

'The Haunting Memory of Contagions':
Infectious Narratives and Crisis in Liberal
Biopolitics

A C Ros

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'The Haunting Memory of Contagions':
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Andreea Catalina Ros

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Abstract

Interest in new and re-emerging diseases as well as a developing language of informational contagions has led to a wave of interdisciplinary analyses of contagion narratives and contagion metaphors in the fields of literary studies, cultural theory, philosophy and medical history. This thesis makes a contribution to the growing field of “contagion theory” exploring the ideological implications of narratives of contagion through a historically situated analysis of the relationship between contagion narratives and governmental efforts to manage contagious disease in the 19th and late 20th centuries. I explore contagion narratives in the work of a range of Gothic and science fiction writers writing during times of crisis and change: Mary Shelley, Charles Dickens, Elizabeth Gaskell, Bram Stoker, Harriet Marryat, Elizabeth Barren Brown, Michael Crichton, Margaret Atwood and Cormac McCarthy. Through a highly interdisciplinary analysis, I put these fictional texts in conversation with contemporary political and medical representations of contagion in order to understand how historical changes in the expansion of biopolitics and, in particular, the rise of liberalism and neoliberalism have shaped contagion narratives. Given Foucault’s description of popular imaginaries of contagion (which he terms, “the haunting memory of contagions”), a side-by-side exploration of the development of biopolitics and evolution of contagion narratives also makes an important intervention in theoretical debates on Foucauldian biopolitics.

This thesis argues that contagion narratives help negotiate tensions between the expansion of biopolitics and (neo)liberalism’s hostility to state interventions by conceptualising acquired resistance or immunity to transmissible disease as an result of liberal individualism and rational self-governance and, secondly, of governmental interventions in private health as a necessary, educational corrective to lack of self-government of illiberal subjects, rather than as an extension of quarantine.

Dedication & Acknowledgements

This thesis is dedicated to the memory of my grandmother, Silvia Roman.

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Introduction

“Dickensian diseases on the rise in Tory Britain today. Isn’t it shameful and as socialists we must respond.”¹

“There is not a drop of Tom's corrupted blood but propagates infection and contagion somewhere.”²

“Behind the disciplinary mechanisms can be read the haunting memory of ‘contagions.’”³

Dickensian Disease

In February 2019, Jonathan Ashworth (at the time, Labour’s Shadow Health and Social Care Secretary) announced his party’s pledge to end health inequalities with a damning accusation: “Dickensian diseases on the rise in Tory Britain today.”⁴ This policy pledge came in the midst of highly contentious debates over Brexit and was intended to shift focus back to Labour’s traditional political message of fighting inequality. What is a little strange about Ashworth’s damning announcement, however, is that it did not attempt to woo voters by highlighting health disparities in common mortality causes (such as heart disease or cancer). Instead, Ashworth decried an increase in hospital admissions for handful of so-called “Dickensian diseases”: scarlet fever, whopping cough, malnutrition and gout. There is a long history of British left-wing movements politicising issues

¹Labour Party (UK), “Labour Commits to New Health Inequalities Target and Reveals Return of Dickensian Diseases in Tory Britain,” news release, 02 February, 2019, <https://labour.org.uk/press/labour-commits-new-health-inequalities-target-reveals-return-dickensian-diseases-tory-britain/>.

² Charles Dickens, *Bleak House*, ed. Doreen Roberts (Hertfordshire: Wordsworth Editions, [1853] 1993), 533. All further references to this text are from this edition and are given parenthetically.

³ Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan, 2nd ed. (New York: Vintage Books, 1995), 198.

⁴ Labour Party (UK), “Labour Commits to New Health Inequalities Target.”

around public health and health inequalities.⁵ In the 1970s, Labour's rhetoric on public health and health inequality focused specifically on quantifiable large-scale differences, particularly life expectancy and infant mortality. Importantly, the Callaghan Labour government commissioned the Black Report on health inequalities in 1977 in order to examine the impacts of economic inequality and poverty on life expectancy and infant mortality. Although successive Conservative governments ignored the findings of the Black Report (which were only published in 1980), the Black Report's analysis of health inequalities served as a model for a growing field of research into the relationship between health outcomes and socio-economic determinants (including income, gender and ethnicity).⁶ Health inequalities research published in 2018 has shown that, since 2011, improvements in mortality rates and life expectancy have slowed significantly and, for some age groups, have been reversed.⁷ This reversal is due not to the rise of "Dickensian diseases," but to an increased incidence of conditions that are already leading causes of death, particularly chronic lower respiratory disease, dementia and Alzheimer's.⁸ Ashworth's announcement makes brief reference to these worsening mortality statistics, but does not discuss them in the detail given to "Dickensian disease."⁹ Why the much greater focus on "Dickensian disease"?

This narrative of the comeback of "Dickensian disease" does not emerge inevitably out of epidemiological data. The source of statistics used in Labour's press release is a supplementary information dataset on "Victorian diseases" hospital admissions in 2016-17 and 2017-18 released by NHS Digital in January 2019.¹⁰¹¹ This "Victorian diseases" dataset contains a large number of diseases

⁵ See, for example: George Davey-Smith, Daniel Dorling, and Mary Shaw, eds., *Poverty, Inequality and Health in Britain: 1800-2000: A Reader* (Bristol: Policy Press, 2001).

⁶ C Bamba, K E Smith, K Garthwaite, K Joyce & D J Hunter, "A Labour of Sisyphus? Public Policy and Health Inequalities Research from the Black and Acheson Reports to the Marmot Review," *Journal of Epidemiology & Community Health* 65, no. 5 (2011): 399-406.

⁷ Public Health England, *A Review of Recent Trends in Mortality in England*, December 2018. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/762623/Recent_trends_in_mortality_in_England.pdf

⁸ Public Health England, *A Review of Recent Trends*, 8-9.

⁹ Labour Party (UK), "Labour Commits to New Health Inequalities Target."

¹⁰ The NHS Information Centre, "Hospital Episode Statistics for England: Inpatient statistics, 2010-11," 2 November 2011. <https://digital.nhs.uk/data-and-information/publications/statistical/hospital-admitted-patient-care-activity/hospital-episode-statistics-admitted-patient-care-england-2010-11>

¹¹ The NHS Information Centre, "Victorian Diseases, 2017-18," 10 January 2019. <https://digital.nhs.uk/data-and-information/find-data-and-publications/supplementary-information/2019-supplementary-information->

(including: tuberculosis, measles, scurvy, diphtheria, mumps, rickets, cholera, typhoid fever and vitamin D deficiency) and its figures shows that the number of hospital admissions related to most “Victorian diseases” decreased from 2016-17 to 2017-18. Comparing the “Victorian dataset” with the 2010-11 HES (Hospital Episode Statistics) admitted patient care dataset also reveals a noticeable drop in hospital admissions for the most common “Victorian diseases”: tuberculosis and mumps.¹² The relative weakness of the epidemiological data underlying “Dickensian diseases” highlights how much this framing of “Victorian diseases” as indicator of health inequality is an intentional political construction. While this is somewhat unremarkable because most (if not all) press releases by political parties are meant to be political framings of current issues, an intriguing question arises: what discursive work does “Dickensian diseases” carry out that could not be carried out by mortality data?

Although the 1997 New Labour government initially pursued public health policies along the lines of the proposals of the Black Report, the publication of the *Choosing Health: Making Healthy Choices Easier* report in 2004 marked Labour’s turn towards a public health agenda focused on individual responsibility and lifestyle (rather than socio-economic) factors. *Choosing Health* reframes the problems of health inequality (conceptualised through life expectancy and infant mortality statistics) as “new opportunities” for rapid progress and boundless individual choice. As this thesis will discuss in further detail, this swing away from environmental (including socio-economic) determinants of health towards lifestyle risk factor medicine was not unique to the UK, but took place within the context of the global spread of neoliberal governance models in public health. Jill Fischer has argued that “medical neoliberalism” is characterised by a strong emphasis on individual responsibility and an increased commodification of health and wellness (expressed through the language of “opportunity” and “choice”), as well as intense surveillance of those who have to

[files/victorian-diseases---hospital-admissions](#)

¹² The NHS Information Centre, “Victorian Diseases, 2017-18;” The NHS Information Centre, “Hospital Episode Statistics for England, 2010-11.”

continue to rely on the welfare state for healthcare.¹³ *Choosing Health*, like other documents of neoliberal health policy, divorces the “choice” to be healthy from socio-economics determinants and, ultimately, from ill-health itself. Describing “health” in terms of a commodity, *Choosing Health*’s stated aim is not the alleviation of ill-health, but “developing new demand for health” and providing people necessary support to make “complex” decisions to fulfil this new market demand.¹⁴ Subsequent Coalition and Conservative governments have continued to accelerate the neoliberal commodification of public health.¹⁵ In the face of this seemingly apolitical commodification of health inequality statistics and individual health, the rise of the “Dickensian diseases” narrative attempts to re-politicise public health by imbuing it with the ghosts of Victorian contagions.

Critical literature has generally interpreted contagion narratives as stigmatising discourses whose effect is to encourage negative associations between already socially excluded groups and disease, filth and immoral behaviour. Susan Sontag and Priscilla Wald’s analyses have been particularly influential in highlighting the role of contagion narratives as a vehicle for homophobic, racist and xenophobic anxieties.¹⁶ However, it is quite clear that this is not how “Dickensian diseases” is intended to function. As Charlotte Boyce and Elodie Rousselot have argued, the 2012 Dickens Centenary reinforced the role of Charles Dickens as a symbol of Britishness, although the “Dickensian” itself retains a mutable meaning, simultaneously standing in “popular imaginations of urban poverty, destitution and suffering” and “bountiful Christmases, idealised families and domestic harmony.”¹⁷ Ian Higgins has likewise noted that, around the Dickens bicentenary celebrations, political journalists began using the “emotional capital” of “Dickensian” as a shorthand

¹³ Jill A. Fisher, "Coming Soon to a Physician near You: Medical Neoliberalism and Pharmaceutical Clinical Trials," *Harvard health policy review: a student publication of the Harvard Interfaculty Initiative in Health Policy* 8, no. 1 (2007): 61-70.

¹⁴ HM Government, *Choosing Health: Making Healthy Choices Easier* (Department of Health, London: 2004), 13.

¹⁵ See, for example: Gavin Brookes, & Kevin Harvey, "Opening Up the NHS to Market," *Journal of Language and Politics* 15, no. 3 (2016): 288-302.

¹⁶ Susan Sontag, *Illness as Metaphor and AIDS and Its Metaphors* (Harmondsworth: Penguin, 2002); Priscilla Wald, *Contagious: Cultures, Carriers, and the Outbreak Narrative* (Duke University Press, 2008).

¹⁷ Charlotte Boyce & Elodie Rousselot, "The Other Dickens: Neo-Victorian Appropriation and Adaptation," *Neo-Victorian Studies* 5, no. 2 (2012): 3.

for social inequality to criticise David Cameron's coalition government and its austerity policies.¹⁸ "Dickensian diseases," thus, does not signal the threat posed by stigmatised outsiders to the nation, but the looming danger of a return to a technologically backward past through backwards political choices. The phrase "Dickensian disease" evokes the contagious slime and pestilential gas that stalked the decrepit urban neighbourhoods of *Bleak House* (1852-53), but all four diseases named in the press release were endemic in the UK until after the Second World War.¹⁹ In order to make the point that voting for a Conservative government reflects a callous "Victorian" attitude towards others, "Dickensian diseases" necessarily obscures the modernity of scarlet fever, whooping cough, malnutrition and gout. The Labour press release utilises a contagion narrative to frame political choices in a very obvious way, given that its implicit purpose is to encourage more people to vote for the Labour Party. However, the narrative of "Dickensian diseases" touches on the first main question of this thesis: how do contagion narratives frame contagion as politically meaningful in debates not only over health and disease, but over good political values and the meaning of good governance? Moreover, because "Dickensian diseases" is an attempt to re-politicise public health after its apolitical commodification in the early 2000s, it also highlights the second (related) research question of this thesis: what has been the role of liberal and neoliberal ideals of governance and individualism in shaping the biopolitics of contagion?

¹⁸ Marshall Gail et al., "Thinking Feeling at the Dickens Bicentenary," *19: Interdisciplinary Studies in the Long Nineteenth Century* 0, no. 14 (2012).

¹⁹ Scarlet fever and whooping cough were endemic in the UK until after the Second World War when the concurrent development of penicillin (an antibiotic effective against the bacterial infection of scarlet fever) and the roll out of the national whooping cough immunisation programme saw their incidence decrease significantly. Moreover, although Labour's announcement optimistically states that gout had been "confined to the history books," there has been a significant increase in gout cases worldwide since at least 1990. Similarly, malnutrition was one of the core focuses of the Black Report on health inequalities. See: Gareth Millward, *Vaccinating Britain: Mass Vaccination and the Public since the Second World War* (Manchester: Manchester University Press, 2019); R. Quinn, "Comprehensive Review of Morbidity and Mortality Trends for Rheumatic Fever, Streptococcal Disease, and Scarlet Fever: The Decline of Rheumatic Fever," *Clinical Infectious Diseases* 11, no. 6 (1989); Edward Roddy & Michael Doherty, "Gout. Epidemiology of Gout," *Arthritis Research & Therapy* 12, no. 6 (2010).

Overview & Hypothesis

This thesis explores the ideological implications of narratives of contagion in the context of governmental efforts to manage contagious disease in the 19th and late 20th centuries. This project conceptualises government efforts to manage contagion in Foucauldian terms as an extension of biopolitical governmentality (a mode of governance in which the state's ultimate goal is to increase the productivity of life) and aims to complement current Foucauldian conceptualisations of the role of discourses of contagion in the development of liberal biopolitics. The catalyst for this analysis is Foucault's assertion that the ideological cornerstone of the expansion of biopolitics in the 18th and 19th centuries was the "political dream of the plague" as "the penetration of regulation into even the smallest details of everyday life."²⁰ Foucault argued that this penetration of regulation is made self-evidently necessary by the "haunting memory of 'contagions,' of the plague, of rebellions, crimes, vagabondage, desertions, people who appear and disappear, live and die in disorder."²¹ Although his analysis of "the political dream of the plague" is relatively limited, Foucault's work suggests the utility of examining the evolution of contagion narratives as a means to investigate the development of biopolitics itself. Because of Foucault's own Gothic portrayal of contagion narratives (as haunting memories of 'contagion') this thesis explores primarily, although not exclusively, the particular role of Gothic contagion. While the resurgence of contagion narratives and anxieties in the last 40 years has been documented in work by cultural historians and literary critics (as will be discussed below), the particular significance of the Gothic mode in this context has still not been explored. The thesis sets out to address this and to argue for the significance of Gothic tropes in expressing the emotional and ideological dimensions of contagion.

As I have already suggested, this thesis is particularly concerned with the complications (neo)liberalism creates for biopolitics and I want to clarify what I mean by these two potentially slippery terms: biopolitics and liberalism. The composite term "biopolitics" brings together life (bios)

²⁰ Foucault, *Discipline and Punish*, 197-98.

