1992), 70.

115. H. G. Wells, *The Island of Doctor Moreau* (London: Penguin Classics, 2005), 59.

116 Kelly Hurley, *The Gothic Body: Sexuality, materialism, and degeneration at the* fin de siècle (Cambridge: Cambridge University Press, 1996), 42.

from all humans, and Wells' novel actually concludes on this biopolitical note – of registering affectively and shunning an animal element within the human in order to guard human rational autonomy.

Centering Scientific Rationality

Guarding human autonomy through wonder/horror/terror from nonhuman agencies (death, animality) unfolds further in the novels in close relation to centering the modern scientific worldview. We can understand this if we draw links between biopolitical concepts and Latour's understanding of modernity. For Agamben, the modern anthropological machine is primarily the scientific-political production of the species *Homo Sapiens*, which has a longer historical trajectory in western philosophical discourses. As he argues, the differentiations can be seen to go back to Aristotle, who did not define what life is but rather divided it into distinctive living functions of nutrition, sensation and thought, which in turn formed the basis for modern understandings of vegetative, animal and human forms of life.[117] In this way, not only different "degrees" of life are posited, but they are also put in a hierarchy and differently valued. The vegetative function and form of life gets to be seen as inherently linked to nutrition, animal life to sensation, and human life to thought. While Agamben is concerned with how the racist logic of the anthropological machine produces some humans as bare life instead of fully human life, he does not address that this positions nonhuman animals or indeed plants as expendable as well, precisely because they are not considered "full forms" of life as they do not possess all the living functions (as humans do). The anthropological machine can be seen to construct such forms of life as "less than fully living", in the sense of not thinking and/or less sentient or even not sentient at all. Such biopolitical distinctions can

117. Giorgio Agamben, *The Open: Man and Animal* (Stanford: Stanford University Press, 2004), 14.

be traced in the early modern philosophy and science of Descartes. He thought that only humans possess souls, and therefore thinking capacities, while all other living functions can be explained in terms of mechanical physical relations of cause and effect. He thought that animal bodies were essentially machines (same as physical human bodies) and not only that they do not have minds, but are therefore also less sentient or aware of their sensations, and their sensations are to be approached strictly mechanically, as reactions to stimuli. Descartes practiced vivisection based on the understanding that animals do not suffer as they cannot feel pain in the way that humans do.[118] Interestingly enough though, if we look into the etymology of the English word "animal", we find out that it is dated back to the early 14tth century but rarely used before 1600, and refers to "any living creature", including humans; comes from Latin *animale* for "living being, being which breathes," and *anima* for "breath, soul; a current of air."[119] Thus the notion of animal in early modern period comes to denote the attribute of living, breathing being, and historically it goes back to the idea of soul. Nevertheless, Descartes in the 17th century in a biopolitical manner attributed soul only to certain living beings, humans. In the subsequent mechanistic approaches to the living, which have been prominent in life sciences till the present day,[120] the human species has frequently been understood as the only rational (self-conscious, willing, autonomous) being, while animals if not without conscious minds, have been seen as having no or significantly less thinking capacities and relatedly capacities for sentience. In turn, these scientific differentiations between the degrees of life have been often entangled with biopoliticial valuing of human

118. See Stanford Encyclopedia of Philosophy, entry on "Animal Consciousness," Accessed 10 November, 2016. http://plato.stanford.edu/entries/consciousness-animal/

119. http://www.etymonline.com/index.php?term=animal&allowed_in_frame=0 Accessed October 20, 2016.

120. It is illuminating to quote historian of science John Henry on the persistence of mechanistic approaches in the life sciences: "Although vitalistic ideas have had their moments in the subsequent history of the life sciences, they have mostly been seen as capitulations to a fundamentally 'unscientific' view, and as such have tended to be reduced, sooner or later, to a more 'mechanist' account. It remains true to say that our own worldview is heavily influenced by the mechanistic notion of the *bête-machine*, with all its implications for biology and medicine." (John Henry, *The Scientific Revolution and the Origins of Modern Science*, Palgrave MacMillan, 1997, 84).

lives over others. Such an understanding of modern sciences is compatible with Bruno Latour's views.

Latour does not explore the modern scientific carvings of the rational human in relation to the less valued animals (which are seen to have less capacities), but he puts emphasis on the modern western scientific worldview as anthropocentric. This means that it keeps what Latour calls human political agency firmly at the center of the world picture and renders nonhuman materiality "inanimate", in the sense of not being political agent that consciously transforms materiality. As Latour writes in the essay "Compositionist Manifesto" (2010), ever since the 17th century a divide has been installed between the animate and inanimate matter:

> One of the principal causes of the scorn poured by the Moderns on the sixteenth century is that those poor archaic folks, who had the misfortune of living on the wrong side of the 'epistemological break,' believed in a world *animated* by all sorts of entities and forces instead of believing, like any rational person, in an *inanimate* matter producing its effects only through the power of its causes.[121]

According to Latour, the modern scientific worldview posits all materiality as mechanistic relations of cause and effect rather than as animated by mysterious forces. Nonhuman objects and organisms are in this process relegated to the status of scientific objects and economic resource, rather than interfering into human politics as before. At the same time, humans are understood as the only rational beings and therefore political agents, who consciously transform the world. In contrast to such understandings, Latour discusses "animism" as a pre-scientific, pre-17th century understanding of the world animated by various forces or indeed souls. He suggests that current discussions of climate change have again brought nonhuman forces to the fore as political agents. Significantly for my analysis here, he links an animist outlook with a particular affect: "Once again, our age has become the age of wonder at the disorders of nature."[122] The current age re-discovers animism, but in the new context of a

121. Bruno Latour, "An Attempt at a 'Compositionist Manifesto'," *New Literary History* 41 (2010): 481.
122. Latour, "Compositionist Manifesto," *New Literary History* 41 (2010): 481.

disordered climate change, while the 16th century saw a harmonious order between macrocosm and microcosm. On the other hand, a couple of pages later he notes that the current notion of ecological crisis can be seen as nothing more than a turning around of modern humans who have been extricating themselves from a "horrible past" and fleeing this past "in terror."[123] In my view, Latour's deployment of the affects of terror, horror and wonder is anything but random. Although he does not discuss his brief allusions to affects, they are very specific and significant: wonder is linked to a possible redistribution of political agencies between humans and nature (and to a re-investment in animism), while terror and horror can be seen to signal the attempts to keep the modern rational human at the center of the political world picture and banish the regressive, destabilizing forces from materiality. This Latourian understanding of terror/horror/wonder help us think how these affects might be entangled with centering the modern scientific worldview, by negotiating between the human and nonhuman agents, which in turn might be linked with negotiating between different degrees of life, as I discussed above. Let us look closely how such negotiations by the scientists Frankenstein and Moreau unfold in the novels.

Victor Frankenstein's scientific training is curious. Before he goes to university to study chemistry, he reads and becomes fascinated by the alchemical knowledge of C. Agrippa, A. Magnus and Paracelsus, which is shrouded in mystery and promising such incredible things as raising ghosts from the dead, as Victor remarks in the novel. However, an early instance in the novel prompts Victor to change his allegiance to mysterious alchemy and become interested in the current, "properly directed" science, as his university professors will later in the novel instruct him. This instance crucially dramatizes a particular affective geography of the Alps:

123. Ibid., 486.

> It advanced from behind the mountains of Jura; and the thunder burst at once with frightful loudness from various quarters of the heavens. I remained, while the storm lasted, watching its progress with curiosity and delight. As I stood at the door, on a sudden I beheld a stream of fire issue from an old and beautiful oak which stood about twenty yards from our house; and so soon as the dazzling light vanished the oak had disappeared, and nothing remained but a blasted stump.
>
> On this occasion a man of great research in natural philosophy was with us, and, excited by this catastrophe, he entered on the explanation of a theory which he had formed on the subject of electricity and galvanism, which was at once new and astonishing to me. All that he said threw greatly into the shade Cornelius Agrippa, Albertus Magnus, and Paracelsus, the lords of my imagination;[124]

In this passage Victor experiences delightful terror at the sight of a powerful thunderstorm in the mountains. In the manner of Burkean or Kantian sublime, the occurrence can be said to hover between a supernatural and natural explanation. The lightning could indicate the presence of Christian God, but in the next moment this explanation is replaced with a natural explanation provided by the modern science: the power of electricity, where the lightning could metaphorically stand for the process of Enlightenment. The scientific Enlightenment and Christianity can be seen to go hand in hand actually, and Kant himself thought that scientific reason is not opposed to the Christian religion, quite the contrary. Kant rather saw scientific rationality as suspending or putting in brackets the existence of God and not erasing it.[125] In the experience of Kantian sublime, Christian God is intimated but only to eventually elevate the human mind above the rest of nature, thus re-centering human agency. It is rather pre-Christian, pagan, mysterious forces that are destabilizing and need to be expelled from the scene, and therefore Victor dissociates himself fromt he previous lords of his imagination, the alchemists. They are expelled from his pursuits in favour of proper (Christian) science, in a way in which Latour proposes that the modern scientific worldview expels the animist forces of nature as a superstitious belief. In this way, the human political agency is stabilized while the nonhuman nature is relegated to the sphere of scientific object which can be

124. Mary Shelley, *Frankenstein* (Hertfordshire: Wordsworth Editions, 1999), 33.

125. Derrida writes about Kant's suspension of the existence of God in "Faith and Knowledge" (2002) and argues that modern western science has in fact been deeply entangled with Judeo-Christianity.

understood and commanded. This early moment in the novel disengages Victor from pursuing the destabilizing alchemical forces further and its promise of raising ghosts, and sets him on the path of chemistry and physics, which leads to his animation of a corpse not by magic but with electricity (though, intriguingly, the actual procedure is in fact never explained and remains mysterious to the reader). Alchemical animist philosophy and practice is relegated to the status of para- or pseudo-science, and human rational agency is centered against the animist agencies which need to be banished. This is staged through the delightful terror experienced at the thunderstorm in the magnificent Alps.

Nevertheless, mysterious nonhuman agencies come back to haunt Frankenstein and destabilize his scientific worldview. The scene above foreshadows his two key encounters with the creature, which both take place in the Gothic surroundings of the sublime Alps – a geographical location that in and since Shelley's time has perfectly accommodated the slippages between science and the intimations of the Christian divine.[126] As a destabilization of Frankenstein's worldview, which attempts to understand nature in strictly physical terms and reproduce its laws practically, but also can encounter God in the sublime Alps, the creature enters the scene as a demon. The earlier scene of thunderstorm and a lightning striking a tree repeats itself when Victor comes home from Ingolstadt, after being informed that his little brother William had been killed (by the creature, which Victor yet does not know). Before heading to Geneva, he takes a walk in the mountains where William had been killed, and which the banished creature inhabits:

> While I watched the tempest, so beautiful yet terrific, I wandered on with a hasty step. This noble war in the sky elevated my spirits; I clasped my hands, and exclaimed aloud, 'William, dear angel! this is thy funeral, this thy dirge!' As I said these words, I perceived in the gloom a figure which stole from behind a clump of trees near me; I stood fixed, gazing intently: I could not be mistaken. A flash of lightning illuminated

126. William Cronon in the essay "The Trouble with Wilderness; or, Getting Back to the Wrong Nature" (1995) writes that in the Enlightenment theories of Burke and Kant, "sublime landscapes were those rare places on earth where one had more chance than elsewhere to glimpse the face of God" (73).

> the object, and discovered its shape plainly to me; its gigantic stature, and the deformity of its aspect, more hideous than belongs to humanity, instantly informed me that it was the wretch, the filthy demon, to whom I had given life.[127]

The creature is put at the center of the delightful terror experienced at the thunderstorm in the Alps, which shifts between the explanations of electricity and divine presence (as we saw above). He is cast as a demon, undermining an intuition of the Kantian divine. That is, Victor first in the manner of Kantian sublime experiences an affective overwhelming by the "noble war in the sky", which results in an elevation of the human mind that transcends the senses and grasps the infinite. However, the intuition of infinitude is in the very same instant undermined by the terror of a material presence of demonic agency, and relatedly the threat of death (as Victor immediately suspects the demon is William's killer). The material demonic agency communicating death is a political agent in an animist worldview who interferes into human affairs, in a Latourian way. The ambivalent Alpine scenery is imbued with spirit, but as long as it mediates only the transcendent Christian divine which elevates the human mind above the mortal realm, while otherwise materiality is inanimate and explained through the mechanistic laws, this does not contradict the scientific worldview. However, when an animist, demonic agency signalling death is suddenly materialized in this Gothic geography, Frankenstein needs to exorcize it from the physical materiality:

> Their icy and glittering peaks shone in the sunlight over the clouds. My heart, which was before sorrowful, now swelled with something like joy; I exclaimed - 'Wandering spirits, if indeed ye wander, and do not rest in your narrow beds, allow me this faint happiness, or take me, as your companion, away from the joys of life.' As I said this I suddenly beheld the figure of a man, at some distance advancing towards me with superhuman speed.
>
> […] 'Devil,' I exclaimed, 'do you dare approach me? and do not you fear the fierce vengeance of my arm wreaked on your miserable head? Begone, vile insect! or rather, stay, that I may trample you to dust!"[128]

127. Mary Shelley, *Frankenstein* (Hertfordshire: Wordsworth Editions, 1999), 60.
128. Mary Shelley, *Frankenstein* (Hertfordshire: Wordsworth Editions, 1999), 76-77.

I suggest that it is not surprising that Victor's expulsion of the demon correlates with figuring him as an insect. I would suggest that rendering nonhuman nature "inanimate" by expelling the demon in a Latourian sense correlates here with making biopolitical distinctions between different degrees of life, the in/capacities for thinking and sentience, which Agamben sees as the fuel of the anthropological machine. Victor abjects through horror the animality of "vile insect" from humanity, which can be simply trampled to dust with impunity, and this can be seen as channelling a Cartesian mechanistic view of animals, that are assumed to have no rational capacities nor full sentience. Insects are particularly interesting in this regard as they were potentially seen to be even more machinic than other animals. Scholar of media Jussi Parikka showed how throughout the 19th century the development of various technological devices frequently relied on examining insect locomotion, bodily properties and ways of perceiving, in order to use those insights for designing movement and structure technologically. Such historical associations between insects and technology are significant to note when Frankenstein refers to the creature as insect, since he is in fact designed and animated technologically.[129] The creature compared to an insect can be seen as rendered animal-machinic, which means that his capacities for sentience are seen to be less than human sentience, and this is manifested by the fact that the creature keeps reasserting his capacity for pain throughout (as we saw in the previous chapter). In this way the scene of the creature's encounter with Frankenstein in the delightfully terrible Alps performs two things: attempts to center the scientific-political human agency against the animist force of demon (to draw on Latour) and devalues less than human, less sentient, forms of life (to draw on Agamben).

129. Parikka argues that in the 19th century entomological discourses on the links between insects and technology, "the primitive insect is revealed as an alternative kind of technical assemblage, a technics of insect and nature in which the tools are no differentiated from the body of the animal." (Jussi Parikka, *Insect Media: an Archeology of Animals and Technology,* xxx). Frankenstein's "vile insect" can indeed be seen as one peculiar technical assemblage, assembled from animal and human corpses and animated electrically.

If we look at *The Island of Dr Moreau* in a direct trajectory from *Frankenstein*, we could argue that the Christian divine has not only been bracketed but rather erased in Moreau's end-of-the-century scientific worldview. The allusions that throughout *Frankenstein* compare Victor and his creature to God and Adam, in *Dr Moreau* are turned into a parody, where Moreau as a mock God figure unsuccessfully persists to instil moral values into animals to make them humans through hypnotic procedures, while the Beast-People are seen to perform strange rituals in worship of their mock God. Moreau's scientific secular rationality has expelled reference points to Christian religion, as well as to the possibility of Latourian animist interfering into human affairs (as we saw in Shelley). For Moreau, this means that nature is in fact amoral when he proclaims that "pleasure and pain have nothing to do with heaven and hell."[130] For such an understanding of amoral universe, Wells drew on T.H. Huxley's view. Huxley, a Darwinian scholar, distinguished between cosmic and moral processes, and saw cosmic processes as having nothing to do with human morals, but he also thought that humans should aim for moral progress in spite of the perceived cosmic indifference. In Wells's particular take on these views, nature in which god does not play a role is cast as "a vast, pitiless mechanism"[131] which grinds living organisms regardless of their pain and pleasure. Moreau argues that in the name of scientific progress, human science is to become as terrifyingly pitiless to organisms as supposedly nature is: "The study of Nature makes a man at last as remorseless as Nature."[132] In a trajectory from Frankenstein, who attempts to expel the demon from the spooky Alps while casting him also as expendable insect, Moreau has accomplished positing nature as an inanimate mechanism in which all animal pain will eventually become redundant. What is posed as a threat to scientific progress and human rationality and needs to be expelled is sensation itself, and the way this is staged is through the terror/horror that Moreau's theory and practice provokes:

130. H. G. Wells, *The Island of Doctor Moreau* (London: Penguin Classics, 2005), 97.
131. Wells, *Doctor Moreau*, 117.
132. Wells, *Doctor Moreau*, 97.

> So long as visible or audible pain turns you sick, so long as your own pains drive you, so long as pain underlines your propositions about sin, so long, I tell you, you are an animal, thinking a little less obscurely what an animal feels. This pain-' I gave an impatient shrug at such sophistry. 'Oh! but it is such a little thing. A mind truly opened to what science has to teach must see that it is a little thing. It may be that, save in this little planet, this speck of cosmic dust, invisible long before the nearest star could be attained – it may be, I say, that nowhere else does this thing called pain occur. But the laws we feel our way towards… Why, even on this earth, even among living things, what pain is there?' He drew a little penknife, as he spoke, from his pocket, opened the smaller blade and moved his chair so that I could see his thigh. Then, choosing the place deliberately, he drove the blade into his leg and withdrew it.[133]

This scene stages the terror of Moreau's practice, which makes expendable the pain of living organisms for the sake of scientific progress. Pain is indeed expelled from human rationality itself, as Moreau cuts into his own thigh as an animal part of himself in order to prove the point to Prendick that not all living flesh feels pain. He associates sensation firmly with animal instinct, and rationality with humans, arguing that animal pain will be superseded in the human evolution of the mind, and that as long as Prendick is driven by it, he is an animal in fact (and thus inferior). This is entangled with rendering the actual animal bodies that feel pain expendable. For Moreau, nature is an inanimate mechanism, whose engine is evolution and which basically grinds and shapes living organisms at whim – which is in fact rather an accurate description of his practice. Moreau's scientific outlook is Cartesian combined with an evolutionary framework, as he casts nonhuman nature and animality as a set of mechanical principles, which eventually will be emptied from sensation, while human rationality will advance. Such banishment of sensation is aimed at asserting the legitimacy of Moreau's science, but it in fact, through Prendick's terror/horror and disbelief at Moreau's arguments, presents his science as cruel and violent and in fact a controversial, pseudo-scientific practice.

133. H. G. Wells, *The Island of Doctor Moreau* (London: Penguin Classics, 2005), 96.

Welcoming Nonhuman Agencies

As we saw, through the Gothic affects of wonder/terror/horror, Frankenstein expels the demon as an interfering agency from nature, and Moreau considers sensation redundant in nature, in order to assert scientific rationality and human agency, which is entangled with valuing particularly the human form of life above nonhuman animals. On the other hand, I argued in the previous chapter that the critiques of animal sacrifice are in *Frankenstein* based on the idea of sentience of all living organisms, and in *Dr Moreau* on shared suffering of both human and nonhuman animals. Now let us look how staging the sentience of living organisms in the novels crucially utilizes the Gothic affects of wonder/terror/horror, which then work to welcome nonhuman agencies instead of rejecting them. Such welcoming of nonhumans into human subjectivity provokes what can be read as an ecology of human-nonhuman relations. If we approach this through a Latourian lens, we can suggest that what happens is a redistribution of agencies between humans and nonhumans, destabilizing the primacy of human agency in a supposedly "inanimate" nature. Latour uses the notion of political ecology to refer to such distribution, which for him challenges an anthropocentric world picture where the human is the only political agent.[134] As I wrote above, Latour sees this happening in the current context of climate change, as a certain re-investment in the pre-17th century animism and the intricate relationships between microcosm and macrocosm, experienced through wonder. Although Latour does not elaborate more on the ways in which wonder negotiates between human and nonhuman agencies, another thinker develops a theory of what can be called ecological affect.

Jane Bennett follows a Latourian analysis that nature in modernity has been rendered inanimate while on the other hand human agency and science have been centered, pointing

134. Bruno Latour, *Politics of Nature: How To Bring the Sciences into Democracy* (Cambridge: Harvard University Press, 2004).

out Max Weber's theory of the disenchantment of nature since the Enlightenment. She argues, that contrary to such views, nonhuman materiality in modernity should not be seen as disenchanted and therefore inanimate, or inert, but rather as vibrant, enchanted and indeed, as enchanting the human. Bennett proposes that the way in which we can think of nonhumans exerting agency on the human is through the affect of enchantment, which she describes as "a pleasurable feeling of being charmed by the novel and yet unprocessed encounter and a more *unheimlich* (uncanny) feeling of being disrupted or torn out of one's default sensory-psychic-intellectual disposition."[135] This mixture of delight and uncanniness, wonder and disturbance experienced in the human body registers that nonhuman materiality, be it animals, environment or things, is animate, vibrant, and an agent that affects the human in various ways and interferes in human politics. In *Vibrant Matter: Political Ecology of Things* (2010) she argues further that affect is not to be understood only as human experience but a more general way to think agencies between all actors in a Latourian manner, in a political ecology of things, which includes humans as well as nonhumans. Nevertheless, affect when experienced particularly in the human as a combination of wonder and surprise, is for Bennett potentially ecological, which means that it potentially provokes more sustainable human action towards the environment: "The feeling of an incomplete, dangerous, and unsettling affinity with the nonhuman outside may just induce me to treat it – animals, plants, earth, even artifacts and commodities – less mindlessly, with more care, wariness, or respect."[136] She sees such ecological affect as closely related to the experience of the sublime in the natural landscapes, but only if the sublime is reinterpreted not primarily as an elevation of the human mind, but as foregrounding the agency of nonhuman surroundings.

135. Jane Bennett, *The Enchantment of Modern Life* (Princeton University Press, 2001), 5.

136. Jane Bennett, "Thing-Power and an Ecological Sublime" in *The Sublime Now*, ed. Luke White and Claire Pajaczkowska (Newcastle upon Tyne: Cambridge Scholars Publishing, 2009), 32.

Bennett emphasizes that her view includes also what we think of as nonliving and inorganic matter. She points out that her theory has similarities with "animism, the Romantic quest for Nature and vitalism,"[137] but insists that she does not want to make distinctions between spirit and matter, or life and matter, which she reads in these philosophies. Also, her view of enchanted matter is described as "quasi-pagan" and does not rely on the western Christian providential god.[138] Both Latour by discussing animism, and Bennett by referring to animism and paganism, bring to the fore the pre-modern and/or non-western spiritual worldviews as those that could potentially challenge human-centrism. For Bennett this is in opposition to the Christian religion that has been entangled with modern western science, and has aimed to preserve the primacy of the human at the top of the hierarchy of life on earth. Christian views were historically compatible with the Cartesian view that only humans have souls and therefore minds while other living organisms are without souls and machinic. Romanticism and vitalism, on the other hand, which Bennett sees as precursors to her view of vibrant matter, were historical responses to the mechanistic Christian worldview, which can be said to have distributed the spirit (of Nature) or vital /life force (in biological discourse) more widely throughout the living nature. Let us look indeed how these historical redistributions of human and nonhuman living agencies inform *Frankenstein* and *Dr Moreau* as a challenge to a mechanistic human centrism, and how we can approach their Gothic staging with Bennett's idea of affect that is potentially ecological.

As we saw in the previous chapter, Shelley articulates a critique of European colonialist and flesh-eating practices, by casting Frankenstein's creature as a postcivilized human, to use Oliver's term, who wishes to leave Europe after having acquired education, go live into the wilds of South America and feed on a vegetarian diet. His diet is presented as both natural but

137. Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham and London: Duke University Press, 2010), xviii.

138. Jane Bennett, *The Enchantment of Modern Life* (Princeton University Press, 2001), 12.

also a conscious choice not to kill animals for food. What is another defining characteristic of the creature is his understanding of nature, which is cast as a non or pre-scientific belief, an animist worldview that Latour discusses. Similarly to the creature's diet, his animism is staged as both spontaneous and post-civilized. John Rieder argues that the creature is manifesting "a spontaneous animism," [139] which should be read through his racial difference, and later resonated with the early post-Darwinian anthropological theories. These theories reinterpreted animism as a fearful superstition, which the civilized European societies should have left behind. For Shelley though, the creature's wonder at animate nature can be read as entangled with his benevolence towards animals and vegetarian diet. In the early hours after the creation, he experiences the following:

> Soon a gentle light stole over the heavens, and gave me a sensation of pleasure. I started up, and beheld a radiant form rise from among the trees.* (Shelley's note: the moon.) I gazed with a kind of wonder. It moved slowly, but it enlightened my path; and I again went out in search of berries.[140]

Later in the novel, after the creature has been spurned by the De Lacey family, and has obtained a European language and education, he is travelling in a state of utter despair because all humans reject him, and the only comfort he can get is from the natural landscape:

> One morning, however, finding that my path lay through a deep wood, I ventured to continue my journey after the sun had risen; the day, which was one of the first of spring, cheered even me by the loveliness of its sunshine and the balminess of the air. I felt emotions of gentleness and pleasure, that had long appeared dead, revive within me. Half-surprised by the novelty of these sensations, I allowed myself to be borne away by them; and, forgetting my solitude and deformity, dared to be happy. Soft tears again bedewed my cheeks, and I even raised my humid eyes with thankfulness towards the blessed sun which bestowed such joy upon me."[141]

If we read the two passages with the help of Bennett's theory, we can say that what is articulated is the nonhuman agencies of the moon and sun enchanting the creature who gazes at them in wonder and pleasure. Nature is constructed as animate in the Latourian sense of

139. John Rieder, *Colonialism and the Emergence of Science Fiction* (Middletown: Wesleyan University Press, 2008), 100.

140. Mary Shelley, *Frankenstein* (Hertfordshire: Wordsworth Editions, 1999), 80.

141. Mary Shelley, *Frankenstein* (Hertfordshire: Wordsworth Editions, 1999), 108.

exerting political agency on the human. In this way the agencies between the human and the nonhuman can said to be redistributed in the manner of political ecology. Nature is seen in a pagan vein as spirited, as the sun is "blessed" and "bestows" joy on the creature, who feels humility and gratitude, in the manner of indigenous New World peoples. But further, nature is also imbued with feeling, since it "revives" the creature with the sensations of gentleness and pleasure while he was already emotionally dead. In this way the nature is staged as living, which relates to the creature's view that all living organisms are sentient, which motivates him not to kill animals for food. Shelley was informed by Erasmus Darwin's organicist views of feeling and sensibility permeating all living organisms, i.e., humans, animals and plants. The experience of nature as spirited and sentient is signalled crucially through the creature's wonder, which welcomes the agencies of the living and this leads to his compassion with animals. In a way that Bennett proposes, affect is ecological, as the wonder and surprise at the nonhuman motivate the creature to make ethical choices about animals.

For Shelley, wondering at animate nature is a characteristic of the anthropological figure of postcivilized human - racially and geographically linked with a pre or non-scientific, premodern, non-Christian beliefs, but also supporting a biological organicist view of nature rather than a Cartesian mechanistic one which Frankenstein enacts. While Frankenstein through his exorcism of the demon and trampling the insect can be said to attempt a disenchantment of materiality, the creature is pleasantly enchanted by the spirited and living nature, which leads to an ethical diet. As argued in the previous chapter, Shelley in this way can be said to keep the anthropological machine running with the production of a better and more ethical version of the human, while the point of Bennett's theory of ecological affect is to put the nonhuman agencies in the foreground rather than any new version of humanity.