²¹ Foucault, *Discipline and Punish*, 198.

and politics to suggest a close interdependence between governance structures and human life processes and, more particularly, the phenomenon through which, beginning with the 18th century, these human life processes were engulfed by state structures. Foucault argued that biopolitics began as an extension of the 18th century disciplinary anatomo-politics of the human body (the body as a machine to be regulated for optimisation) to the population as a whole. This expansion aimed “to rationalise the problems posed to governmental practice by phenomena characteristic of a set of living beings forming a population: health, hygiene, birthrate, life expectancy, race.”²² Foucault used the term “liberalism” to refer not to the specific ideologies of liberal parties, but to the broad understanding of government as rational, natural and self-limiting that emerged in the late 18th and early 19th century.²³ This thesis explores “liberalism” as a more narrow political phenomenon as it seeks to build on a host of recent re-examinations of the role of liberalism in 19th century English politics and literature, in particular in the work of Lauren Goodlad. These analyses (which are often critical of Foucault’s generalisations) define liberalism as a diverse, occasionally self-contradictory political ideology characterised primarily by an opposition to statist intervention and a positive investment in self-governing individualism.²⁴ I will interpret and utilise neoliberalism in similarly expansive terms, as a political ideology that emerged in the 1970s and aims to promote strong property rights, free markets and free trade.²⁵ While 19th century liberalism and neoliberalism are not identical ideologies, as Goodlad remarks, their mutual investment in self-governing individualism leads to “uncanny echoes” between liberal and neoliberal rhetoric.²⁶ The comparative structure of this thesis aims to take advantage of these “uncanny echoes” and put portrayals of both (neo)liberal

²² Michel Foucault, *The History of Sexuality, Volume 1: An Introduction*, trans. Robert Hurley (New York: Vintage Books, 1990), 139; Michel Foucault, *The Birth of Biopolitics: Lectures at the College de France, 1978-79*, trans. Graham Burchell, ed. Michel Senellart (Basingstoke: Palgrave Macmillan, 2008), 317.

²³ Foucault, *Birth of Biopolitics*, 20-22.

²⁴ Lauren Goodlad, *Victorian Literature and the Victorian State: Character and Governance in a Liberal Society* (Baltimore: John Hopkins University Press, 2003), viii-ix.

²⁵ David Harvey, "Neoliberalism As Creative Destruction." *The Annals of the American Academy of Political and Social Science* 610, no. 1 (2007): 21-44.

²⁶ Lauren Goodlad, "Liberalism and Literature," in *Oxford Handbook of Victorian Literary Culture*, ed. Juliet John (Oxford University Press, 2016), 103-124, 104.

individualism and Gothic contagion in 19th and late 20th century texts in conversation with each other.

Foucault's genealogy of biopolitics as an extension of quarantine is troubled by the dominance of anti-contagionist and anti-quarantine attitudes in British medicine and politics for most of the 19th century. Although the 18th century was haunted by numerous contagion fears, as Annika Mann and Kevin Sienna have demonstrated in their recent monographs, in the 1810s and 1820s an increasingly vocal anti-contagion and anti-quarantine grew out of merchants' opposition to the cost of plague quarantine.²⁷ Chapter 2 will explore the growth of this movement and the reasons for its eventual success. Medical historians have tended to argue that laissez-faire liberalism led to the adoption of anti-contagionism as state doctrine in Britain after the 1830s and that this significantly slowed down the emergence of state regulation of transmittable disease as well as substantially influenced the sanitary focus of state regulations when they did emerge.²⁸ Even profoundly traumatic disease epidemics (and their "contagious" memories) did little to shift liberal opposition to quarantine. For example, although successive cholera epidemics (in 1832-33, 1848-49, 1853-54 and 1865-67) had long-lasting cultural and political effects in Britain, they did not dissuade medical and political opposition to cholera quarantine. In fact, British opposition to cholera quarantine was so decisive it led to the repeated failure of pan-European cholera quarantine agreements.²⁹ Opposition to contagionism did not, however, mean that contagion narrative did not enjoy increasing visibility. As this thesis will seek to demonstrate, contagion narratives multiplied throughout the 19th century, particularly in texts written in the Gothic mode. As Chapter 2 will discuss, even the texts of the avowedly anti-contagionist sanitary reform movement made extensive

²⁷ Annika Mann, *Reading Contagion: The Hazards of Reading in the Age of Print* (Charlottesville: University of Virginia Press, 2018); Kevin Sienna, *Rotten Bodies: Class and Contagion in Eighteenth-Century Britain* (New Haven, CT: Yale University Press, 2019).

²⁸ This historiography is discussed in detailed in the section 'History of liberal biopolitics in Britain' of this Introduction.

²⁹ Norman Howard-Jones, *The Scientific Background of the International Sanitary Conferences 1851-1938* (Geneva: World Health Organization, 1975), 20-21. For impact of cholera epidemics on Britain, see, for example: Mary Poovey, *Making a Social Body: British Cultural Formation, 1830-1864* (University of Chicago Press, 1995); Pamela K. Gilbert, *Cholera and Nation: Doctoring the Social Body in Victorian England* (Albany: SUNY Press, 2008).

use of contagion narratives. But, if these contagion narratives could not and, often, did not intend to support quarantine regulations, what role did these “haunting memory of ‘contagions’” really play in the emergence of public health regulation and biopolitics? Anti-contagionist contagion narratives point to the flexibility of contagion narratives and the possibility that contagion narratives can focus on themes other than contagion anxieties.

Because biopolitics seeks to engulf every aspect of human life and liberalism seeks to limit governmental intrusion on private life, there is an obvious tension at the heart of liberal biopolitics.³⁰ This thesis will argue that this tension is negotiated through the conceptualisation of rational self-governance as the key requirement for liberal individualism. English liberalism celebrated individual responsibility, both as a religious value and a secular one, as a particularly English virtue and the sanitary reform movement made rational self-governance and self-restraint increasingly important to conceptualisations of public health.³¹ **As Chapters 1 will detail**, a liberal biopolitics of contagion appeared in England through the anti-quarantine movement’s opposition to medical policing and public advocacy for the theory that England was “already” immune to the plague due to its high level of “cultivation.” This gave rise to a new conceptualisation of immunity or resistance to disease in which the “cultivated” liberal individual is free from the constraints of the quarantine police and, instead, assumes responsibility for his own health and wellbeing. The sanitary reform movement was the first successful attempt to manage transmittable disease through this new liberal biopolitical model, rather than the old (interventionist) model of plague quarantine. Sanitary reform was closely related to Poor Law reform (codified by the Poor Law Amendment Act of 1834) in that its aims were to re-educate working-class people to be better, more rational and self-governing individuals (through continuous surveillance of their domestic spaces) and to reduce the cost of poverty and ill-health to the state. The coercive surveillance of the New Poor Law and the sanitary reform movement might seem like the exact opposite of the liberal resistance to state intervention that

³⁰ Foucault, *Birth of Biopolitics*, 20-22.

³¹ J.P. Parry, “Liberalism and Liberty,” in *Liberty and Authority in Victorian Britain*, ed. Peter Mandler (Oxford University Press, 2008), 71-100, 73.

dominated English politics from the 1830s until the end of the 19th century. However, liberty from state intervention was not understood as license (that is, the right to do anything you want), but as complementary to a punitive but fair justice system.³² Thus, the hypothesis I aim to put forward is that, within liberal biopolitics, contagion narratives contribute discursively to conceptualisations, firstly, of acquired resistance or immunity to transmissible disease as an result of liberal individualism and rational self-governance and, secondly, of governmental interventions in private health as a necessary, educational corrective to lack of self-government (as an attribute of bad citizenship) rather than as an extension of quarantine.

Contribution & Models for Reading Contagion & Immunity

I am not alone in seeking to use contagion narratives as a window into the workings of political power structures. In the 2000s, interest in epidemics of new and re-emerging diseases (such as SARS, Ebola or Zika) as well as a developing language of informational contagions led to a wave of interdisciplinary analyses of contagion as a metaphor endemic to different popular and specialist discourses. Much of this work was shaped by Susan Sontag's earlier analysis of the metaphors and cultural perceptions of cancer and HIV/AIDS. Sontag's argument that "[e]very feared epidemic disease, but especially those associated with sexual license" create divisions between "putative carriers" and "the general population" has been particularly influential.³³ Priscilla Wald's analysis of contagion narratives, which she termed "outbreak narratives," as a vehicle for nationalist and xenophobic fears has been similarly influential. Although Wald's analysis provides important methodological tools for this thesis's examination of contagion narratives, this thesis will argue that Wald's work overgeneralises the typicality of outbreak narratives. Wald defined outbreak narratives as formulaic stories that begin with the identification of a new "emerging" infectious disease, almost always in the Global South, follow its spread through global travel networks and end with the containment and defeat of the contagious threat by scientists and the military.³⁴ The term "outbreak

³² Parry, "Liberalism and Liberty," 72-3.

³³ Sontag, *Illness as Metaphor*, 109.

³⁴ Wald, *Contagious*, 2-3.

narrative” itself comes from Robin Cook’s 1987 medical thriller, *Outbreak*.³⁵ Despite this 1980s origin, the bulk of the analysis in *Contagious* (2007) examined texts written before the 1980s and Wald reads the “outbreak narrative” back into texts that predate the clearest portrayal of Wald’s “formula.” Wald’s outbreak narrative is strongly related to the concept of (re)emerging infectious diseases (EIDs), a broad category that includes infectious diseases previously thought to not pose a serious danger to human life, but whose incidence has increased in the recent past and or could increase to dangerous levels in the foreseeable future.

EIDs might seem like a neutral term for a phenomenon with a long history in Western public health governance. However, the term was only coined and popularised in the early 1990s by a relatively small group of infectious disease specialists in the US.³⁶ EIDs tell a very particular narrative about contagion: we need to prevent contagion because diseases whose dangers had previously been overlooked or downplayed will (re)appear. Because of this, EIDs rhetoric and research focuses on a large number of infectious diseases that might become devastating pandemics, but have not fully “emerged” yet. As Chapter 1 will explore in much more detail, although this rhetoric of “emergent” contagious threat is often portrayed as an inevitable consequence of anxieties sparked by the HIV/AIDS epidemic, EIDs were rather intended to bring some of the public attention and research funding that HIV/AIDS began to receive in the late 1980s to other infectious diseases. Moreover, EIDs research and public awareness messaging have a close connection to a neoliberal agenda of biodefense and global surveillance, reflecting an increased overlap between medical and military research in the 1980s. For example, the 1992 *Emerging Infections* report that brought EIDs to public attention advocated for funding overseas infectious disease laboratories with (US) Department of Defense funds because EIDs pose a danger to US national security.³⁷ Thus, although Wald has argued that outbreak narratives are one of the archetypic “myths” of Western culture, outbreak narratives portray contagion with many of the very specific traits of EIDs rhetoric.

³⁵ Wald, *Contagious*, 27.

³⁶ Joshua Lederberg et al, *Emerging Infections: Microbial Threats to Health in the United States* (Washington DC: Institute of Medicine National Academies Press, 1992).

³⁷ Lederberg, *Emerging Infections*, 9-10.

Chapter 1 will explore in much more detail Wald's definition of outbreak narratives, its relationship to the emergence of neoliberal models for global public health governance as well as the relationship between HIV/AIDS narratives and the more formulaic narratives Wald analysed. I will do so in order to argue that the outbreak narrative is not the archetype of all (Western) contagion narratives, but is instead a specific sub-genre of contagion narratives shaped by specific anxieties of the 1990s and early 2000s. Historical analyses of cultural and literary portrayals of contagion often end with the author reflecting on the implications of historical contagion tropes (particularly contagion fears) to the current HIV/AIDS epidemic.³⁸ This thesis will take the opposite approach, it opens with a reconsideration of the "outbreak narrative" in light of early HIV/AIDS narratives in recognition that current analyses of historical contagion narratives are shaped by the continued social and cultural impact of the HIV/AIDS epidemic. Due to space constraints, this thesis cannot comprehensively analyse all the transformations in (neo)liberal biopolitics's management of contagion and the contagion narratives that accompanied them. Instead, I have opted for a comparative, case-study approach that focuses on significant moments of crisis and change in the late 20th and 19th centuries and which aims to put texts written at very different times in history in conversation with each other. As Wald's "outbreak narrative" analysis illustrates, it is very tempting to assume that contagion and immunity (or resistance) to contagious disease have always had the same meaning because their current meanings seem so self-evidently objective and "natural" to us. This thesis has often veered towards this trap as well. However, I hope that by developing my analysis through a comparative approach, I have been able to use late 20th century narratives to reflect on 19th century narratives and vice versa. It was through this comparative approach, of reading late 20th century texts through the lens of 19th century ones, that the centrality of acquired immunity (or resistance) to contagious disease to both liberal biopolitical conceptualisations of

³⁸ Examples of this, include not only Wald's *Contagious* which ends with a chapter on HIV/AIDS, but also: Ed Cohen, *A Body Worth Defending: Immunity, Biopolitics, and the Apotheosis of the Modern Body* (Durham & London: Duke University Press, 2009); Allan M. Brandt, *No Magic Bullet: A Social History of Venereal Disease in the United States Since 1880s* (Oxford University Press, 1987); Alan Bewell, *Romanticism and Colonial Disease* (Baltimore: Johns Hopkins University Press, 1999).

public health regulation and contagion narratives became clear. Chapter 2 (on Mary Shelley's *The Last Man*) will explore the rise of the liberal immunitary self and the role of acquired immunity in early efforts to create a specifically liberal biopolitical model for illness and health.

My analysis of acquired resistance or immunity to diseases challenges and complements Ed Cohen's Foucauldian genealogy of immunity as the basis for both modern political theory and modern biomedicine. Cohen has traced the histories of immunity in French and Anglophone political theory and medicine from the 18th century onwards and, in particular, immunity's particular role as a political and medical concept in enclosing the body as a self-contained, defensive interior continuously fighting against the hostility of the outside.³⁹ While Cohen's analysis astutely dissects the implications of political immunity for embodied individualism, my main contention with his work is the insistence that immunity should only be understood in the sense of "immunity-as-defence." Cohen has argued that Metchnikovian self-defensive immunity discovered (or, perhaps, invented) in the 1880s was not an innovation, but merely the fulfilment of a long process of medicine's appropriation of immunity as a legal term denoting exclusion from the political community.⁴⁰ However, Cohen's monograph offers only a limited, relatively generalised analysis of how this process of appropriation occurred. This thesis seeks to address this gap in the scholarship by analysing medical conceptualisations of contagion and acquired immunity more closely. More broadly, however, I aim to demonstrate that discussing liberal biopolitical disciplinary technologies only or even primarily in terms of technologies of exclusion obscures the work of biopolitical subjectivation. Cohen's account of immunity (like the work of recent reassessments of Foucault's biopolitics by Roberto Esposito and Giorgio Agamben) emphasizes the violence of biopolitical exclusion from liberal personhood and citizenship and urges us to imagine more inclusive models of personhood and political community. While much of Chapter 2 and 4 will focus on how illiberal subjects are made vulnerable to coercion and violence through the exclusionary logic of liberal biopolitics, this thesis will focus on the subjectivation process through which liberal biopolitics forms

³⁹ Cohen, *A Body*, 14-15.

⁴⁰ Cohen, *A Body*, 1-7.

illiberal subjects. I will argue that the illiberal subjectivities created by liberal biopolitics are not straightforwardly excluded from the political community or the nation. Rather, the 19th century portion of this thesis will focus on liberal biopolitical technologies that emerged, not as a means to compel the removal of illiberal Others from the nation, but in order to (re)form illiberal insiders into rational liberal individuals. More specifically, Chapter 3 will examine the rise of the sanitary reform movement in the mid-19th century and the new, Gothicised working-class illiberal subjectivities the movement sought to create. Similarly, Chapter 4 will explore the circumstances in which liberal biopolitics expanded into the domain of reproduction (including reproductive inheritance and sexuality) at the end of the 19th century through a reconceptualisation of prostitutes as illiberal subjects in need of rescue driven, somewhat paradoxically, both by the Contagious Diseases Acts (1864-1886) and by the middle-class feminist campaign to repeal those same Acts.