The trajectory of nonhuman agencies affecting the human, which leads to compassion towards nonhuman animals, continues in *The Island of Dr Moreau.* A critique of Moreau's

controversial scientific practice comes from inside the scientific community, from the narrator Prendick, who is himself a student of natural history, and doubts the legitimacy of Moreau's methods. The critique is crucially triggered through Prendick's affective response (which Moreau lacks) at the animal outcries of suffering during Moreau's vivisection:

> Presently I got to stopping my ears with my fingers. The emotional appeal of these yells grew upon me steadily, grew at last to such an exquisite expression of suffering that I could stand it in that confined room no longer. I stepped out of the door into the slumberous heat of the late afternoon, and walking past the main entrance – locked again I noticed – turned the corner of the wall. The crying sounded even louder out of doors. It was as if all the pain in the world had found a voice. Yet had I known such pain was in the next room, and had it been dumb, I believe – I had thought since – I could have stood it well enough. It is when suffering finds a voice and sets our nerves quivering that this pity comes troubling us. But in spite of the brilliant sunlight and the green fans of the trees waving in the soothing sea-breeze, the world was a confusion, blurred with drifting black and red phantasms, until I was out of earshot of the house in the stone wall.[142]

The scene registers forcefully the suffering of animal bodies, which for Moreau is expendable. This insight goes through the human being affected by an audible expression of animal pain. Almost as an antidote to Prendick's abjection of animality within the human, which is entangled with vision, as I argued earlier, here it is the auditory means that mark animal agency that cannot be banished. Drawing on Bennett's theory, we could say that Prendick here acknowledges nonhuman agencies, through a disturbance into his subjectivity, which provokes compassion for animal bodies.. Instead of a pleasant wonder that the creature experiences in *Frankenstein,* the dominant affect here is an unpleasant surprising disturbance into Prendick's perception, which signals the nonhuman worthy of ethical consideration. As in Bennett's theories, registering through an affective disturbance that nonhuman materiality is an animate agent, rather than inert or inanimate, leads the human to consider ethics towards animals. This can be said to redistribute political agencies between the human and the nonhuman. As with *Frankenstein,* the animate agency is crucially staged as living and sentient, in opposition to Moreau's mechanistic worldview. The framing of nature as a

142. H. G. Wells, *The Island of Doctor Moreau* (London: Penguin Classics, 2005), 64.

remorseless mechanism is disrupted when Prendick describes his surroundings as "brilliant sunlight and the green fans of the trees waving in the soothing sea-breeze," which paints nature as rather infused with sensation.

As already discussed in the previous chapter, the emphasis on suffering of the living organisms has a long historical tradition in emancipatory politics which has called for sympathy with fellow creatures, as Oliver has summarized.[143] As we saw, the positioning of Moreau's non-white Beast People on a tropical island paints them not only as vivisected animals but also colonial subjects. From the early 19th century anti-slavery to the anti-vivisectionist appeals of the 1890s, up to the animal rights advocates of the 1970s and 1980s, the question of embodied sentience and more particularly suffering, and how this provokes human compassion has been a major concern of emancipatory politics. In this sense, the notion of compassion comes out of the strategies of humanist politics, as a way of seeing compassion towards fellow creatures as a defining characteristic of the human. The role of human compassion that Prendick feels as an outcome of being affected by an expression of animal suffering could be then understood as relying on a humanist strategy and keep a human capacity at the center of politics. A similar emphasis on compassionate human is staged in Shelley, as we saw, where the animate nature provokes compassion in the creature, which is seen to make him precisely therefore human (as he sees it). In this way, registering nonhuman agencies, against an anthropocentric view of nonhumans as inanimate, as Latour understands it – registering the spirited/living nature in *Frankenstein* and animal suffering in *Dr Moreau* – reinscribes a figure of the human who is compassionate when affected by the fact of living nature. What would go beyond such a humanist ideal is Bennett's suggestion that affect should be understood as shifting the emphasis on nonhumans and away from humans. Her idea is "to theorize a kind of geoaffect or material vitality, a theory born of a

143. Kelly Oliver, "The Right to Remain Silent," in *Animal Lessons: How They Teach Us to be Human* (New York: Columbia University Press, 2009), 25-48.

methodological commitment to avoid anthropocentrism and biocentrism."[144] For Bennett, nonhuman affects signal primarily that nonhumans are agents in their own right (as Latour conceptualizes them), which challenges anthropocentrism. This could *additionally* provoke ethical and ecological relations with the nonhumans, but there is no guarantee that it actually will. In addition, for Bennett it is very important that not just the living but what we understand as inorganic or non-living matter is seen in terms of nonhuman agencies (challenging biocentrism), which goes beyond the scope of Shelley's and Wells's emphasis on nature and animals as living and sentient (rather than inert, inanimate mechanism). From Bennett's perspective, this reinscribes the dualism between the living and non-living, organic and inorganic, which her concept of vibrant matter sets out to unsettle in the first place.

Conclusion

In the previous chapter I looked at the production of nonhuman bare life as animal-machinic by the anthropological machine, as well as the critical politics of vegetarianism and anti-vivisectionism, in Shelley's *Frankenstein* and Wells's *Dr Moreau.* Building on this, in this chapter I focused on how the production of bare life as well as its critique in the novels is staged through the peculiar affects in the Gothic tradition, of horror/terror/wonder. I analysed how the scenario of horror/terror/wonder performs on the one hand, an expulsion of a nonhuman threat from the autonomous human, and on the other, a welcoming of nonhuman agencies into human subjectivity, inducing an ethical treatment of animals. In this way, Shelley's and Wells's novels can be understood as early articulations of the issue of un/ethical treatment of animals that mobilizes affect.

144. Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham and London: Duke University Press, 2010), 61.

I approached this scenario as affective biopolitics, which allows us to look at how the human is delineated precisely through affect as the highest value and center of political agency, as well as how affect could work to redistribute the human-nonhuman agencies and value nonhuman life. By suggesting that Agamben's bare life can be marked by abjection as conceptualized by Kristeva, I showed that in both novels, horror and disgust signal an expulsion of a nonhuman threatening abject from human autonomy: monstrosity of a body which crosses between life and death in *Frankenstein*, and the drives of sex and violence in *Dr Moreau.* I suggested this correlates with the ways in which the scientific worldviews in the novels are asserted, which in Latourian reading can be understood as anthropocentric. Frankenstein as the scientist figure through terror expels the creature as a demon from the sublime Alps, at the same time as he calls him an insect that should be trampled on. I suggest that Frankenstein in this way performs a Cartesian view of nonhuman nature as inanimate and animals as mechanistic. In this trajectory, Moreau in his terrifying scientific practice can be said to bracket sentience in nature altogether, rendering animal pain expendable for the purpose of vivisection, which is interlinked with superseding animality in favour of human rationality.

On the other hand, the novels also stage a critique of mechanistic nature and animal sacrifice that can be approached with Bennett's ideas of ecological affect. In *Frankenstein* the creature's wonder at the spirited/living nature, constructed as a non-scientific animist belief, leads him to a decision not to kill animals for food. Bennett's theory of the nonhuman agencies enchanting the human through wonder/disturbance and provoking an ecological sensibility enables such a reading. This thread continues into *The Island of Dr Moreau* where the surprising disturbance experienced by Prendick at the voice of animal suffering leads to an anti-vivisectionist position. An insight that animal bodies are living, sentient organisms leads to compassion and a view that animal pain is not simply expendable. Both novels can be said

to redistribute the agencies between the human and the nonhuman in the manner of Latour's political ecology, challenging in this way the exceptionality of human political agency.

However, those critical strategies continue to rely on humanist ideas. Shelley's alternative to Frankenstein's affective biopolitics is the racially/colonially marked figure of the post-civilized human enchanted by the living nature. Similarly, Wells relies on the humanist idea that experiencing suffering of fellow creatures leads to compassion. For Bennett though, the ways in which nonhumans affect humans does not by default lead to compassion, but it is desirable that it might do so while there are no guarantees. What she wants to emphasize primarily is rather that the nonhumans, be it animals, plants or things, are to be understood as political agents which affect humans, and in my view, Shelley's and Wells' deployments of affect stage precisely this. For them however, this crucially depends on showing that nature and animals are living, sentient, feeling, in opposition to staging them as mechanistic, inanimate or inert. What is beyond the scope of the novels is Bennett's suggestion to challenge even the organic/inorganic, living/nonliving dualisms further, arguing that absolutely *all* materiality is to be understood as agent that affects us.

Chapter 3: Alienation of Humans from (Human) Nature

Introduction

The previous chapter looked at how Mary Shelley's *Frankenstein* and H.G. Wells's *The Island of Dr Moreau* utilize the Gothic affects of horror/terror/wonder to either expel from or welcome nonhuman agencies into the autonomous human. This chapter further builds on the insight into what I call affective biopolitics, to look at another peculiar affective response that manifests itself at the intersection of science-fictional and Gothic trajectories throughout the 19th century, that of alienation. I look at Shelley's *The Last Man*, Wells's *The Time Machine* and *The War of the Worlds* as a scenario of alienation to argue that they stage alienation as an affect of undesirable loss of some authentic human attachment to either external (environment) or internal (embodied) nature. Alienation is staged, as we will see, through either a disorientation of the human species in particular spaces, or a technological prosthesis on the human body. Both Shelley and Wells situate the planet Earth and the human species on it in relation to wider cosmos, as well as imagine postapocalyptic deserted spaces, in order to disorient and alienate the human species from its assumed earthly home. Wells also imagines that human bodies in the future might become so merged with their machinic prostheses that they lose and alienate themselves from the supposed organic authenticity. We can understand these stagings of the loss of human attachment to either external (home) or internal (organic) nature in the classic sci-fi scenarios, following Brian Aldiss, as being "cast in the Gothic or post-Gothic mode."[145] As I wrote in the previous chapter, Aldiss sees the 19th century trajectories of science fiction and the Gothic as intricately entangled and mutually transforming each other. These trajectories are therefore inhabited by all kinds of creepy crawlies, be it animals, monsters, ghosts or aliens, but also conjure up particular sentiments of

145. Brian W. Aldiss, *Trillion Year Spree: The History of Science Fiction* (London: Paladin Grafton Books, 1988), 30.

human helplessness and loneliness that Aldiss associates with the term "post-Gothic" and describes in the following way:

> […] the climate, the effects of the light, the desolate scenery. No longer in the fifteenth century Italy, perhaps... but on a planet just as remote from us. In that remoteness lies another marked feature of science fiction, alienation. Both the Industrial Revolution and evolution have brought a marked sense of isolation to humanity in general: isolation from one another - and from Nature, so often seen in science fiction as an enemy to be conquered, as if we were no longer ourselves a part of the natural world.[146]

This sense of the isolation of humanity from what is understood as "Nature" has continued to permeate science fiction over the course of the 20th and 21st centuries, and it manifests itself recently in the narratives of the human overuse of digital technologies at the expense of face-to-face communication, or the environmental catastrophes caused by the human highly industrialized and technologized activities. Biopolitical and posthumanist/environmental approaches allow for a critical examination of the ways in which the affect of alienation is staged to negotiate the human relationship to modern technologies, the environment as well as some inner humanness, and therefore I will utilize them to analyse closely Shelley's and Wells's novels. More particularly, I will rely on Kelly Oliver's analysis of the political meanings of the spatial images/ination of the globe and desert, Claire Colebrook's analysis of the postapocalyptic spaces, and Timothy Campbell's emphasis on the role of technology in his take on Agamben's theory of bare life.

Before I look closely into the novels, I wish to outline briefly the historical links between the trajectories of dystopia, increasing industrialization, Marx's critique of the capitalist economy, and evolutionary framing of nature, which all co-construct the 19th century scenario of alienation. Science fiction scholar Brian Stableford ties these knots together when he writes

146. Ibid., 19.

that the 19th century futuristic fiction started exploring the premise that "the most fundamental social evil – the essential seed of dystopia – was the abstraction of human beings from a supposedly harmonious relationship with the natural environment and its inherent rhythms: a pernicious form of alienation that was equally corrupting in its effects on the rich and the poor."[147] The term dystopia was first used in England by John Stuart Mill in a parliamentary debate in 1868, but its undertones in literature as well as politics go back to the turn of the century. In the post-Revolutionary period, a disbelief in the Enlightenment idea of progress produced the fictions of the Last Man and the Apocalypse, as well as Malthus's pessimistic text *Essay on the Principle of Population*. His idea of population control strongly influenced Darwin's idea of natural selection, and by the end of the century mutated into the topics of eugenics and socialism, which channelled into H. G. Wells' *The Time Machine*, considered one of the early representatives of the literary genre of dystopia.

What crucially contributed to dystopian sentiments was the increasing industrialization and mechanization of Victorian Britain, which exaggerated anxieties about the severance of some kind of organic link between humans and Nature that in the Enlightenment philosophies go at least as far back as Rousseau. In this trajectory, philosopher Thomas Carlyle spoke in 1829 of an age of machinery, criticizing that the lives of factory workers were regulated by their shifts to such an extent that they became "mechanized" themselves. As Stableford writes, "Carlyle's essay elevates Mechanism to the status of a satanic counterpart to Nature."[148] This meant for him that, instead of more organic temporal cycles, the technological society became dominated by the clock, while nature became a limitless storehouse for the industrialised transformation and exploitation through human labour. In this context Karl Marx developed his critique of capitalism, which crucially deployed the concept of the alienation of labour. In

147. Brian Stableford, "Ecology and Dystopia," in *The Cambridge Companion to Utopian Literature*, ed. Gregory Claeys (Cambridge: Cambridge University Press, 2010), 266.
148. Ibid., 264.

Economic and Philosophical Manuscripts of 1844 Marx argues that the factory worker is alienated from the object of their labour, the labour process, other humans as well as the "species-being", which, as Bellamy Foster argues, Marx understood as "the transformative, creative activity that defined human beings as a given species."[149] Bellamy Foster emphasizes that all this was intricately entangled for Marx with an alienation of the human species from nature, which he understood as the material base that humans transform into the means of subsistence. Such overwhelming sense of alienation, from both internal species-being (i.e., humanness) and external nature (environment), stems from the institution of private property in a capitalist society and it can be transcended with the abolition of land ownership as the means of production and with the instalment of socialized production. In this way humans would through material activity creatively transform their relationship with nature in a way which is not conditioned by gaining profit from the surplus value for the capitalists, and which is therefore more authentic and not alienating, as Marx thought. He also criticized the increasing pollution in the big industrialized cities such as London, as well as the poor housing and working conditions of workers, and these environmental concerns contributed to his concept of alienation.

Anxieties around the human relationship to inner or outer nature were raised also by the evolutionary theories. Darwin situated the human species into the evolutionary time, which challenged its fixed, God-given position, and emphasized kinship with other living beings. The idea of random mutational processes undermined a teleological narrative in which the human is the pinnacle of divine creation. It also opened the horizon for the thought of human extinction and a displacement by the material processes seen as oblivious to the human specificity. This produced concerns around how to redefine the specific difference and place of the human in the material world, which were no longer certain.

149. John Bellamy Foster, *Marx's Ecology: Materialism and Nature* (New York: Monthly Review Press, 2000), 72.

The ways in which the classic Gothic sci-fi scenarios stage the affect of human alienation from nature both channelled the outlined cultural anxieties as well as contributed to their shaping, and are very much alive in contemporary popular culture. Let us look closely into Shelley's and Wells' scenarios of alienation in order to examine how they produce a human-centric perspective as well as possibly undermine it.

Improperly Technologized Humans

In the previous chapter I looked at how the Gothic thread of delightful terror and horror is utilized in *Frankenstein* and *The Island of Dr Moreau* to delineate between humanity and nonhumanity through affect. I argued that horror and terror, mixed with wonder, can be understood as a function of Agamben's anthropological machine, which signals in the affected bodies of the narrators Frankenstein and Prendick the nonhumanity of the creature and the Beast-People, respectively. Their "nonhumanity" abjected through affect, is staged as animality and monstrosity, but also in a Cartesian mechanistic way, as their sentience/pain is treated as an expendable instinct. I followed Oliver's argument that Agamben's anthropological machine that produces killable bare life, does not involve only the human-animal distinctions, but frequently involves also the human-machine or organic-technological distinctions in various ways. Such human-nonhuman affective biopolitics unfolds itself further in *The Time Machine* and *The War of the Worlds*, in the figures of animalized-technologized Martians and Morlocks. While they certainly provoke terror/horror in the narrators (similarly to the monster and Beast People, as we saw), they also embody what can be called the alienation of humans from their inner nature as well as from outer nature through technological advancements, which I wish to analyse here more closely.

Wells' Time Traveller imagines a society for which he finds "no convenient cicerone in the pattern of the Utopian books,"[150] as he puts is, implying that this society is in fact opposite to utopia – a dystopia. *The Time Machine* marks the beginnings of dystopia as a recognizable literary genre with the key ingredients of social engineering (such as human reproduction or urban housing), industrialized work, technologization, and the role of the state in all this (these ingredients are to develop fully in the 20th century fiction).[151] The Traveller speculates that the future society which is divided into two "subhuman" species, the Eloi and the Morlocks, is the radical outcome of the capitalist-worker distinction and the industrial developments of Victorian Britain. While the nation-state eventually disintegrates in this process, the human class-based society degenerates into two less than-human, animal-like species, whose relations are represented as that of predator and prey. In this way Wells imagines that humans in fact lose their inner humanness, and the role of industrialized work and technology is in fact central in installing a rift between humans and their true nature. This is brought to the foreground when the spider-like Morlocks are represented also crucially as underground machine workers:

> Evidently, I thought, this tendency had increased till Industry had gradually lost its birthright in the sky. I mean that it had gone deeper and deeper into larger and even larger underground factories, spending a still-increasing amount of its amount therein, till, in the end - ! Even now, does not an East-end worker live in such artificial conditions as practically to be cut off from the natural surface of the Earth?[152]

This passage can be understood as Wells' particular take on Marx's view of modern alienation from the labour process, from fellow humans, from the human species-being (transformative, creative activity that defines humans as a species) as well as the outer nature. The Morlocks, working on the machines under the ground in "artificial" conditions, become alienated from the surface of the Earth, which is seen as their natural habitat. As a

150. H.G. Wells, *The Time Machine* (Planet eBook), 64.

151. According to Gregory Claeys in "The Origins of Dystopia: Wells, Huxley and Orwell," in *The Cambridge Companion to Utopian Literature*, edited by Gregory Claeys (Cambridge: Cambridge University Press, 2010), 107-134.

152. Ibid., 63.

consequence, they become alienated from their own human nature as they gradually degenerate into spider-like nocturnal, predatorial creatures. Furthermore, they are alienated from their fellow humans, the upper class Eloi (who also degenerate into something nonhuman) for whom they produce and whom they eventually start to feed on. Not simply the activity of labour itself, but rather modern working machines play a crucial role in these alienations, and become a threat to humanity itself. What is thus gestured at in *The Time Machine* is an emerging need to save a proper form of humanity from their technological prostheses, which is a cautionary thread that Wells develops head on three years later in *The War of the Worlds* (1898).

In this novel the Martians (as a stand-in for future humans) who attack the Earth are not only octopus-like, but also crucially operate different machines in sophisticated ways, be it for work or for killing. Such cautionary thread anticipates in fact Heidegger's views on technology, the biopolitical implications of which Agamben unpacks and criticizes in *The Open* (2004). Agamben criticizes Heidegger's view of an essential difference between humans, who have an authentic relationship to Being, and animals who are "poor in world". He sees it as crucially informing the distinctions through which the modern anthropological machine operates, between those who are "fully" human, and politically valued *bios*, and those who are "less than human" based on their biology, or *zoē* as a biological life. While Agamben exposes the anthropological machine at work in Heidegger's distinctions, he does not address the crucial role that modern technology plays in the divisions between full and lesser human lives. He rather hints at this role of technology when he writes towards the end of *The Open* that for Heidegger, there are two modern scenarios possible: the first in which man seeks to take on his animality and "govern it by means of technology," and the other in which man's animality "neither remains hidden nor is made an object of mastery."[153] In my

153. Giorgio Agamben, *The Open: Man and Animal* (Stanford: Stanford University Press, 2004), 80.

reading of Heidegger here, via Agamben, the relationship between humanity and animality crucially goes through technology: the technological mastery reduces humans to their animality which they want to manage, and only a release from such mastery would restore the authentic relationship of humans to Being, where their animality would no longer be at stake, to put it like this.

Timothy Campbell looks closely into Agamben's critique of Heidegger and considers singularly important his "drawing forth of an implicit sacralisation from Heidegger's ontology,"[154] but also points out that Agamben does not address the question of technology. Campbell then elaborates on Heidegger's condemnation of modern technology. Modern technology, epitomized for Heidegger by the typewriter, is not simply a tool but what he calls a way of "enframing", by which he means governing and, in fact, dominating the human relationship to Being, which in this way becomes inauthentic and therefore improper. As Campbell explains, this way of thinking slips into making a distinction between a proper and improper (i.e., technologically enframed) ways of being human, or proper and improper human lives. For Heidegger, modern technology can be said to change the very essence of what it means to be human, as Campbell argues: "The change in the species of man that attempts to extend his domination over technology […] is in fact what is most dangerous about technology."[155] Because of this, the modern human is for Heidegger in need of saving. Campbell further suggests that Agamben does not address explicitly this aspect of Heidegger's biopolitics – the withdrawal of Being from the human which reduces it to zoē precisely through technology – because an overall negative vision of modern technology implicitly informs Agamben's own theory of bare life. What is crucial to understand about the concept of bare life, as Campbell argues, is that as life which in modernity can be taken with

154. Timothy C. Campbell, *Improper Life: Technology and Biopolitics from Heidegger to Agamben* (Minneapolis: University of Minnesota Press, 2011), 34.
155. Ibid., 7.

impunity, it is completely managed and mastered through technological means. Agamben's understanding of the Nazi camp as a paradigmatic space which produces bare life on a massive scale supports this reading as the modern technology played the key role in the camp thanatopolitics. We could also infer the importance of technology implicit in Agamben's theory from the concept of anthropological *machine* itself. Agamben's suggestion that the same logic of thanatopolitics continues to persist in contemporary politics, where everybody can potentially be turned into bare life, cannot be understood without foregrounding the negative role of technology in enabling this, as an implicit Heideggerian outlook in Agamben's theory.

Wells' Martians in *The War of the Worlds* anticipate Heideggerian anxieties around modern technology changing the very essence of the human species. The Martians, who are represented as mechanized workers and fighters, are crucially marked by their technological prostheses:

> At first, I say, the handling-machine did not impress me as a machine, but as a crablike creature with a glittering integument, the controlling Martian whose delicate tentacles actuated its movements seeming to be simply the equivalent of the crab's cerebral portion. But then I perceived the resemblance of its grey-brown, shiny, leathery integument to that of the other sprawling bodies beyond, and the true nature of this dexterous workman dawned upon me. With that realisation my interest shifted to those other creatures, the real Martians.[156]

The narrator mistakes the handling-machine for the parts of a Martian body. The future machines are so sophisticated and so smoothly integrated with the Martian morphology that he compares them first to a crab's tentacles before realizing they are in fact metallic prostheses (same as the fighting prosthetic devices he saw earlier). The Martians, "dexterous workmen", are essentially brains with tentacles, that put on working or fighting metallic devices as they wish, and which integrate seamlessly with their bodies. Later in the novel the narrator suggests that "it is quite credible that the Martians may be descended from beings not

156. H.G. Wells, *The War of the Worlds* (Planet eBook), 163.

unlike ourselves,"[157] whose bodies eventually mutated to the point of turning into octopus-like, non-human creatures, who are ruthless and lack empathy. What was crucial in this undesirable metamorphosis was the use of and, in fact, increasing dependency on the advanced technology which was able to completely replace organic bodily parts. In this way the technological prostheses should be understood as alienating humans from their very embodied humanity as they literally turn them into "alien" beings. In this way Wells' imagination of an alien mesh of machine and animality prefigures Heideggerian caution against the kind of "improper" species humans might become through the technological enframing. Wells' scenario is a warning for Victorian humans to not alienate themselves through the speedy technological advancement from their own "proper" humanity. If we read the aliens as products of Agamben's anthropological machine, we can see that their improper nonhumanity is imagined as animality but paradoxically also, which is what Agamben does not address explicitly, a thoroughly technologized embodied form of life.

The way in which the negative aspects of technology do come to the fore in Agamben's theory is as a technological possibility to unleash annihilation of human lives on a massive scale. Agamben draws on the example of the Nazi state but also suggests that in contemporary politics everybody is potentially bare life. With this he implicitly continues a Heideggerian line of thinking that through technological enframing, and a "technological uprooting from earth," as Oliver discusses, "everything is a standing reserve and therefore disposable. Everything, then, is destructible and therefore terrorizible."[158] Oliver points out that Heidegger's warnings of the dangers of technology in relation to war politics are controversial as he was himself a member of the Nazi party. She adds that for Heidegger, annihilation through technology means an annihilation of the earth, in the sense of cutting a primordial

157. Ibid., 168.

158. Kelly Oliver, *Earth and World: Philosophy After the Apollo Missions* (New York: Columbia University Press, 2015), 34.

relationship to human habitat – which we could also read as an early environmentalist insight. We could suggest that based on a Heideggerian line of argument, the human "improper" relationship to advanced technology not only alienates humans from their inner proper nature, but also is seen to lead to an annihilation of life and pollution of the environment, alienating the humans from their outer nature.

Wells' Martians embody the technological dangers of both annihilation and pollution. In that sense we could say that the Martian apocalypse of the Earth foreshadows the 20th century mass annihilations by the warfare machinery as well as the environmental pollution brought on by the speedy industrialization, when the narrator writes:

> Each of the Martians, standing in the great crescent I have described, had discharged, by means of the gunlike tube he carried, a huge canister over whatever hill, copse, cluster of houses, or other possible cover for guns, chanced to be in front of him. (…) These canisters smashed on striking the ground – they did not explode – and incontinently disengaged an enormous volume of heavy, inky vapour, coiling and pouring upward in a huge and ebony cumulus cloud, a gaseous hill that sank and spread itself slowly over the surrounding country. And the touch of that vapour, the inhaling of its pungent wisps, was death to all that breathes.[159]

This scene could be interpreted as depicting either a biological warfare or a heavy smog pollution, both of which endanger humans as well as other living beings. In fact, "all that breathes" becomes disposable, in a Heideggerian way, or turned into Agambenian bare life by the means of Martian advanced machinery. The earthly humans, animals and plants can be annihilated, and the environment can be rendered uninhabitable. We could interpret the aliens, who might be future humans (as Wells strongly suggests) coming from Mars as the future technologically advanced humans who have literally been uprooted from Earth in a Hedeggerian sense and "became of another world", i.e., of Mars. In this way Martians are not only represented as having alienated themselves from their inner human nature, but also from outer nature or the planet Earth itself, which they now pollute or annihilate (as they come

159. Ibid., 114.

from another planet). The alienation of humans from their environment or natural habitat through scientific and technological advancement is communicated further in other ways in Shelley and Wells, which I wish to scrutinize in the following sections.