Cohen's examinations of the medical police and vaccination offer two further illustrative examples of the necessity to historicise the concept of immunity (as well as that of contagion) and of the valuable contribution this thesis can make to theoretical discussions of the history of biopolitics and the role of immunity within this history. Cohen has located the origin of the "medical police" in Johann Peter Frank's cameralist *Medizinischepolizei* and argued that the (English) sanitary movement was merely an expansion of this Prussian model of medical police.⁴¹ Christopher Hamlin has demonstrated that the idea of a medical police (modelled after its German form) was hugely politically unpopular in England as it was seen to open the door for a range of government interventions in private property, industry and trade.⁴² Because of this, the mid-century sanitary reform movement emphasised its opposition to Continental models of the medical police, although Patrick E. Carroll has argued persuasively that in Britain and Ireland medical charities, Poor Law bureaucrats and, in the 1870s, Local Government Boards effectively took on the role of the medical

⁴¹ Cohen, *A Body*, 97-104; 117-18.

⁴² Christopher Hamlin, *Public Health and Social Justice in the Age of Chadwick: Britain 1800-1854* (Cambridge University Press, 1998), 340.

police.⁴³ This thesis focuses specifically on liberal biopolitics precisely in order to produce an analysis that is acutely aware of the political peculiarities of, firstly, nineteenth century British liberalism and, secondly, post-1970s Anglophone neoliberalism. Furthermore, Cohen exaggerates the impact of vaccination in the first half of the nineteenth century.

Cohen argued that “throughout much of the nineteenth century” Jenner’s vaccination “remain[ed] the only empirically verified, specific treatment.”⁴⁴ While vaccination has certainly been retrospectively interpreted as the only empiric medical treatment of the nineteenth century, nineteenth century medical professionals did not believe all of their medical treatments with the exception of vaccination had no empirical basis. Chapter 2, in particular, will explore the sustained claims to empiricism made early anti-contagionists who argued that the plague is not a contagious disease (a medical view we now regard as having no empirical basis) as well as explore the highly contentious debates that surrounded the regulation of inoculation and vaccination in the first half of the century. Likewise, Cohen has argued that “vaccination marks a spectacular turning point for medicine in terms of material effects and popular expectations” and that Jenner’s innovation consisted of the relative removal of the risks of “the preventive protocol” of inoculation.⁴⁵ As Chapter 3 will explore in more detail, Jenner and his supporters fought a long and, until the 1830s, largely unsuccessful campaign to persuade Parliament to recognise inoculation as a risky medical procedure and, consequently, regularise (if not outright ban) inoculation. Unfortunately for vaccination’s popularisers, the Suttonian method of inoculation gained significant popularity among the gentry in the latter half of the eighteenth century and medical professionals who continued to provide Suttonian inoculation as a medical service after 1796 argued strongly that any regulation of inoculation would constitute an undue intervention in the free medical marketplace.⁴⁶ In the early biopolitical life of vaccination, the issue of risk did not inevitably cross paths with vaccination due to

⁴³ Patrick E. Carroll, “Medical Police and the History of Public Health,” *Medical history* 46, no. 4 (2002): 461-494.

⁴⁴ Cohen, *A Body*, 117.

⁴⁵ Cohen, *A Body*, 118-19.

⁴⁶ On the popularity of the Suttonian method, see: David Van Zwanenberg, “The Suttons and the Business of Inoculation,” *Medical history* 22, no. 1 (1978): 71-82.

an objective, inevitable recognition that the earlier practice of inoculation was risky, but from the efforts of Jennerians to politicise risk. Cohen's exploration of eighteenth century attempts to numerically quantify the value of smallpox inoculation (particularly by French mathematician Charles-Marie de La Condamine) is fascinating, but in the British context, it is remarkable just how little these calculations mattered when it came to the biopolitics of vaccination. As Deborah Brunton notes, although Jenner's first (1802) Parliamentary award was justified through mercantilist arguments (Jenner deserved £10,000 because of the actual number of lives he saved were worth at least £200,000 to the nation in their tax contributions), his second award (in 1808) was given because vaccination had reduced human suffering caused by smallpox.⁴⁷

I hope that this brief exploration of Cohen's analysis shows that the distance between the material circumstances in which the structures of English liberal biopolitics emerged and the theoretical models proposed by Foucault and Cohen raises intriguing questions about the role of contagious disease in the growth of biopolitics. As the following chapters will demonstrate, throughout the 19th century, British doctors and politicians did not exclusively or even primarily conceptualise immunity (or resistance) to disease in explicitly self-defensive terms. Rather, because of the cultural and political dominance of liberalism and its strong opposition to quarantine, for most of 19th century England medical professionals, legislators and fiction writers, from Charles Maclean to Bram Stoker, imagined immunity as a result or consequence of civilised liberalism and individual resistance to disease as flowing from liberal individualism and rational self-governance, not from an individualised form of defensive quarantine. Cohen's political conceptualisation of immunity is indebted to Roberto Esposito's "paradigm of immunity."⁴⁸ Esposito has developed Foucault's analysis of biopolitics and has argued that Western political communities achieve cohesion through a

⁴⁷ Deborah Brunton, *The Politics of Vaccination: Practice and Policy in England, Wales, Ireland, and Scotland, 1800-1874* (University of Rochester Press, 2008), 14-15.

⁴⁸ Roberto Esposito, *Bíos: Biopolitics and Philosophy*, trans. Timothy C. Campbell (Minneapolis: University of Minnesota Press, [2004] 2008), 45-77.

self-defensive immunitary logic. Like inoculation, biopolitics attempts to neutralise the dangerous outside by attempting to incorporate some of its violence in state power structures.⁴⁹

The modern meaning of the term “immunity” (as self-defence) carries so much weight that I am reluctant to use it when referring to 19th century contexts without qualifying it as a general sense of resistance to disease. Ed Cohen as well as other theorists of immunity (in particular, Donna Haraway and Roberto Esposito, whose work I will discuss later in this Introduction) have argued that immunitary models that are not based on self-defensiveness would have a liberatory effect, enabling both political and medical thought to imagine political and biological communities in more equitable terms. However, Emily Martin has long demonstrated that, although self-defensive immunitary models dominate popular and medical media in the 20th century, alternative models are present in the popular imagination.⁵⁰ Importantly, Martin has argued that flexibility has become an increasingly prominent feature of understandings of immunity in the second half of the 20th century due to a new emphasis on flexibility as an attribute of good citizenship in neoliberalism.⁵¹ My thesis builds on Martin’s insights in its analysis of post-HIV/AIDS conceptualisations of **immunitary citizenship (in Chapters 4 and 5)** and it hopes to show that non-self-defensive models of immunity have occurred within (neo)liberal biopolitics.

Moreover, if Cohen’s conceptualisation of immunity is indebted to Esposito, my own conceptualisation of acquired immunity or resistance to disease shares more with Giorgio Agamben’s development of Aristotle’s distinction between *zoē* (natural or biological life) and *bios* (political or qualified life) in the context of biopolitics. In order to elaborate this distinction, Agamben focuses on the figure of the “homo sacer,” a concept from Roman law that refers to a person who “can be killed but not sacrificed,” someone who is included in the jurisdiction of lay and divine law

⁴⁹ Esposito, *Bios*.

⁵⁰ Emily Martin, *Flexible Bodies: Tracking immunity in American Culture from the Days of Polio to the Age of AIDS* (Boston, MA: Beacon Press, 1994).

⁵¹ Martin, *Flexible Bodies*, 64-82.

only through the exclusion of their life from the protection of the law.⁵² Agamben argued that the personhood of “homo sacer” is bare life, a politicised natural life, and that the production of the exclusion of bare life in law enables the law to enact violence against homo sacer.⁵³ Agamben was, thus, primarily concerned with the relationship between sovereignty and violence and his work questions the process through which violence becomes non-political when it is enacted against bare life. My inquiry follows the opposite direction. I ask what processes of transformation are necessary within liberal biopolitics to make contagious disease into something that falls within the jurisdiction of the law. The following chapters will demonstrate that the gradual inclusion of contagion within the legal and political spheres of liberal biopolitics occurred through an immunitary conceptualisation of liberal citizenship. While the exclusion of bare life from the law’s protection against sovereign violence has negative consequences for the homo sacer, the “immunity” of good liberal citizens to transmittable disease allows them to avoid the purview of sanitary surveillance. Although this thesis focuses much more closely on how contagious disease shaped the subjectification of (il)liberal citizens, I hope that my more brief discussion of acquired immunity in the context of biopolitics will encourage debate in the field to move away from a conceptualisation of biopolitical violence as extra-judicial.

Methodology, Obstacles, Disciplinary Position

This project began with the intention to write a relatively straightforward historicisation of 19th century representations of contagion in canonical Gothic novels such as Mary Shelley’s *The Last Man* (1826), Charles Dickens’s *Bleak House* (1852-1853) and Bram Stoker’s *Dracula* (1897) to connect this historicisation to work on the contagion narratives of the HIV/AIDS epidemic. Such a project would build on other efforts to historicise the portrayal of science and medicine in 19th

⁵² Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life*, trans. Daniel Heller-Roazen (Stanford: Stanford University Press, [1995] 1998), 115.

⁵³ Agamben, *Homo Sacer*, 114-120.

century Gothic fiction in the growing field of Medical Gothic studies.⁵⁴ By analysing Gothic fiction within the context of emerging biopolitics, it would also supplement other critical engagements with the law within Gothic Studies, including in the work of David Punter, Sue Chaplin and Bridget Marshall.⁵⁵ Lastly, its comparative approach would provide a link between Gothic Studies and the huge body of research on narratives of HIV/AIDS in Disability Studies, Science and Technology Studies, and Queer Studies. However, two major obstacles in carrying out this initial research project made it necessary to incorporate interdisciplinary sidesteps into medical history, political philosophy and discourse analysis. Firstly, I observed that recent work on contagion or “outbreak” narratives tends to represent contagion as a stable medical concept originating in late 19th century formulations of “germ theory”, meaning these cannot provide a basis for nuanced theorisations of contagion narratives until after, at the earliest, the 1870s.⁵⁶ For example, of the essays included in *Endemic: Essays in Contagion Theory* (edited by Megan Nixon and Lorenzo Servitje) only one discusses 19th century texts and it does so largely in order to argue that the 20th century Western “fixation on contagion” has its origins in late Victorian political thought’s adoption of ideas from germ theory.⁵⁷ The essay briefly analyses late 19th century germ theories, but largely focuses on contagion as a metaphor in Matthew Arnold’s writing about culture.⁵⁸ Likewise, although Peta Mitchell discusses medical theories and definitions of contagion, the analyses focuses primarily on how metaphors or tropes of contagion “have emerged and proliferated in sociological and humanistic discourse from classical antiquity to the present day.”⁵⁹

⁵⁴ Sara Wasson, "Useful Darkness: Intersections between Medical Humanities and Gothic Studies," *Gothic Studies* 17, no. 1 (2015).

⁵⁵ Current Gothic studies scholarship on the law focuses on property and criminal law, rather than issues of governmentality. See: Sue Chaplin, *The Gothic and the Rule of the Law, 1764-1820* (Basingstoke: Palgrave Macmillan, 2007); Bridget Marshall, *The Transatlantic Gothic Novel and the Law, 1790-1860* (London: Routledge, 2016); David Punter, *Gothic Pathologies: The Text, the Body and the Law* (Basingstoke: Macmillan, 1998).

⁵⁶ Including: Ed Cohen, *A Body*; Priscilla Wald, *Contagious*; Kari Nixon & Lorenzo Servitje, eds., *Endemic: Essays in Contagion Theory* (London: Palgrave Macmillan, 2016); Peta Mitchell, *Contagious Metaphor* (London: Bloomsbury Academic, 2012).

⁵⁷ Lorenzo Servitje, "Contagion and Anarchy: Matthew Arnold and the Disease of Modern Life," in *Endemic: Essays in Contagion Theory*, ed. Kari Nixon & Lorenzo Servitje (London: Palgrave Macmillan, 2016), 21-42, 23.

⁵⁸ Servitje, "Contagion and Anarchy."

⁵⁹ Mitchell, *Contagious Metaphor*, 5.

Secondly, I realised that, while there exists a large body of historical scholarship on medical theories about transmittable disease and the emergence of professional and state medicine in the 19th century, this scholarship rarely explores in detail medical, judicial and fictional conceptualisations of contagion and their biopolitical implications.⁶⁰ Simultaneously I became familiar with the growing number of highly interdisciplinary explorations of liberalism as a shaping influence of 19th century realism, and I considered that their portrayal of realism as the main aesthetic mode involved in the development of liberalism and liberal biopolitics demanded a response from within Gothic Studies.⁶¹ In my attempt to overcome these initial difficulties, I have engaged more purposefully with non-literary and non-Gothic narratives of contagion in order to explore the workings of liberal biopolitics in ways that Gothic texts alone could not capture. This is particularly the case with **Chapter 1** (as I explain in more detail in its introduction). As such, this thesis now sits more comfortably within the larger field of Medical Humanities than that of Gothic Studies. It does, however, remain explicitly informed by critical debates within Gothic Studies, particularly around the circulation of the Gothic as a mode. In particular, my methodological approach to analysing a broad range of literary and non-literary texts has been driven by Sara Wasson's encouragement to conceptualise the relationship between the Gothic and medicine as a two-way dialogue.⁶²

A final important influence on this thesis's subject matter and methodology comes from my desire to explore of the ideological and affective investments of the work of historicising the

⁶⁰ Hamlin, *Public Health and Social Justice*; Roy Porter, *Disease, Medicine and Society in England, 1550-1860*, 2nd ed. (Cambridge University Press, 1995); Michael Worboys, *Spreading Germs: Disease Theories and Medical Practice in Britain, 1865-1900* (Cambridge University Press, 2000). There is also a growing literature on contagious disease in 19th century British politics, including Peter Baldwin, *Contagion and the State in Europe, 1830-1930* (Cambridge University Press, 1999); Nadja Durbach, *Bodily Matters: The Anti-Vaccination Movement in England, 1853-1907* (Durham, NC: Duke University Press, 2005); S. J. Watts, *Epidemics and History: Disease, Power, and Imperialism* (New Haven: Yale University Press, 1997).

⁶¹ The foundational text of this critical tendency is Ian Watt's *The Rise of the Novel* (Berkeley: University of California Press, [1957] 2001). More recent detailed analyses of realism and liberal biopolitics include Amanda Anderson, *Bleak Liberalism* (University of Chicago Press, 2016); Carolyn Betensky, *Feeling for the Poor: Bourgeois Compassion, Social Action, and the Victorian Novel* (Charlottesville: University of Virginia Press, 2010); Daniel Born, *The Birth of Liberal Guilt in the English Novel* (Chapel Hill, NC: University of North Carolina Press, 1995); Goodlad, *Victorian Literature and the Victorian State*.

⁶² Wasson, "Useful Darkness."

HIV/AIDS epidemic. Part of this desire comes from my experience working as an archive volunteer in the video archive of the Háltér Society in Budapest (Hungary) in the summer of 2015. Háltér Society, one of the oldest organisations of its kind in Eastern Europe, was founded in 1995 in order to further LGBTQI people's liberation. It began amassing a sometimes-eclectic archive of print and video material related to LGBTQI people in Hungary and abroad in 1997. As an archive volunteer, I spent afternoons fast-forwarding through hours of short films (mostly made in the 1990s) on unlabelled VHS tapes in an attempt to gather as much identifying information as possible for the archival catalogue.⁶³ I was struck by the randomness of the material on tapes, much of it in Dutch, German and English as well as Hungarian, as well as by how much of the material related to HIV/AIDS. I began to suspect that HIV/AIDS has become a somewhat uncomfortable site of queer remembrance in Eastern European countries given the epidemic's recent history in the region.⁶⁴ These suspicions were confirmed in the work of Joanna Mizielińska and Shannon Woodcock on the belief that landmark events of US LGBTQ history (including the AIDS crisis) will be "recreated" in Eastern Europe, and in Conor O'Dwyer's research on Eastern European LGBTQ activists' deliberate focus on HIV/AIDS as a public health issue in order to gain legitimacy and funding in the 1990s.⁶⁵ Coupled with my readings of the AIDS crisis as a site of trauma in national memory in the US and activist attempts to preserve the affective history of AIDS activism, I became very interested in how post-HIV/AIDS contagion narratives historicised HIV/AIDS within affective registers other than grief and trauma.⁶⁶

⁶³ Unfortunately, Hatter have still not completed their cataloguing work and a catalogue of the archive is still not available online.

⁶⁴ Eastern Europe and Central Asia is one of only two regions (alongside Latin America and the Caribbean) that saw an increase in new HIV infections in 2010-2015. The region's still growing epidemic has been the focus of much epidemiological research, see: Françoise F. Hamers & Angela M. Downs, "HIV in Central and Eastern Europe," *The Lancet* 361, no. 9362 (2003); Emma Jolley et al., "HIV among People Who Inject Drugs in Central and Eastern Europe and Central Asia: A Systematic Review with Implications for Policy," *BMJ Open* 2, no. 5 (2012); Claire Thorne et al., "Central Asia: Hotspot in the Worldwide HIV Epidemic," *The Lancet Infectious Diseases* 10, no. 7 (2010).

⁶⁵ Joanna Mizielińska, "Travelling Ideas, Travelling Times: On the Temporalities of Lgbt and Queer Politics in Poland and the 'West'," in *De-Centring Western Sexualities: Central and Eastern European Perspectives*, ed. Joanna Mizielińska and Robert Kulpa (London: Routledge, 2016); Shannon Woodcock, "A Short History of the Queer Times of 'Post-Socialist' Romania, or Are We There Yet? Let's Ask Madonna!," in *De-Centring Western Sexualities: Central and Eastern European Perspectives*, ed. Joanna Mizielińska & Robert Kulpa (London: Routledge, 2016); Conor O'Dwyer, *Coming out of Communism: The Emergence of LGBT Activism in Eastern Europe* (New York University Press, 2018), 58-60.

⁶⁶ Ann Cvetkovich, *An Archive of Feelings: Trauma, Sexuality, and Lesbian Public Cultures* (Durham & London: Duke University Press, 2003); Marita Sturken, *Tangled Memories: The Vietnam War, the Aids Epidemic, and the*

Particularly significant was the way in which medical texts on (re)emerging infectious diseases from the early 1990s historicised HIV/AIDS as an epidemic that is already over as well as a model for all future epidemics. Chapter 1 explores in detail the emergence, in the early 1990s, of narratives of HIV/AIDS as an inevitable and ahistoric epidemic and the relationship between these narratives and claims for government intervention and government research funding, as well as, growing cultural anxieties around the “failure” of “development” in the Global South. Moreover, even the other chapters (which do not address the HIV/AIDS epidemic explicitly) are driven by a keen awareness that global structures of exclusion, violence and death that were made so highly visible by the HIV/AIDS epidemic. Because of this awareness, this thesis foregrounds both discursive and material structures as two sides of the same liberal biopolitics within which people with contagious diseases were regimented.

Foucault’s work highlights the utility of a wider analytical project to trace the concurrent evolution of biopolitics and imaginaries of contagion. However, due to space constraints, this thesis will focus only on five case-studies that highlight moments of change and crisis: the HIV/AIDS epidemic and (re)emergent infectious diseases in the 1980s and 1990s (Chapter 1); the emergence of anti-contagionist and anti-quarantine histories of the plague in the 1820s and 1830s (Chapter 2); the so-called sanitary revolution in the 1840s and 1850s (Chapter 3); the turn-of-the-century eugenic conceptualisation of venereal diseases (Chapter 4); and the current climate crisis (Chapter 5). As this thesis will demonstrate, these moments of crisis give rise to new Gothic contagion narratives and provide opportunities for liberal biopolitics to reshape popular imaginaries - not only of the danger of contagion but, more importantly, of the meaning of governance, selfhood and the relationship between governance and individuals. These new imaginaries, in turn, make state intervention or non-intervention in private life and the free market feasible as a response to the crisis of contagion. Structured around a series of comparative case-studies, this thesis aims to create a flexible

Politics of Remembering (Berkeley: University of California Press, 1997).

theoretical framework for conceptualising the role of contagion narratives in the evolution of biopolitics in order to facilitate further research.

Biopolitics as Methodology

Foucault's analysis of biopolitics has given rise to a huge body of literature that explores biopolitical governmentality.⁶⁷ Biopolitics has proven to be a particularly productive methodology for examining entanglements between life and politics born out of new 21st medical technologies. Critical attention has particularly been drawn to the biopolitical implications of blood and organ transplantation, genomic medicine and genetic testing.⁶⁸ To a lesser extent, Foucauldian analysis has been used to explore 19th century histories of disease and medical technology. *Contagion, Isolation, and Biopolitics in Victorian London* (2017) by Matthew Newsom Kerr is particularly notable. Newsom Kerr explores the sudden expansion of isolation fever and smallpox hospitals in London between 1870 and 1900 through Foucault's conceptualisation of the close relationship between biopolitics and liberalism and argued against analyses of asylums as spaces of enforced removal and detention and explores new affective investments in preventative medicine as a form of citizenship.⁶⁹ Newsom Kerr explicitly utilises Foucault's conceptualisation of biopolitics and liberalism to argue against analyses of asylums as spaces of enforced removal and detention and explore new affective investments in preventative medicine as a form of citizenship.⁷⁰ Foucault's work implicitly informs many New Historicist analyses of 19th century literature through the prism of evolving political structures. Monographs such as Mary Poovey's *Making A Social Body: British Cultural Formation, 1830-1864* (1995), Alan Bewell's *Romanticism and Colonial Disease* (2003) and Emily Steinlight's

⁶⁷ For an overview of this literature: Thomas Lemke, "From State Biology to the Government of Life: Historical Dimensions and Contemporary Perspectives of 'Biopolitics'," *Journal of Classical Sociology*, Vol. 10, No. 4 (2010): 421-438; Jakob Nilsson & Sven-Olov Wallenstein eds., *Foucault, Biopolitics and Governmentality* (Huddinge, Sweden: Södertörn University Press, 2013); Andrew Barry, Thomas Osborne & Nikolas Rose eds., *Foucault and Political Reason: Liberalism, Neo-liberalism and Rationalities of Government* (Abingdon: Routledge, 1996).

⁶⁸ Cathy Waldby, *Tissue Economies: Blood, Organs, and Cell Lines in Late Capitalism* (Durham, NC: Duke University Press, 2006); Paul Rabinow & Nikolas Rose, "Biopower Today," *Biosocieties* 1, no. 2 (2006): 195-217; Catherine Mills, *Futures of Reproduction: Bioethics and Biopolitics* (Dordrecht: Springer Netherlands, 2011).

⁶⁹ Matthew Newsom Kerr, *Contagion, Isolation, and Biopolitics in Victorian London* (Basingstoke: Palgrave Macmillan, 2017).

⁷⁰ Newsom Kerr, *Contagion*.

recent *Populating the Novel: Literary Form and the Politics of Surplus Life* (2018) implicitly or explicitly draw on Foucault's methodology and conceptualisations of transformations in power in the 19th century in order to analyse a highly diverse range of literary and non-literary texts. This thesis seeks to contribute to this evolving body of work from the specific perspective of contagion.

History of Liberal Biopolitics in Britain

One obstacle to researching the relationship between contagion narratives and liberal biopolitics is the long-standing assumption that liberalism, particularly in its British variant, is inherently opposed to conceptualisations of contagiousness. Erwin Ackerknecht's work on 19th century contagionist and anticontagionist theories of diseases causation has been highly influential in this respect. Ackerknecht argued that anticontagionist or miasmatic theories were popular in liberal European states throughout the 19th century because "[c]ontagionism would, through its associations with the old bureaucratic powers, be suspect to all liberals"⁷¹ But Peter Baldwin's more recent analysis of contagion prevention policies in European states between 1830 and 1930 has shown that contagious disease "[p]rophylactic traditions developed gradually under the impress of geographic, economic, administrative and political factors that put these various nations in different positions vis-à-vis the disease in question."⁷² For example, Baldwin shows that, in the late 19th century enforced medical examination of prostitutes was supported as a preventive technique against syphilis by distinct political groups in Britain, Sweden, Germany, Italy and France for entirely different ideological motives, including liberalism.⁷³ Newson Kerr's examination of late 19th century London isolation hospitals as sites of liberal citizenship and self-government demonstrates the need to investigate how liberal values become affectively attached to biopolitical practices that otherwise seem antithetical to liberalism.⁷⁴

⁷¹ Erwin Ackerknecht, "Anticontagionism between 1821 and 1867," *International Journal of Epidemiology* 38, no. 1 (2009).

⁷² Peter Baldwin, *Contagion and the State*, 562.

⁷³ Baldwin, *Contagion and the State*, 488-91.

⁷⁴ Newson Kerr, *Contagion*, 158-159.

The laissez faire liberal tendency of the British politics did contribute to the comparatively late emergence of public health bureaucracy in Britain, but this only makes it more necessary to analyse how public health concerns eventually emerged as explicitly liberal concerns.⁷⁵ By the beginning of the 19th century, most other European countries already had a form of “medical police” tasked with supervising burials, the sale of food and the slaughter of animals in abattoirs as well as regulating housing, but no such centralised, permanent medical policing efforts existed in England.⁷⁶ In the first three decades of the 19th century, the only form of British public health legislation were the Quarantine Acts of 1800, 1805 and 1825. The 1805 Act did expand the scope of the law to “the plague, or any other infectious disease or distemper,” instead of only legislating quarantine against the Black Plague, however, quarantine legislation remained controversial throughout this period.⁷⁷ The penalties attached to quarantine infringements were significantly lowered in the 1825 Act as a result of relatively successful anti-quarantine public campaign by ship-owners and merchants allied with anti-contagionist doctors. The importance of the 1834 Poor Law Amendment Act (also known as the New Poor Law) to the development of public health policies and practices in Britain is difficult to overestimate. As I have already noted, English liberalism understood liberty as complimentary to individual responsibility and punitive justice and the New Poor Law’s overtly punitive approach to poverty relief reflected this. The first wave of public health infrastructure was created in the 1830s after the 1834 New Poor Laws required medical officers for newly established workhouses as well as Poor Law doctors and Poor Law infirmaries and isolation hospitals. But even later public health legislation relied on the New Poor Laws. For example, under the 1848 Public Health Act (the first piece of legislation to explicitly regulate public health), a Board of Health could only be created through a petition signed by poor ratepayers (the property tax that was used to fund poor relief) or if the death rate exceeded 23 per 1,000 inhabitants over 7 years or more.⁷⁸ Moreover, the penalties

⁷⁵ William F Bynum, *Science and the Practice of Medicine in the Nineteenth Century* (Cambridge University Press, 1994): 57-8; Porter, *Disease, Medicine and Society*, 54-5.

⁷⁶ Baldwin, *Contagion and the State*, 331-38.

⁷⁷ *An Act for making further provision of the effectual performance of Quarantine 1805.*

⁷⁸ *A Bill for Promoting Public Health, 1848.*

for non-vaccination laid out by the Vaccination Act of 1853 could be put in practice only because the New Poor Laws created a network of guardians and doctors who already kept working class people under surveillance.

Thus, from its inception, British public health infrastructure was intimately tied to the liberal project of the New Poor Laws: dealing with the problem of persistent poverty among working-class people by attempting to shape working-class men into liberal citizens who act freely, which is to say, according to the rules of the free market.⁷⁹ The calls for a centralised system of public health surveillance and regulation that formed the sanitary reform movement in the 1840s and 1850s were strongly shaped by the crisis of “the ordinary lower-class Man” seen as the cause of new working-class political organisations and movements.⁸⁰ Mid-century sanitary reforms were also part of a wider effort of bureaucratisation. The Public Health Act of 1848 created the local Boards of Health and local Medical Officers of Health (whose powers were further enhanced by a succession of Nuisance Removal Acts in 1855, 1860 and 1863), while the Vaccination Act of 1853 made smallpox vaccination compulsory.⁸¹ Towards the concluding decades of the century, the Contagious Diseases Acts (first passed in 1867) and the Public Health Act of 1875 seemed to have fully entrenched the government’s power to regulate both business practices and private health-related behaviours into law.⁸² However, both sets of laws were faced with significant backlash. This backlash led to the significant watering down of the regulations of the 1875 Public Health Act and the repeal of the Contagious Diseases Acts in 1886. The effective replacement of the medical regulation of prostitution under the Contagious Diseases Acts with the criminalisation of prostitution under the Criminal Law Amendment Act of 1885 also points to the demise of the sanitary movement’s utopian vision of the state as a techno-scientific bureaucracy driven by statistics. Instead, in the closing decades of the century, a string of moral panics pushed British liberalism back to emphasising the role of the state as guardian of public morality. Thus, the expansion of biopolitics into more areas of

⁷⁹ Poovey, *Making a Social Body*, 107-8.

⁸⁰ Hamlin, *Public Health*, 84-85.

⁸¹ Porter, *Disease, Medicine, Society*, 54-5.

⁸² Porter, *Disease, Medicine and Society*, 55.

human life was a lumpy, rather than linear or smooth process. New technologies of disease containment and prevention, ranging from new biomedical technologies (like vaccines) to new bureaucratic structures (for example, local Public Health Authorities), did not immediately take hold. They were shaped and reshaped by historical events, political and public debates as well as further technological innovations.

In the aftermath of the First World War, the prominent position of liberalism as ideological underpinning of British governance ended. The decline of liberalism in Britain reflected a global trend and occurred in circumstances too complex for this thesis to explore in detail.⁸³ Over the course of the first half of the 20th century, concerns around population health were further integrated in governance, particularly in issues related to human reproduction and eugenics.⁸⁴ In the aftermath of the Second World War, the welfare or social state became the primary mode of governance in Western Europe. Although the evolution of contagious disease prevention and treatment practices over the 20th century raises its own questions (in particular in relation to the progressive internationalisation of efforts to eradicate specific contagious diseases), the current project's focus on specifically liberal biopolitics guides a focus on the more recent shift towards neoliberalism, away from the welfare state. Melinda Cooper has shown that major transformations in how biomedical sciences understood contagious diseases coincided with the "neoliberal revolution" against state intervention in the economy and private life in the 1970s and 1980s.⁸⁵ The progressive shift in global public health policies away from broad social and environmental factors in ill-health (such as hygiene or housing conditions) towards a focus on specific diseases caused by personal choices (and, consequently, requiring individual responsibility) has been well

⁸³ The decline of liberalism around WWI has preoccupied political thinkers in England since the publication of George Dangerfield's *The Strange Death of Liberal England* in 1935. Notable studies on this subject include: G.R. Searle, *The Liberal Party: Triumph and Disintegration 1886-1929* (New York: Macmillan Education, 1992); Paul Adelman, *The Decline of the Liberal Party 1910-1931*, Seminar Studies in History (Harlow: Longman, 1981); Roy Douglas, *Liberals : A History of the Liberal and Liberal Democrat Parties* (London: Hambledon and London, 2005).

⁸⁴ Porter, *Disease, Medicine and Society*, 181-182.