Visually Disorienting the Earth

Donna Haraway referred to Freud in discussion of the historical Copernican wound to human exceptionalism. As she argues, the Copernican wound "removed Earth itself, man's home world, from the center of the cosmos and indeed paved the way for that cosmos to burst open into a universe of inhumane, nonteleological times and spaces. Science made that decentering cut."[160] Copernicus, observing the sky with the naked eye, proposed a heliocentric system instead of the accepted geocentric one, which was later confirmed by Galileo, who utilized a new instrument, the telescope. These developments of modern astronomy, which started to rely crucially on telescopic vision, displaced the Earth from the center of the universe, but also relatedly displaced the human earthly position, previously thought to be God-given and fixed, within the universe. This astronomical disorientation of the human crucially depended on the new telescopic possibilities of visualizing the place of the Earth in cosmos, and we could look at the ways in which this has been unfolding till the present day. Oliver has looked in this trajectory into the photographic images of the Earth taken during the Apollo missions on the Moon (1969-1972), and the ways in which they can be said to rehearse the Copernican wound in a new context, in which the Earth is seen as threatened by environmental destruction. What interests me here particularly is the ways in which Oliver sees these photographs in the post-60s context to be producing certain affects, which negotiate the human relationship to the planet and cosmos. She analyses how the image of the Earth in

160. Donna J. Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008), 11.

outer space, the iconic Blue Marble photograph, speaks to the environmentalist concerns by coming to stand for the connectedness of all living beings, but relatedly also the vulnerability of all life in the face of technological, and particularly nuclear, destruction. In order to call for saving the planet and the life on it, they are first imagined through a possibility to be lost in an ecological fallout. These political concerns are articulated as global, a politics that attempts to unite all mankind on the globe. The Blue Marble image represents a home of all humans in need of protection from the possibility of destruction: a lonely, tiny, fragile island floating in a vast, black, unchartered ocean. As Oliver argues, this image at the same time communicates human importance, and in particular, human technological progress and achievement (the ability to travel in and "conquer" space) as well as the insignificance of human life and the whole planet when seen from and localized within wider cosmos, but also threatened by a possible technological destruction. This produces, as Oliver argues, an ambivalent affective landscape: "Seeing the Earth from space, so tiny, and yet the only visible colour, prompted ambivalent feelings of vast loneliness and eerie insignificance along with immense awe and singular importance."[161] I suggest that this ambivalence between loneliness and awe, insignificance and importance, produced through an astronomical, visual localization of the Earth within wider cosmos, can be read as alienation, in the sense of losing yet wanting to hold on to an attachment of human species to some stable place in cosmos.

To that effect, Oliver connects the ambivalence between loneliness and awe, insignificance and importance at the visually mediated image of the Earth with the following political tensions: "The reactions to seeing the Earth from space make manifest tensions between nationalism and cosmopolitanism and between humanism, in the sense that we are the center of the universe, and posthumanism, in the sense that we are insignificant in the universe."[162]

161. Kelly Oliver, *Earth & World: Philosophy After the Apollo Missions* (New York: Columbia University Press, 2015), 16.
162. Ibid., 14.

The achievements of the space exploration program were an outcome of the race between the US and the USSR, but at the same time precisely the images of the tiny blue planet within the vast universe which they returned back to Earth summoned for a cosmopolitan politics that crosses the nation-state borders and could unite mankind in the face of a possible environmental destruction. Oliver proposes that the localization of the planet and the human species on it within much wider material processes, which renders them rather small and insignificant, could be understood as a posthumanist insight. However, as she adds, this posthumanist insight is most commonly in science fiction films which show the Earth in the black universe reinscribed back into the sense of human importance, which can be read as a humanist desire. The movement between the desire for human centeredness and the disorientation and indeed vulnerability of the human place in nature, through the astronomical, visual framing of the Earth in space, I suggest, produces an affect of alienation of humans from their environment. Precisely such images/ination is staged in Shelley's *The Last Man* and Wells' *War of the Worlds.*

In Shelley's *Last Man* there is a curious character of astronomer, called Merrival, who does not really have any other role in the plot except for being an astronomer at the Windsor Castle (residence of the Lord Protector of the state) and representing what is framed as an astronomer's point of view. That is, he is imagined to be detached from the immediate affairs happening around him. In a scene after the narrator Verney returns from the Greco-Turkish war to Windsor, and the devastating contagious plague is just about to make its appearance in England, astronomer Merrival and candidate for the next Lord Protector of the state, Ryland, are discussing the future prosperity of the human kind in the following way:

> "Not so far as you may suppose," observed a little old astronomer, by the name Merrival, "the poles precede slowly but securely; in a hundred thousand years—"
>
> "We shall all be underground," said Ryland.

> "The pole of the earth will coincide with the pole of the ecliptic," continued the astronomer, "a universal spring will be produced, and earth become a paradise."
>
> "And we shall of course enjoy the benefit of the change," said Ryland, contemptuously.[163]

We could say that what is articulated in the passage is a way of alienating the human embodied scale of events from their wider environment through a scientific point of view of an astronomer, and more particularly, through his visualization of the movement of the Earth in cosmos. Using his telescope and mathematical calculations, Merrival is interested more in what trajectory the Earth will take in a hundred thousand years than in the immediate human affairs that Ryland is concerned about, and which is in crisis due to the possibility of plague. Merrival can be said to localize the human species on Earth within the cosmic space-time, on the basis of his astronomical and telescopically mediated knowledge. To follow Oliver's arguments, we could say that the other side of this disorienting localization, which renders humans rather small and could be read as a posthumanist intuition, is a humanist desire for reinscribing human centeredness and importance, and Ryland precisely plays this part in the exchange above, when he self-righteously keeps bringing discussion back to the importance of "we" of the present time, both the people around him as well as the human population. This scene, occurring before the plague spreads in England, can be said to foreshadow the ensuing events in which humans will not only be simply situated into a cosmic space-time, but endangered in their own immediate embodiment through the contagious disease. In this context Merrival repeats again his role of a detached scientist immersed in nonhuman, cosmic phenomena instead of sympathizing with the unfolding human tragedy. The narrator Verney describes him in the following manner:

> He was far too long sighted in his view of humanity to heed the casualties of the day, and lived in the midst of contagion unconscious of its existence. This poor man, learned as La Place, guileless and unforeseeing as a child, had often been on the point

163. Mary Shelley, *The Last Man* (The Project Gutenberg EBook, 2006), 102.

> of starvation, he, his pale wife and numerous offspring, while he neither felt hunger, nor observed distress. His astronomical theories absorbed him;
>
> […] If an old Roman of the period of the Republic had returned to life, and talked of the impending election of some laurel-crowned consul, or of the last battle with Mithridates, his ideas would not have been more alien to the times, than the conversation of Merrival.[164]

Merrival's astronomical ideas about cosmic bodies are "alien to the times", which is to say to the lifespan of the individuals around him, but also to the human scale of things, as he is immersed in nonhuman materiality. A scientific genius compared to Laplace, who proposed in the 1790s the nebular hypothesis of the origin of the Solar system, he is depicted as alienated from his family who is suffering amidst the contagious disease. This is happening due to his "long-sightedness", which can be understood in two ways – both as his embodied gaze through the telescope and his speculations about the future times, which distance him from the here and now. For Verney, it is no longer a question of simply localizing humans and the planet into a wider and longer scale of materiality through science and rendering them small but being able to bracket this insight nevertheless (as in the previous scene). Situating the Earth in relation to cosmos, and relatedly displacing the importance of the human place in nature, cannot be bracketed anymore (and dismissed, as Ryland did) because it is dramatically brought to the foreground at the human embodied level through the threatening agency of plague which causes individual deaths, but possibly could also human extinction. In this context, Merrival's indifference to his family and fellow humans, which reflects his posthumanist stance, we could argue, is represented as rather crazy, as Verney, whose main concern is whether his family but also the species will survive, pities him, recentering the individual and human embodied position.[165]

164. Mary Shelley, *The Last Man,* 134.

165. Such characterization of Merrival continues the trope of "the mad scientist" in a trajectory from Victor Frankenstein, who is so immersed in his scientific practice that this leads to "alienation of the affective capacities of the human mind – capacities that engender inter-subjective feelings and aesthetic and ethical sensibilities," according to Suparna Banerjee in *Science, Gender and History: The Fantastic in Mary Shelley and Margaret Atwood* (Newcastle upon Tyne: Cambridge Scholars Publishing, 2014), 129.

In *The War of the Worlds,* in the very opening page Wells sets up the tone for displacing humanity from its assumed firm place in nature, and this insight, in a trajectory from Shelley, again goes through an astronomical point of view. Wells plays with the scales of the telescopic and microscopic vision to draw attention to not only how the Earth and the humans on it are situated in the wider universe but also how they might look to other, and in particular, hostile beings out there:

> No one would have believed in the last years of the nineteenth century that this world was being watched keenly and closely by intelligences greater than man's and yet as mortal as his own; that as men busied themselves about their various concerns they were scrutinised and studied, perhaps almost as narrowly as a man with a microscope might scrutinise the transient creatures that swarm and multiply in a drop of water. With infinite complacency men went to and fro over this globe about their little affairs, serene in their assurance of their empire over matter. It is possible that the infusoria under the microscope do the same.
>
> […] Yet so vain is man, and so blinded by his vanity, that no writer, up to the very end of the nineteenth century, expressed any idea that intelligent life might have developed there far, or indeed at all, beyond its earthly level.[166]

The narrator stages, by changing the scales of vision, possible through the application of scientific instruments, human situatedness and contingency, in a way which has not been possible prior to the end of the 19th century, as he says. That is, he not only situates the Earth as the human home in wider cosmos (as Merrival has already done), but rather, based on the 19th century evolutionary theories, imagines that intelligent life might have evolved elsewhere than on Earth, and speculates what the human species might look like from the point of view of such intelligent nonhumans. The answer he proposes is that humans, "watched keenly and closely" – a description Wells models on the possibility of telescopic vision – might look the same as "transient creatures" that are seen by humans through the microscope in a drop of water. By going back and forth between the telescopic and microscopic visions, between "a drop of water" scrutinized by humans and "the globe" scrutinized by aliens, between microcosm and macrocosm, Wells activates the meanings that Oliver associates with the

166. H.G. Wells, *The War of the Worlds* (Planet eBook), 5-6.

image of the lonely planet Earth floating in a vast black ocean. These are the meanings of rendering the humans small, insignificant, but also fragile, vulnerable or "transient", which could be read as a posthumanist insight. This disorienting insight mediated through a scientific vision is alienating because humans can no longer be "complacent" and "serene" once they can imagine the possibility of other-than-earthly life that potentially might endanger them. Such imagination undermines human vanity and centredness in the universe, and assurance of their continuous existence and, indeed, "empire over matter" due to which they have not contemplated the idea of life on other planets more seriously so far. This opening framing of a human alienation from a stable place in nature sets up the stage for an actual "alien" apocalypse of the Earth, and in view of that, the narrator's critical view of humanity is by the end of the novel reinscribed within the desire to save the humans and the planet. But the opening pages do bring to the surface and linger on the sense of human insignificance.

Nature's Revenge or Indifference towards Humans

The insight into human insignificance, mediated through the image of the Earth in black cosmos in the context of environmental destruction and frequently deployed in contemporary science fiction films, can be thought in relation to what Claire Colebrook refers to as cosmic indifference. Colebrook argues that the current popular culture, and sci-fi cinema in particular, favours redemption of the humans, and mourning for the possibly lost humanity, instead of potentially exploring "cosmic indifference" to the human species in the narratives of "war between humans and the cosmos."[167] These narratives bring to the foreground the question of whether the human species deserves to survive in the context of climate change, given its malevolent practices to other living beings and the environment. The answer is that most

167. Claire Colebrook, *Death of the PostHuman: Essays on Extinction, Vol. 1* (Open Humanities Press, 2014), 188.

postapocalyptic fiction which stages human extinction through environmental destruction is by default invested in the survival of human life as we know it. An alternative way of thinking for Colebrook would be to see climatic and geological occurrences as an expression of broader, inhuman material processes rather than as primarily disastrous for humans, while life that might come after the human need not be seen necessarily as undesirable and signifying only human death. In other words, Colebrook proposes that we can think of environmental occurrences as indifferent in the sense of not being specifically targeted at and tied to the human embodied level, and also not solely caused by the human industrial activity, which is seen as one among the contributing factors. In this way, what Oliver sees as an insight into human insignificance within cosmos might be linked to a view of cosmic indifference towards the human. In that sense, a disorientation of some assumed human place in nature or indeed, a disappearance of the human species itself, need not necessarily be staged as mournful and alienating.

Shelley's *The Last Man* certainly does not welcome the idea that the life of the human species is insignificant within Nature to the effect that it can be obliterated with Nature's indifference. Therefore, Shelley stages climatic disturbances, which foreshadow the arrival of the plague, as Nature's spitefulness towards the human species:

> Yet a feeling of awe, a breathless sentiment of wonder, a painful sense of degradation of humanity, was introduced into every heart. Nature, our mother, and our friend, had turned on us a brow of menace. She shewed us plainly, that, though she permitted us to assign her laws and subdue her apparent powers, yet, if she put forth but a finger, we must quake. She could take our globe, fringed with mountains, girded by the atmosphere, containing the condition of our being, and all that man's mind could invent or his force achieve; she could take the ball in her hand, and cast it into space, where life would be drunk up, and man and all his efforts forever annihilated.[168]

In this passage Verney navigates between a humanist sense of human importance and in fact mastery over the laws of nature, and a posthumanist sense of human insignificance in cosmos.

168. Mary Shelley, *The Last Man* (The Project Gutenberg EBook, 2006), 108.

The imagination of the Earth, or indeed what Oliver discusses as the Blue Marble image, of the Earth enveloped by atmosphere against the threatening black background, is crucial for staging this movement. It produces the feelings of awe, wonder and degradation, and in this way alienates the humans from Nature. Although Shelley depicts Nature as both mother and friend, which are different political signifiers, I would like to focus here on the image of revengeful mother, as in opposition to that of benevolent father, which I discuss below.[169] Gendered female, Mother Nature is not seen as possibly indifferent but rather volatile and spiteful, as it is imagined to turn easily, on a whim, against humans and "cast their globe into space", unleashing an environmental destruction and displacing the humans from the safety of their home. Suparna Banerjee argues that the novel presents Nature as indifferent to humans, and that this "negates the eighteenth century faith in the congruence between the natural and the human orders and undercuts anthropocentrism."[170] While indifference here could be understood as a possibility of human annihilation, I would argue, following Colebrook, that Nature's indifference would mean also an absence of showing any sort of care whatsoever for the human action. In the way it is depicted above, Mother Nature does care and it is precisely because of that spiteful towards her children, for what is their hubris and an attempt at mastery of her laws and powers. In this way, though on the one hand the human species is rendered insignificant through the possibility of its ultimate annihilation within cosmos, on the other hand its centredness is reinscribed insofar as the Nature's actions are specifically aimed at the human level. The natural disaster is understood as such precisely because it is disastrous *for* humans, rather than as an expression of broader material processes, which is what might be read as cosmic indifference, according to Colebrook. Such scenario results in

169. The notions of mother and friend which Shelley uses in the same sentence signify different political relations, but here I choose to focus on the political meanings of mother in relation to humans as their children, which is used by Shelley more frequently throughout the novel, and is also a more conventional depiction of Nature in Romantic literature.

170. Suparna Banerjee, *Science, Gender and History: The Fantastic in Mary Shelley and Margaret Atwood* (Newcastle upon Tyne: Cambridge Scholars Publishing, 2014), 130.

the mourning for the anticipated loss of the human species, and interestingly enough, in a nostalgic outlook on the past, when, according to Shelley, the human was at the centre of divine creation and not yet alienated from Nature:

> Once man was a favourite of the Creator, as the royal psalmist sang, "God had made him a little lower than the angels, and had crowned him with glory and honour. God made him to have dominion over the works of his hands, and put all things under his feet." Once it was so; now is man lord of the creation? Look at him – ha! I see plague! She has invested his form, is incarnate in his flesh, has entwined herself with his being, and blinds his heaven-seeking eyes. Lie down, O Man, on the flower-strown earth; give up all claim to your inheritance, all you can ever possess of it is the small cell which the dead require.[171]

In this passage Verney is nostalgic for past human significance as staged in the biblical discourse, which is undermined through the secularized agency of plague in the present. The two discourses, of the divine agency of God and the natural agency of plague, are not constructed as mutually exclusive but rather as historically successive. While Nature gendered as female and mother is spiteful, the Christian God gendered male and father, is seen as having been generous towards the human. In the past, framed through the biblical discourse, humans were supposedly "favourite" of the Creator and granted mastery over the rest of the creation, in juxtaposition to the secularized and scientifically framed present, where Nature has alienated humans from their "inheritance". The staging of alienation of humans from their earthly home, i.e., their insignificance and possible obliteration, is based for Shelley on the historical shift between a divine generosity and a secular spite towards the human; where the two historically successive but equally valid worldviews stage the human central place in cosmos.

In Wells's *The War of the Worlds*, on the other hand, the narrator does not fall back on religious interpretations to mourn the home supposedly granted to humanity by the Christian God, but rather conveys indifference of the secularized cosmos towards humans. In Wells'

171. Mary Shelley, *The Last Man* (The Project Gutenberg EBook, 2006), 145.

late 19th century worldview there is no attempt to appeal to God except in an ironic sense. In the opening of the novel, as we saw above, the narrator insists on localizing the Earth and its human inhabitants by imagining the Martians who might have been scrutinizing them for ages through their instruments. They might have done this in the same way as the scientists study tiny creatures in a drop of water, but also the anthropologists cast their gaze on the unknown societies. In this way the smallness, vulnerability, and insignificance of humans and their earthly home is staged. Later in the novel such an outlook comes to the fore again, when the narrator describes the killing of a group of humans by the Martians by the so called heat ray, which burns everything to death instantaneously:

> Nothing was changed save for that and a terrible astonishment. The little group of black specks with the flag of white had been swept out of existence, and the stillness of the evening, so it seemed to me, had scarcely been broken. It came to me that I was upon this dark common, helpless, unprotected and alone. Suddenly, like a thing falling upon me from without, came – fear. With an effort I turned and began a stumbling run through the heather. The fear I felt was no rational fear, but a panic terror not only of the Martians, but of the dusk and stillness all about me. [172]

The narrator stages the insignificance of humans by playing again with the distance and proximity of a visual view from the killed humans, and by registering it affectively through "terrible astonishment". The people killed by the Martians' heat rays are imagined from a considerable distance as simply "the little group of black specks", while the sounds that caused their death "had scarcely broken the stillness of the evening". In other words, some humans got killed by the aliens, and a second later everything goes on as normal, as if nothing has happened at all. This could be understood as nature's indifference, i.e., nature's total obliviousness to what happens to humans, through a visual but also audible incongruity with the dramatic occurrences. It is not only vision but also (the absence of) sound, for Wells, which frames the catastrophe for humanity that took place as insignificant (and more will be said on the importance of sound in Wells below). However, this disorientation through

172. H.G. Wells, *The War of the Worlds* (Planet eBook), 32.

distance and silence shifts back in the next moment to the human embodied experience and provokes the feelings of helplessness, loneliness and fear – as an alienation of the narrator from the indifferent surroundings around him. That is, it is not that he is unbearably afraid only of the Martians, but of "the dusk and stillness" around him, i.e., of nature which does not seem to care what happens with humanity in the face of destruction. With this, Wells reinscribes the sense of importance of the human embodied scale and human life, as Oliver and Colebrook help us understand. This is played out a couple of pages later when the narrator, still navigating between the visual distance and proximity to human corpses, silence and the sounds of human death, proclaims the following:

> Perhaps I am a man of exceptional moods. I do not know how far my experience is common. At times I suffer from the strangest sense of detachment from myself and the world about me; I seem to watch it all from the outside, from somewhere inconceivably remote, out of time, out of space, out of the stress and tragedy of it all.[173]

The narrator is trying to navigate between the impending human tragedy of massive death caused by the Martians, to which nature is oblivious, and the fact that human everyday activities elsewhere in London and the rest of England continue as normally and trivially as ever, as if nothing is wrong. The way for him to deal with such incongruity is to detach himself from his own embodiment and supposedly take a view from nowhere, "out of time and space", as to survive affectively the knowledge of the imminent human catastrophe amidst the normal everyday experiences. Wells stages an alienation from own embodied self at the traumatic prospects of annihilation, which in turn reinscribes a desire to save humanity and to not let go of it as it is simply impossible to embody the knowledge that humanity might be obliviously obliterated by the nonhuman forces.

173. Ibid., 38.

Postapocalyptic Land/Soundscapes of Mourning

Wells's imagination of the site of destruction of a group of humans by the aliens, permeated by stillness as if nothing has happened at all, can be said to also activate the political meanings associated with the images of desert and postapocalyptic space, as Oliver and Colebrook discuss them. For Oliver, as we saw, the image of the Earth in outer space as a metaphor for a lonely island in a vast black ocean provokes the ambivalent feelings of awe and loneliness, and the senses of human importance and insignificance. Furthermore, she discusses another image and metaphor as provoking similar ambivalent reactions – the desert. She looks into the ways in which Arendt and Heidegger, both in reference to war, deploy the desert to stand for an inhospitable political geography, marked by the particular feelings of isolation and meaninglessness. Arendt associates the desert with wordlessness, isolation and a lack of connections between people, which can allow for totalitarianism to slip in as a "sandstorm", as she writes. As Oliver argues, Arendt's conceptualization of the desert is that of the loss of human relationships that make life meaningful and is not necessarily linked to postapocalyptic spaces. On the other hand, Heidegger's understanding of desertification has postapocalyptic connotations as it is seen primarily as an outcome of the human improper relationship to technology, as discussed earlier. For him, modern advanced technology uproots or unearths humans from the earth, which results in a desertification of the world. The desert stands here for the possible threats of annihilation and pollution through technology, as well as dehumanization of humans through becoming animalized/technologized: "Like animals, we become poor in world when the totalizing technological worldview renders our world a meaningless desert, as if devoid of life, or at least devoid of the meaning of life."[174] As discussed earlier, these Heideggerian ideas have biopolitical implications of adjudicating who is more or less properly human based on their relationship to technology. The modern

174. Kelly Oliver, *Earth & World: Philosophy After the Apollo Missions* (New York: Columbia University Press, 2015), 34.

improperly technologized humans live in a lifeless and meaningless world of a desert, where everybody and everything becomes easily disposable or annihilated. As Oliver adds, such a perspective is frequently staged by contemporary postapocalyptic films, where the uncanny desert produces nostalgic memories of what earth once was, in order to call for saving the earth and the humans on it from environmental destruction.[175] Of course, this reasserts a human centric perspective from which the desert appears barren and lifeless, which is far from true, as Oliver notes. She suggests an alternative perspective on the desert, taking from Derrida, arguing that it can be seen also as a condition for any possible meaning and meaningful life, a performative space not yet inscribed within law or convention but rather fundamentally open for communication and relationality.

Claire Colebrook reads the postapocalyptic space in contemporary science fiction in similar ways. As she argues, as long as world is understood primarily as stemming from human meaning, imagining the postapocalypse is framed as a redemptive narrative, in which humanity ultimately saves itself, or a cautionary dystopia, which warns that the present human actions should be averted: "…for all our *post-apocalyptic* or *techno-utopian* posthuman imaginings - we remain tied to a nostalgia for the properly human that has supposedly been threatened by an inhumanity that may appear from without."[176] She discusses the key role of geological image, as an image of the earth's strata after the humans have been gone, that is inscribed with the traces of human capacity to cause radical environmental change. The meanings of such constructed geological image resonate with the meanings of the desert as discussed by Oliver. The postapocalyptic geological image is staged as a deserted world, inscribed with the remaining traces of the human species, such as the crumbling or flooded buildings, and permeated by nostalgia for the human world as it once

175. Ibid., 34.

176. Claire Colebrook, *Death of the PostHuman, Essays on Extinction Vol. 1* (Open Humanities Press, 2014), 206.

was. Colebrook asks a question if it is possible to imagine a posthuman world differently, which would be a thought experiment in inhuman perception, as she says, imagining other timelines and other points of views than the human one. "Can we imagine a form of reading the world, and its anthropogenic scars, that frees itself from folding the earth's surface around human survival?,"[177] and furthermore, which would not produce the alienating sense of mourning for the lost humanity but rather "we can look positively to the inhuman and other imaging or reading processes."[178] She proposes that such a postanthropocene or disembodied image, as she calls it, would try to convey a sense of a world that is not *for* a human body, i.e., not tied to a human embodied point of view, but rather opening the reading/perceiving of materiality to other, inhuman points of view after the humans have been displaced by the Earth. As she quickly adds, this would be a thought experiment, as any projection onto a future Earth's surface emptied of humans is necessarily imagined from the present time and by an embodied human (same as the images of the Earth from space which Oliver discusses, while staging an inhuman point of view, were taken by the astronomers). Nevertheless, they contain a possibility to think of a world from an inhuman perspective which, crucially, is not necessarily inscribing mourning for the human species.

Shelley's *The Last Man*, and Wells' *The War of the Worlds* and *The Time Machine* stage a scenario of disastrous human extinction, be it caused by plague, aliens or degeneration. One way in which this scenario unfolds is by trying to imagine what a world without humans in the future might look like. More precisely, the novels imagine what the surface of the Earth might look like with the human bodies gone or just a very few of them left. The novels thus describe postapocalyptic spaces, as the deserted surface of the Earth, which are all imbued with a nostalgia for a proper human political world (a world of proper meaning, values and laws) in the way that Oliver and Colebrook discuss. In Shelley's *The Last Man*, in the

177. Ibid., 23.
178. Ibid., 28.

moments after the catastrophic plague has ravaged England, Verney paints the landscape in the following manner:

> Have any of you, my readers, observed the ruins of an anthill immediately after its destruction? At first it appears entirely deserted of its former inhabitants; in a little time you see an ant struggling through the upturned mould; they reappear by twos and threes, running hither and thither in search of their lost companions. Such were we upon earth, wondering aghast at the effects of pestilence. Our empty habitations remained, but the dwellers were gathered to the shades of the tomb.[179]

Shelley shifts between the macrocosm and microcosm metaphors, similarly to Wells who, as I discussed earlier, compares the humans on Earth to tiny organisms in a drop of water. Verney disorients the human embodied scale by comparing it to an anthill. The anthill is a "deserted mould", which is a depiction of the Earth's surface that, following Oliver's arguments, activates the political meanings of meaninglessness, emptiness, and loss of the properly human world. The deserted anthill is not emptied completely of human bodies but inhabited by a few survivors who skitter around like ants in a state of "wondering aghast" at the agency of plague, thus alienated and not being able to posit a properly meaningful world in an Arendtian way. It is a postapocalyptic space, upturned after the destruction, which if we follow Colebrook, inscribes mourning for the death of the human species ("the shades of the tomb"). What is alienating is the fact that the Earth, the home of the human species, can nevertheless easily displace humans and from its surface and turn its strata into a tomb. For Verney, eventually the last man on Earth, it is not enough to know that different animal and plant species continue to flourish in the deserted landscapes in spite of the plague (as we find out later in the novel), and the lack of human bodies in such spaces prompts in him only mourning for the human lives and nostalgia for the human political world as it once was.

As sci-fi scholar Patrick Parrinder argues, Wells's novels *The Time Machine* and *The War of the Worlds,* written just before the turn of the 20th century, stage pessimistic millennial

179. Mary Shelley, *The Last Man* (The Project Gutenberg EBook, 2006), 145-146.

anticipations of the apocalypse, which will change in the new century, when Wells takes a much more optimistic political outlook.[180] Postapocalyptic spaces in early Wells, depicted after the human species has gone extinct in the far future in *The Time Machine,* or might go extinct with the Martian apocalypse of the Earth in *The War of the Worlds*, are not only constructed through the visualization of desert but also through (the lack of) sounds in the desert. Wells imagines silence pervading the future deserted spaces which accompanies the absence of (human) life, to convey a sense of alienation of humans from a no longer homely and safe earthly environment. The Time Traveller in *The Time Machine* travels to a very far future when there are no living beings left except for some green slime on the rocks and some black round things with tentacles on the beach, and human traces could potentially only be found in the geological strata. What adds to the apocalyptic tone of the extinction scenario is a sudden eclipse of the sun that the Traveller witnesses on a beach:

> 'The darkness grew apace; a cold wind began to blow in freshening gusts from the east, and the showering white flakes in the air increased in number. From the edge of the sea came a ripple and whisper. Beyond these lifeless sounds the world was silent. Silent? It would be hard to convey the stillness of it. All the sounds of man, the bleating of sheep, the cries of birds, the hum of insects, the stir that makes the background of our lives – all that was over. As the darkness thickened, the eddying flakes grew more abundant, dancing before my eyes; and the cold of the air more intense. At last, one by one, swiftly, one after the other, the white peaks of the distant hills vanished into blackness.[181]

The relationship between humans and the planet which has displaced humans in the future is communicated through a visual imagination of a desolate beach enveloped by blackness, cold wind and snowflakes, but significantly also by the sound of silence. Oliver's and Colebrook's analysis help us understand how it is that the construction of the planet's deserted surface in the future channels the sense of human alienation from their assumed home that might displace them, but we can also add to this the imagination of sounds in the desert. While

180. Patrick Parrinder, "Edwardian Awakenings: H. G. Wells's Apocalyptic Romances (1898-1915)," In *Imagining Apocalypse: Studies in Cultural Crisis,* edited by David Seed (Basingstoke: Macmillan Press Ltd, 2000), 62.

181. H.G. Wells, *The Time Machine* (Planet eBook), 110.

Oliver speaks of the image of the desert, and Colebrook of the geological image, they do not address the sounds that accompany the moving images of contemporary sci-fi films. We can easily think of the ways in which eerie sounds in deserted landscapes are staged in postapocalyptic films to disorient the human relationship to the environment. As a historical precursor to this, Wells imagines both a deserted landscape and soundscape to communicate the threat of disappearance of not just human but almost all earthly life. That is, the ripple and whisper of the sea are "lifeless" sounds, which however cannot be easily taken for granted, and re-asserts a human-centric perspective, as we saw with Oliver's arguments. However, at the same time, the disappearance of sheep that the narrator mentions, due to the absence of their bleating, is earlier in the novel attributed to human actions. In the beginning of the novel when the narrator explains why the Eloi are strict vegetarians, he says that many animal species have already gone extinct, such as horses, cattle, sheep and dogs. He does not linger on this statement, but the reader is to infer from this that it is precisely those domesticated species most bred and kept by the humans, in the context of increasing industrialization of food production, that went extinct. If we connect this to the picture of the technologized Morlocks who live underground, as I analysed earlier, we can say that although a critique of the increasingly industrialized and technologized management of life is not directly articulated (but it comes to the fore subsequently in *The War of the Worlds*), it is hinted at with mentioning the role of humans in the extinction of other species. It is the advanced technologized society that drove humans into degeneration and relatedly other species into extinction. In the quote above however, this destructive role of humans is not voiced and is subsumed under the feelings of mourning for all animal life, both human and nonhuman: for "the sounds of man, the bleating of sheep, the cries of birds and hums of insects" that once could be heard on Earth. The Traveller is shocked and disoriented at the species extinction he witnesses in the future deserted space, and instead of possibly opening this image to "an

inhuman perception" not tied to human embodiment, as Colebrook suggests, he in panic quickly escapes back to the safety and familiarity of the human world of his Victorian London.

In *The War of the Worlds* the narrator witnesses the late 19th century London emptied out of human bodies, which have either become victims of the Martians' attacks or have fled the city in order to rescue themselves. In the chapter entitled "Dead London" Wells describes postapocalyptic spaces of the devastated city permeated with unbearable silence:

> There was black dust along the roadway from the bridge onwards, and it grew thicker in Fulham. The streets were horribly quiet. I got food – sour, hard and mouldy, but quite eatable – in a baker's shop here. Some way towards Walham Green the streets became clear of powder, and I passed a white terrace of houses on fire; the noise of burning was an absolute relief. Going on towards Brompton, the streets were quiet again. Here I came once more upon the black powder in the streets and upon dead bodies. [182]

The silence of the devastated city provokes utter anxiety, while even the sound of burning brings "relief", as the narrator says. Alienation of the remaining humans from their environment is mediated through both sound and image of a postapocalyptic city. As I wrote earlier, the Martians are supposed to represent technologized humans from the future and the possible threats of annihilation and pollution of modern technology, anticipating Heideggerian views, which are staged by the images of black dust and black powder as the remainders of devastation. These land- and soundscapes thus represent a Heideggerian desertification, and can be said to be deployed by Wells as an early environmentalist critique, in the sense of prompting humans to change their actions and return to their "home" alienated through technology, save the planet and themselves. On the other hand, Colebrook is critical of the environmentalist politics inscribed in the postapocalyptic image which produces mourning for the lost humanity, and asks if the surface of the Earth imagined without humans is necessarily to be mourned. She points out that different forms of life would continue living

182. H.G. Wells, *The War of the Worlds* (Planet eBook), 216.

after the humans (and would not be simply a degradation of more proper forms of life, which is how Wells sees Martians, Eloi, Morlocks, or crabs), and certainly material processes would continue to unfold. However, such possible outlook is beyond Wells' purview, who through the eerie images and sounds of postapocalyptic ruins invests in saving primarily human life on Earth.

Conclusion

This chapter continues on the previous one in which I examined how the Gothic affects of terror/horror/wonder are staged in *Frankenstein* and *The Island of Dr Moreau* to either expel or welcome nonhuman agencies into human subjectivity. In this chapter I proposed that another affect should be examined at the intersection of sci-fi and Gothic trajectories, that negotiates between the human and nonhuman, which is alienation. Drawing on biopolitical and posthumanist/environmental approaches, I showed how alienation is staged in *The Last Man*, *The Time Machine* and *The War of the Worlds* as a loss of attachment to either a stable place in external nature (environment) or to an inner nature (humanness). In turn, this thread of alienation can be easily traced in recent sci-fi, refashioned in the new context as, for example, an overuse of digital technologies at the expense of face-to-face communication or the human pernicious effects on the environment which led to climate change. In this trajectory, Wells' novels can be understood as early articulations of an environmentalist critique.

I looked into how the affect of alienation either reaffirms human centredness and propriety in the face of a nonhuman threat, or possibly undermines a human-centric perspective. The close readings showed the following. Wells' representation of the animalized-technologized Martians who release poisonous gas upon the Earth prefigures a Heideggerian outlook on

modern humans as improperly technologized – due to which they alienate themselves from their own proper humanness as well as from their earthly environment. Relying on Campbell, I suggested that such assertion of what is properly human has biopolitical implications, of delineating improper and disposable human lives (those which are technologically enframed). Furthermore, both Shelley and Wells stage an alienation of humans from some assumed stable place in nature through the visualization of certain spaces: the Earth in space and the postapocalyptic desert. Both deploy astronomically framed images of the Earth in relation to wider cosmos to stage a disorienting ambivalence between the senses of human importance and human insignificance in cosmos, awe and loneliness, between a humanist desire and a posthumanist insight, as Kelly Oliver's work helped me analyse. However, in the face of nonhuman threats to the human species (plague, aliens), the importance of human life on Earth is reasserted, against the spitefulness of Nature in Shelley or in spite of nature's indifference in Wells. Finally, the images, but also (the absence of) sounds in Wells, of the postapocalyptic deserted Earth's surface in all three novels stage a mourning for the life of the human species, instead of possibly framing the species extinction within the wider material processes not by default as mournful, as Colebrook suggests.

We can conclude that the scenario of human alienation in Shelley and Wells, as a loss of attachment to some proper inner nature or some stable place in the environment, are predominantly invested in the continuous survival of the human species on Earth, the proper kind of human relationship to technology, as well as recentering the material processes back to the human scale. Nevertheless they still allow at moments for the insights of human insignificance and cosmic indifference to surface.

Chapter 4: Disastrous Extinction of the Human Species

Introduction

In the previous chapter I analysed Mary Shelley's *Last Man (1826), H.G. Wells' Time Machine (1895)* and *The War of the Worlds (1898)* as the scenario of human alienation from (human) nature, which stages alienation as an affect of undesirable loss of some authentic human attachment to either external (environment) or internal (embodied) nature. As we saw, such affective biopolitics channels environmental concerns as well as concerns around the modern over/uses of advanced technology. Building on these insights, here I continue with analysis of the three novels, reading them as the scenario of disastrous extinction, which could be seen as precursor to the contemporary imagination and thinking of climate change. As in the previous chapter, I draw on biopolitical and posthumanist/environmental tools to read the scenario of disastrous extinction, zooming in particularly on the role of modern nation-state. More precisely, I argue that the 19th century sci-fi scenario of disastrous extinction stages a state ordering of human survival against the agency of nature, but also challenges nation-state politics in favour of global citizen in the face of a nonhuman threat.

Be it floods, hurricanes, pandemics, nuclear outfall or alien invasions, the imaginaries of some radically disastrous event and the possibility of massive or total obliteration of humans have been closely tied together in modern science fiction, developing most recently with an explicit environmentalist twist. At the beginning of the 19th century, the existing biblical frameworks of an apocalyptic end of humanity became transformed by the new conceptualizations in the geological and life sciences, and the secular future horizons of the modern state. In this context Shelley's *The Last Man* in 1826, which imagined a planetary human extinction at the end of the 21st century caused not by divine will but by a catastrophic outbreak of plague, inaugurated a "fad in Victorian science fiction for end of the universe

stories."[183] Crucially, both Shelley's and Wells's novels stage a possible human extinction not just as an issue for individual humans, but rather for the whole states. This can be best understood within the Foucauldian framework of biopolitics as the modern state governing of human population. Within this framework, I explore the links between Agamben's notion of the state of exception and Ruth Miller's understanding of natural disaster by showing the ways in which a disastrous extinction in the novels is figured primarily as crumbling the state order, and relatedly positing the relations between the humans and nature in some way in terms of war. As we will see, when a scenario of disaster is read as a biopolitical state of exception, it foregrounds an Agambenian symptom of constantly drawing boundaries between nature and law, the so called state of nature and modern state, in order to justify the instalment of sovereignty. The issue at stake in drawing these boundaries is how to frame human violence, as the foregrounding of disastrous extinction raises the question of whether humans, due to their violence, have in fact deserved to be obliterated as a species. In response to this, the novels articulate a questioning of nation-state politics, and refashion a state citizen into a global citizen under the nonhuman threat of nature. This can be understood in the way that Claire Colebrook suggests, as an investment in a certain kind of cosmopolitanism in the face of extinction, which however keeps the human embodied form of life and human civilization as the highest values that need to be preserved at all costs.

Before I go into close readings of the novels, let me briefly elaborate on the interlinked 19th century trajectories of the development of futuristic fiction, secularization of biblical apocalypse and new understandings in geological and life sciences, which all come together to shape the sci-fi scenario of disastrous extinction. Historian of sci-fi Paul K. Alkon argues

183. Robert Markley, "Time," in *Telemorphosis: Theory in the Era of Climate Change,* ed. Tom Cohen (Open Humanities Press, 2012), 51.

that before the 18th century, the temporality of humans in western literature was predominantly constrained by religious frameworks.[184] By this he means that the displacement of humans from the present time was imagined mainly through the religious myths: of the classical Golden Age located in some happy past, the Christian heaven and hell located in eternity, or the coming apocalypse, as a destruction of the world brought on by God. These literary frameworks underwent changes throughout the Enlightenment processes of industrialization, scientific developments, and class politics, and by the end of the 18th century, the narratives of secular political futurity took center stage, which Alkon refers to as "futuristic fiction."[185] The genre of biblical apocalypse was transformed by secular horizons, and some radical disaster for humanity started to be framed as caused by (also) natural rather than (only) divine agents. Alkon suggests that Jean Baptiste Cousin de Grainville's novel *Le Dernier Homme* from 1805 was the beginning of what he reads as the secularization of apocalypse, while after two decades, "Mary Shelley's story is a complete secularization of Apocalypse that reduces Revelation to a source of imagery decorating a work."[186] Robert Markley, who unearths a genealogy of the western conceptualizations of time, dates the shift in the literary representations of disaster similarly, between the times of Daniel Defoe and Mary Shelley. Defoe wrote in 1703 about a devastating wind storm, a tropical cyclone that struck England as the God's vengeance for England's sins. Mary Shelley in 1826 imagined human extinction on a planetary scale caused by a catastrophic plague which was preceded by raging winds and storms, but she did not frame it as an expression of divine will. Rather, as Markley suggests, climatic occurrences were by then no longer understood "as the

184. Paul K. Alkon, *Origins of Futuristic Fiction* (Athens and London: The University of Georgia Press, 1987).
185. Ibid.
186. Ibid., 190.

catastrophic irruption of divine judgement but as a non-anthropogenic time that transcends both individual and historical experience."[187]

What brought on such profound changes in the understanding of time were the scientific developments at the turn of the 19th century, which challenged the biblical chronology. As Markley usefully summarizes,[188] in the 1790s Pierre Simon de Laplace proposed a theory of the origins and evolution of the Solar system, situating it into cosmological time, while James Hutton argued that the Earth's crust changes historically through the processes of erosion and sedimentation over long spans of geological time. These insights situated the Earth into a much longer history than the biblical 6000-year period. At the same time Georges Cuvier offered arguments for species extinction, relying on the fossilized remains of the species that humans had never encountered such as the mastodon. He did not endorse an idea of evolution of organic species, but argued that the paleontological evidence shows that species go extinct and new species develop as an outcome of disastrous climatic and geological events. Other thinkers, however, in particular Charles's grandfather Erasmus Darwin, were developing early theories of evolution in which species, including humans, were seen to gradually develop from other organic forms. Contrary to biblical arguments, the human species was put in the relationship of kinship to other species, and its history was situated in a long evolutionary, geological, climatological, and cosmological time. All this paved the way for Charles Darwin's evolutionary theory, in which he argued that the species transform, evolve into new ones and go extinct through long gradual processes of natural selection rather than primarily through periodic major disasters, as Cuvier had thought.

The 19th century horizons of extinction, particularly the possibility of human extinction, be it through some climatic or geological catastrophe, an extermination by another species, or

187. Robert Markley, "Time," in *Telemorphosis: Theory in the Era of Climate Change*, ed. Tom Cohen (Open Humanities Press, 2012), 51.

188. Markley, "Time."

through gradual natural processes, channelled into the futuristic fiction concerned with the secular political future that had been developing since the 18th century. The idea of a sudden disaster played a key role here because it reworked the old genre of biblical apocalypse, but a Darwinian idea of long gradual processes towards extinction came to inform science fictional accounts as well. While Mary Shelley at the beginning of the century imagines an apocalyptic plague preceded by volatile climatic occurrences, which decimates humanity, H.G. Wells at the end of the century adds Darwinian twists to his plots, imagining an alien species apocalypse upon the Earth as well as a long gradual devolution of humankind into oblivion. In the rest of the chapter I approach the scenario of a disastrous human extinction by relying on the Foucauldian biopolitical framework in order to argue that it stages a state management of human survival against the agency of nature.

Naturally Disastrous for the State Order

Before I look into the links between Ruth Miller's understanding of natural disaster and Agamben's concept of the state of exception, let me elaborate on Foucault's understanding of the modern state, which both these thinkers draw on. The Foucauldian biopolitical framework crucially informs Shelley's and Wells's novels, where human extinction is staged not simply as an issue for individual lives but as an issue for the state. In the eleventh lecture of *Society Must Be Defended* (1975-76), Foucault defines biopolitics as a modern mode of governing situated at the level of a population, which emerges at the end of the 18th century. As he puts it, this model of governing is "no longer an anatomo-politics of the human body, but what I would call a 'biopolitics' of the human race."[189] The modern state transforms the classical sovereign right (that of kings) to kill and let live into an imperative to foster the lives of state

189. Michel Foucault, "Eleven: 17 March 1976," in *Society Must be Defended: Lectures at the Collège de France, 1975-76* (New York: Picador, 2003), 243.

citizens or let them die (those who are considered lesser citizens). The state continues to rely on disciplinary mechanisms and the related institutions such as the military, school, prison or hospital, but also installs new mechanisms for regulating and monitoring the population such as the birth and mortality rates, or general illness rate, among others. In contrast to the classical sovereign that ruled over their subjects and territory through the power of sword, what Foucault calls "governmentality"[190] as a modern phenomenon is about the arrangement or disposition of people and things throughout the entire social fabric towards an economically convenient end. As he points out, the legal issue of sovereignty does not disappear, nor the disciplining of the body, but "one has a triangle, sovereignty-discipline-government, which has as its primary target the population and as its essential mechanism the apparatuses of security."[191] The function of such power is normalizing and it organizes the social structure around the established norms.

Importantly for understanding the 19th century literary scenario of disastrous extinction, Foucault argues that modern biopolitics changes the very relationship of sovereignty to death. In classical sovereignty, death penalty was a public event displayed for everyone to see the king's power, while suicide was a crime that usurps the king's power over one's body. In a modern state, death penalty has gradually disappeared and suicide has become an object of psychological and sociological analysis and considered private. Before the 18th century, "death was a manner in which a terrestrial sovereignty was relieved by another, singularly more powerful sovereignty,"[192] i.e., the sovereignty of God. In a modern state, however, which performs itself as secular and wants to primarily foster life rather than kill, "death is power's limit, the moment that escapes it; death becomes the most secret aspect of existence,

190. Michel Foucault, "Governmentality," in *The Foucault Effect: Studies in Governmentality*, ed. Graham Burchell, Colin Gordon and Peter Miller (Chicago: The University of Chicago Press, 1991), 87-104.

191. Foucault, "Governmentality," 102.

192. Michel Foucault, *The History of Sexualty, Volume 1: An Introduction* (New York: Pantheon Books, 1978), 138.

the most 'private'."[193] Let me add here that this does not mean that the realm of the divine or religion, for that matter, disappears in a modern state, but rather that the way in which biopolitical governmentality frames death primarily is not in reference to the divine power but as a limit of its own biomedical power.

Ruth Miller draws on the Foucauldian understanding of modern state, and its relationship to divine sovereignty to approach the natural disaster. She argues that the Lisbon earthquake of 1755 was among the first major disasters in European history to be understood no longer predominantly as a divine punishment unleashed upon humanity, but also as caused by natural causes. It impacted "a population on the verge of becoming rational, progressive and aware of its various rights."[194] The supernatural and natural explanations of earthquake were throughout the 18th century not yet disconnected: "The supernatural earthquake proved the existence of God; the natural earthquake proved nothing more than the existence of law."[195] Miller refers here to the existence of a natural law, to be explained by the emerging geological science, but her suggestion can be also read in relation to the state law. That is, in Foucauldian terms, we could read the natural earthquake as that which exposes or makes visible the limits of state sovereignty. In this way, natural disaster is primarily made intelligible as collapsing the biopolitical state order, which frames natural disaster in a human-centric way because it ties a geological or climatic event firmly to the human political structures. By this I mean what Claire Colebrook suggests in relation to the contemporary framings of climate change. She sees the discourses of climate change to discuss the phenomenon in relation to the political strategies of human survival, not voicing at all the possibility to "view this world beyond the bounds of climate, and see climate as one expression – among many – of a

193. Ibid.
194. Ruth A. Miller, *Law in Crisis: The Ecstatic Subject of Natural Disaster* (Stanford: Stanford Law Books, 2009), 39.
195. Ibid., 36.

broader time and broader (inhuman) life."[196] Shelley's and Wells's scenarios are precursors to such human-centric understanding and stage the natural disaster as an investment in upholding the state order rather than as a process that might be independent from human politics. *The Last Man* frames the natural disaster precisely in such a way:

> Then mighty art thou, O wind, to be throned above all other viceregents of nature's power; whether thou comest destroying from the east, or pregnant with elementary life from the west; thee the clouds obey; the sun is subservient to thee; the shoreless ocean is thy slave! […] when any whole nation becomes the victim of the destructive power of exterior agents, then indeed man shrinks into insignificance, he feels his tenure of life insecure, his inheritance on earth cut off.[197]

In this dramatic description, a disastrous wind, which foreshadows the subsequent appearance of the plague, is depicted in a political vocabulary of sovereignty, as no less than a "viceregent" ruling over the obeying clouds, the subservient sun and the slave ocean. In a way that follows Miller's argumentation, such power is no longer understood primarily as divine but rather as "nature's power". Shelley stages a sort of duel between the wind depicted in terms of classical sovereignty and the modern nation-state, as Foucault understands these. This can be seen as shadowing the political events occurring in the novel: England's transition from a monarchy into a republic imagined to happen at the end of the 21st century, which in fact channels the revolutionary political events in Europe at the turn of the 19th century and the emergence of the modern nation-states.[198] In this context, Shelley crucially makes intelligible the enormous power of wind that threatens the humanity on a massive scale in reference to a "nation", which is wind's "victim". The way to make sense of natural disaster in the quote above is that it is disastrous primarily for the nation-state, and not a climatic occurrence that might be completely independent of human politics.

196. Claire Colebrook, "Framing the End of the Species: Images Without Bodies," in *Death of the PostHuman, Essays on Extinction Vol. 1* (Open Humanities Press, 2014), 24.

197. Shelley, *The Last Man,* 107.

198. Ranita Chatterjee offers a compatible political reading when she writes that Shelley aligns Nature with the Plague, and that "the Plague functions like a despotic global queen ruling the lives of the earth's people, infecting and killing" them. She reads this as a relentless inclusion of bare life into the sovereign through contagion, which anticipates Agamben's theory of modern biopolitics. In "Our Bodies, Our Catastrophes: Biopolitics in Mary Shelley's *The Last Man," European Romantic Review,* Vol. 25, No. 1 (2014), 38.

Wells continues the thread of staging the natural disaster as a dissolution of state order in *The Time Machine*, which is concerned with the possibility of human degeneration as a reversal of evolutionary processes in the far future. The Time Traveller transports himself from Victorian London into the year 802 701 only to find out that the human species has degenerated gradually into two inhuman species, the feeble, child-like Eloi, and the brute ant-like Morlocks. As an epilogue to such degeneration of humanity, the traveller goes into yet farer future, where humans have gone extinct, and this is signalled for the traveller as no less than a cosmic disaster, a momentary extinction of the sun:

> At last, some time before I stopped, the sun, red and very large, halted motionless upon the horizon, a vast dome glowing with a dull heat, and now and then suffering a momentary extinction. At one time it had for a little while glowed more brilliantly again, but it speedily reverted to its sullen red heat.[199]

In Wells' imagination the extinction of humanity is followed by a long, gradual extinction of all other life on Earth, and ultimately a dissolution of cosmic bodies themselves, i.e., the end of the world. The momentary extinction of the Sun is to be understood as natural disaster for Wells's Time Traveller because it is meant to signal from the far future the obliteration of his Victorian civilization in the nearer future. For Wells, the dissolution of the British state is intricately entangled with the devolution of the human civilization, which cannot but eventually result in the end of the world itself. In this way the future nonhuman material processes are seen from a human-centric perspective of the Time Traveller in the Victorian present. What would challenge such an understanding would be to view the cosmic occurrence in the above quote as happening independently from humans. In Wells' text the material world (the Earth and the Sun) after all does continue to exist long after the human state and the human species disappear, independently from them. However, such a viewpoint is not accessible to the Time Traveller as he rushes in panic to return back to the familiarity of Victorian England. For him, the extinction of the sun is primarily a disastrous occurrence

199. Wells, *The Time Machine*, 106.

which communicates an epilogue logically unfolding after the fall of the human state and the extinction of human life on Earth.

War Between the State and the Agency of Nature

Understood in a biopolitical framework, natural disaster can further be connected to the state politics of war, and more precisely, to Agamben's concept of the state of exception. While Foucault coins the term biopolitics to mean the politics of life, and is concerned with regulatory dispositifs that govern lives around the norm, Agamben is mainly concerned with the ways in which the modern states continue to exercise the legal right to kill those who are considered non citizens in some way. For him, the inevitable underside of biopolitics is "thanatopolitics,"[200] or death management. He therefore turns to examining the war politics of the 20th century modern states, and more specifically, their legal structure through which war is proclaimed. Drawing on Carl Schmitt's definition of sovereign as that who decides on the state of exception, Agamben discusses the state of exception as the modern state's suspension of the normal law or the rule. This brings to the fore the originary exceptional character of law, which grants legality to itself out of nothing, as it were, through the sheer force of a decision to install a rule. The decision on exception (which suspends the normal order) and on the norm (which suspends the supposed state of lawlessness) are the same operation of enforcing authority. It should be noted that Agamben's argument about the originary force of decision which installs a rule is similar to Derrida's understanding of the instalment of law into society as a violent act in the essay "Force of Law".[201] Both thinkers understand the character of law in general as a violent or forceful act that installs authority, while Agamben

200. Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (Stanford: Stanford University Press, 1998), 122.

201. Jacques Derrida, "Force of Law: The 'Mystical Foundation of Authority'," in *Deconstruction and the Possibility of Justice*, ed. Drucilla Cornell, Michel Rosenfeld and David Gray Carlson (New York: Routledge, 1992).

comes to this conclusion by examining the legal state of exception in the proclamations of war by the modern 20th century state.

Miller draws on Agamben's concept of the state of exception to argue that "the politics of disaster and the state of exception seem in many ways interchangeable."[202] By this she means that the state of exception as a suspension of legal norm proclaimed in the situations of war is at work in the situations of natural disaster as well. To support this claim, Miller relies on the 19th and 20th century historical examples of the close links between the legal proclamation of exception in the situations of human riots or wars, and natural disasters caused by nonhuman agents. According to the U.S. 1807 "Insurrection Act", military force could be used in response to a natural disaster, epidemic, a terrorist attack or an insurrection; by the early 20th century the American Red Cross documents frequently conflated riots and rebellions with famines and floods; while in the Italian law the instances of riots and plagues have been conflated as instances that require an exceptional state management. While Miller is in her take on the natural disaster as a legal state of exception interested in the subjectivity produced through particular disaster laws, what is important for my purposes is her attention to the collapses between the human riots and the nonhuman (be it climatic, geological or epidemic) disturbances by the modern state law. All these circumstances repeatedly legally fall under the structure of the state of exception, making visible a collapse of the normal legal order, whether due to human or nonhuman agents. Building on this, I suggest that if the state of exception, for Agamben, legally frames war relations between the nation-states, and the natural disaster, for Miller, manifests the structure of the state of exception, we can think of the natural disaster as a state of exception that frames the relations between the human state and the nonhuman agencies in terms of war.

202. Ruth A. Miller, *Law in Crisis: The Ecstatic Subject of Natural Disaster* (Stanford: Stanford Law Books, 2009), 16.

Both Shelley's and Wells's scenarios manifest Millerian collapses between the human-induced wars and the nonhuman climatic and geological occurrences and diseases, as the states of exception which impact on the normal biopolitical order. According to Melissa Bailes, while the scholarship so far has predominantly focused on the agency of the plague in the *The Last Man*, what is intricately entangled with it is geological catastrophism.[203] Thus, when plague suddenly appears on the globe but not yet in England, Shelley immediately ties it firmly with geological and climatic disturbances, as well as specific geography.

> In the still uncultivated wilds of America, what wonder that among its other giant destroyers, Plague should be numbered! It is of old a native of the East, sister of the tornado, the earthquake, and the simoon.[204]

In this passage the disastrous agency of plague seems to be readily collapsed with the agency of wind and earthquake, but furthermore, they are all situated in very particular geographical spaces, America and the East, which are inhabited by racially and colonially marked human bodies. In a Millerian way, what is staged is a collapse between specifically human politics and natural disaster, as a legal state of exception to the normal order. More precisely, Shelley can be said to collapse the supposed disastrousness of specific human bodies native to the colonial spaces and of the nonhuman phenomena, as both of these in the quote above get to be marked as "uncultivated" and "wild". That is, the colonial geography of Shelley's time, in which Europe marks an ordered and cultivated society, while America and the East are uncultivated, crucially shapes the trajectory of the disastrous non/human agencies. Originally coming from the shores of the Nile and spreading to Asia, and eventually entering western Europe from a death ship from America, the trajectory of the plague projects in fact a fear of a counter-colonial destruction of the civilized European state by the uncivilized nature as well as humans, framing these relations in terms of a counter-colonial conflict. Natural disaster as

203. Melissa Bailes, "The Psychologization of Geological Catastrophe in Mary Shelley's *The Last Man,"* In *ELH*, Volume 82, Number 2 (Summer 2015): 671-699.