⁸⁵ Melinda Cooper, *Life as Surplus: Biotechnology and Capitalism in the Neoliberal Era* (Seattle: University of Washington Press, 2008), 3-5.

documented.⁸⁶ In the UK, the rejection of the findings and recommendations of the Black Report on health inequalities by the incoming Conservative government in 1980 epitomised this shift towards separating public health from socio-economic and environmental factors.⁸⁷

After more than a decade of public health cuts and deregulation, the HIV/AIDS epidemic precipitated the re-emergence of contagious diseases as a contentious topic of political debate at the end of the 1980s. However, this (re)emergence was not an inevitable process. In many countries, including the US and the UK, the HIV/AIDS epidemic only became politicised at the end of the 1980s due to the work of activists who challenged government non-intervention. In the 1990s, the HIV/AIDS epidemic seemed to herald a new era of overwhelming anxiety about the future of humanity shattering post-WWII optimism about public health measures against infectious disease.⁸⁸ Yet, as Chapter 1 will detail, such straightforward narratives about HIV/AIDS as a watershed moment are complicated by common representations of HIV/AIDS as an isolated outbreak throughout the 1980s and 1990s and the virtual disappearance of the epidemic from public discourse after the development of effective treatments against HIV/AIDS in 1996. This does not mean that the late 1980s and early 1990s were not a time of changing conceptualisations of health, risk and futurity and that these new conceptualisations were not shaped by neoliberal biopolitics. Ulrich Beck, writing in 1986, argued that the drastic technological interventions in human life occasioned by later modernity (such as fertilisers, genetic technology or nuclear energy) have led to a systematic anxiety about the future similar to that experienced by the working-class during the 19th century.⁸⁹ Beck terms the return of 19th century anxieties in late modernity "risk society."⁹⁰ While Beck focuses in particular on environmentalist worries, a distinctly new anxiety about new and returning infectious

⁸⁶ See, for example: Constance A. Nathanson, *Disease Prevention as Social Change: The State, Society, and Public Health in the United States, France, Great Britain, and Canada* (New York: Russell Sage Foundation, 2007), 5-6.

⁸⁷ Virginia Berridge, "Making Health Policy: Networks in Research and Policy after 1945," in *Making Health Policy: Networks in Research and Policy after 1945*, ed. Virginia Berridge (Amsterdam: Rodopi, 2005), 5-37, 13.

⁸⁸ Cooper, *Life as Surplus*, 52-54.

⁸⁹ Ulrich Beck, *Risk Society: Towards a New Modernity*, 5th ed, trans. Mark Ritter (London, UK: SAGE Publications, [1986] 2005), 51-52.

⁹⁰ Beck, *Risk Society*, 20-25.

diseases took shape in the mid-1990s through the popularisation of the concept of (re)emerging infectious diseases in popular science and fiction accounts of epidemic disease.⁹¹ These new biological crises facing humanity increasingly called into question the role of the state in the management of life and, as Chapter 5 will demonstrate, the role of the state in climate change in particular as individuals and organisations grapple with the question of how to address climate change.

Key Concepts

Contagion

Writing about the history of contagion as metaphor in a 2002 special edition of *American Literary History* on contagion and culture, Cynthia J. Davis has noted that “[i]n and of itself contagion refers to no specific illness, yet as a description of all communicable illnesses it resonates with echoes of each.”⁹² This thesis seeks to be mindful of the multiple meanings of contagion echoed within contagion narratives. For my conceptualisation of contagion, I am particularly indebted to Margaret Pelling’s research on contingent contagionism in mid-19th century medical theories about cholera. Pelling warns against the temptation of reducing conceptualisations of contagion to a binary contest between miasmatism and person-to-person transmission arguing instead that contagion is more accurately understood as a conceptualisation of the relationship between human beings and between humans and their environment within both medical and lay (including folk or traditional) understandings of disease.⁹³ Chapter 3, in particular, will examine in more detail how the mid-19th century sanitary reform movement, while overtly proposing miasmatic theories of disease, created narratives about contagion that used Gothic tropes in order to persistently confuse the categories of environmental/miasmatic and person-to-person transmission and fashion contagion into an elastic medical and political category. The rest of this thesis also examines a wide range of texts written at

⁹¹ Wald, *Contagious*, 29-32.

⁹² Cynthia J Davis, "Contagion as Metaphor." *American Literary History* 14, no. 4 (2002): 828-36, 830.

⁹³ Margaret Pelling, "Contagion/Germ Theory/Specificity," in *Companion Encyclopedia of the History of Medicine*, eds. W. F. Bynum & Roy Porter (London: Routledge, 2013), 309-34.

different points in time and reflecting often very different medical, political and popular understandings of the concept of “contagion.” Although each chapter seeks to contextualise contagion through contemporary medical understandings of communicable diseases, my use of the concept of contagion is necessarily broad. As Davis states, even when writers imagine contagion to have a very specific meaning, their narratives often resonate with the echoes of multiple, sometimes contradictory previous and current meanings and connotations.

Although medical and political debates between anti-contagionists and contagionists concluded in the early decades of the 20th century, contagious diseases have re-emerged as a topic of medical and political debate over the last 30 years at the same time as liberalism has enjoyed a resurgence in the form of neoliberalism. Heather Schell remarked in 1997 that we have “become infected with virus metaphors”⁹⁴ and this observation continues rings true in 2019. Viral metaphors have continued to multiply. We now use “going viral” to describe the process of large groups of people simultaneously sharing the same internet content⁹⁵ and we are warned to guard ourselves against the “virus of fake news.”⁹⁶ As Peta Mitchell demonstrates in *Contagious Metaphor* (2012), by the late 20th century, metaphors of contagion have found their way into the discourse of fields as varied as psychology, economics, computer science and anthropology, although the meanings acquired by these proliferating metaphors have little to no explicit relation to infectious disease.⁹⁷ While Schell wrote about the infection of virus metaphors as a passing fashion in science fiction and the work of a handful of worried epidemiologists,⁹⁸ contagious pathogens now feature frequently in mainstream political discourses on issues such as antibiotic resistance, vaccine hesitancy and (re)emerging infectious diseases. Through the lenses of these new medical crises, contagious pathogens have become not only a source of renewed anxieties, but an increasingly powerful

⁹⁴ Heather Schell, "Outburst! A Chilling True Story About Emerging-Virus Narratives and Pandemic Social Change," *Configurations* 5, no. 1 (1997).

⁹⁵ Karine Nahon & Jeff Hemsley, *Going Viral* (London: Polity Press, 2014), 16.

⁹⁶ Lilla Szabó, "Fake news: Virus, Weed, Water or Villain? The Framing of Fake News by the Media in the United States of America," *Filológia* 9, no. 1-2 (2018).

⁹⁷ Mitchell, *Contagious Metaphor*, 3-7.

⁹⁸ Schell, "Outburst."

discourse through which competing ideas about what government is, who should govern and how they should govern are expressed.

A second productive line of inquiry into contagion narratives has focused on immunity, partly informed by Donna Haraway's analysis of the immune system as "elaborate icon for principal systems of symbolic and material 'difference' in late capitalism" and partly spurred on by Roberto Esposito's theorisation of immunity and community.⁹⁹ Ed Cohen's *A Body Worth Defending* (2009) is, to date, the most comprehensive critical engagement with Anglophone histories of immunity within the context of biopolitics. Like the present thesis, Cohen's analysis moves through successive case studies over a period of 200 years, examining topics as diverse as the origin of immunity as a political category in the 1679 Habeas Corpus, the popularisation of variolisation and vaccination in the 18th and early 19th centuries, mid-19th century cholera epidemics and the global HIV/AIDS epidemic.¹⁰⁰ Like Sontag, Wald and Schell, Cohen understands contagious disease narratives primarily as a discursive opportunity to distinguish the Self from the dangerous Other and reinforce wider societal power imbalances. According to this line of argument, the effect of contagion narratives is a stigmatising one, of encouraging negative associations between immoral behaviour, disease and already socially excluded groups.¹⁰¹ However, reading contagion narratives with a focus only on extraordinary global pandemics with a small number of easily identifiable outside "putative carriers" overlooks many episodes in the historical development of both contagion narratives and biopolitical measures to manage contagion.

Elizabeth Povinelli and Veena Das have drawn attention to how forms of suffering and dying that are "ordinary, chronic and cruddy rather than catastrophic, crisis-laden and sublime" underlay

⁹⁹ Donna Haraway, "The Biopolitics of Postmodern Bodies: Determinations of Self in Immune System Discourse," in *Feminist Theory and the Body: A Reader*, ed. Janet Price & Margrit Shildrick (Edinburgh: Edinburgh University Press, 1999); Roberto Esposito, *Immunitas: The Protection and Negation of Life*, trans. Zakiya Hanafi (Cambridge: Polity, [2002] 2011).

¹⁰⁰ Cohen, *A Body Worth Defending*.

¹⁰¹ Schell, "Outburst," 96.

global divisions and distributions of health, wellbeing and death in late modernity.¹⁰² Building on their work, this thesis conceptualises contagious diseases as both “ordinary, chronic and cruddy” and “catastrophic, crisis-laden and sublime” and aims to capture narratives about both “ordinary” contagious diseases and extraordinary pandemics. A focus on both is important because both “catastrophic” and “ordinary” contagious diseases appear in debates on public health policy. The question of why common communicable diseases (responsible for a large proportion of mortality and morbidity in the Global South) attract little attention from global health organisations has also troubled public health and global development scholars. Jeremy Shiffman and Stephanie Smith have created a theoretical framework to understand the determinants of political priority for global health initiatives. Of particular importance to this thesis is Shiffman and Smith’s emphasis on the need for a politically effective and cohesive framing of a specific health issue as a created by human actions and, consequently, amenable to change in order to reach global and local policy agendas.¹⁰³ This argument offers an important insight into the political processes that shape Gothic contagion narratives: political actors who seek to encourage more government intervention in contagion management frame contagion not only as a catastrophic phenomenon or generalised source of anxiety, but as an ultimately controllable set of circumstances created by human actions. Meanwhile, political actors arguing for less government intervention in contagion frame contagious diseases as an uncontrollable catastrophic event with natural (or sometimes supernatural) causes. These two distinct framings are particularly visible in early 19th century debates over plague quarantine (discussed at length in Chapter 2), but more recently they can be observed in responses to the HIV/AIDS epidemic. This logic is very visible in fanatical portrayals of the epidemic as divine punishment but, as Paula Treichler notes, even conceptualising HIV/AIDS as a natural phenomenon (even a natural disaster) within seemingly non-partisan medical discourse can discourage people

¹⁰² Veena Das, *Affliction : Health, Disease, Poverty* (New York: Fordham University Press, 2015), 12-14; Elizabeth A. Povinelli, *Economies of Abandonment Social Belonging and Endurance in Late Liberalism* (Durham, NC: Duke University Press, 2011), 12.

¹⁰³ Jeremy Shiffman & Stephanie Smith, "Generation of Political Priority for Global Health Initiatives: A Framework and Case Study of Maternal Mortality," *The Lancet* 370, no. 9595 (2007): 1370-79.

from expecting or demanding government assistance with the epidemic.¹⁰⁴ Subsequent chapters will explore the use of the Gothic to frame specific health crises as changeable or unchangeable: HIV/AIDS (Chapter 1), the plague (Chapter 2), so-called “filth diseases” (Chapter 3), venereal diseases (Chapter 4), and climate change (Chapter 5).

My historical analysis of the role of the Gothic in the transformation of contagious disease into an object of liberal biopolitics is indebted to Faye Marie Getz’s work on the emergence of a Gothic epidemiology of the Black Plague at the beginning of the 19th century.¹⁰⁵ Getz identifies epidemiologist and medical historian, Justus Hecker (1795-1850), and his popular history of the Black Plague, *Der schwarze Tod im vierzehnten Jahrhundert (The Black Death in the Fourteenth Century)* (1832) as the most visible source of a shift in imaginations of the plague at the beginning of the 19th century. Hecker historicises the Black Plague as a 14th century quasi-supernatural epidemic that enacted irreversible historical change and brought about the Renaissance.¹⁰⁶ This new understanding of the plague removed it from its much more recent 18th century epidemics, erased the multiple interpretations previously given to plague epidemics (including in the 14th and 15th centuries) and strongly exaggerated the more morbid and strange stories about the epidemic.¹⁰⁷ As Chapter 2 will demonstrate, this new conceptualisation of the plague as a (super)natural historical event removed from human agency was vital to British liberal opposition to plague quarantine in the first decades of the 19th century. Getz’s engagements with the Gothic as a mode and with Gothic criticism were relatively limited. Getz identifies the Gothic with a small number of tropes: an exotic and distant setting, the celebration of the power of nature and the insignificance of human individuals, human genius and “the emphasis on suffering, death and redemption.”¹⁰⁸ As a historian of the Middle Ages, Getz is primarily interested in how Gothic epidemiology has shaped historical understandings of the

¹⁰⁴ Paula Treichler, *How To Have Theory in An Epidemic: Cultural Chronicles of AIDS* (Durham, NC: Duke University Press, 1999), 170-71.

¹⁰⁵ Marie Faye Getz, “Black Death and the Silver Lining: Meaning, Continuity, and Revolutionary Change in Histories of Medieval Plague,” *Journal of the History of Biology* 24, no. 2 (1991): 265-89.

¹⁰⁶ Getz, “Black Death,” 275-276.

¹⁰⁷ Getz, “Black Death,” 270.

¹⁰⁸ Getz, “Black Death,” 280-81.

Middle Ages and the Black Plague, not in why these interpretations of the contagious disease use the Gothic mode specifically. Nevertheless, Getz's research is central to this project as it defines a specifically Gothic aesthetic through which contagious disease was understood in the early 19th century and it shapes this thesis's central claim that the Gothic mode played a central role in framing contagion as an object of government intervention within liberal biopolitics.

Because of the Gothic's tendency to spill over into other genres and modes, the conceptualisation of the Gothic as a mode (or tone) is a particularly useful tool for exploring how contagion narratives are created and travel between scientific books and articles, political rhetoric and legislative debates, journalistic reports, novels and films. Judith Wilt has argued for a conceptualisation of the Gothic as a mode or a tone that permeates a variety of literary forms, rather than a specific set of fictional texts.¹⁰⁹ Fred Botting has pointed out that from the 19th century onwards, the Gothic existed "in excess of, and often within, realist forms."¹¹⁰ Other 19th century scholars have noted the Gothic's influence on other modes. Kelly Hurley has argued that 19th century scientific discourses often exhibit a certain "Gothicity" because their "rhetoric, modes of imagining, and narrative structures" were influenced by Gothic fiction¹¹¹ and Meegan Kennedy has demonstrated that Gothic fiction shaped the norms of medical case writing through the "curious" case genre.¹¹² More broadly, Sara Wasson has argued for conceptualising the relationship between the Gothic and medical thought and writing as one of two-way, mutual influence.¹¹³ Jonathan Arac has pointed to the use of Gothic language in the work of Karl Marx and Friedrich Engels as evidence of the Gothic's usefulness as a mode for political and scientific writing in the 19th century,¹¹⁴ while

¹⁰⁹ Judith Wilt, *Ghosts of the Gothic: Austen, Eliot and Lawrence* (Princeton University Press, 1980), 3-6.

¹¹⁰ Fred Botting, *Gothic* (London: Routledge, [1996] 1997).

¹¹¹ Kelly Hurley, *The Gothic Body: Sexuality, Materialism, and Degeneration at the Fin De Siècle* (Cambridge University Press, 1996), 5-6.