204. Mary Shelley, *The Last Man* (The Project Gutenberg EBook, 2006), 109.

exceptional to the norm involves winds, plague but also humans from particular spaces, and is primarily figured as that which comes from the uncivilized non-west to attack the western state order, which is in need of defending.

Towards the end of the century, Wells in *The War of the Worlds* continues to manifest a similar framing of the natural disaster. A Martian attack on the Earth is made understandable in reference to nonhuman volcanoes, earthquakes as well as human wars when the narrator exclaims to a distressed curate:

> 'You are scared out of your wits! What good is religion if it collapses under calamity? Think of what earthquakes and floods, wars and volcanoes, have done before to men!'[205]

As with Shelley above, where natural disaster is in reference to the particular geographical spaces, and implicitly bodies that inhabit them, constructed as uncivilized, here it is the agency of an alien species from Mars that is in reference to earthquakes and floods understood as naturally disastrous. The aliens are thus ambiguous figures: they are a species that has, following in the footsteps of the evolutionary path of the human species, developed ever more advanced technology (transport machinery and weapons) than humans, but at the same time they are crucially represented as animal predators who lack civilization and culture that the Victorian Britain has. The way the aliens are seen to act involves both the meanings of particularly human wars and an agency marked as natural (in opposition to civilized), which is disastrous for the human civilized state. The alien apocalypse as a state of exception to the biopolitical order in a Millerian way collapses war and natural disaster in staging the relations between the human and nonhuman species.

As we can see, Shelley's and Wells' scenarios of the natural disaster as the state of exception delineate distinctions between the civilized biopolitical state and the uncivilized disastrous agency of nature, which includes winds and earthquakes as well as the colonial subjects and

205. H.G. Wells, *The War of the Worlds* (Planet eBook), 91.

aliens. Miller draws attention to another pair of distinctions which is activated in thinking natural disaster as a state of exception, which is that between law and chaos: "The state of exception is, in other words, a disaster," i.e., a situation "when law, governing chaos, embodies chaos."[206] In other words, the law becomes chaotic in the state of exception but also the agency that impacts on the normal law is chaotic. Though Miller does not elaborate in detail on the notion of chaos, it is a concept that Agamben uses as well when conceptualizing the state of exception: "The state of exception is thus not the chaos that precedes order but rather the situation that results from its suspension."[207] What Agamben argues is that chaos is not something that pre-exists the law, but the law necessarily constructs it as such, as a precondition in order to justify itself: to govern, the law needs chaos. The construction of chaos as opposite to the legal order is revealed in the moment when the legal norm dissolves or is suspended. What is thus staged by the state of exception is an agency of nature as chaotic in opposition to the biopolitical ordering.

Wells in the *War of the Worlds* stages precisely such a chaotic agency of nature when the state order quite literally dissolves in the face of the alien apocalypse. While in Shelley's novel optimism prevails long into the narratives about the well-ordered British state being able to govern successfully in the exceptional circumstances, Wells early on communicates an insufficiency of the state order. The government and the police collapse completely and the human society literally melts into a chaotic state described through the vocabulary of nonhuman environmental processes:

> Before dawn the black vapour was pouring through the streets of Richmond, and the disintegrating organism of government was, with a last expiring effort, rousing the population of London to the necessity of flight. […] So you understand the roaring wave of fear that swept through the greatest city in the world just as Monday was

206. Ruth A. Miller, *Law in Crisis: The Ecstatic Subject of Natural Disaster* (Stanford: Stanford Law Books, 2009), 16.

207. Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (Stanford: Stanford University Press, 1998), 18.

> dawning – the stream of flight rising swiftly to a torrent, lashing in a foaming tumult round the railway stations, banked up into a horrible struggle about the shipping in the Thames, and hurrying by every available channel northward and eastward. By ten o'clock the police organisation, and by midday even the railway organisations, were losing coherency, guttering, softening, running at last in that swift liquefaction of the social body.[208]

In this suggestive description, the narrator utilizes the vocabularies of biological and environmental processes, to paint the state government as a "disintegrating organism", and its security apparatuses as "a swift liquefaction of the social body". The legal order in the state of exception can be said to both embody and govern chaos, in a Millerian way, as its apparatuses dissolve into and merge with some underlying chaotic natural processes, described as a stream of water that roars, rises to a torrent, lashes in a tumult, foams, gutters and runs in a liquefaction. Such chaotic agency, however, is not to be understood as that which precedes order, but rather as ensuing from its suspension, in a way that Agamben argues. Same as Shelley, the narrator installs a western-centric biopolitical perspective when he sees chaos impacting on London as "the greatest city in the world", meaning both in size and in the way it is governed, which indirectly tells us of all those cities that are not great and that are located outside Britain, and most likely outside Europe.

What Shelley's and Wells's novels manifest when read through the conceptual link between natural disaster and the state of exception, as I analysed so far, is a disastrous impact of the agency of nature, the uncivilized and chaotic, which involves humans as well as nonhumans, on the state order. Thereby the relations between the state and what is naturally disastrous are figured in terms of war, which is informed by the situations of war between humans themselves. The issue of particularly human violence indeed informs crucially Shelley's and Wells' scenarios of disastrous extinction (caused by the nonhumans), and I discuss this further in the following section. As we will see, this issue raises the question of whether in fact the human species deserves to go extinct because it has been so violent and waged wars amongst

208. Wells, *The War of the Worlds*, 118-19.

themselves, as well as has caused extinction of some animal species, in the modern biopolitical state.

Violence by Nature or by Law

The 19th century sci-fi scenarios of disastrous extinction raise, implicitly rather than head on, the question of human cause of or contribution to the disaster. Human responsibility is framed in an ambiguous way: while the nonhuman forces of plague, climate, aliens, and devolution seem to impact on the modern state without being directly caused by particular human actions, it is implicit in the novels that the human actions did contribute in some way to the disastrous occurrences, and therefore, that humans might deserve to be obliterated. Following Miller's argument about the Enlightenment shifts in understanding earthquakes from supernatural to natural explanations (where one did not exclude the other), we can argue that natural disaster is throughout the 19th century no longer made intelligible predominantly as a divine punishment for human actions, but it is rather increasingly intelligible as a possible punishment of "nature" on the human species for their wrong-doings. This adds another layer to the discourse of nature as chaotic in the novels: while chaotic nature is, as we saw, something that supposedly underlines state order (into which the order dissolves in Wells), it is also a volatile punishment on a "bad" state order, as we will see. Shelley's and Wells's narratives in this way prefigure the contemporary concerns about human responsibility for climate change in the age of the Anthropocene. Colebrook discusses the ways in which these concerns manifest in contemporary discourses, but the form of question which they pose can be traced back to the 19th century: "given human brutality and life-destructiveness, by what

right will humans continue to survive? It is no longer life that needs to be justified, but the human species' malevolent relation to life."[209]

This is certainly a question that underlies Shelley's and Wells' novels and exposes humans as a violent species, who brought on destruction amongst themselves as well as on other species, but crucially, I argue, the novels show us the role of the state in mediating violence. Nature as chaotic on the one hand acts as a punishment for bad state governing, and on the other, it is precisely that disorder against which state order defines itself. That is, in the way that Agamben argues, chaos made visible in the state of exception has been figured in the history of western politics as something that supposedly predates the law. In that sense, as being the direct opposite to the law, it is closely linked with another political concept, that of "the state of nature". Agamben discusses Thomas Hobbes as an early modern thinker who deploys the state of nature as that which pre-exists the sovereign and is specifically associated with violence – a condition where men are wolves to each other. In such a precarious condition, men decide to enter into a commonwealth by signing a social contract and thereby establishing and submitting to authority of a sovereign in exchange for protection of their rights. Foucault argues that contract theory, as it was proposed by Hobbes in the 17th century and later developed by Rousseau in the 18th century, functions "as a sort of theoretical matrix for deriving the general principles of an art of government,"[210] i.e., for modern governmentality (and not the classical sovereignty of kings). This matrix for governmentality functions, according to Agamben, in such a way as to constantly draw distinctions between the state of nature and the modern state, in order to legitimize authority. If men are "naturally" violent to each other, then the state is justified precisely because it purports to order such violence in a civilized manner, as Hobbes would have it. However, for Agamben, this

209. Claire Colebrook, "Why Saying 'No' to Life is Unacceptable," in *Death of the PostHuman, Essays on Extinction Vol. 1* (Open Humanities Press, 2014), 188.

210. Michel Foucault, "Governmentality," in *The Foucault Effect: Studies in Governmentality*, ed. Graham Burchell, Colin Gordon and Peter Miller (Chicago: The University of Chicago Press, 1991), 98.

instalment of a sovereign is paradoxical because it is installed by a force of decision. As I discussed earlier, Agamben's understanding of law as installed by force, and therefore by some form of violence, is similar to Derrida's understanding of the authority of law. Such understanding is in opposition to the social contract theory which regards the law as a product of social consent. Agamben claims that violence is internal to the state order as the rule of the sovereign who gives legitimacy to itself is based on sheer force. In this way it becomes rather impossible to distinguish between ordered law and some violent state of nature, while it is crucial for the modern state to keep making these distinctions in order to legitimize its own right to kill in the situations of war or to simply let die those considered lesser or non citizens. It is useful to quote Agamben's explanation of the relation between the state of nature and state of exception at length, in which he makes a reference to Hobbes's idea that the state of nature is revealed in the moment in which the sovereign is considered as dissolved – which in Agamben's take is the state of exception:

> At its very center, the localization-ordering link thus always already contains its own virtual rupture in the form of a "suspension of every law." But what then appears (at the point in which society is considered as *tanquam dissoluta*) is in fact not the state of nature (as an earlier stage in which men would fall back) but the state of exception. The state of nature and the state of exception are nothing but two sides of a single topological process in which what was presupposed as external (the state of nature) now reappears, as in a Möbius strip or a Leyden jar, in the inside (as state of exception), and the sovereign power is this very impossibility of distinguishing between outside and inside, nature and exception, *physis* and *nomos*. The state of exception is thus not so much a spatiotemporal suspension as a complex topological figure in which not only the exception and the rule but also the state of nature and law, outside and inside, pass through one another.[211]

In this paragraph Agamben discusses a sovereign decision that orders, or installs a rule, as always already containing a possibility to suspend the order through an exception. The legal exception from the rule does not bring forth some state of nature, imagined as violent relations between humans, according to Hobbes, that predates or is outside the law, but it rather suspends the rule from the relations that have been already internalized within the state.

211. Ibid., 37.

Whether violence is natural or legal, to put it like this, is impossible to disentangle – this is what the state of exception brings to the foreground. It circumscribes a state which is neither simply factual (nature) nor legal (law) but a constant entanglement between the two, and the sovereign power constantly taps into this entanglement in order precisely to make a decision between what is natural and what is legal, what is violence and what is not. The narratives of extinction as an implicit punishment for human violence expose precisely how the state's attempts to define itself as ordered and civilized, and therefore in opposition to chaos and violence, constantly fail.

In Shelley, the plague by the end of the novel gives a blow to the human assurance that the species would continue forever as Verney remains the Last Man in the devastated Rome, about to set sail out of empty Europe and towards Asia Minor, Syria and Africa in search of a possible surviving companion. But long before this scenario unfolds and leaves Verney convinced that humanity would disappear with him, before the outset of the plague, he gives a clue of why perhaps the human species should not continue forever. At the time he is engaged in the Greco-Turkish war, which is framed as an effort of the European civilized nations against a "monument of antique barbarism,"[212] which is Turkey. In a moment of foreshadowing the ensuing natural disasters, Verney contemplates the following:

> During the busy day, my mind had yielded itself a willing slave to the state of things presented to it by its fellow-beings; historical association, hatred of the foe, and military enthusiasm had held a dominion over me. Now, I looked on the evening star, as softly and calmly it hung pendulous in the orange hues of sunset. I turned to the corse-strewn earth; and felt ashamed of my species. So perhaps were the placid skies; for they quickly veiled themselves in mist, and in this change assisted the swift disappearance of twilight usual in the south; heavy masses of cloud floated up from the south east, and red and turbid lightning shot from their dark edges; the rushing wind disturbed the garments of the dead, and was chilled as it passed over their icy forms.[213]

212. Shelley, *The Last Man*, 82.
213. Shelley, *The Last Man*, 84.

Verney, looking at the grounds full of corpses, feels ashamed of the human species for waging wars amongst themselves. More particularly, he attributes such events to the historical association, that is, the current politics of the modern states. It is due to the state politics that he is obliged to consider the Turks his foes. The modern European nation-state is therefore to be understood as violent, although it defines itself precisely in opposition to the Turkish uncivilized barbarism, and therefore to an imagined Hobbesian violent state of nature. The distinctions between violence as natural or as lawful become blurry, in an Agambenian way, as Verney makes us think why state violence in the name of civilization should be justified, and he in fact suggests that it should not. The moment after his moment of shame, the skies suddenly turn gloomy and bring about lightning and wind, in an anticipation of the plague that ensues later. What is staged by this is that nature might in fact be angry at the humans waging wars, and therefore issue punishment for their violent behaviour, foreshadowed here and enacted later with the appearance of the plague.[214] This scenario anticipates Colebrook's question posed in the current context of climate change of why the human species should survive extinction when they have been such a destructive force. The link between Verney's shame of humans, and nature's punishment on humans, makes visible in the novel the responsibility of the nation-state for waging ethnic wars.

The idea that humans, but more particularly, the modern state, might have deserved to be punished for their violent wars comes to the surface in Wells's novels too. *The War of the Worlds* stages a controversial evolutionary-framed understanding of the differences between

214. The affective dynamics between Verney's sense of shame, and nature manifesting what can be read as anger, would be interesting to read with the help of Silvan Tomkins's conceptualizations of affect in *Affect Imagery Consciousness: The Complete Edition* (2008). Verney and nature in the quote manifest what Tomkins describes as the typical markers of shame and anger: Verney lowers his head and eyes down towards the ground in front of the skies in relation to which he feels ashamed; and the nature turns red and heated as it issues lightning. The connection between these affects could be explored further with Tomkins, which is beyond the scope of my interpretation here, where I emphasize the framing of nature as issuing punishment.

inferior and more advanced human races, as well as between the animal and human species, and criticizes the European colonial practices based on this view, when the narrator says:

> And before we judge of them too harshly we must remember what ruthless and utter destruction our own species has wrought, not only upon animals, such as the vanished bison and the dodo, but upon its inferior races. The Tasmanians, in spite of their human likeness, were entirely swept out of existence in a war of extermination waged by European immigrants, in the space of fifty years. Are we such apostles of mercy as to complain if the Martians warred in the same spirit?[215]

The narrator here frames violence within what he understands as an evolutionary logic of natural selection and struggle for survival, between the supposed inferior and superior species and races, as he puts it. The hierarchy supposedly goes from animals through inferior humans, such as Tasmanians, to the Europeans. This hierarchy is, however, posited only to be challenged, as the narrator articulates a critique of the European colonial practices towards other races as well as towards animal species which led to the extermination of Tasmanians and the extinction of the dodo and the bison. We can see this as both a critique of racializing colonialism as well as an ecological critique of species extinction, both caused by and intricately linked in the modern state. These practices are to be re-examined when the human sovereign is itself threatened by a more advanced species of aliens, which might lead to an extermination of humanity itself. Following Hobbesian argumentation, the situation of war with the aliens, which dissolves the normal state order, makes visible the species violence as the supposed state of nature (or the struggle for survival in evolutionary terms, as posited in the novel). However, taking an Agambenian view on this, what becomes visible in the state of exception is that violence has in fact long been internalized and ordered within the European states, when they colonized and exterminated the supposedly inferior race of Tasmanians, as well as the animal species of the bison and the dodo. In this way any purported distinctions between violence figured as natural and legal order, between war as an exceptional and as normal state practice, are blurred. As in Shelley, the ambivalence foregrounds the question of

215. Ibid., 7-8.

whether humans through their violent state politics have deserved to be punished by an alien apocalypse.

The Time Machine stages a similar impossibility of distinguishing between human violence as some sort of state of nature and the practices internalized by the modern British state, more specifically in relation to class distinctions, but also by dropping a brief hint to the extinction of certain animal species. Again, it is the state of exception that makes this visible – the gradual "devolution" of specific human embodiment into animal one, entangled with the dissolution of the state order. The Traveller in the far future speculates that the Eloi and the Morlocks metamorphosed in fact from the two classes of citizens in the capitalist state, through "the gradual widening of the present merely temporary and social difference between the Capitalist and the Labourer."[216] Wells imagines that the late 19th century divisions between the capitalists and the working classes have reached its radical conclusions in no less than a division into two sub-human, monstrous species: the feeble Eloi, who are described as physically fragile and lacking intelligence (embodying decadent elites), and the beastly Morlocks, who are ant-like carnivorous predators (embodying brute factory workers). In this critique of the hierarchical class relations within the capitalist state Wells is however entirely silent on the middle class, which, we can argue, is assumed to be the norm of human embodiment in a Foucauldian sense. For Foucault, the biopolitical normalizing dispositifs in the modern state govern through the instalment of the norm, and here the norm is figured as the proper human embodiment of the middle class: "Humanity had been strong, energetic, and intelligent, and had used all its abundant vitality to alter the conditions under which it lived. And now came the reaction of the altered conditions."[217] The narrator here stages the relations between humans and what he understands as natural conditions in terms of conflict, which is informed by the idea of evolutionary struggle for survival, and these are mediated crucially

216. Wells, *The Time Machine*, 63.
217. H.G. Wells, *The Time Machine* (Planet eBook), 42.

through the state and middle class politics. After the humans ordered through the state politics, the altered conditions are understood to react back in a disastrous way, as a sort of punishment – by gradually dissolving the state order and the normative human physical form into degraded embodiment, which is devoid of intelligence, energy and strength. The Time Traveller narrates the dissolution of the capitalist state and the human bodily shape, vitality and civilization further:

> 'So, as I see it, the Upper-world man had drifted toward his feeble prettiness, and the Under-world to mere mechanical industry. […] Apparently as time went on, the feeding of the Under-world, however it was effected, had become disjointed […] And when other meat failed them, they turned to what old habit had hitherto forbidden.[218]

The Morlocks are creatures who, in a reversed evolutionary scenario, revert to their animal roots, to the time before the social contract "had forbidden" them to eat the flesh of their own species. In other words, they enact the Hobbesian dogma stretched to the limits of the species – in the "state of nature", exposed through the dissolution of the normal state order, they turn back into carnivorous cannibals, more beastly than Hobbesian wolves. However, what is actually exposed, in an Agambenian twist, is that the capitalist state itself orders hierarchical class relations between the working and the elite class, which makes the distinctions between the violent state of nature and the state hierarchies blurry. The hierarchical relations simply become more visible with the erosion of the state rule and an animalized inverted relation between the effete capitalist (prey) and the spider-like worker (predator). In this way exception and norm, nature and law, or even disorder and order, constantly pass into each other. The state is also seen as responsible for the extinction of certain animal species, which is briefly hinted at when the Time Traveller explains why the Eloi are strict vegetarian. It is because horses, cattle, sheep and dogs have gone extinct. In other words, precisely those animal species that we predominantly associate with domestication and with modern food industries will have disappeared in the future. Similarly as in *The War of the Worlds,* this

218. Ibid., 102.

articulates an early ecological critique of the modern state role in the extinction of, and thus violence towards, animal species.

As we saw, while Shelley's novel criticizes the ethnic distinctions of the modern state, Wells is concerned in his narratives with the class and race hierarchies that the modern state orders, as well as the human violence towards other animal species, which results in their extinction. By staging the violence of the modern state, the narratives in fact imply that the modern humans might have deserved to be punished by nature by their own extinction. However, they also articulate a possible alternative to the nation-state, which is the idea of a cosmopolitan human citizen, to which I turn in the next section.

Survival of Civilized Cosmopolitans

While the novels stage disastrous extinction as a possible punishment of nature for a bad nation-state governing, they also suggest a politics of cosmopolitanism. In Shelley, where the colonial geography of plague charts an orientalising discourse for the better part of the novel, the threat of natural disaster is also a point of critique of the ethnic implications of the nation-state, as I discussed in relation to the European/Turkish distinctions. The plague is furthermore understood as a great leveller, which renders ethnic distinctions insignificant, in the face of the danger of massive human death. In turn Shelley appeals to a politics that transcends, though does not deconstruct, the nation-state by putting forward the idea of global citizen in the face of threat to the whole species. This can be understood in relation to Colebrook's arguments about cosmopolitanism. She argues that the currently discussed threats of extinction, such as resource depletion, global warming or viral apocalypse, which are posed as the threats to the human species, push us to think human politics beyond the confines of the nation-state, or as she says, "to free the polis from the nation-state and imagine

a greater cosmos."[219] In this understanding, Colebrook goes back to Kant's late 18th century concept of cosmopolitanism as "an *Idea* of a polity – a gathering of bodies for discussion, decision and determination – that would not be that of this or that nation but of the cosmos."[220] However, the way in which this Kantian idea has been politically construed ever since the Enlightenment is around the notion of a global human citizen as an international citizen rather than getting rid of the nation-state altogether. For Colebrook this asserts a uniform model of the human and reduces all the differences to a single model of citizenship. It is the politics of the capitalist market, which transcends the national boundaries for the sake of economic profits, and tries to be inclusive of more individuals on the idea of human rights. Colebrook is critical of the global market and human rights politics because for her they reassert the figure of the rational human consumer endowed with rights as the political foundation, and do not question the existing global geopolitical mapping.

Shelley's and Wells' novels can be illuminated through Colebrook's arguments as they enact the transformation of a nation-state citizen into a global citizen in the face of threat from a nonhuman agency. Shelley constructs the idea of brotherhood of man in the face of the agency of plague, which however does not do away with the nation-state. In the situation in which the Irish, in the ensuing disorder and panic from the epidemic, flee to England, they are first depicted as a wild, lawless and violent bunch in a striking contrast to the ordered English, which enacts the ethnic distinctions of the nation-state. Lord Protector Adrian gathers a military unit to fight their violent arrival, but in the end he appeases his soldiers and settles the conflict by proclaiming:

> Sheath your weapons; these are your brothers, commit not fratricide; soon the plague will not leave one for you to glut your revenge upon: will you be more pitiless than pestilence? As you honour me – as you worship God, in whose image those also are

219. Claire Colebrook, "Destroying Cosmopolitanism for the Sake of Cosmos ," in *Death of the PostHuman, Essays on Extinction Vol. 1* (Open Humanities Press, 2014), 97.
220. Ibid.

> created – as your children and friends are dear to you, - shed not a drop of precious human blood.[221]

Adrian here imagines "a brotherhood of man", in which all human blood, by which he more precisely means the blood of all human ethnicities, is of equal worth, as long as it stays alive. It is a question of life vs. death, when human survival is presented as the highest value under the threat to the whole humanity, which then works to erase the ethnic differences between humans. In this way Shelley calls for global citizenship, which at the end of the 19th century Wells reasserts in *The War of the Worlds* when the narrator suggests that the alien threat to humanity "has done much to promote the conception of the commonweal of mankind."[222] As John Partington argues, H. G. Wells contributed to cosmopolitan thought by advocating from 1901 till his death in 1946, "some form of world government," which would unite humankind in peace and prosperity.[223] His suggestion in *The War of the Worlds* can be then read as an early formulation of this thinking. According to Colebrook, such model of commonwealth constructs a global politics and economy which does not simply erase the national boundaries, and deploys the predetermined figure of the human, as the inherent bearer of the right to life. In other words, in the face of extinction, cosmopolitanism as an alternative to the nation-state politics figured in terms of global human citizen invests in human survival above everything else. This is why, as Colebrook adds, sci-fi scenarios of global politics in the face of extinction are commonly predetermined in advance as those of human survival rather than being open to the possibility of imagining inhuman worlds and inhuman futures that might come after the humans. In this way, what is understood as life, but more specifically human life, is normative and unquestioned, and a value to be preserved at all costs. What is absolutely inadmissible is the thought that human life has no value, or even "life" itself as we know it. As Colebrook argues, this does not mean that what she calls "the question of life",

221. Shelley, *The Last Man,* 139.
222. Wells, *The War of the Worlds,* 236.
223. John S. Partington, "H. G. Wells and the World State: A Liberal Cosmopolitan in a Totalitarian Age, " in *International Relations* Vol. 17 (2) (2003): 233.

i.e., "whether the survival of what has come to be known as life is something we should continue to admit as the only acceptable option,"[224] cannot reach an articulation in sci-fi scenarios. The question does surface, but most commonly it is immediately domesticated within the hopes for human survival. This is precisely what happens in Shelley's and Wells' scenarios, as I discussed above, where humans are seen as possibly deserving to be punished for their violent state politics (based on ethnic, racial, classed and species distinctions). However, this suggestion is reinscribed back into the hopes for the survival of humanity at all costs, which should be refashioned as global.

For Shelley, the investment in the survival of particularly human life is staged as an investment in the values of human civilization and indeed, cultivation of other species on Earth. In this way, the desire for human survival is mediated through upholding the values precisely through which the biopolitical sovereign defines itself in the narratives – that of civilization and order in opposition to the natural, uncivilized and chaotic. That is, the imagination of nonhuman life that might outlive humanity is staged as nostalgia for human civilization. The imagination of a "post-human" world is not open to the thought of a possible inhuman life or inhuman materiality, as Colebrook has argued. That is, curiously, the nonhuman lives of animals and plants after the humans have been decimated, continue to be domesticated and a product of human culture. Verney towards the very end of the narrative observes the plants and animals that thrive in the absence in humanity in the following way:

> A herd of cattle passed along in the dell below, untended, towards their watering place – the grass was rustled by a gentle breeze, and the olive-woods, mellowed into soft masses by the moonlight, contrasted their sea-green with the dark chestnut foliage. Yes, this is the earth; there is no change – no ruin – no rent made in her verdurous expanse; she continues to wheel round and round, with alternate night and day, through the sky, though man is not her adorner or inhabitant. Why could I not forget

224. Colebrook, "Why Saying 'No' to Life is Unacceptable," in *Death of the PostHuman, Essays on Extinction Vol. 1* (Open Humanities Press, 2014), 202.

> myself like one of those animals, and no longer suffer the wild tumult of misery that I endure?[225]

For Verney, it is not enough of a solace that the nonhuman life of animals and plants will continue and that the earth will continue spinning around its axis, and the thought that humans will not inhabit this verdurous nature causes him only suffering. He mourns human life, marked by civilization and cultivation of other species. While humans are eliminated from the thriving landscapes, their traces curiously remain: the "cattle" and "olive woods" are a continuation of human domestication and agriculture which Shelley imagines to persist even after humans are gone. These traces are also traces of a biopolitical management of life, in the sense that human civilization is at the core of the definition of modern state. In this sense the cosmopolitanism that Shelley wishes for (the brotherhood of man) in her novel is one of human civilization. Andrea Haslanger has recently offered a different reading. She argues that the novel towards the end abandons "a variety of cosmopolitanism based on a belief in historical perfectibility, guided by a teleological unfolding of history, and associated with a specific vision of future government (often a federated Europe)."[226] Rather, the ending, where Verney sets sail out of Europe with his dog as the only remaining companion, "associates survival with nonhuman animals, in the process imagining an earth without humans and developing a model of cosmopolitanism that uses the nonhuman animal as its guide."[227] In my view, this is interpreting too much into the final pages of the novel where Verney is left to roam around devastated Italy, coming across a herd of cattle that still appears domesticated, and later across a dog that still tends to a flock of sheep, whom Verney takes for a companion. Even if the only bodies left on Earth are Verney and the animals, which could now be understood in terms of a new political community, Shelley nevertheless strongly indicates Verney's desire to find another remaining human as he leaves Europe, as well as his intention

225. Shelley, *The Last Man*, 210.

226. Andrea Haslanger, "The Last Animal: Cosmopolitanism in *The Last Man",* in *European Romantic Review*, Vol. 27, No. 5 (2016), 662.