¹¹² Meegan Kennedy, "The Ghost in the Clinic: Gothic Medicine and Curious Fiction in Samuel Warren's Diary of a Late Physician," *Victorian Literature and Culture* 32, no. 2 (2004).

¹¹³ Sara Wasson, "Scalpel and Metaphor: The Ceremony of Organ Harvest in Gothic Science Fiction," *Gothic Studies* 17, no. 1 (2015).

¹¹⁴ Jonathan Arac, *Impure Worlds: The Institution of Literature in the Age of the Novel* (New York: Fordham University Press, 2011), 84.

Margaret Cohen has examined the use of the Gothic mode as a means to explore “the irrational aspects of social processes” in early 20th century Marxist thought.¹¹⁵

Yet, the wider implications of defining the Gothic as a mode (or tone) are often left unexplored by critical analyses that continue to privilege Gothic fiction as the primary site of the emergence and development of the Gothic mode and represent scientific, political or other modes as merely the cultural context in which Gothic fiction is written. Notable exceptions to this tendency include Catherine Oakley’s analysis of the legacies of fin-de-siècle medical Gothic fictions in 21st century scientific writing on blood transfusion and rejuvenation technologies¹¹⁶ and Sara Wasson’s work on “Gothic ceremony” as a means to negotiate the alienation of bodily organs in biomedical discourses of organ harvesting and transplantation.¹¹⁷ This thesis takes seriously the challenge of understanding the intersections between the Gothic mode and medical and political thought and writing by exploring the presence of the Gothic mode in a wide range of texts, including statistical reports, social commentary, legislative debates, expert witness testimonies within Parliamentary commissions, specialist medical science publications and popular science journalism. By doing so, this thesis will demonstrate that Gothic fiction is not merely the repository of anxious nightmares and fantasies of other modes, but that the Gothic is utilised to create new negative and positive emotional attachments. Moreover, this thesis will illustrate how the Gothic mode facilitates the exchange of images, tropes and narratives between different genres and modes. As such, it makes a valuable contribution to developing theoretical debates within the field of Gothic studies over the relationship between the Gothic and other modes.

My characterisation of specific contagion narratives as distinctly Gothic relies on their use of a broad range of Gothic stylistic features. The Gothic contagion narratives discussed in this thesis share a tendency towards aesthetic and affective excess, geographical and/or temporal remoteness,

¹¹⁵ Margaret Cohen, *Profane Illumination: Walter Benjamin and the Paris of Surrealist Revolution*, (Berkeley: University of California Press, 1993), 3-5.

¹¹⁶ Catherine Oakley, "Towards Cultural Materialism in the Medical Humanities: The Case of Blood Rejuvenation," *Medical Humanities* 44, no. 1 (2018): 5-14.

¹¹⁷ Wasson, "Scalpel and Metaphor."

claustrophobic architectural spaces, a sense of history as a set of menacing hidden secrets that are haunting the present and representations of (quasi-)supernatural forces.¹¹⁸ However, like Sara Wasson and Emily Alder, I identify “a disturbing affective lens” as the defining element of the Gothic mode.¹¹⁹ As Xavier Aldana Reyes has argued, the Gothic relies on “the readers’/viewers’ awareness of their own bodies, particularly of their vulnerability and shared experience of projected pain through vicarious feelings.”¹²⁰ Through its access to vicarious feelings, the Gothic actively shapes perceptions and experiences of vulnerability. This is how sanitary reformers (such as Edwin Chadwick) utilised the Gothic mode to create working-class neighbourhoods into sites of constant contagious danger, for example. This project will establish the importance of the Gothic mode in shaping a range of affective responses (including anxiety, possibility, pity, curiosity, pleasure and anger) to contagion and the biopolitical technologies intended to prevent and contain it. The inherent dangers of contagion, its ability to permeate physical and social boundaries and infect anyone and everyone, make it a powerful imaginative source of shared experiences of vulnerability.

Liberal Biopolitics

In *Discipline and Punish* (1975, 1991), Foucault uses the “compact model” of 17th century plague quarantine measures to illustrate the mechanisms of disciplinary power.¹²¹ In a lengthy passage, Foucault describes how the plague’s crisis of contagion made it possible for the inhabitants of a small town to become subject to a wide range of technologies of enclosure, segmentation and surveillance.¹²² Foucault then argued that the “political dream of the plague” as “the penetration of regulation into even the smallest details of everyday life” underlies all forms of disciplinary power, including the extension of disciplinary power to the whole population as biopower.¹²³ Foucault

¹¹⁸ Botting, *Gothic*, 1-4; Chris Baldick, “Introduction” to *The Oxford Book of Gothic Tales*, ed. Chris Baldick (Oxford University Press, [1992] 2009), xi-xxiv, xix; Jerrold E. Hogle, “Introduction: The Gothic in Western Culture,” in *The Cambridge Companion to Gothic Fiction*, ed. Jerrold E. Hogle (Cambridge University Press, 2002), 2-3.

¹¹⁹ Sara Wasson & Emily Alder, *Gothic Science Fiction 1980–2010* (Liverpool University Press, 2011), 2.

¹²⁰ Xavier Aldana Reyes, *Body Gothic: Corporeal Transgression in Contemporary Literature and Horror Film* (Cardiff: University of Wales Press, 2014), 2.

¹²¹ Foucault, *Discipline and Punish*, 197.

¹²² Foucault, *Discipline and Punish*, 195-198.

¹²³ Foucault, *Discipline and Punish*, 197-198.

argued that the plague functions not a specific moment of crisis for governance (although he distinguishes it from the individual, as opposed to collective, threat of leprosy), but as a stand-in for “all forms of confusion and disorder” that can disrupt natural, rational government.¹²⁴ This analysis suggests that the management of contagious diseases represents a very particular tension point within the workings of biopolitics as it brings together modern technologies (as this thesis will explore) with a pre-modern (real and imaginary) history of disease and governance. Foucault himself imagines the plague not as a long series of epidemics lasting from the 14th to the 18th century with multiple, often competing meanings, but as a one-off, historically distant deadly force of nature that caused claustrophobic enclosures, social and legal chaos and enacted permanent historical change. As such, the “political dream of the plague” belongs to a Gothic epidemiology of the plague that Faye Marie Getz identifies as emerging in the early decades of the 19th century.¹²⁵ As this thesis will demonstrate, this narrative of the plague as a Gothic danger from the pre-modern past appears, again and again, in fictional portrayals of contagious disease as well as in legislative debates about measures to prevent and contain contagion in order to express opposition to government intervention. While 18th and early 19th century conceptualisations of liberalism imagined a distant, pastoral past as the origin of the “natural” freedom self-regulating liberal subjects should enjoy, these conceptualisations also imagined the medieval past as the incarnation of the monstrous threat of authoritarianism. As Chapter 2 will demonstrate, these imaginations of the plague were particularly important because plague quarantine legislation (the necessity of which was widely accepted after the 1665-1666 Great Plague of London) was a central point of reference in legislative debates over public health infrastructure in the early 19th century. In these debates, the vision of the plague as belonging to an unfree, Gothic pre-modern past was used both to mediate the tension surrounding governmental intervention in private life and to argue successfully that governmental intervention is unnecessary in modern, liberal Britain.

¹²⁴ Foucault, *Discipline and Punish*, 199.

¹²⁵ Getz, “Black Death.”

Text Choice

This thesis takes a comparative, case-study approach. Due to space limitations, I am not able to comprehensively analyse the entire historical development of liberal and neoliberal biopolitics and I have instead selected specific moments of crisis and change to focus each chapter on. The historical focus and primary texts in each of the chapters has been driven both by the research questions and by three additional thematic concentrations of this thesis: firstly, the evolution of medical technologies related to contagion (including the process of professionalisation of medical practitioners in the 19th century), secondly, historical socio-political crises and transformations in biopolitical modes of government and, thirdly, stylistic trends within both contagion narratives and the Gothic mode. The fictional texts discussed exemplify major trends in the portrayal of contagion in fiction during the 19th and the second half of the 20th century, with a predominant focus on Gothic fiction, and the analysis aims to balance more canonical texts with lesser known ones in order to point to more generalised trends within contagion narratives. Non-fictional texts have been selected for their historical relevance as well as their ability to exemplify diverse uses of the Gothic mode.

Chapter 1 (Reconsidering the Outbreak Narrative) seeks to contextualise Priscilla Wald's concept of the "outbreak narratives" by exploring both the immediate antecedents of the formulaic outbreak narrative Wald has explored and the circumstances in which (re)emerging infectious diseases, the medical concept, Wald relies on has appeared. Wald has argued that the outbreak narratives are one of the archetypal myths of Western culture and that contagion narratives written well before the 1980s share the same features as the "outbreak narratives" of medical thrillers and science fiction horror. However, I argued that the outbreak narrative is a historically specific sub-genre of contagion narratives, whose conventions were shaped both by neoliberalist fears about Global South invasions and by the medical concept of (re)emerging infectious diseases (EIDs), itself an effort to gain public recognition and funding for infectious diseases in the wake of the attention given to the HIV/AIDS epidemic by the late 1980s.

Chapter 2 (The Gothic Dream of the Plague and Mary Shelley's *The Last Man* (1826)) traces the emergence of a specifically liberal biopolitical model for contagion management back to the early 19th century anti-quarantine movement and their efforts to counter quarantine legislation by crafting a discourse of English liberal individuals as already immune or resistant to contagious disease. By exploring the portrayal of immunity and immunitary liberal subjectivity in Mary Shelley's *The Last Man* (1826) and the medical texts of notorious anti-quarantine doctor, Charles Maclean, this chapter aims to explore early 19th century conceptualisations of immunity and contagion, as well as individualism and good governance. Comparative close-readings of Shelley and Maclean's texts will show a profound shift in representations of the plague occurred in the early 19th century as the disease became less the object of practical medical knowledge and, more, a set of Gothic images. By the 1820s, plague narratives no longer provided readers with instructions about plague prevention methods, but used the plague as a Gothic trope that elicits terror. This chapter will argue that the relative lessening of maritime quarantine and the failure of smallpox quarantine legislation in this period show that, in the absence of the bureaucratic infrastructure of the New Poor Laws (1834) and of sufficiently developed scientific practices for surveying and containing contagion, knowledge that smallpox spreads through contagion was not enough to effectively mobilise political will to pass legislation regulating smallpox.

Chapter 3 (Edwin Chadwick's Gothic Sanitary Reports and Working-Class Illiberal Subjectivities) continues the analysis of the historical development of liberal biopolitics through an examination of Edwin Chadwick's *Report on the sanitary conditions of the labouring population of Great Britain* (1842) and *A supplementary report on the results of a special inquiry into the practice of interment in towns* (1843) as Urban Gothic texts. Through a comparative analysis of the thematic and stylistic features of Urban Gothic fiction focusing on *Bleak House* (1853) by Charles Dickens and *Mary Barton* (1848) by Elizabeth Gaskell, I will argue that Chadwick's reports did not merely influence the conventions of the Urban Gothic genre, but should be read as the first Urban Gothic texts. Repositioning the narrative mode of Chadwick's reports in this way will highlight Chadwick's

use of the Gothic mode in his representations of working-class people and his efforts to frame working-class subjectivities as Gothically illiberal. Furthermore, this chapter will analyse the mid-century sanitary reform movement as a major development in the evolution of liberal biopolitics and will argue that sanitary reform had a close relationship to the Poor Law Amendment Act of 1834 and that the latter created the bureaucratic structures for public health surveillance, as demonstrated also by Deborah Brunton.¹²⁶

Chapter 4 (Vampiric Blood and Reproductive Biopolitics) jumps forward in time slightly to the end of the 19th century in order to explore the shift from sanitary regulation to reproduction and sexuality as a major focus of biopolitics. It will do so through two inter-linked analyses: firstly, of the impact of the Contagious Diseases Acts (CDAs) (1864-1886) and the successful campaign for the repeal of the Acts on the regulation of sexuality and reproduction and, secondly, of portrayals of contagious vampirism in the vampire fiction in the 1890s. I will argue that both pro- and anti-CDAs texts Gothicised prostitutes as illiberal subjects and, importantly, created the ideological and discursive context for the large scale regulation of sexuality and reproduction through the Criminal Law Amendment Act of 1885 and eugenic legislation in the 1890s and 1900s. This chapter will argue that, while the anti-CDA campaign has been interpreted as a backlash against medical authority (and, thus, state surveillance of public health), the CDA repeal should be seen in the wider context of a reorientation of political attitudes towards a biopolitics of reproduction and the state as moral, not scientific, authority. Close readings of the portrayal of blood and medical professionals in Mary Elizabeth Braddon's short-story "Good Lady Ducayne" (1896), *The Blood of the Vampire* (1897) by Florence Marryat and *Dracula* (1897) by Bram Stoker are interspersed with analyses of conceptualisations of blood in medical publications and the anti-CDA campaign's representation of medical professionals in order to show the progressive Gothicisation of both.

Chapter 5 (Contagion in EcoGothic Fiction) examines Cormac McCarthy's *The Road* (2006) and Margret Atwood's *MaddAddam* Trilogy (2003, 2009, 2013) as prime examples of the rise of

¹²⁶ Brunton, *The Politics of Vaccination*.

EcoGothic pandemic narratives in the 2000s against a background of the increased prominence of climate change in public and scientific debates. Using the model of Priscilla Wald's "outbreak narrative," this chapter examines the deployment of Gothic contagion tropes within the environmentalist narratives of McCarthy and Atwood's novels, as well as the use of Gothic contagion in legal and public discourses around state action against climate change. In particular, the chapter explores the complicated histories of the concept of pre-emptive action and the trend towards conceptualising biological crises as risks to national security to be managed through privately contracted militarised medical research. I will argue that contagion narratives help mediate ethical questions about individual responsibility for climate crisis and the possibility of pre-empting action against environmental destruction because the unique challenges of making climate crisis representable, while accounting for the precariousness of climate futures, has meant that outbreak narratives (as well as acquired immunity tropes) serve as a means to interrogate as well as portray individual survival in the climate crisis future as a series of (neoliberally) individualist choices.

Chapter 1: Reconsidering the Outbreak Narrative

The three chapters that form the bulk of this thesis (Chapters 2, 3 and 4) will trace the historical development of liberal biopolitics in England over the course of the 19th century by analysing changing legal mechanisms and medical technologies intended to control contagion and the contagion narratives that accompanied them. This chapter, however, will discuss the outbreak narrative, a subgenre of popular science writing and science fiction that became popular in the late 1980s and 1990s. Such a sudden temporal and geographical leap between chapters might raise eyebrows. However, the influence of the outbreak narrative on critical assessments of historical contagion narratives and popular imaginaries of contagion makes it necessary to explore the origins of the outbreak narrative first. Moreover, although this thesis will generally focus on England, the emergence of the outbreak narrative was closely tied to the medical and political landscape of the US in the 1980s and 1990s.¹ The contagion narratives created by US doctors, scientists, politicians, activists and journalists around HIV/AIDS and (re)emerging infectious diseases in this period have had a huge influence on discourses elsewhere, including the UK. Thus, an initial geographic focus on the US is necessary. It is also necessary to devote space to an analysis of contagion narratives in journalistic and medical texts, as well as fiction texts that could not be accurately described as

¹ Historically, public health legislation has been a devolved matter and there have been significant differences in the legislation regarding contagion between England, Wales and Scotland. Because of this and because the 19th century texts I examine have been written by English authors, I restrict my analysis to England. However, some pieces of legislation do apply to all of Britain and, in the case of more recent legislation, to all of the UK. When this is the case, I signal this in the text.

Gothic. This is necessary in order to explore the circumstances that gave rise to the outbreak narrative.