227. Ibid., 666.

to read and contemplate the achievements of human civilization, such as Homer and Shakespeare, on the way. Thus, I would argue that Verney's imagined and desired political community at the very end is one in which perhaps animals could be included, to follow Haslanger's argument, but in which humans certainly have the most important place.

For Wells, an investment in the survival of human life in an imagined commonwealth (as he proposes) is entangled with reasserting the proper human embodied form as a biopolitical norm, which is, as I argued above, represented in terms of the bodily ideals of vitality, strength and intelligence. The life after the humans and the dissolution of a biopolitical state is imagined as a degraded, uncivilized, monstrous form of life. This can be understood in relation to Colebrook's argument that the figures of nonhuman others, be it aliens, vampires or zombies, in science fiction scenarios of extinction frequently become a projection of humanity gone awry in the future. This is bad humanity that no longer can be associated with an affirmation of life, but is rather presented as cannibalistic, void of empathy, ruthless, and/or dependent on technology. Such bad future humanity is imagined as one from which humans can still save themselves in the present and emerge as properly human, which means a life-affirmative species. In this manner, in Wells' *The Time Machine*, the traveller's first thoughts after he transports himself into a far future, are about what the future humanity might be like and, importantly, might look like. He ruminates:

> What might not have happened to men? What if cruelty had grown into a common passion? What if in this interval the race had lost its manliness and had developed into something inhuman, unsympathetic, and overwhelmingly powerful? I might seem some old-world savage animal, only the more dreadful and disgusting for our common likeness - a foul creature to be incontinently slain.[228]

The traveller here fears that the humanity might have "gone awry" in the future, as Colebrook puts it in her arguments, i.e., that it devolved into a life form without empathy but cruel and ruthless, and therefore inhuman. In such a devolutionary scenario, Victorian humans might

228. Wells, *The Time Machine*, 27.

turn out to be just another "savage animal", inferior in relation to a more powerful species, that could be killed like humans in the present kill animals, which they see as savage. Wells's imagination of a possible life in the far future is not a thought of a posthuman life that might come after the human, but rather a cautionary tale of what humans should not become. It presents the prospects of metamorphosis of the proper human bodily form into something animal-like, unmanly and uncivilized, such as the brute Morlocks. Such prospects come entangled with the dissolution of the civilized state order, which defines itself precisely against the uncivilized state of nature, and gradually dissolves and reveals the assumed underlying ruthless, savage forms of life. The very human form of life, as a biopolitical norm of embodiment, turns into monstrosity. The idea that forms of animal life, which is understood as inferior to the human, as a product of the state collapse might outlive the superior human form and civilization, is for the Time-Traveller terrifying. Going even further into the future than the Morlocks and the Eloi, the only life he can spot is "a monstrous crab-like creature" [229] on a desolate beach, which is not simply a description of what life in the future looks like, but rather what a life degraded from a superior and normative embodiment of the human might look like. The Traveller quickly escapes the scene fleeing back to his familiar Victorian London.

Precisely the same unease about a future degraded "inhuman" life into which humans metamorphose in the future surfaces in *The War of the Worlds*. The proper human embodiment, as normalized in the biopolitical state, is imagined again to turn into bodily monstrosity. The Martians are in fact figures very alike the Morlocks, and they do not simply come from another planet but from the future as well, as a projection of what humans should not become in the future:

229. Wells, *The Time Machine*, 107.

> There is many a true word written in jest, and here in the Martians we have beyond dispute the actual accomplishment of such a suppression of the animal side of the organism by the intelligence. To me it is quite credible that the Martians may be descended from beings not unlike ourselves, by a gradual development of brain and hands (the latter giving rise to the two bunches of delicate tentacles at last) at the expense of the rest of the body. Without the body the brain would, of course, become a mere selfish intelligence, without any of the emotional substratum of the human being.[230]

The narrator here speculates, in a facetious fashion when he refers to "beings not unlike ourselves", that the Martians could be such creatures into which humans are likely to evolve in the future: only brains with tentacles, merged with their sophisticated machines, intelligent but ruthless and with no emotions. They are also vampiric, since they feed by injecting the living blood of other creatures directly into their veins. Paradoxically, at the same time they embody an animal form of octopuses, which is understood as strictly instinctual; and they have suppressed the animal side of organism as emotional, and become mere brains, and thus highly intelligent and technologically advanced. These very ambiguous creatures, both instinctual and pure intelligence, primitive and tech savvy, coming really from the future and not simply from Mars into Victorian London, are presented as a warning to the humanity of what it should not devolve into. Following Colebrook's argument, such a projection of inhumanity onto aliens or vampires is invested in the survival of the human as we know it, more specifically of the proper human form of embodiment. Such proper form can be understood as constructed by the normalizing biopolitical dispositifs, which manage around the embodied norm. The narrative is not really interested in imagining what life might be like after the human, for example the life from another planet, and the Martians superseding the human species on Earth is not an option for Wells. Through the agency of the Earth bacteria, of which I will speak more in the last chapter, the monstrous Martians/future humans are defeated and the Victorian life as the proper form continues on. Wells' imaginations of a post-

230. Ibid., 168.

human life is reinscribed within a humanist framework, in which the alien or vampire figure stands for bad future humanity from which we can still save ourselves.

Conclusion

In this chapter I analysed Shelley's *Last Man*, and Wells' *Time Machine* and *The War of the Worlds* as the 19th century scenario of disastrous extinction, and in this way precursor to the contemporary political concerns around climate change. Relying on biopolitical and posthumanist/environmental approaches, I argued that Shelley's and Wells's novels manifest a biopolitical state ordering of human survival against the agency of nature, but also challenge nation-state politics in favour of global citizenship in the face of extinction.

Disastrous extinction is staged as a Foucauldian issue of modern state management of population, in an Agambenian state of exception. While Agamben conceptualizes the state of exception in relation to the proclamations of war by the modern states, Miller makes a further link with the situations of natural disaster. This link helps us see the ways in which in Shelley's and Wells's scenarios, what can be understood as a disastrous agency of nature is staged as primarily disastrous for the state order. The relations between the biopolitical state and the disastrous agency of nature are framed in some way in terms of war. Natural disaster is not staged as something that might be independent of human politics, and an expression of broader material processes, which in Colebrook's view would disassociate climatic changes from strictly being targeted at the human level.

Furthermore, in the way that Miller sees the link between the state of exception and natural disaster, the novels manifest a slippage between the human and nonhuman agents, be it racially marked bodies, winds, and plague in Shelley, or aliens, floods and devolution in

Wells, as the agents of "nature" and therefore marked as wild, uncivilized or chaotic. As we saw, it is precisely these values – the uncivilized, wild, chaotic or indeed, the supposed state of nature – that the biopolitical state defines itself in opposition to. To do that, the scenarios manifest an Agambenian symptom of constantly having to draw boundaries between nature and law, the state of nature and modern state, particularly when it comes to human violence. What is at stake is that the scenarios of disastrous extinction raise the question of whether humans, due to their violence, have in fact deserved to be punished as a species and obliterated by the nonhuman agencies. This question leads to critiques of the state ethnic politics in *The Last Man*, the racial and colonial politics in *The War of the Worlds*, and the capitalist class divisions in *The Time Machine*, while Wells's novels also articulate a critique of nonhuman species extinction. The critiques work by blurring the nature-law boundaries, and exposing an impossibility to attribute violence to either simply nature, or the law (while it is necessary for the state to keep drawing these separations).

The said issues are precursors to the contemporary discussions about whether humans deserve to be obliterated in the climate change due to their destructive actions towards life and the environment. A proposed alternative which is articulated in *The Last Man* and *The War of the Worlds* to the state politics is to refashion a state citizen into a global citizen, bearing an inherent right to life. However, if we follow Colebrook's arguments, such cosmopolitanism can be read as one of a humanized globe, which invests in the human form of life above everything else, rather than opening politics towards the forces of "cosmos", i.e., nonhuman forces. Such investment in the human political life is staged in Shelley as a nostalgia for human civilization despite of the thriving animal and plant life, and as re-affirming the proper human embodiment in Wells by imagining monstrous, uncivilized post-human forms of life.

In this way Shelley's and Wells' narratives are not open towards the potential post-human forms of life which might come after the dissolution of the state and the extinction of the

human species, but rather reaffirm a survival of the human species, civilization and state as we know it. A different approach to this, which is beyond the classic scenarios of disastrous extinction, would be, in Colebrook's view, to open the idea of cosmopolitanism to virtuality, to what comes as radically other and does not fit easily into any predetermined model of citizenship, which would work to dislocate a human-centric perspective.

Chapter 5: Biological Invasions of the Human Self

Introduction

The previous chapter looked at Shelley's *The Last Man* and Wells' *The Time Machine* and *The War of the Worlds* as the scenario of disastrous extinction. Reading these novels through a conceptual link between Agamben's state of exception and Miller's natural disaster showed how the nonhuman agents of plague, winds, aliens and devolution, are figured to be in some way at war with humans. This chapter builds and further elaborates on this insight to look at how the vocabulary of human-nonhuman war intersects with the biomedical discourses of the body in the early science fiction. I look at Shelley's and Wells's novels as the scenario of biological invasion in order to argue that they construct the biomedico-political borders of human self against the biological other figured as invader.

Shelley in *The Last Man* imagines human bodies invaded by plague at the end of the 21st century and Wells in *The War of the Worlds* imagines an invasion of vampiric Martians upon the Victorians. Over the course of the 20th and 21st centuries, science fiction narratives of parasitic bodily invasions have become widely popular ways to figure the human body as not/ immune to its other, be it microorganism or alien. How we should understand such fiction is not only as a popular representation of medical discourses of disease and immunity (which it certainly is), but also as participating in and shaping the medical discourses themselves. As Ed Cohen writes in relation to the concept of immunity, we need to acknowledge "the imaginary work that metaphor performs *in* and *as* science. The scientific and poetic dimensions of bioscience are not only *not* opposed, they are co-constitutive."[231]

231. Ed Cohen, "Metaphorical Immunity: A Case of Biomedical Fiction," *Literature and Medicine* 22, no 2 (Fall 2003) : 145.

One particular metaphor that cuts across both the biomedical sciences and science fiction to co-constitute the bodily borders is, I argue, that of the invasion. Be it a sci-fi plot of an alien parasite inside a human, or a biomedical understanding of the trajectory of a particular disease, invasion is replete with biopolitical meanings. That is, it entangles the biological and political vocabularies in constituting the modern organism as primarily that which needs to be defended from the outsiders, "a body worth defending,"[232] as Cohen argues. Recent biopolitical and posthumanist approaches to subjectivity and body have analyzed this entanglement between politics and medicine in drawing the bodily boundaries, as well as proposed more affirmative metaphors than those of war to conceptualize the relationships between the organisms, be it between humans themselves, or between human and other micro/organisms. In this chapter I read the classic sci-fi as scenario of biological invasions by relying on Cohen's Foucauldian analysis of biomedical body, Esposito's notion of the immunitary paradigm, Derrida's notions of auto/immunity, carnophallogocentrism and hospitality, and Cary Wolfe's take on them, as well as Donna Haraway's critique of the immune system. Close readings of the 19th century sci-fi scenario of invasion will show it as early articulations of the concerns around pandemics or ecological im/balances.

Before I undertake close readings of the novels, let me elaborate briefly on the historical links between the trajectories of science fiction, European colonial expansions, and the histories of medicine, which intersect to co-construct the scenario of invasion. The emergence of science fiction in modern European literatures is intricately entangled with the European overseas voyages of exploration and colonial conquest ever since the 16th century. Science fiction scholar Peter Fitting argues that science fictional narratives of the first encounter often tended

232. Ed Cohen, *A Body Worth Defending: Immunity, Biopolitics, and the Apotheosis of the Modern Body* (Durham: Duke University Press, 2009).

to repeat the European "discovery" of the New World, and in this way asserted an European perspective of exploration and the spread of western progress while in fact being the narratives of colonial conquest.[233] They also drew on the controversial theories of differences between the savage and civilized, inferior and superior human races, which were throughout the 19th century made understandable through an evolutionary and anthropological prism. However, a European colonial perspective has also been questioned in the sci-fi encounter plots and one way in which this has been done is by staging a reversal of the movement from Europe to colony, framed as an invasion of the colonial centre from the margin. This reverses the perspectives, and Fitting proposes that Wells' *The War of the Worlds* is an early example of this reversal, in which a European imperial power is subjugated by a superior species who could not care less about the human, and more particularly western, civilization and culture. We could say that the scenarios of invasion of the colonial centre work to, on the one hand, undermine the historical colonialisms, but on the other, project the fear of counter-colonisation from the non-west.

Modern European colonialisms, as a movement of bodies across the geographical spaces and a related removal of the members of indigenous populations, did not involve just the human species. They involved the movements of plant and animal species aboard the ships, as well as microorganisms that caused contagious diseases, which historian William Cronon calls "a cast of nonhuman characters" that take center stage in his ecological history of colonial New England.[234] Cronon analysed the ways in which the plant and animal species as well as the related livestock and agricultural practices that were introduced to New England from the Old World changed the landscapes and the ecological communities. He also argued that the

233. Peter Fitting, "Estranged Invaders: *The War of the Worlds,"* in *Learning from Other Worlds: Estrangement, Cognition, and the Politics of Science Fiction and Utopia,* ed. Patrick Parrinder (Liverpool: Liverpool University Press, 2000), 127.

234. William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill & Wang, 1983), 4.

colonial conquest of the Americas by the European settlers was crucially performed through the agency of the diseases such as smallpox, chicken pox, measles and influenza, to which the Amerindians populations succumbed because of biological vulnerability. In biomedical vocabulary, they simply did not have the acquired immunities to these diseases as the Europeans did, and as a result were decimated, which completely undermined their spiritual beliefs and practices.[235] Of course, the concept of immunity as a biomedical concept did not exist at the time, but was in fact formalized only towards the end of the 19th century, after the development of the germ theory of disease. Before that, the predominant theory of disease was the miasma theory, according to which diseases were caused by the presence of poisonous vapour in the air emanating from decaying matter. In the 1860s Louis Pasteur proposed that what can be found in the air and causes diseases is in fact microorganisms or germs, which was followed in the 1880s by Robert Koch's identification of the bacillus that causes cholera, and Elie Metchnikoff's conceptualization of immunity to microorganisms. The concept of bodily immunity framed the relations between an organism and its environment in terms of defense or protection.

The scenario of invasion, as it emerged in the 19th century science fiction, channelled as well as contributed to the shaping of the entanglements between the bodily invasions by microorganisms, the ecological plant, animal and human invasions, and the geographical colonial contexts informed by racial theories. Rob Latham uses the term "biotic invasions,"[236] which he takes from the vocabulary of the post-WW2 ecological science, to refer to these entanglements and its stagings in science fiction. He is particularly interested in the post-war emergence of sci-fi which is critical of the colonial biotic invasions from an explicitly

235. William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill & Wang, 1983), 73.

236. Rob Latham, "Biotic Invasions: Ecological Imperialism in New Wave Science Fiction," *The Yearbook of English Studies* Vol. 37, No. 2, Science Fiction (2007): 103-119.

environmentalist perspective. What interests me here is what prefigures such 20th and 21st century developments, i.e., the classic science fictional stagings of biotic invasions.

Biomedico-political Defense of Self from Nonself

In the previous chapter I looked at the ways in which Shelley's and Wells' scenario of disastrous extinction, when approached through the link between Agamben's state of exception and Miller's natural disaster, frames various nonhuman agents, such as plague, wind, aliens or devolution, to be at war with the human state. Here I suggest that such biopolitical human-nonhuman framing can be further seen as intersecting with the medical discourses in the novels, when we read them as the scenario of biological invasion. In order to explicate this, it is necessary to start with Foucault's take on biomedicine in his biopolitical theory.

Foucault in his work approached medicine as a biopolitical knowledge formation and practice in a number of ways, from analysing the histories of western discourses on madness to analysing the establishment of the modern hospital. In the lecture "The Crisis of Medicine or the Crisis of Antimedicine" (1974), Foucault proposes that the phenomena of medicalization is in fact one of the key forms of biopolitical governmentality. To recall, Foucault argues that modern biopolitical state governs a population by the maxim to make live and let die, rather than by killing and letting live, as the classical sovereignty did. In such an outlook of fostering and improving life, one of the key areas of state intervention becomes the health of its citizens. The biopolitical state, as Foucault argues, has since the 18th century been invested in securing "the right to health"[237] for its citizens. Throughout the 18th and 19th centuries, this is

237. Michel Foucault, "The Crisis of Medicine or the Crisis of Antimedicine?," *Foucault Studies* No 1 (December 2004): 6.

articulated predominantly as the preservation of the national economic and military, physical strength. The biomedical dispositifs emerge at the intersection of the previously historically established disciplinary regimes over body, i.e., its physical capabilities, usefulness and docility; and the new regulatory control over the species body, i.e., the biological processes of life such as births, mortality, and reproduction. Modern biomedine as a discourse and practice is situated at the crossover of what Foucalt calls "an anatomo-politics of the human body," and "a biopolitics of the population."[238] For Foucault, what is crucially governed at this crossover of discipline and regulatory control, the individual and species body, is sexuality, through the biomedical discourses of normalization/pathologization. Other biomedical issues concerning the body took center stage as well, such as cleanliness and hygiene as predispositions for good health. Sexuality and hygiene framed as biomedical issues have been entangled with moralizing discourses on what makes a good citizen.

Foucault refers to the modern focus on the body as "somatocracy" in opposition to the earlier sovereign "theocracies" as the governing of souls. In a modern somatocracy, the differences in race, sex, gender, class or age become understandable as attributes of the body rather than expressions of the soul. Foucault suggests that biomedicine is a key somatocratic dispositif when he writes that "We live in a regime that sees the care of the body, corporal health, the relation between illness and health, etc. as appropriate areas of State intervention."[239] Modern biopolitics crucially depends on biomedical authority, which governs not primarily through law (as establishing sovereignty) but rather through the norm (but the two are nevertheless interconnected in various ways). The biomedical authority operates by drawing distinctions between the normal and the abnormal/pathological and eventually in the late 20th century, according to Foucault, comes to penetrate all aspects of citizens' lives.

238. Michel Foucault, The *History of Sexuality,* Volume 1: An Introduction (New York: Pantheon Books, 1978), 139.
239. Ibid, 7.

Within the Foucauldian framework of understanding biomedicine, Ed Cohen looks closer into the construction of the modern biomedicalized body. He adds to Foucault's arguments by arguing that, in parallel to the national body of the state as militarized, the individual biomedical body is crucially constructed through the discourse of defense or protection. This reaches its apotheosis in the biomedical conceptualization of immunity at the end of the 19th century. Cohen argues that Elie Metchnikoff's concept of the immunity of biological organism in 1881 emerges as an outcome of a long western tradition of political and legal discourses on the relations between particularly human organisms. In ancient Rome, legal immunity meant that some citizens were exempt from certain responsibilities, e.g., from paying taxes, but still could exercise the citizens' rights. In early modern political philosophy, Thomas Hobbes, whose contract theory is considered by Foucault to be the legal matrix for modern biopolitics, conceptualized self-defense as the natural right of the body. Cohen sees the two politico-legal concepts as eventually merging together into the biomedical immunity-as-defense. This happened in the context of the 18th and 19th century war politics of the European nation-states which framed the citizen's body as a resource for national defense, as well as the epidemics of various infectious diseases across Europe such as cholera. By the end of the 19th century, microbes got to be equated with military invaders, and thus the relations between organisms and their environments at the level of bodily cells and tissues became understood through the vocabulary of defense. This naturalized the political vocabulary of the relations between particularly human organisms. Eventually today, we come to "declare war on cancer and AIDS. We visualize white blood cells destroying tumors. We imagine that we are fighting off a cold. We kill the germs that cause bad breath.[240]

Mary Shelley's *The Last Man* (1826) as a story about an epidemic of plague that at the end of the 21st century decimates humanity contributes to the emerging 19th century biopolitical

240. Ed Cohen, "A Body Worth Defending. Opening Up a Few Concepts: Introductory Ruminations," *AVANT* Volume III, Number 1/2012: 68.

intersection of war and medicine which Cohen identifies. It does so by staging a biological invasion of the European city/body from the colonial margins. At the time when the plague starts to make its way through Europe, the narrator Lionel Verney remains optimistic that the disease will not come to the republic of England, governed by the Lord Protector, due to the following reasons:

> The cleanliness, habits of order, and the manner in which our cities were built, were all in our favour. As it was an epidemic, its chief force was derived from pernicious qualities in the air, and it would probably do little harm where this was naturally salubrious. […] We will fight the enemy to the last. Plague shall not find us a ready prey; we will dispute every inch of ground; and, by methodical and inflexible laws, pile invincible barriers to the progress of our foe. Perhaps in no part of the world has she met with so systematic and determined an opposition. Perhaps no country is naturally so well protected against our invader; nor has nature anywhere been so well assisted by the hand of man.[241]

Shelley stages literally a war between the state, depicted as a sovereign legislator, and the plague depicted as an enemy, foe and invader, thus merging the vocabularies of politics and medicine. The invasion is not staged as directly that of the human bodies but rather as an invasion of the city, on the assumption that they intersect in the "citizen's body". What Foucault understands as the modern right to health granted by the biopolitical state is to be ensured through a defense from the invasion, by issuing the appropriate laws concerning health. The city is to be kept clean and the citizens' bodies disciplined through hygienic habits. Shelley's understanding of an epidemic is informed by the miasma theory of contagion, according to which the disease spreads in the areas of bad, contaminated air, which contains the vapours of decaying matter. Significantly, Shelley suggests that the air in England is "naturally salubrious" as well as "well assisted" by the proper governing. This has colonial implications and indirectly tells us of those countries where air is not naturally salubrious and well assisted by man, but most likely impure and contaminated: the plague-stricken East, Asia, and America, from where the plague eventually invades Europe. Shelley

241. Mary Shelley, *The Last Man*, (The Project Gutenberg EBook, 2006), 114.

merges the medical understanding of plague as a contagion through "bad air" with a colonial mapping of salubriousness. Alan Bewell argues that the novel is a powerful articulation of the British anxieties at the time, which interlinked colonial geography and disease, "that commercial and military expansion had left no place on earth safe from the diseases of others."[242] As a consequence, Shelley in a Foucauldian manner constructs the city cleanliness and bodily hygiene as western biopolitical dispositifs that are to treat the disease primarily as an invader and fight it off, but crucially, to fight it off as an invasion coming from the contaminated colonies.

Shelley's framing of the plague as an invasion participates in the modern entanglement between biomedicine and politics, which according to Cohen, eventually leads to the concept of immunity proposed by Metchnikoff, who researched vaccination with Louis Pasteur. The concept emerged out of the historical period in which the epidemics of infectious diseases raged and caused huge mortalities in Europe. Cohen argues that immunity imagined "the individual organism as the space within which a cellular struggle for survival (a.k.a. disease) takes place."[243] In this way, the conceptualization of immunity merged a Darwinian evolutionary understanding of organism's relationship to other organisms and the environment, with the understanding of cellular functions within the body – as one of struggle. The relations between biological organisms have ever since in biomedicine been naturalized as defensive, but in fact this construction draws on the western legal and political ideas of immunity and self-defense that referred to the political relations between humans. The scientifically approved notion of defense in biomedicine at the end of the 19th century increasingly relegated the previous conceptualizations of healing and harmony with the environment to the areas of non-science, while also validating the germ theory of disease that

242. Alan Bewell, *Romanticism and Colonial Disease* (Baltimore and London: The Johns Hopkins University Press, 1999), 21.

243. Ed Cohen, "A Body Worth Defending. Opening Up a Few Concepts: Introductory Ruminations," *AVANT* Volume III, Number 1/2012: 69.

was introduced a few decades earlier (1860s). All these developments, according to Cohen, manifested the problem of boundary maintenance through "bacteriology's equation of microbes with invaders – a metonymy derived from the metaphoric representations of epidemics (especially cholera) as invasions."[244]

While Shelley's metaphoric representation of the plague as an invasion in 1826 was not yet informed by the theory of germs, Wells' literary worlds in which the aliens from Mars invade the Earth, and the human embodied form deteriorates in the far future, are certainly populated by microorganisms or particularly marked by their absence. *The Time Machine* (1895) as well as *The War of the Worlds* (1898) are crucially informed by the idea that humans need to defend their bodies and environments from the harmful microorganisms that cause diseases and that the greatest achievement of future biomedicine will actually be to eradicate them from Earth completely. In *The Time Machine* the Time Traveller who finds himself in the far future after the decline of the British state, among the remaining Eloi and Morlocks as degenerate forms of the human species, observes that "The air was free from gnats, the earth from weeds or fungi," and "The ideal of preventive medicine was attained. Diseases had been stamped out."[245] The eradication of what is understood as disease carrying, invasive or parasitic organisms is understood as one of the key achievements of biomedicine. The same idea informs *The War of the Worlds* where the Martians are depicted as not only coming from another planet but are in fact a future d/evolved form of humans (both monstrous and technologically advanced), akin to the Morlocks after the fall of the human civilization and state. What is peculiar about them, and a sign of their advanced science, is that "Micro-organisms, which cause so much disease and pain on earth, have either never appeared upon Mars or Martian sanitary science eliminated them ages ago."[246] Similarly as in *The Time*

244. Ibid., 93.
245. H.G. Wells, *The Time Machine*, (Planet eBook), 40-41.
246. H.G. Wells, *The War of the Worlds,* (Planet eBook), 168.

Machine, the key achievement of future biomedicine is the elimination of disease-causing bacteria and viruses. This biomedical detail is in fact crucial for the narrative twist in which the aliens, after having invaded the Earth and the human bodies by injecting the blood of living humans, are in fact eventually counter-invaded themselves by the Earth bacteria to which they have not acquired immunity.

Colonial and Space Invaders

From the perspective of today's biomedical knowledge about bacteria, the Wellsian scenario of a complete eradication of microorganisms is certainly not desirable, as we know that certain bacteria useful for human digestion inhabit the gut. Microorganisms also inhabit other parts of the human body, as well as more generally other organisms in a co-existing way. Donna Haraway, who critically examined the concept of the immune system in "The Biopolitics of Postmodern Bodies" argues that what is constituted as an individual does not "stop nor start at the skin, which is itself something of a teeming jungle threatening illicit fusions, especially from the perspective of a scanning electron microscope."[247] Haraway with this visual image of a microscopic jungle wants to challenge the medical conceptualizations of the immune system as the keeper of strict bodily borders, which she sees as asserting the logic of recognition and misrecognition of self and other in western political discourses. Haraway, same as Cohen above, sees the biomedical discourse of immunity as emerging out of and invested in the western philosophies and politics, and therefore as mapping out the ways in which the (violent) political relations between humans have been imagined onto the relations between biological micro/organisms (naturalizing in this way the vocabulary of politics). She argues that immunology, when read as a biopolitical discourse, paints

247. Donna Haraway, "The Biopolitics of Postmodern Bodies: Constitutions of Self in Immune System Discourse," in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 215.

individuality as a drama of strategic defense, where the immune system is a battlefield, and other an invader into self that needs to be defended. Critical of this oppositional dialectic, Haraway also crucially brings to the fore that such staging of human self vs. nonhuman microorganism has historically been informed by the western colonizing contexts, and therefore the relations between differently racialized human bodies. The understanding of infectious disease in the colonial contexts commonly involved a "stunning reversal: the colonized was perceived as the invader. In the face of the disease genocides accompanying European 'penetration' of the globe, the 'coloured' body of the colonized was constructed as the dark source of infection, pollution, disorder, and so on, that threatened to overwhelm white manhood (cities, civilization, the family, the white personal body) with its decadent emanations."[248] In other words, Haraway not only situates the biomedical concept of the immune system into a trajectory of western law and politics, as Cohen does, but crucially also emphasizes its entanglements with western colonialisms and racialization.