Priscilla Wald first identified “the outbreak narrative” as a highly formulaic narrative tracing the emergence, development and eventual containment of a new or re-emerging infectious disease generally originating in the Global South which became popular in the 1980s and 1990s. Notable examples of the genre include *Outbreak* (1987), *Contagion* (1995), and *The Hot Zone* (1994) by Richard Preston. Although Wald initially maintained a distinction between “the outbreak narrative” as a distinctly post-HIV/AIDS genre and “outbreak narratives” as previous incarnations of contagion narratives her analysis persistently obscured these distinctions,² Instead, Wald stressed the “archetypal” and “mythic” qualities of both the outbreak narrative and outbreak narratives and argued communicable disease by its very nature “constitutes mythic social bonds.”³ The main difference between the outbreak narrative and outbreak narratives seems to be the relative popularity and high visibility of “the outbreak narrative” in contemporary culture: Wald does not note any significant differences between 19th and early 20th century outbreak narratives and the outbreak narrative. The 19th century chapters of this thesis will demonstrate that, despite superficial similarities in structure and plot, contagion narratives written in the 19th century imagine contagion as well as social and political belonging in highly historically specific terms. This chapter, however, will analyse “the outbreak narrative” itself and its origins in the specific historical circumstances of the late 20th century and, in particular, neoliberal biopolitics.

For Wald, the outbreak narrative has the important role of articulating “community on a national scale, as it depicts the health and well-being of those legally within the borders of the state as a mark of their belonging.”⁴ Foreign or otherwise Other disease carriers and, particularly, healthy carriers who showed no visible symptoms of disease are the villains and narrative focus of the outbreak narrative. There are many similarities between outbreak narratives and turn-of-the-century vampire

² Wald, *Contagious*, 3.

³ Wald, *Contagious*, 16-7.

⁴ Wald, *Contagious*, 33.

fiction (discussed in Chapter 4) in terms of its portrayal of foreigners as viral threat. However, where outbreak narratives and vampire fiction diverge is in their portrayal of contagion containment and control. While *Dracula* (1897), for example, represent contagious Others as pathogens within the body of the nation that must be fought by middle-class professionals (who acquire immunity to vampirism by embracing their rational liberal individualism and eugenically successful marriage), outbreak narratives portray quarantine of the national borders as the only reliable form of containment. Moreover, outbreak narratives themselves are contained by hemmed in “hot zones,” including: Africa, military labs, gay communities etc. In almost all of the notable outbreak narratives of the 1990s, including Preston’s *The Hot Zone*, Laurie Garrett’s *Coming Plague* (1994), and films such as *Carriers* (1995), *Contagion* (1995) and *Invasion* (1997), outbreaks take place in bounded, more or less quarantined locales and the narrative ends with a reminder this containment is only ever temporary.

Wald has contended that “the outbreak narrative” originated in the late 1980s because the HIV/AIDS epidemic led to an increase in scientific as well popular publications about “newly surfacing disease.”⁵ The argument that the HIV/AIDS epidemic inevitably gave rise to fears of re-emerging infectious diseases is also often repeated in texts about EIDs, as I will discuss later. This chapter will argue that the outbreak narrative is intimately connected to the rise of EIDs as a medical concept, however, it is necessary to reassess readings of EIDs and “the outbreak narrative” as nothing more than a “natural” or inevitable extension of HIV/AIDS anxieties. I am particularly interested in the timing of the popular emergence of the outbreak narrative and its relationship with EIDs. Paradoxically, although both the outbreak narrative and medical discourses around EIDs narrate HIV/AIDS as an epidemic that is already “over” (something this chapter explores), early popular incarnations of both predate the discovery of effective anti-retroviral treatments for HIV/AIDS in 1995. Thus, the central research question of this chapter is: why did representations of obscure pathogens from Africa overtake portrayals of an actual, ongoing devastating pandemic with

⁵ Wald, *Contagious*, 2; 27.

US origins in the popular American imaginary of the 1990s? What kind of neoliberal biopolitics is at work in this displacement?

The replacement of HIV/AIDS with EIDs is particularly intriguing due to the rapid proliferation of texts on HIV/AIDS in the 1980s. Although the HIV/AIDS epidemic was initially ignored by US general audience media, by 1986, attempts to make sense of the epidemic had generated large amounts of medical, journalistic and fictional literature. Conflicting narratives about the disease's origin and mode transmission generally portrayed AIDS sufferers in deeply dehumanising and stigmatising terms, as has been extensively analysed by Cindy Patton, Dennis Altman, Susan Sontag, Paula Treichler, Steven Epstein and Douglas Crimp.⁶ Treichler highlighted the rapid proliferation of discourses about AIDS in the late 1980s, describing AIDS as both a disease epidemic and “an epidemic of signification” as doctors, scientists, activists, journalists, politicians and novel writers all sought to create coherent narratives out of the perplexing, still unknowable epidemic.⁷ I do not intend to duplicate these analyses of HIV/AIDS narratives themselves. Instead, this chapter will investigate the relationship between narratives about HIV/AIDS and the outbreak narrative. In order to do so, the first part of this chapter will examine the most influential HIV/AIDS narrative of the 1980s: Randy Shilts' *And The Band Played On* (1987). Shilts' account of the epidemic contains several “outbreak narrative” tropes, particularly in its portrayal of Africa as a possible source of the virus and, even more obviously, in its creation of the “Patient Zero” myth. However, *And The Band Played On* deviates from the outbreak narrative significantly in its negative portrayal and overt criticism of both scientific authority and conservative, ethno-nationalist politics. Wald herself has argued that HIV/AIDS cannot be “incorporated into the mythic dimensions of communicable-disease outbreak narratives” because “there is no endpoint from which to look back, not even the possibility

⁶ Cindy Patton, *Inventing AIDS* (New York: Routledge, 1990); Dennis Altman, *AIDS in the Mind of America* (Garden City, N.Y.: Anchor/Doubleday, 1986); Steven Epstein, *Impure Science: AIDS, Activism, and the Politics of Knowledge* (Berkeley: University of California Press, 1996); Douglas Crimp, *Melancholia and Moralism: Essays on AIDS and Queer Politics* (Cambridge: MIT Press, 2002); Paula A. Treichler, *How To Have Theory in An Epidemic: Cultural Chronicles of AIDS* (Durham, NC: Duke University Press, 1999); Sontag, *AIDS and Its Metaphors*.

⁷ Treichler, *How to Have Theory*, 11.

of a projected closure that is necessary for an outbreak narrative.”⁸ However, I will show that *And The Band Played On* (like many other HIV/AIDS narratives by queer writers) does not merely imagine the containment of the epidemic, but makes this eventual containment one of the cornerstones of its politics. I will argue that Shilts’ portrayal of the “containment” of HIV/AIDS is a clear example of the acquired immunity through liberal individualism trope (first generated by 19th century liberal biopolitics). This illuminates not only the different affective and political investments of HIV/AIDS narratives and the outbreak narrative, but the fact that the outbreak narrative is driven by a different set of assumptions about the meaning and possibility of survival and immunity shaped by a (neo)liberal biopolitics that is significantly different from its 19th century counterpart.

However, in order to understand why the failure of HIV/AIDS narratives to conform to outbreak narrative conventions is highly significant, the second half of this chapter will explore the features of the outbreak narrative (as identified by Wald) and its relation to EIDs. In particular, I will explore the origins of EIDs as a medical category and the relationship between the HIV/AIDS epidemic and EIDs and I will argue that both EIDs and the outbreak narrative are shaped by three distinct aspects of neoliberal biopolitics: “risk factor medicine” as a means of individualising risk, the simultaneous militarisation and commercialisation of medical research and the paradoxical positioning of Global South populations as both biopolitical resource and viral threat. I will also offer a brief overview of the emergence of medical neoliberalism and the changes it made to the global management of transmittable disease. As my analysis of 19th century contagion narratives will make clear, pre-neoliberalism contagion narratives envisioned paths for individuals to acquire immunity, while outbreak narratives imagine no such path to individual disease resistance. Instead, outbreak narratives imagine contagion outside the borders of the nation, either in the Global South or in hermetically sealed laboratories or minority populations in the US, and portray military surveillance of those borders as the only means to prevent contagions that will inevitably re-emerge. Like neoliberal biopolitics more generally, the outbreak narrative embraces both quarantine and a

⁸ Wald, *Contagious*, 27-8; 216.

neoliberal public health management model that individualises risk and blames ill-health on poor “lifestyle choices.” This reduces further the appeal of acquired immunity tropes, as individual characters of the outbreak narrative are doomed by their choice from the start.

Another distinguishing feature of outbreak narratives is that, while narratives about disease outbreaks have a long history (as following chapters in this thesis will demonstrate), outbreak narratives have a distinct, exclusive focus on new or relatively unknown diseases and they represent these new diseases as symptoms that human progress no longer has positive effects on humanity. Charles E. Rosenberg has identified strong parallels between mid and late 19th century concerns about neurasthenia and hysteria and late 20th century anxieties that “human progress breeds disease” born out of a perceived increased incidence of disease (including cancer, diabetes and infectious diseases such as HIV/AIDS).⁹ Rosenberg has identified this set of tropes about new, modern ways of living to pathology as “the progress-and-pathology narrative” and has argued that its popularity comes partly from its flexibility, as the progress-and-pathology narrative “can be used in a variety of contexts and with a variety of social motives.”¹⁰ The outbreak narrative is a specific kind of progress-and-pathology narrative distinguishable through its emphasis on progress as a source of new contagions. Neurasthenia and hysteria, the two diseases Rosenberg argued are exemplary of 19th century progress-and-pathology narratives, were thought to be caused by the mental and emotional stress of living in industrialised urban centres, not by transmissible pathogens. As the 19th century half of this thesis will demonstrate, contagious diseases and the illiberal subjectivities who carried them were represented as a risk to the progress of Western civilisation throughout the 19th century and this risk was imagined as the threat of a return to a darker, more contagious past or the Gothic reincarnation of that contagious past as punishment for modernity. Outbreak narratives reverse the temporality of this narrative. In *Outbreak*, *The Hot Zone* or *The Coming Plague*, individual disease outbreaks are warnings of a dark future where the unstoppable growth of medical

⁹ Charles Rosenberg, *Our Present Complaint: American Medicine, Then and Now* (Baltimore: John Hopkins University Press, 2007), 78-9.

¹⁰ Rosenberg, *Our Present Complaint*, 91.

technologies, urbanisation, human migration, environmental degradation and microbial evolution will lead to ever more dangerous pathogenic agents. These anxieties about the future's dangerous trajectory towards contagion point, firstly, to the sense that neoliberalism is the stagnant endpoint of civilisation beyond which no progress is possible.¹¹

Secondly, however, because these anxieties concentrate on the contagious failure of progress in the Global South specifically, they suggest that outbreak narratives are strongly shaped by neoliberal concerns that the "development" of the Global South is not feasible. The "development" project, named after the UN Development Decade of 1961-71, arose in the 1960s out of the optimism of newly decolonized Global South nations, as well as a strong belief among US politicians that with necessary (American-led) technical and financial assistance formerly colonised countries will be able to "develop" quickly and resolve long-term problems with poverty and poor living standards (which make them ideal targets for communist propaganda).¹² In the US, enthusiasm for development began to wane by the early 1970s as little material progress occurred and in the 1980s the Reagan administration embraced globalisation instead of development. If the development project hoped to achieve progress by intervening in and guiding Global South economies, neoliberal globalisation worked through radical deregulation, privatisation and economic liberation.¹³ Despite neoliberalism's quasi-utopian vision of freedom of choice on the free market, neoliberal globalisation also had a close relationship to US imperialism. After all, the "Chilean experiment," the first attempt to put neoliberal ideals into practice, could only take place because of the US-backed military coup against Chile's socialist government.¹⁴ America's imperialist aspirations grew in the 1990s under neoconservative administrations and, particularly after 9/11, these aspirations materialised into an international relations agenda obsessed with the threat of terrorism

¹¹ For a more positive interpretation of neoliberalism as end of history, see: Francis Fukuyama, *The End of History and the Last Man* (London: Penguin, [1992] 2012).

¹² Litonjua, M. D. "Third World/Global South: From Development to Globalization to Imperial Project." *Journal of Global South Studies* 27, no. 1 (2010): 107-132.

¹³ Harvey, "Neoliberalism As Creative Destruction."

¹⁴ Harvey, "Neoliberalism As Creative Destruction," 26-7.

and the dangers of the US losing its status as world military power.¹⁵ Because of all of this, it is not surprising that at the end of the 1980s, the Global South gave rise to dark fantasies of uncontrollable contagion in the US.

Origin of EID

New and re-emerging infectious diseases (often referred to simply as emerging infectious diseases or EIDs) appeared as a distinct medical category of diseases in the early 1990s. Stephen S. Morse, virologist at Rockefeller University at the time, is generally credited with the modern usage of the term “emerging diseases.” Morse helped to organise and chaired the 1989 conference “Emerging Viruses: The Evolution of Viruses and Viral Disease” and published several articles calling attention to the issue of new viral diseases between 1990 and 1993.¹⁶ In 1991, together with geneticist and microbiologist Joshua Lederberg, Morse chaired a committee on the threat of emerging infectious disease in the US organised by the National Academy of Science’s Institute of Medicine. It is important to understand efforts to bring attention to “emerging diseases” in the context of a changing funding landscape in the US. From the late 1980s, as HIV/AIDS gained visibility as a public crisis and as it became evident that HIV/AIDS technologies would be highly profitable, HIV/AIDS research began attracting considerable public and private funds. In 1993, as part of a broader reorganisation of the National Institutes of Health (NIH), the main government agency that allocates medical research funding in the US, Congress agreed that at least 10% of the NIH’s disease-specific research funds should be ring-fenced for HIV/AIDS research. HIV/AIDS was the only disease with ring-fenced funding and HIV/AIDS research funding was not capped at the 10%. For example, in 1996, HIV/AIDS research was allocated almost one third (28.7%) of all disease-specific research funding

¹⁵ David Held, “Globalization: The Dangers and the Answers,” in *Debating Globalization*, eds. David Held, Anthony Barnett & Casper Henderson (Cambridge: Polity Press, 2005): 1-36.

¹⁶ Stephen S. Morse, “Emerging Viruses: The Evolution of Viruses and Viral Diseases,” *Journal of Infectious Diseases* 162 (1990): 1-7; “Regulating Viral Traffic,” *Issues in Science and Technology* 7 (fall 1990): 81-4; “Emerging Viruses: Defining the Rules for Viral Traffic,” *Perspectives in Biology and Medicine* 34 (1991): 387-409.

provided by the NIH and only three other transmittable diseases received funding above 0.1% of the NIH budget: sexually transmitted diseases (2.1%), tuberculosis (1.3%) and pneumonia (1.3%).¹⁷

The report issued by the committee headed by Morse and Lederberg, *Emerging Infections: Microbial Threats to Health in the United States* (1992), defined emerging infectious diseases as “clinically distinct conditions whose incidence in humans has increased” and listed over fifty different emerging viral, bacterial, fungal and parasitic infectious diseases that pose serious threat to health in the US. The report not only cemented the place of “new emerging infections” in medical and popular discourse, but crafted a clear narrative about the dangers of human progress. The *Emerging Infections* report attributed the increased incidence of infectious disease to human “progress,” particularly after the end of the Cold War. According to the report, progressive changes that caused the emergence of new infectious diseases included increased local and international migration, less restrictive sexual norms, new medical technologies (radiation therapy, immunosuppressive drugs and antibiotics), environmental degradation and a reduction in public health infrastructure attributed to “complacency” about infectious disease.¹⁸ The report defined emerging infectious diseases as “clinically distinct conditions whose incidence in humans has increased” either “due to the introduction of a new agent, to the recognition of an existing disease that has gone undetected, or to a change in the environment that provides an epidemiologic “bridge.””¹⁹ The report’s Preface warned that “complacency (i.e., the assumption that we have conquered a disease and can thus shift our concern to other pressing problems)” constitutes “a major threat to health” in the US as it can allow for “the re-emergence, as well as the emergence, of disease.”²⁰ The report makes some references to HIV as a cautionary tale about the dangers of complacency, but the vast majority of the report is devoted to highlighting the danger of the re-emergence of already recognised diseases other than AIDS (such as malaria, tuberculosis and Ebola) in the US. The report authors bemoan the fact that

¹⁷ Cary P. Gross, Gerard F. Anderson, & Neil R. Powe, "The Relation between Funding by the National Institutes of Health and the Burden of Disease," *New England Journal of Medicine* 340, no. 24 (1999): 1881-1887.