In Shelley's crossover between medicine and war politics, she stages precisely such a colonially and racially inflected encounter which Haraway discusses, between the narrator Verney and a man infected with the plague. Verney, after roaming about the streets of the plague-devastated London, returns home to see his wife and children, only to embark upon the following scene:

> I lowered my lamp, and saw a negro half clad, writhing under the agony of disease, while he held me with a convulsive grasp. With mixed horror and impatience I strove to disengage myself, and fell on the sufferer; he wound his naked festering arms round me, his face was close to mine, and his breath, death-laden, entered my vitals. For a moment I was overcome, my head was bowed by aching nausea; till, reflection returning, I sprung up, threw the wretch from me, and darting up the staircase, entered the chamber usually inhabited by my family.[249]

248. Ibid., 223.
249. Shelley, *The Last Man,* 155.

It is highly significant that Shelley decides to stage her main protagonist's possible contraction of the deadly disease (as he believes it to be at the time, but later on survives) by a "negro", which puts it in a colonial as well as racial framework. Rather than becoming infected though, Verney in fact can be said to develop immunity by being exposed to a small dose of infectious agent, as by the end of the novel he remains the last man standing. Alan Bewell offers such a reading of Verney's inoculation by the colonial encounter.[250] In this understanding, the vehicle of exposure is the negro's death-laden breath, which is informed by the theory of bad air as a source of transmission. Peter Melville challenges such a reading by arguing that it does not fit the miasmatic etiology of disease. According to him, while one individual sufferer can indeed contribute to the stagnant air, they cannot be a single cause of contagion. He, nevertheless, acknowledges that the staged encounter is racially significant, but that it should be understood as Verney's lack of compassion for the racial other, and not through the immunitary mechanism.[251] However, I would argue that the passage strongly invites a reading of Verney's possible contagion and immunity in relation to the racial other, even if this might contradict the prevalent understanding of miasma.

In a way that anticipates Haraway's arguments, the negro's breath can be read as a decadent emanation from a coloured body, which crosses the bodily boundaries and invades the white body and its familial surroundings, in a stunning medico-colonial reversal in which the colonized is the infectious invader. This, in turn, leads to an immunitary protection of the white body from infectious disease (in anticipation of the biomedical concept of immunity). Paradoxically, the contact with the racialized/diseased body is threatening but also that which grants protection. Analogously to the geographical trajectory of the plague, which charts an invasion of the European states from the East and America, a black body is placed at the heart

250. Alan Bewell, *Romanticism and Colonial Disease* (Baltimore and London: The Johns Hopkins University Press, 1999), 245.

251. In "The Problem of Immunity in 'The Last Man,' *Studies in English Literature, 1500-1900,* Vol. 47, No. 4 (Autumn 2007), 833.

of London to threaten the narrator's white one, within the framework of western biopolitics of space and race. This can be read as either a projection of the fear of counter-colonisation and bodily contamination of the center from the margins, or a possible undermining of the British colonial power, or most likely both. Both Shelley's and Wells's narratives of counter-invasion in fact manifest this ambiguous relationship to western colonialisms and racial theories. On the backdrop of colonial geography, Shelley stages a racially controversial moment of a non-white body infecting but also creating immunity of the European main protagonist, but ultimately the western civilization crumbles from the infectious disease and its state power is therefore completely undermined. In contrast to that, Wells in his novel explicitly criticizes the European colonial practices towards the supposedly "inferior race" of Tasmanians as well as towards the animal species of the dodo and bison,[252] but ultimately the western state survives and the invading superior Martians are defeated themselves because of their lack of immunity to the Earth bacteria.

Wells thus adds a twist to the narrative of biological invasion of the colonial centre from the margins. He imagines that the alien invaders come to colonize the Earth (by comparing them to the Europeans who colonized Tasmania) while being invaded themselves by the bacteria to which the human species has become immune. Such constellation can be understood as anticipating Haraway's arguments about the trope of space invaders in immunological discourses. She argues that in the second half of the 20th century immunology, the visualization of inner bodily space frequently relies on the imagination of extra-terrestrial space. That is, the inner space of the human body is represented as the Outer space full of strange, nonhuman, "alien" living forms and shapes. The image of the landscape of bodily interiority is informed by the image of the Space, and the invasions of the immune system in the bodily interior are seen as analogous to the invasions in Space. This raises the set of

252. Wells, *The War of the Worlds*, 7.

following questions, according to Haraway: "The trope of space invaders evokes a particular question about directionality of travel: in which direction is there an invasion? From space to earth? From outside to inside? The reverse? Are boundaries defended symmetrically? Is inner/outer a hierarchicalized opposition?[253]

Wells anticipates these questions at the turn of the 20th century when he stages a link between the travel of the aliens from Mars to Earth, their vampiric invasions of the human bodies, and the movement of microganisms from outside to inside both human and alien bodies. He utilizes the visual and conceptual links between travel in outer space and an invasion of the bodily immune system, and makes us think about the trajectories of invasion, i.e., who is figured as invader and who as invaded. Wells' narrator reports the following:

> These germs of disease have taken toll of humanity since the beginning of things – taken toll of our prehuman ancestors since life began here. But by virtue of this natural selection of our kind we have developed resisting power; to no germs do we succumb without a struggle, and to many – those that cause putrefaction in dead matter, for instance – our living frames are altogether immune. But there are no bacteria in Mars, and directly these invaders arrived, directly they drank and fed, our microscopic allies began to work their overthrow. Already when I watched them they were irrevocably doomed, dying and rotting even as they went to and fro. It was inevitable.[254]

In a trajectory from Shelley, Wells frames the relations between the human species and disease in the biopolitical terms of war, adding to it a Darwinian lens of the struggle for survival at the cellular level. By the end of the 19th century Wells's understanding of disease was informed by the germ theory as well as the concept of immunity. He utilizes what Haraway calls the trope of space invasion, as the aliens invade the Earth but also literally the human bodies, since they "took the fresh, living blood of other creatures, and injected it into their own veins."[255] Their parasitic invasions into the human organisms parallel the microscopic invasions of the immune system which cause diseases. However, the human

253. Donna Haraway, "The Biopolitics of Postmodern Bodies: Constitutions of Self in Immune System Discourse," in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 223.
254. Wells, *The War of the Worlds*, 222.
255. Wells, *The War of the Worlds*, 165.

selves gradually managed to defend themselves from some microscopic others by developing immunity, and in an unexpected twist, they defend from the alien others when the microscopic others become their "allies" and invade the Martian bodies. The directions of the space and bodily invasions in Wells work to re-establish a human-centric perspective, and relatedly Earth-centric perspective (once the Earth bacteria become human allies) since it is the human species that is figured as in need of defense from other micro/organisms. The defensive biomedical logic of self and other constructs the relations between the humans and other species but also between different races of humans. That is, the aliens are understood as a superior race into which the present humans have morphed in the future, as their practices towards the humans are crucially made understandable in comparison to the European practices towards the supposed "inferior race" of Tasmanians, as the narrator informs us. In a trajectory from Shelley's counter-colonial and racialized mapping of disease, Wells utilizes the new biomedical understanding of bodily immunity-as-defense to negotiate both racial and species differences, situating them in a counter-colonisation of Earth from Space.

Auto/Immunitary Protection and Carnivorous Sacrifice

An intricate relation between a biopolitics of race and the discourses of immunity which both Shelley and Wells stage, is what Roberto Esposito discusses at length in his biopolitical theory. Esposito proposes that modern biopolitics follows "the paradigm of immunization,"[256] or in other words, that immunization is at the core of the constitution of political community in modernity. He goes back to Hobbes, similarly as Foucault and Agamben. To recall, Foucault considers Hobbesian social contract theory to be the legal matrix for biopolitical governmentality, while Agamben brings to the fore the crucial role that the concept of a

256. In Timothy Campbell, "*Bios*, Immunity, Life: The Thought of Roberto Esposito," *diacritics* 36.2, summer 2006: 2.

violent state of nature plays in Hobbes' theory, which humans exit when they sign a contract to transfer authority to and be granted rights from the sovereign. Esposito interprets the Hobbessian moment of signing a social contract and instituting a sovereign authority as the moment of immunization of a community from violence. Esposito's take on Hobbes' theory, as scholar of biopolitics Timothy Campbell explicates, is that

> …of the sovereign who immunizes the community from the community's own implicit excesses: the desire to acquire the goods of another, and the violence implicated in such a relation. When its individual members become subject to sovereign power – that is, when it is no longer possible to accept the numerous threats the community poses to itself and to its individual members – the community immunizes itself by instituting sovereign power.[257]

For Esposito the matrix of biopolitical governmentality goes crucially through immunization and he discusses this, in relation to Nazi politics. As Campbell suggests, Esposito understands the Nazi politics primarily as "an attempt to immunize the Aryan race,"[258] and looks particularly at the role of the medical doctors in the Nazi camps and in the Nazi state more generally. What Foucault referred to as somatocracy, as the modern governing of the body, in the Nazi state turns into a "biocracy", as a complete governing of the citizens' biology.[259] Esposito's understanding of immunizing a proper race through eliminating or purifying can be thought in relation to Agamben's understanding of bare life produced by the Nazi. For Agamben, bare life produced through the modern anthropological machine is an indistinction between bios as a politically valued life and zoē, which is merely living and corresponds to animal or natural life. In this way the Nazi production of racialized life is entangled with a production of less than human life, or an animalized form of human life. While Esposito approaches the Nazi racialization primarily as a biomedical paradigm of immunizing a proper race through purification, Agamben approaches it as a production of a less than human racialized life. By putting these two views on racialization together, we can start to think how

257. Ibid,5.
258. Ibid, 15.
259. Campbell uses this term drawing on an analysis of the Nazi state by Robert Lifton.

a biopolitical immunization of a proper race might be entangled with delineating between species.

As Campbell argues, Esposito proposes to think affirmative biopolitics, which would not immunize certain kinds of lives only by prescribing death to other lives, and which does not necessarily slip into a defense against its own internal tissue or into auto-immunization, as discussed by Jacques Derrida. Though Derrida does not align himself with biopolitical thought and does not make any easy distinctions between pre-modern and modern western politics as Foucault, Agamben and Esposito do, his concepts of auto/immunity helps us think further through the logic of biopolitics as discussed by these thinkers.[260] Derrida refers to the 20th century biomedical conceptualizations in discussing politics as an intricate entanglement of immunity and auto-immunity. Auto-immunity was first referred to in immunology at the beginning of the 20th century as "horror autotoxicus" by Morgenroth and Ehrlich, while during the 1940s, in order to account for the bodily immune activities against its own tissue, MacFarlane Burnet proposed that immunology be redefined as "the science of self/nonself discrimination."[261] As Cohen argues, this conceptualization of self and non-self complicated the idea of the immune system as the host-invader relations as it became accepted that an

260. Esposito raises this issue in "Community, Immunity, Biopolitics" when he says: "And yet, does biopolitics arise with modernity, as Foucault was inclined to believe, or does it have a longer and deeper genealogy? We could answer these questions by saying that, every policy, when considered from the point of view of its living matter, has been and will be a form of biopolitics. However, it is the immunitarian characterization which determines, first, the modern intensification of biopolitics, and later, during the totalitarian phase, the thanatopolitical drift." (http://hemisphericinstitute.org/hemi/en/e-misferica-101/esposito) We can argue that this understanding of modern "intensification" of biopolitics rather than a radical rupture with pre-modernity is similar to Agamben's understanding in *Homo Sacer*, when he argues, referring back to Foucault, that biopolitics be understood as "the growing inclusion of man's natural life in the mechanisms and calculations of power." (119) Derrida, however, in "The Twelfth Session" of *Beast and the Sovereign, Vol. 1* strongly criticizes Agamben's understanding that bios and zoē could be more easily differentiated in pre-modernity than in modernity, and adds that "So I am not saying that there is no 'new biopower,' I am suggesting that 'bio-power' itself is not new. There are incredible novelties in bio-power, but bio-power or zoo-power are not new." (439) Without going into the intricacies of Derrida's critique of Agamben, I would in fact like to suggest that all three thinkers would in principle agree that biopolitics itself as a politics of life is not exclusively a modern phenomenon, but rather has particularly modern inflections that are worth exploring as historically specific, which Esposito proposes to think as an immunization of community and Agamben as a growing inclusion of bare life into politics.

261. In Ed Cohen, "A Body Worth Defending. Opening Up a Few Concepts: Introductory Ruminations," *AVANT* Volume III, Number 1/2012: 89.

organism can defend itself against its own cells and even destroy them. In other words, bodily cells could be recognized as an antigen by the immune system that triggers a production of an antibody. In this way, there is no necessarily outside "invader" to which the organism reacts, but the reactions occur internally. If we remember Haraway's suggestion that the interiority of the body has been frequently visualized in immunology as Outer space full of its own strange, "alien" parts, we could say that what is understood by biomedical autoimmunity is a reaction to a part of self decoded as non-self, alien or foreign.

Derrida refers to the biomedical understanding of auto/immunity in discussing the relationship between the discourses of science and religion, as well as the logic of democracy. Differently from Esposito, who sees the paradigm of immunization as modern, Derrida discusses the logic of auto/immunity in western politics without seeing it as necessarily a modern phenomenon. In the essay "Faith and Knowledge" he argues that the "process of auto-immunization, which interests us particularly here, it consists for a living organism, as is well known and in short, of protecting itself against its self-protection by destroying its own immune system."[262] He links this to the mechanism of immune suppression in organ transplants through which it is possible to limit the functioning of the immune system in order to accept a foreign organ and survive. While here Derrida defines autoimmunity as a capacity of the organism to destroy its own immune system in a quasi-suicidal fashion, he also elsewhere argues that autoimmunity as a logic of democracy attempts to protect democracy "by expelling, rejecting, or sending off to the outside the domestic enemies of democracy."[263] For Derrida then, auto/immunity as a political logic can be said to work in two ways: by protecting the inside through expelling the domestic enemies to the outside (for example, immigrants), but also by diminishing its own protection in relation to the other/outside (for

262. Jacques Derrida, "Faith and Knowledge," in *Acts of Religion* (New York and London: Routledge, 2002), 80.

263. Jacques Derrida, "The Reason of the Strongest (Are There Rogue States?)," in *Rogues: Two Essays on Reason* (Stanford: Stanford University Press, 2005), 36.

example, by letting a certain number of immigrants in). These processes construct a movement between life which is worth protecting and that which is not: "between one which has the form of the machine (mechanization, automatization, machination or *mechane*) and the other, that of living spontaneity, of the *unscathed* property of life, that is to say, of another (claimed) self-determination."[264] In this way, life worth immunitary protection is figured as something more than "mere" biological living, which is reduced to mechanistic processes, and thus subject to an autoimmunitary expulsion to the outside or suppression in order to, paradoxically, defend a proper form of self from self. I suggest that Derrida's understanding of the biological, mechanistic life as sacrificeable corresponds to Agamben's understanding of bare life as killable.[265] In other words, the autoimmunitary relation between a proper, unscathed, self-determined form of life and the mechanistic biological form of life, which Derrida identifies, corresponds to the relation between the proper human form of life and less than human bare life which Agamben discusses. If we read Agamben and Derrida together, we could say that the immunization of a proper self is performed as an autoimmune response to that part of self that is seen as "merely" bio-zoological or machinic and therefore expendable.

Wells's turn of the century scenarios prepare the ground for the subsequent entangled dynamics between the logic of immunity and autoimmunity (which were conceptualized in the biomedical discourse in the 20th ct). In Wells' imagination of the future, as we saw above, the key success of the biomedical sciences is to eventually eradicate the microorganismic invasions to humanity, be it on Earth in *The Time Machine*, or on Mars in *The War of the Worlds,* where the Martians are figured as future humans. The absence of microorganisms on Mars is central to the plot when the Martians are defeated on Earth by the bacteria that

264. Jacques Derrida, "Faith and Knowledge," in *Acts of Religion* (New York and London: Routledge, 2002), 82.

265. Cary Wolfe argues similarly, as I discuss below.

humans are immune to. In *The Time Machine*, what happens in the future when there are no agents from which the human immune system protects itself, is that human tissue starts degenerating, as the Time Traveller understands it:

> The too-perfect security of the Upper-worlders had led them to a slow movement of degeneration, to a general dwindling in size, strength, and intelligence. That I could see clearly enough already. What had happened to the Undergrounders I did not yet suspect; but from what I had seen of the Morlocks – that, by the by, was the name by which these creatures were called – I could imagine that the modification of the human type was even far more profound than among the "Eloi,' the beautiful race that I already knew.[266]

In the Merriam Webster Online Dictionary, degeneration is defined in a biomedical register as "a deterioration of a tissue or an organ in which its function is diminished or its structure is impaired," as well as in more politicial terms, as "progressive deterioration of physical characters from a level representing the norm of earlier generations or forms."[267] In Wells's time, biomedical degeneration of an organism was crucially linked to the idea of a reverse evolution of the whole species, which was enacted much more speedily than evolution itself. According to Kelly Hurley, Benediction Augustin Morel's *Treatise on the Degeneration of the Human Species* (1857) was the first full-blown theory of hereditary degeneration, which crucially framed the debates till the end of the century. As Hurley argues, "Morel posited a gloomy sequence of causes and effects, a hereditary line that began with a first set of defective parents and ended in madness and extinction."[268] She goes on to analyse Wells's Eloi and Morlocks as manifestations of this discourse, where the Eloi are figured through the tropes of emasculation (beautiful but effete) and the Morlocks through the tropes of class (brutish machinic workers) but also animalization (ant-like predators). Building on this reading, I want to suggest further that the way in which Wells stages degenerative processes could be seen as preparing the ground for the biomedico-political structure of autoimmunity.

266. Wells, *The Time Machine*, 65.
267. Merriam Webster Online: http://www.merriam-webster.com/dictionary/degeneration
268. Kelly Hurley, *The Gothic Body: Sexuality, materialism, and degeneration at the* fin de siècle (Cambridge: Cambridge University Press, 1996), 66.

That is, for Wells, in the absence of immunity to external microorganisms, which have been eliminated and therefore the humans are "too perfectly secure", there is an internal reaction in human organism, the outcome of which (a defect) is then passed onto the next generation. There is no external enemy, the exposure to which would create immunity, and thus the supposed perfect protection is what makes the human organisms the least protected. As Wells understands it, the risk from the outside or the Darwinian life struggle is what fosters intelligence, strength, and indeed health, of the human self. When such immunitary protection is removed, an internal cellular process occurs and eventually results in death. The self does not expel a part of self to the outside nor supresses its own immune system in order to survive, in a Derridean manner. An internal mechanism leads to a gradual modification of the "human type" and eventually to the extinction of humans in the far future. Without getting rid of the mere biological part of self as well as the biological others on the outside, the human type can be said to turn itself into the sphere of merely bio-zoological or machinic. Wells thus can be said to stage a (lack of) immunization of a proper "human type". He could be said to anticipate a biopolitical logic of auto/immunity in reference to its absence: the removal of an external microbiological invader removes the ability to protect and in the process, the proper species is imagined through an internal action to modify into an animalized/mechanistic form, the "mere" biological life, and in a suicidal fashion eventually extinguish itself. In this way, what defines healthy, and relatedly proper, form of human life in Wells is precisely a biopolitical immunization against external as well as possible internal enemies.

It is illuminating to further link what Wells stages as a (lack of) immunization of the proper human type (which leads to a corporeal modification into sub-human species and ultimately death), with the politics of eating in his novels. Cary Wolfe is helpful here to think the species differentiation in relation to eating practices. He points out that Agamben's two sets of terms, human/animal and bios/zoē, are useful to think biopolitics across the species lines, as well as

Derrida's notion of carnophallogocentrism. Wolfe suggests that Agamben's notion of bare life in *Homo Sacer* and Derrida's notion of sacrificial structure in "Eating Well" conceptualize the same essential logic of "non-criminal putting to death," to use Derrida's expression.[269] Derrida, however, unlike Agamben, addresses how this "sacrificial structure" entails who or what can be eaten, and links this to the logic of "carnophallogocentrism" in the interview "Eating Well, or the Calculation of the Subject." [270] For Derrida, the structuration of the western subjectivity, which he otherwise critically terms phallogocentrism, entails by default accepting animal sacrifice and eating flesh. The actual practice of eating flesh is on the symbolic level associated with virility, and Derrida suggests that the position of the western head of state is construed symbolically (which is to be followed in practice) as that of a virile animal flesh eater. In discussing carnophallogocentrism as a default acceptance of animal sacrifice, Derrida does not call out directly for the politics and practice of vegetarianism as a simple solution to the issue, because, as he says, one must eat in any case and it tastes good to eat meat.[271] His point is rather to ask the question in the first place of "how to eat well" and in this way to unsettle the silent acceptance of animal sacrifice in western cultures.

Explicating Derrida, Wolfe suggests that the political logic of carnophallogocentrism and of immunitary protection work in an interrelated way, but he does not develop this insight further. I wish to propose one way in which this link could be developed as Wells' scenarios bring it to the fore. As Wolfe points out, Derrida links immunitary protection to sovereignty, but also further to the figure of the phallus, as a symbol of life. This figure is ambivalent, because it is associated with the living spontaneity and potency, as well as with a mechanical reflex of erection. Wolfe cites from Derrida's "Faith and Knowledge" when he writes*:* "On

269. Cary Wolfe, *Before the Law: Humans and Other Animals in a Biopolitical Frame* (Chicago and London: The University of Chicago Press, 2013), 110.
I elaborate on Wolfe's explanation of the difference and similarity between Derrida's and Agamben's understandings of sacrifice in Chapter 2.

270. Jacques Derrida, "'Eating Well,' or the Calculation of the Subject," in *Who Comes After the Subject*, ed. Eduardo Cadava, Peter Connor and Jean-Luc Nancy (New York and London: Routledge, 1991), 112-113.

271. I discuss in more detail Derrida's views on vegetarianism in Chapter 1.

the one hand, it is 'the maximum of life to be kept unscathed, indemnified, immune and safe,' but on the other hand, 'and precisely by virtue of its reflex-character,' it is 'that which is most mechanical, most separable from the life it represents.'"[272] Following from this, Derrida analyzes two kinds of life: one which deserves immunitary protection, and the other which does not and which is linked with mechanicity and figured as lesser life. Wolfe further quotes from "Faith and Knowledge" to the same effect: "life has absolute value only if it is worth *more than life*... It is sacred, holy, infinitely respectable only in the name of what is worth more than it and what is not restricted to the naturalness of the bio-zoological (sacrificeable)…."[273] In other words, we could say that proper life, that which is holy and *immunized*, is figured as not merely bio-zoological or mechanistic, which is sacrificeable. (This Derridean understanding, as I noted already, corresponds exactly to Agamben's distinction between properly human and bare life).

Now, this distinction between proper life which is worthy of immunitary protection, and bio-zoological machinic life, which is not, can be connected to Derrida's critique of the response/reaction distinctions of Lacan in *The Animal That Therefore I Am* (which Wolfe discusses but does not connect directly to the difference between the immunized and sacrificial). Derrida criticizes Lacan's hierarchical understanding that only humans have the capacity to "respond" in a self-determined, free and autonomous way (and thus for example, to lie) while nonhuman animals are constrained by automatic, and therefore predictable reactions (based on the stimulus-response logic).[274] This distinction, in turn, is crucially entangled with hierarchically devaluing animal life in the history of western philosophy, and in the actual practices towards animals such as 20th century factory farming, as Derrida

272. Derrida quoted in Cary Wolfe, *Before the Law: Humans and Other Animals in a Biopolitical Frame* (Chicago and London: The University of Chicago Press, 2013), 94.

273. Derrida quoted in Cary Wolfe, *Before the Law: Humans and Other Animals in a Biopolitical Frame* (Chicago and London: The University of Chicago Press, 2013), 98.

274. Jacques Derrida, *The Animal that Therefore I Am* (New York: Fordham University Press, 2008).

claims. In other words, for Derrida the hierarchical distinction between human response and animal reaction is at the heart of the carnivorous sacrifice of carnophallogocentrism, ie., the accepted sacrifice of animal flesh in western cultures (discussed in "Eating Well"). If we now connect this back to the logic of immunity, it could be argued that based on a Derridean analysis, life that is immunized as proper life is also that which can respond and whose flesh is not to be sacrificed for eating, while the bio-zoological mechanistic life is reduced to reaction and can be eaten – which can then be mapped onto the difference between human and animal life.

Wells' scenarios of biological invasions manifest such link between the immunitary protection of a proper form of human life and the carnivorous sacrifice of animal life. In *The Time Machine,* as we saw, due to the absence of immunitary protection the human form of life degenerates into two animal-like species. What happens in this animalized state of humanity is that the predatorial ones start to eat their prey:

> Even now man is far less discriminating and exclusive in his food then he was – far less than any monkey. His prejudice against human flesh is no deep-seated instinct. And so these inhuman sons of men - - ! I tried to look at the thing in a scientific spirit. After all, they were less human and more remote than our cannibal ancestors of three or four thousand years ago. And the intelligence that would have made this state of things a torment had gone. Why should I trouble myself? These Eloi were mere fatted cattle, which the ant-like Morlocks preserved and preyed upon – probably saw to the breeding of.[275]

What is staged by Wells is an intricate link between the loss of proper form of human (as a consequence of the loss of immunitary protection) and carnivorous sacrifice. When human life is no longer immunized as sacred and unscathed, it is figured to be in the sphere of bio-zoological, in a Derridean manner. When the "prejudice" against cannibalism (which is not a rooted instinct but rather linked to intelligence, as Wells seems to suggest), which could be understood as an immunization of human flesh from eating, is removed, animal flesh is

275. Wells, *The Time Machine,* 81.

figured as sacrificeable. Both "post-human" species, the Eloi and the Morlocks, are described in terms of non-human animals, as fatted cattle or ant-like. By referring to the Eloi as "mere cattle", Wells's Time Traveller in fact asserts that breeding, killing and eating cattle, which is an established practice of the human species, is perfectly alright, which manifests a tacit acceptance of animal sacrifice. The only controversy would be if the Eloi were still seen as human, and thus an immunized form of flesh. On the other hand, the Morlocks, rather than as carnivorous human breeders of cattle, are also depicted as animals. In this way their eating practices are not even possibly troubled by "intelligence", which we could read as the capacity to respond, attributed in the western biopolitics commonly exclusively to the human species (as Derrida argues). The Morlocks rather merely react, or act on instinct, which therefore depicts them in a mechanistic or automatic fashion. Nevertheless, a question that begs to be asked from this is how exactly the intelligent carnivorous humans are any different from the instinctual predatorial animals in eating animal flesh, which troubles any simple distinction between the capacity to respond and the capacity to "merely" react.

Wells implicitly suggests the troubling of this distinction in *The War of the Worlds*, where the logic of immunitary protection and eating practices intersect again:

> They were heads – merely heads. Entrails they had none. They did not eat, much less digest. Instead, they took the fresh, living blood of other creatures, and injected it into their own veins. I have myself seen this being done, as I shall mention in its place. But, squeamish as I may seem, I cannot bring myself to describe what I could not endure even to continue watching. Let it suffice to say, blood obtained from a still living animal, in most cases from a human being, was run directly by means of a little pipette into the recipient canal… The bare idea of this is no doubt horribly repulsive to us, but at the same time I think that we should remember how repulsive our carnivorous habits would seem to an intelligent rabbit.[276]

The Martians are here depicted, similarly as the Morlocks, as a predatorial animal species into which the humans might have d/evolved in the future, possibly through degeneration in the absence of microorganisms on Mars. They do not eat human flesh but are parasitic takers of

276. Wells, *The War of the Worlds*, 165.

human blood. In other words, they are vampiric: parasitic invaders into the human selves, who feed on human blood by injecting it into their systems. The fact that the immunized, i.e., proper human form of life (and not its devolved version as the Eloi above) is rendered sacrificable is the political scandal that shocks the narrator so much. However, he also troubles the unsacrificeability of the human flesh by comparing such practice to the human practices of eating animal flesh. He suggests that what Derrida calls carnivorous sacrifice, as practiced by humans, might be just as equally repulsive to an intelligent, evolved, species which would also be vegetarian. The narrator refers to rabbits, who feed on plants, but he reasserts the distinction between instinct and intelligence. By suggesting that a carnivorous sacrifice would be repulsive to a hypothetical "intelligent" rabbit and not simply to a rabbit, the narrator reasserts that the nonhuman animals in the present possess only the mechanistic capacity to react (while intelligence is reserved for humans). While throughout this section we have looked into how in Wells the immunity of human organisms is figured in relation to species differentiation and politics of eating, in the next section I turn to his staging of the immunity of plants.

Plant Takeovers

The biopolitics of immunity in Wells involves not only human and nonhuman animals but also vegetative species. In *The War of the Worlds*, the aliens also bring with themselves to Earth native Martian plants, which interfere with and invade the ecological systems on Earth, while eventually succumbing to the Earth bacteria, same as the Martians themselves. Wolfe's coupling of Derrida's understanding of immunity and system theories helps us approach this imaginary of ecological invasions. Wolfe, in reference to Derrida, links the notion of sovereignty to the necessity of immunitary protection: "At stake here, then, is sovereignty in

several different registers – not just of the nation-state but of the family, the familiar, the domestic, the 'proper' to man, the *oikos* of the ecological, the economic, the *ethos* and the place of dwelling, of that which is 'ours' or 'mine' and deserves immunitary protection."[277] In other words, Wolfe understands the link between sovereignty and immunity not just in relation to state and body, and its intersection in the citizen's body, which needs to be defended. The notion of immune "system" can be thought in relation to *oikos*, dwelling, or an ecological system. Wolfe discusses the systems theories of Niklas Luhmann in social sciences, and of Francisco Varela and Humberto Maturana in life sciences. He proposes that for Luhmann, law performs an immunitary function for society, in the same way as it performs an immunitary function for community in Esposito's approach. In other words, law can be understood as immunizing a political system from threats in these theories. According to Wolfe, for Maturana and Varela, who focus on biological systems, the notion of autopoiesis can be seen to perform an immunitary function, since it names the maintenance and sustainability of a system in relation to its environment. Thus, we can see ecological systems and not just human organisms or states functioning according to the logic of immunity as defense. Wells imagines precisely this in *The War of the Worlds:*

> At any rate, the seeds which the Martians (intentionally or accidentally) brought with them gave rise in all cases to red-coloured growths. Only that known popularly as the red weed, however, gained any footing in competition with terrestrial forms. The red creeper was quite a transitory growth, and few people have seen it growing. For a time, however, the red weed grew with astonishing vigour and luxuriance. It spread up the sides of the pit by the third or fourth day of our imprisonment, and its cactus-like branches formed a carmine fringe to the edges of our triangular window. And afterwards I found it broadcast throughout the country, and especially wherever there was a stream of water.[278]

Wells stages a competition or struggle between the Martian and terrestrial plant forms. The Martian red growths are seen to invade the Earth's green ecological environment and its

277. Cary Wolfe, *Before the Law: Humans and other Animals in a Biopolitical Frame* (Chicago and London: The University of Chicago Press, 2013), 95.

278. Wells, *The War of the Worlds*, 169.

native plants. As the Martians' invasion of the Earth is compared in the novel to the European colonization of Tasmania, the invasive Martian plants can be understood in reference to the historical transportations of plant species into the colonial spaces. The vegetative systems that cross geographical locations are in this way by Wells understood primarily through the dialectic of host and invader, and the biomedico-political discourses of attack, contagion and defense.

In contrast to this, Wolfe in his take on the crossover between biopolitics and systems theory argues that systems, be it social or ecological, are not characterized simply by immunitary closure from a threat from the outside, but also by openness towards conflicts and contradictions in their environment. From a Derridean perspective, law which immunizes a political community is also always open to its future change through the calls for justice. In a similar way, in Maturana and Varela's theory, autopoietic systems are both open and closed: open on the level of structure to environmental changes, but closed on the level of organizations through which they are able to maintain their internal coherence and functioning. However, in Wells's staging of the red Martian weed invading the Earth's green ecosystems, what unfolds is the logic of attack and defense between two closed systems, one of which is immune to the Earth bacteria and the other which is not.

> In the end the red weed succumbed almost as quickly as it had spread. A cankering disease, due, it is believed, to the action of certain bacteria, presently seized upon it. Now by the action of natural selection, all terrestrial plants have acquired a resisting power against bacterial diseases – they never succumb without a severe struggle, but the red weed rotted like a thing already dead. The fronds became bleached, and then shrivelled and brittle. They broke off at the least touch, and the waters that had stimulated their early growth carried their last vestiges out to sea.[279]

The relations between the Martian weed and the terrestrial plants duplicate the relations between the aliens and the humans, and the narrative twist works to re-assert a favourable outcome for the terrestrial plants. That is, the invading red weeds are eventually defeated

279. Ibid., 192.

because they do not have "resisting power" of immunity to the Earth bacteria, as the Earth plants do. This twist follows the biomedico-political logic of immunity-as-defense, by which, as it has been argued throughout, the relations between primarily human organisms are now mapped onto the relations between plant organisms and microorganisms. By manifesting the biopolitical logic of immunity in relation to vegetation, the narrative asserts an Earth-centric, i.e. "green" perspective in opposition to a "red", Martian one.

Unconditonal Conditioned Hospitality

The thinkers discussed throughout this chapter offer, however, also alternative approaches to body, self or system performed through the immunitary paradigm of defense from external/internal enemies. Donna Haraway suggested that the biomedical vocabulary has a potential to conceptualize the pathology or a breakdown in functioning "without militarizing the terrain of the body,"[280] but that it instead consistently keeps reinscribing the idea of protection. She proposes that "Immunity could also be conceived in terms of shared specificities; of the semi-permeable self able to engage with others (human and non-human, inner and outer), but always with finite consequences; of situated possibilities and impossibilities of individuation and identification; and of partial fusions and dangers."[281]

Haraway's conceptualization of semi-permeable self in biomedical discourse is compatible with Cary Wolfe's suggestion to break down the opposition between a strictly affirmative, such as Esposito's, and strictly thanatopolitical, such as Agamben's, approach to biopolitics. Esposito bases his affirmative approach on the intricate link between the notions of immunity and community, where "munus" is at the heart of both. The Latin term refers to a gift that

280. Donna Haraway, "The Biopolitics of Postmodern Bodies: Constitutions of Self in Immune System Discourse," in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 214.
281. Ibid., 225.

requires an exchange in return, which is the basis of political community – the shared obligation of gift-giving. As Timothy Campbell explains, for Esposito the modern subject endowed with individual rights could be read as too individualistic, as "an attempt to attain immunity from the contagion of the possibility of community."[282] In contrast to this, Esposito proposes to articulate a possibility of radically communitized life, based on the idea of immunity as an affirmation of all life. In this way, Esposito does not tie the immunitary political paradigm inextricably with an autoimmunitary logic, as Derrida does. Esposito's vision of communitized life without a necessary expulsion of its own sacrificeable parts draws on Deleuzian ideas of impersonal singularities that form a virtual community. This means that the multiplicity of living forms constitute at the same time a multiplicity of norms. In Esposito's vocabulary, bios as politically valued life is immanent to life itself, and does not subject a living form to some transcendent norm (the failure of which leads to a possibility of bare life, in Agamben's theory, or sacrifice, for Derrida). For Esposito, every form of life is immediately bios, and thus its own norm, which means that no zoē can be distinguished from bios. While Wolfe appreciates Esposito's articulation of affirmative biopolitics thought through an immunitary paradigm, he also asks whether it is possible or even desirable, in fact, to grant all the living forms the status of immunitary protection. Wolfe asks, "do we extend 'unconditional hospitality' to antrax and ebola virus, to SARS?"[283] In other words, Wolfe finds untenable Esposito's erasure of political violence from his proposition of affirmative biopolitics.

Wolfe suggests instead that hospitality to other is not completely unconditional but rather a movement between the unconditional and conditioned, and he draws on Derrida for such understanding of hospitality. For Derrida, unconditional hospitality is an opening towards

282. Timothy Campbell, "*Bios,* Immunity, Life: The Thought of Roberto Esposito," *diacritics* 36.2, summer 2006: 5.

283. Cary Wolfe, *Before the Law: Humans and other Animals in a Biopolitical Frame* (Chicago and London: The University of Chicago Press, 2013), 93.

who/what ever arrives, neither expected nor invited, an unforeseeable other. Such hospitality is, however, impossible to live because it is always conditioned by the particular historical circumstances. As Wolfe points out, Esposito neglects the conditioned side of hospitality when he equates all living forms with norm, unlike Derrida, whom Wolfe quotes from "Autoimmunity: Real and Symbolic Suicides:" "suspending or supressing the immunity that protects me from the other might be nothing short of life-threatening," and "an unconditional hospitality is, to be sure, impossible to live; one cannot in any case, and by definition, organize it." [284] Based on this, Wolfe proposes to break down the either/or approach to biopolitics, or the choice between the affirmative and thanatopolitical. That logic either unconditionally embraces all forms of the living (in their undifferentiated singularity) as deserving protection, or alternatively leads to autoimmunitary expulsions of some living forms from the community. Wolfe proposes that this choice misses the point that the structure of immunitary protection is at the same time a precondition for any possible affirmation. In other words, the openness and closure of any system for Wolfe go hand in hand, and the immunitary closure (understood as law in social systems) is always also open to its environment. Such understanding is, as I already noted above, compatible with Haraway's conceptualization of immune system as semi-permeable.

Shelley's *Last Man*, although for the most part charting the invasive plague in reference to the colonial geography and racialized bodies, as I wrote above, also manifests the phenomenon of hospitality, as an opening of self towards other, potentially contagious body. Shelley stages a scene in which Verney wants to check on and help a person infected with the plague, while others try to persuade him not to do it, because he might get infected himself.

> 'Do you not know, my friends,' I said, 'that the Earl himself, now Lord Protector, visits daily, not only those probably infected by this disease, but the hospitals and pest

284. Derrida in Cary Wolfe, *Before the Law: Humans and other Animals in a Biopolitical Frame* (Chicago and London: The University of Chicago Press, 2013), 92.

> houses, going near, and even touching the sick? yet he was never in better health. You labour under an entire mistake as to the nature of the plague; but do not fear, I do not ask any of you to accompany me, nor to believe me, until I return safe and sound from my patient.'
>
> So I left them, and hurried on. I soon arrived at the hut: the door was ajar. I entered, and one glance assured me that its former inhabitant was no more - - he lay on a heap of straw, cold and stiff; while a pernicious effluvia filled the room, and various stains and marks served to show the virulence of the disorder.[285]

Verney's friend Lord Protector in this passage stands for the sovereign, the head of the political community. He is represented as immune to the disease, as he goes around touching the sick and extending his hospitality to the infected bodies instead of "leaving them to die" (to use Foucauldian vocabulary), which would be an autoimmune response of neutralizing an internal threat of contagion. The historical biomedical theory that underlies Verney's understanding is that plague spreads through bad air rather than through bacteria or virus, and it is bad air around the sick rather than only a sick body to be avoided in order to stay safe. However, Verney decides to enter the hut of a sick man and extend hospitality to him though he is well aware of a possible danger. In fact, this act might well be what contributes to Verney's survival, as he can be seen to develop immunity by being exposed to small amounts of disease, and eventually remains the last man. I suggest that Verney's actions in the passage above could be understood along the lines of Wolfe's movement between the unconditional and conditioned hospitality. That is, Verney wishes to help the sick man, thus welcoming the other within a community even if it might pose a danger. On the other hand, he is well aware of this danger and does not want to get infected himself, but believes that he will return safe and sound based on his understanding of disease (in a way, he seems to be intuiting but not articulating the mechanism of immunity to disease). Verney, standing as proxy to Lord Protector or the sovereign, thus manifests what Wolfe, taking from Derrida, understands as a double side of political hospitality: openness to other but necessarily on the grounds of immunitary closure from who/what is understood as threatening.

285. Shelley, *The Last Man* 120.

Conclusion

In this chapter I built on the insight from the previous chapter, that in the classic sci-fi the relations between humans and various nonhumans such as plague, winds or aliens, are figured in terms of war, and further linked it to the biomedical discourses on the body. I argued that what links tightly the human-nonhuman biopolitics and the biomedical understanding of immune self is the scenario of biological invasion, and I traced this scenario in Shelley's *The Last Man*, and H. G. Wells's *The War of the Worlds*, as well as *The Time Machine*. The close readings show also that the 19th century sci-fi scenario of biological invasion can be read as early articulations of concerns around the impact of pandemics on the human species, as well as of the imbalances in the ecological systems caused by the movements of both vegetative and animal species.

Shelley and Wells manifest Haraway's point that the western biomedical discourse of immunity-as-defense against disease, be it caused through bad air or microorganisms, has been historically entangled with figuring non-white bodies (negro in Shelley and alien in Wells) as the source of counter-colonising infection. The novels also show how these biological counter-invasions of the body are mapped onto the invasions in space, be it Europe in Shelley or Earth in Wells. The link between the immunitary paradigm of western biopolitics and racialization, which Esposito identifies in his theories, also further includes drawing distinctions between species, as Wolfe argues, drawing on both Agamben and Derrida. Wells's *The War of the Worlds* manifests how the resistance to microorganisms is staged to mediate the hostile relations between the human and alien species, as well as the Earth and Martian plants, re-affirming a human-centric and relatedly Earth-centric perspective. I also suggested that Wells's imagination of the human species degenerating in the far future into subhuman species could be said to anticipate the biomedico-political discourse of autoimmunity, as understood by Derrida. That is, Wells stages a dialectics

through which an external enemy makes one self healthy and immune, and in the absence of external enemies as well as neutralization of internal processes, human organism modifies into a less than human, degenerate form. These less than humans are also figured as animal species, which are furthermore seen to perform carnivorous sacrifice. In this way Wells' scenarios bring to light one possible way of linking the two logics discussed by Derrida, of carnophallogocentrism and immunity. They show how a "proper" form of life that is not merely bio-zoological is to be protected through immunity, and relatedly is not to be eaten, while the life of nonhuman animals which is seen as merely bio-zoological is readily eligible for carnivorous sacrifice. Finally, Shelley's scenario of biological invasion in my view manifests a possibility of Wolfe's bind between unconditional and conditioned hospitality, welcoming but on the condition of sustaining oneself, and thus between affirmative and thanatopolitics, where no simple line between the two can be drawn.

Conclusions

This project set out to explore the ways in which the classic Gothic science fiction of Mary Shelley and H.G. Wells, the novels *Frankenstein* (1818), *The Last Man* (1826), *The Time Machine* (1895), *The Island of Dr Moreau* (1896), and *The War of the Worlds* (1898) stage what is understood as 'the human' in relation to that which is not, in anticipation of contemporary concerns around animal ethics, climate change, or over/use of technology. I suggest that the classic Gothic science fiction sets up key cultural scenarios of human-nonhuman biopolitics, which stage biopolitical relations between the human and the nonhuman – predominantly asserting the human against various nonhuman threats, but also opening human exceptionalism for critique. I have identified five key scenarios: technological creation of the non/human, wonder/terror/horror at the nonhuman, alienation from (human) nature, disastrous extinction of the human species, and biological invasions of the human self.

I read these scenarios as entanglements of science fictional and Gothic elements, following scholars such as Aldiss and Wingrove, who single out Shelley's *Frankenstein*, and Wilt, who singles out Wells's *The War of the Worlds* as the key inaugurating points in which the earlier tradition of Gothic and the emerging sci-fi elements come to intersect.[286] The close readings of Shelley's and Wells's texts from a biopolitical perspective as an analytic of humanism show how they affirm the highest value of human life, the exceptional agency of the human species, and the proper form of human embodiment in relation to technology, environment, or animality. On the other hand, the scenarios begin to question human exceptionalism by raising the issues of vegetarianism, animal vivisection, environmental pollution, overuse of technologies, vulnerability to disease, or natural disasters. Utilizing the theoretical

286. Brian Aldiss and David Wingrove, *Trillion Year Spree: The History of Science Fiction* (London: Paladin Grafton Books, 1988), Judith Wilt, "The Imperial Mouth, the Gothic and Science Fiction," *The Journal of Popular Culture* Volume 14, Issue 4 (1981).

intersection of animal studies/environmental/posthumanist approaches, we see how the critiques, however, frequently fall back on the humanist strategies to challenge the human, such as arguing for more ethical treatment of nonhuman animals on the basis of their shared capacities of suffering with the human species. Understanding such strategies as humanist pushes us to think further what might be alternative or posthumanist positions on animal ethics, advanced techonology or environmental change, in each particular Gothic science fictional scenario.

The scenario of the technological creation of a non/human unfolds in Shelley's *Frankenstein* and Wells's *The Island of Dr Moreau*, and ever since then, it has been unfolding throughout the subsequent sci-fi narratives of android life. I propose that this classic scenario, which puts the highest value on 'authentic' humanity by delineating a threatening nonhuman element of Frankenstein's creature and Moreau's Beast Folk, should best be understood as an operation of Agamben's anthropological machine. It produces bare life of the creature and the Beast People as racially marked, savage life, and relatedly as a zone of indistinction between humanity and animality. Following Oliver's comments on bare life, we see how the devaluation of such lives is entangled with figuring them also as machinic, in the sense that their capacities for pain are repeatedly either ignored (the creature) or expendable (Moreau's animals). In an Agambenian manner of "included exclusion" of bare life within humanity as well as the city, the animal-machinic bodies are rendered killable and inhabit very specific locations – they are either banished outside the city or contained on a colonial island.

On the other hand, both novels articulate criticism of the production of expendable nonhuman bare life, by entangling anti-colonialism with the issues of vegetarian diet and anti-vivisectionism. The novels can be read as early articulations of the question of un/ethical treatment of nonhuman animals, which more recently have unfolded into the animal rights philosophies and politics. They work, however, not by stopping the anthropological machine,

but by reasserting certain humanist values. By inverting the relation between the savage and civilized, rather than dismantling it, Shelley exposes a cruel, flesh-eating practice at the heart of European civilization, fashioning an alternative postcivilized vegetarian, while Wells exposes a cruel, savage vivisection practice at the heart of a civilized science. Both authors also emphasize the shared capacities for suffering of both humans and animals, which however keeps the human embodiment as the benchmark for political value. We could think of alternative strategies, which would go beyond the scope of the classic sci-fi. One alternative is Haraway's suggestions that politics between humans and nonhumans might be based on situated, embodied relations of companion species rather than on some pre-defined essential characteristics. Similarly, Derrida encourages us to think beyond any simple recipe for moral eating but rather to keep questioning how to eat in the most respectful way towards others in particular contexts. Derrida also asks what it would mean to think the shared suffering of human and animal bodies not in terms of similar capacity, as animal rights discourses do (which commonly leads to further drawing of boundaries), but rather in terms of vulnerability.

Building on the first chapter, I analysed the closely interlinked scenario of wonder/terror/horror at the nonhuman. I suggest that the anthropological production of bare life is commonly not only optical, of mis/recognizing oneself in a nonhuman animal, but also affective, fuelled by the Gothic affects of terror/horror/wonder. I showed how the delineation of bare life in *Frankenstein* and *Moreau* is performed through a Kristevan abjection of the nonhuman within through horror and disgust: the agency of death as signalled by the monster which crosses between the living and the non-living in Shelley, and the agency of animality associated with the drives of sex and violence in Wells. These expulsions of nonhuman agencies within can be further linked with the ways in which the scientist figures of Frankenstein and Moreau assert their modern scientific worldviews. This entails, in a

Latourian way, exorcising the so called animist forces from nature, and rendering nature "inanimate" in the sense of not being a political agent that interferes into human affairs but primarily a set of mechanistic cause and effect relations. Such operations are in the novels interlinked with a Cartesian view that nonhuman animals are lacking the capacities for rationality and full sentience. Frankenstein in the sublime Alpine geography exorcises the creature as a threatening demon from nature while he also casts him as an insect that can be trampled on. Moreau in his terrifying outlook casts the pain of living organisms as expendable in the supposed nature's cruel mechanism and relatedly his practice, which correlates with repressing animal instinct in favour of human rationality.

Nevertheless, wonder/terror/horror is also utilized to stage a welcoming of nonhuman agencies, which leads to vegetarian and anti-vivisectionist politics. In *Frankenstein,* the creature wonders at the living, sentient nature, which leads him to decide not to kill animals for food, while in *Dr Moreau* a disturbing sound of animal pain prompts the narrator Prendick to feel compassion towards the vivisected animals. An affective realization that nature and animals are indeed living and sentient (and not mechanistic and inanimate) leads to human compassion, which is a reading enabled by Jane Bennett's understanding of ecological affect. That is, the nonhumans exercise their agency on the human through wonder/disturbance and provoke ecological sensibility. For Bennett, however, affect is primarily a way of acknowledging that nonhumans are agents which influence humans in various ways, and potentially but not prescriptively in an ecological way. While Shelley and Wells stage such agencies, they also can be seen to re-center a humanist ideal of compassionate human, who acknowledges the suffering of fellow beings. This figure depends on the staging of nature and animals as living and sentient in the novels. To think beyond the novels though, from a posthumanist perspective, Bennett asks us to challenge even the assumed distinctions between organic and inorganic, living and non-living matter.

In the next chapter I looked into the novels *The Last Man, The War of the Worlds* and *The Time Machine* as they entangle science fictional and Gothic tropes together into a scenario of alienation from (human) nature. This scenario in turn unfolds in contemporary concerns around climate change and overuses of technology. I showed how alienation is staged in the three novels as an affect of loss of human attachment to either external (environment) or inner nature (humanness). Wells's novels can be read as early articulations of environmentalist critique, as his representation of the animalized-technologized Martians who release poisonous gas upon the Earth prefigures a Heideggerian outlook on modern humans as improperly technologized and alienated from proper humanness and the environment. Both Shelley and Wells stage an alienation of humans from some assumed stable place in nature through the visualization of specific spaces: the Earth and postapocalyptic desert. They deploy astronomically framed images of the Earth in relation to wider cosmos to stage a disorienting ambivalence between the senses of human importance and human insignificance in cosmos, awe and loneliness, between a humanist desire and a posthumanist insight, to draw on Oliver's arguments. In the face of nonhuman threats to the human species (plague, aliens), however, the importance of the human species on Earth is reasserted, against the spitefulness of Nature in Shelley or in spite of nature's indifference in Wells. Ultimately, the images of the postapocalyptic deserted Earth's surface in all three novels stage a mourning for the life of the human species. Thus, the scenario of alienation in Shelley and Wells is invested in the continuous survival of the human species on Earth, the proper kind of humanity as well as recentering the material processes back to the human scale. The novels do allow at moments for the notion of human insignificance to surface, which could be regarded as a posthumanist insight, following Oliver. Going beyond the novels, to insist on this posthumanist insight might be, as Colebrook suggests, to stage the understanding that humans are radically contingent on other material processes not necessarily as mournful.

The biopoliticization of human extinction is discussed further in the next chapter, where I read the three novels as a scenario of disastrous extinction of the human species. I argue that the novels stage a state ordering of human survival against the agency of nature, but also offer a challenge to nation-state politics in favour of global citizenhip in the face of extinction. Disastrous extinction is staged as a Foucauldian issue of modern state management of population, in an Agambenian state of exception. By bringing together Agamben's notion of the state of exception and Miller's ideas on natural disaster, we see how the relations between the biopolitical state and the disastrous agency of the natural and chaotic, which can entail both nonhumans and humans, are framed in some way in terms of war. The novels manifest a slippage between the human and nonhuman agents, be it racially marked bodies, winds, and plague in Shelley, or aliens, floods, and devolution in Wells, as the agents of "nature" and therefore marked as uncivilized or chaotic. It is these values – the uncivilized, wild, chaotic or indeed, the supposed state of nature – that the biopolitical state defines itself in opposition to, by constantly drawing boundaries between nature and law, the state of nature and modern state, particularly when it comes to human violence. What is at stake is the question whether humans, due to their violence, have in fact deserved to be punished as a species and obliterated by the nonhuman agencies, which prefigures contemporary discussions around climate change. This question leads to critiques of the state ethnic politics in *The Last Man,* the racial and colonial politics in *The War of the Worlds*, and the capitalist class divisions in *The Time Machine*, while Wells's novels also articulate a critique of nonhuman species extinction. The critiques work by blurring the nature-law boundaries, and thus exposing an impossibility to attribute violence to either simply nature, or the law. An alternative which is articulated in both *The Last Man* and *The War of the Worlds* to the nation-state politics is to refashion a state citizen into a global citizen, bearing an inherent right to life. However, if we follow Colebrook's arguments, such cosmopolitanism invests in the human form of life above

everything else, rather than opening politics towards the forces of "cosmos". Shelley invests in the lost human civilization despite the thriving animal and plant life, and Wells re-affirms the proper human embodiment by imagining monstrous post-human forms of life. In this way Shelley's and Wells' scenarios are not open towards the potential post-human life which might come after the dissolution of the state and human extinction, but rather reaffirm a survival of the human species, civilization and an improved form of state politics. An alternative approach to this, which would dislocate a human-centric perspective and disassociate climatic changes from strictly being targeted at the human level in Colebrook's view, would be a cosmopolitanism open to virtuality, to what comes as radically other and does not fit easily into any predetermined model of citizenship.

The final chapter builds on the insight from the previous chapter, that in the classic science fiction the relations between humans and various nonhumans such as plague, winds or aliens, are figured in terms of war, and further links it to the biomedical discourses on the body. What links tightly the human-nonhuman biopolitics and the biomedical understanding of immune self is the scenario of biological invasion of the human self in the three novels, which unfolds in contemporary concerns around pandemics. Shelley and Wells manifest Haraway's point about how the western biomedical discourse of immunity-as-defense against disease, has been historically entangled with figuring non-white bodies from the colony as the source of counter-colonising infection (negro in Shelley) or parasitism (aliens in Wells). The link between the immunitary paradigm and racialization, that Esposito identifies, also further includes drawing distinctions between species. *The War of the Worlds* manifests how the resistance to microorganisms is staged to mediate the hostile relations between the human and alien species, as well as the Earth and Martian plants, re-affirming a human-centric and relatedly Earth-centric perspective. Wells's imagination of the human species degenerating in the far future into less than human species stages a mechanism through which an external

enemy makes one self healthy and immune, in the absence of which degeneration occurs, which in turn sets the stage for the biomedical dicourses of autoimmunity. In addition, the degeneration of human form into animal forms in Wells brings to the foreground the carnivorous sacrifice of animal flesh. Following Wolfe's take on Derrida, I suggest that Wells's novels stage a link between the logic of immunizing a proper human life and the logic of carnophallogocentrism, as unsacrificeability of human flesh and a silent acceptance of eating animal flesh. However, Wells also troubles human eating of animals by suggesting it would be repellent to an intelligent rabbit. Finally, I suggest that Shelley's scenario of invasion possibly opens towards a Derridean hospitality towards other, but on the condition of closure through which an organism necessarily sustains itself, which shows us, as Wolfe suggests, that no simple line between the affirmative and thanatopolitics can be drawn.

The questions that arise from examining the five key classic Gothic science fictional scenarios, and more particularly the ways in which they challenge human exceptionalism, is how to push forward with posthumanist strategies. In other words, as Wolfe has suggested, posthumanism aims to unsettle the ways of thinking that fall back on reinstalling the primary value of human life, or the central agency of the human species, or the normative human embodiment. That might mean thinking how to stop the production of the human-nonhuman hierarchies by the anthropological machine, as Agamben suggests, or how not to mourn by default a possible extinction of the human species, as Colebrook proposes. Such thinking is beyond the scope of the classic Gothic science fiction, but scholarship has been recently focusing on the contemporary sci-fi and how it opens the possibilities for posthumanist imagination and politics. This is certainly an avenue for further exciting exploration, fostered by this project, which worked to establish the key classic Gothic sci-fi scenarios of the human-nonhuman biopolitical relations.

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