¹⁸ Lederberg, *Emerging Infections*, 34-112; 34.

¹⁹ Lederberg, *Emerging Infections*, 34.

²⁰ Lederberg, *Emerging Infections*, v.

although the AIDS epidemic has “stimulated a high level of interest in the scientific, medical, public health, and policymaking communities,” this has not led to higher levels of interest in other infectious diseases and, as a consequence, there is only critically low “awareness of and concern about the threats to human health posed by other emerging and reemerging microbial diseases.”²¹

Moreover, *Emerging Infections* contains a comprehensive list of (re)emerging infectious diseases, many of them (like malaria and toxoplasmosis) with a long history in the United States. However, once transposed into fiction, the outbreak narrative has tended to focus on the danger of new pathogens originating from the Global South spreading or migrating to the North. Ebola has been a particularly rich imaginative source for outbreak narratives. Although Ebola was first diagnosed in 1976, outbreak narratives continuously reimagine it as a newly (re)discovered disease. Outbreak narratives about Ebola hold strong imaginative appeal. Sheldon Ungar and Susan D. Moeller have shown that reports of the relatively limited 1995 Ebola outbreak in Zaire were blown out of proportion by US media under the influence of fictional outbreak narratives.²² Colin McInnes has also exposed the ways in which the outbreak narrative has impacted the tendency to report (again, relatively limited) Ebola outbreak in 2014 and 2015 as an international crises.²³ Two of the major texts of the outbreak narrative (*The Hot Zone* (1994) and its loose adaptation, *Outbreak* (1995)) both narrate devastating Ebola outbreaks.

Neoliberal Biopolitics, Science & Optimism

Beginnings

Both HIV/AIDS narratives and outbreak narratives tend to begin by invoking the period before the epidemic as one of a dangerous slowing down of scientific and technological advancement fuelled by political and scientific hubris. According to these narratives, by the 1970s, due to the discovery of

²¹ Lederberg, *Emerging Infections*, 32.

²² Sheldon Ungar, “Hot Crises and Media Reassurance: A Comparison of Emerging Diseases and Ebola Zaire,” *British Journal of Sociology* 49 (1998): 36-56; Susan D. Moeller, *Compassion Fatigue: How the Media Sell Disease, Famine, War, and Death* (London: Routledge, 1999).

²³ Colin McInnes, “Crisis! What crisis? Global health and the 2014-15 West African Ebola Outbreak,” *Third World Quarterly*, 2016, vol. 37, no. 3 (2016): 380-400.

miraculously effective antibiotics and the eradication of smallpox, medical professionals simply did not see infectious diseases (particularly sexually transmitted ones) as dangerous anymore. Instead, both scientists and politicians came to believe that Western medical science was already all-powerful. This trope is particularly prominent in AIDS narratives and appears in narratives written with very different political objectives in mind. For example, Cindy Patton's *Sex and Germs: The Politics of AIDS* (1986) and *And The Band Played On* (1988) by Randy Shilts chronicle the early years of the epidemic from very different political perspectives and with different political aims in mind. Yet, both condemn the scientific establishment for not taking infectious diseases seriously before the HIV/AIDS epidemic. Patton begins her analysis of the politics of the early years of the AIDS epidemic with the claim that,

[a]ccording to popular wisdom, an epidemic like AIDS should not have been possible. Modern medicine has conquered communicable disease. The epidemics faced in recent history have been virtually wiped out. Polio, cholera, and bubonic plague occur only in isolated cases. The traditional venereal diseases, childhood illnesses, and even influenza are readily identifiable and quickly cured with minimal long-term effect on the patient. The twentieth-century sensibility of U.S. superpower strength admits no plagues, no deadly communicable diseases of unknown origin. In the pantheon of dread illness, only cancer remains to be conquered.²⁴

Patton does not provide a source for the claim that this view is indeed "popular wisdom." And, although Patton admits that people in the US continued to die from infectious diseases (many of them still very poorly understood) in the 1970s, she maintains that according to popular wisdom and "from a medical standpoint" traditional infectious diseases have been "conquered" and little significant medical research into viral diseases happened in the 1970s.²⁵ Shilts recounts a similar

²⁴ Patton, *Sex and Germs: The Politics of AIDS* (Montreal-New York: Black Rose Books, 1986), 19.

²⁵ Patton, *Sex and Germs*, 20.

narrative of hubris in the face of infectious disease, although, unlike Patton, he condemns gay men alongside medical practitioners and researchers. Part II and III of his hugely successful journalistic account of the epidemic detail several lengthy anecdotes about heroic researchers and community practitioners who unsuccessfully attempted to warn disinterested colleagues and hedonistic gay patients of the dangers of sexually transmitted disease before the epidemic. In one particularly evocative passage, Shilts describes how

[g]ay men were being washed by tide after tide of increasingly serious infections. First it was syphilis and gonorrhoea. Gay men made up about 80 percent of the 70,000 annual patient visits to [San Francisco's] VD clinic. Easy treatment had imbued them with such a cavalier attitude toward venereal diseases that many gay men saved their waiting-line numbers, like little tokens of desirability, and the clinic was considered an easy place to pick up both a shot and a date.²⁶

Throughout his account, Shilts repeatedly blames gay men's promiscuity for the rapid spread of the epidemic, while Patton repeatedly attacks those who seek to blame gay men's sexual behaviour for the disease.

Despite their very different views on who bears responsible for the epidemic's spread, both Patton and Shilts reproduce roughly the same narrative about medical research's failure to advance enough to prevent or at least treat the disease. As no medical treatment against AIDS with even marginal effectiveness was known until 1987 (when AZT was approved for use as an AIDS drug), throughout the 1980s much of the activism of people with AIDS and their supporters focused on "getting drugs into bodies." And, although most activists were vocally critical of many aspects of medical research, including its supposed hubris, they still argued for technological progress (the rapid development of more, better drugs) as the ultimate solution to the crisis. Early coverage of AIDS in general audience media was even more optimistic about the power of scientific progress to halt the

²⁶ Randy Shilts, *And the Band Played On* (New York: St Martin's Press, 1987), 39. All further references to this text are from this edition and are given parenthetically.

epidemic and the overly optimistic tone of some of these publications is likely to blame for some of the widespread prevalence of the “scientific hubris” trope.

While gay publications published huge number of very diverse texts on the AIDS epidemic (ranging from touching obituaries, safer sex advice, sophisticated overviews of recent medical research and conspiracy theories about the origin of AIDS), reports on the epidemic in the general audience press tended to focus on the scientific aspects of the disease throughout the 1980s. This created some obvious problems. As James Kinsella has demonstrated, science news was a rapidly growing field in American journalism by the late 1970s, but most general audience publications did not have experienced science journalists.²⁷ Because of their lack of scientific expertise, when journalists had to cover a big science story (such as the 1969 Moon landing), they tended to rely heavily on information from press releases from scientific institutions and write bland stories about the “wonder of American science.” Although some publications began hiring dedicated science correspondents with science degrees in the early 1980s, much of the early reporting on AIDS still followed the “wonder of American science” script.²⁸ Walter Isaacson’s “Hunting for the Hidden Killers: AIDS,” published in July 1983 and only the second feature length story on AIDS to be published in a mainstream US magazine is an illustrative example of this kind of coverage.²⁹ Most of Isaacson’s 9 page article does not focus on AIDS, but on the heroic work and Faustian ambitions of American researchers serving as “the FBI of disease detection and the Interpol for medical sleuths around the globe”³⁰ whose work has “virtually eliminated the threat of such onetime plagues as polio, smallpox, cholera and diphtheria.”³¹ The article optimistically ends with the claim that “health officials are optimistic that science will eventually conquer AIDS” as it has conquered other “diseases whose ravages once shaped the course of history.”³²

²⁷ James Kinsella, *Covering the Plague: AIDS and the American Media* (New Brunswick: Rutgers University Press, 1989), 112-113.

²⁸ James Kinsella, *Covering the Plague*, 113.

²⁹ Walter Isaacson, “Hunting for the Hidden Killers: AIDS” in *TIME Magazine*, July 04, 1983. Accessed November 2019. <http://content.time.com/time/subscriber/article/0,33009,950937-1,00.html>

³⁰ Isaacson, “Hunting.”

³¹ Isaacson, “Hunting.”

³² Isaacson, “Hunting.”

It was, thus, relatively easy for the trope of scientific hubris as cause of AIDS to emerge partly as a reaction to narratives about all-conquering American science in AIDS reporting. Particularly given that throughout the 1980s not only activists, but many medical professionals felt deep anger and resentment at the paucity of AIDS research funding. Yet, even the scientific hubris trope is underlaid by optimism about science's potential to prevent and control pandemics: if only doctors had devoted more attention to virology, if only more research on epidemic disease had been commissioned, the epidemic would not have happened. Versions of the AIDS scientific hubris trope later become part of outbreak narratives, but these narratives lose the underlying optimism and urgency for scientific progress of AIDS narratives and instead represent AIDS as a straightforward progress-as-pathology narrative. Moreover, the scientific hubris trope obscures the neoliberal biopolitical contexts of the AIDS epidemic.

The rise of neoliberalism in the 1970s with its twin ideological commitments to cutting public spending and individualising risks led to a cut in public health programs, particularly those not focused on research and technological innovation. Although AIDS narratives condemn lack of research and research funds, public investment in medical research continued at a steady pace throughout the 1970s, largely because medical innovation could lead to lucrative new technologies. Neoliberal individualisation of risk also resonated with new disease causation theories that identified high-risk "lifestyle factors," rather than specific pathogenic agents, as the source of disease. Environmental theories of disease causation date back to at least the 19th century, but lifestyle factors theories and, in particular, their popular interpretations differ from older environmental theories disease causation theories because they attribute disease prevention to careful self-management of lifestyle behaviours (such as diet or exercise). Unsurprisingly, given the growing popularity of "lifestyle factors" theories in the 1980s, AIDS was first attributed to an unknown factor in gay men's lifestyles. The appeal of blaming individuals for AIDS was so strong, theories attributing the disease to lifestyle factors such as number of sexual partners, diet or drug use persisted among medical practitioners long after HIV was discovered.

Before 1981: Neoliberalism, scientific research and global risk

The three decades after the Second World War were a period of steady improvements in public health among countries in the Global North facilitated both by specific technological innovations (such as the large-scale production technologies for relatively safe antibiotics and the development of effective insecticides against disease vectors of common infectious diseases) and by large-scale disease control and eradication campaigns. Mass radiography screening campaigns intended to diagnose early stage tuberculosis began in the 1930s and accelerated after the end of the war, the US National Malaria Eradication Program (1947-1952), mass polio vaccination campaigns after 1955 and the global smallpox eradication campaign (1966-1980) are only some examples of the drive towards large-scale campaigns that characterised public health policy in Global North countries in this period. These post-war mass disease control and eradication campaigns were driven by what James C. Scott has identified as the high-modernist ideology, a belief that science and technology have the ability to perfectly understand nature (including human nature) and create technological solutions to even the most complex problems facing humanity.³³ High modernism also relies on the assumption that these technological solutions would be best implemented by a centralised state bureaucracy. However, as Scott documents, high modernist projects tended to fail. Large-scale efforts to eradicate disease in the Global South were particularly problematic as projects led by the US or international organisations driven by optimism about “development” tended to not take into account the material inequities which continued to shape the Global South. For example, the US-led Global Malaria Eradication Program (begun in 1955) was terminated in 1969 in recognition that malaria eradication was not a realistic short-term goal for many regions in the Global South.³⁴ Similarly, the WHO changed its tuberculosis control strategy for Global South countries in the 1960s from a focus on mass vaccination campaigns to an emphasis on treatment of already infected patients after it admitted in a 1964 report that the BCG tuberculosis vaccine had not

³³ James C Scott, *Seeing Like A State* (New Haven: Yale University Press, 1998).

³⁴ José A Nájera, Matiana González-Silva, & Pedro L. Alonso, “Some lessons for the future from the Global Malaria Eradication Programme (1955-1969).” *PLoS Medicine* vol. 8,1 e1000412. 25 Jan. 2011, doi:10.1371/journal.pmed.1000412.

been successful in lowering the incidence of tuberculosis in the Global South.³⁵ The smallpox eradication campaign, often touted as a miracle of US research, was actually a Soviet initiative.³⁶

While the 1970s were undoubtedly the decade of the “war on cancer” in the US, claims that either the general population or American scientific establishment thought that all infectious disease had been conquered ignores significant infectious diseases crises that occurred in the 1970s. In fact, these infectious crises helped to shape the later narrative around the AIDS epidemic. The most visible crisis was the 1976 influenza outbreak and the scandals related to the nationwide immunisation campaign it prompted. In January 1976, a group of soldiers stationed at Fort Dix, New Jersey, were hospitalised with what appeared to be influenza and what further testing identified as swine flu (influenza A virus subtype H1N1), the same virus that caused the 1918 influenza pandemic.³⁷ David Matthews, the Secretary of the Health, Education, and Welfare Department at the time, claimed that projections suggest that as many as one million Americans could die in a flu pandemic and President Gerald Ford launched a program to vaccinate all US residents by the end of 1976. While yearly flu vaccination campaigns were already common in the 1970s, a drive to vaccinate everyone against a flu was unprecedented and mirrored high modernist projects like the polio and smallpox eradication campaigns. However, the swine flu vaccination program ended in failure. In November, the media began reporting that many of the people receiving the vaccine suffered from Guillain-Barré syndrome, a relatively rare autoimmune disease that causes muscle weakness and paralysis due to the immune system damaging the peripheral nervous system, and this coupled with the absence of confirmed cases after the initial outbreak, led to the cancellation of the vaccination campaign.³⁸

³⁵ Niels Brimnes, "BCG vaccination and WHO's Global Strategy for Tuberculosis Control 1948–1983." *Social Science & Medicine* 67, no. 5 (2008): 863-873.

³⁶ Erez Manela, "A Pox on Your Narrative: Writing Disease Control into Cold War history." *Diplomatic History* 34, no. 2 (2010): 299-323.

³⁷ Arthur Silverstein, *Pure Politics and Impure Science: The Swine Flu Affair* (Baltimore: John Hopkins University Press, 1981), 42.

³⁸ Silverstein, *Pure Politics*, 119-23.

The government's swift and somewhat panicked reaction to the isolated swine flu outbreak suggests that, far from feeling safe from infectious disease epidemics, public health officials continued to see them as a serious threat requiring significant funding and bureaucratic implementation efforts. However, the failure of the campaign, alongside the failure of many other high modernist public health projects, also signals the inadequacy of high modernism in the face of public health crises. The election of Ronald Reagan as US president in 1980 was the death knell of high modernist public health. As part of a wider policy of decentralisation and budget cuts, the Reagan administration reorganised federal funding for social and public health services into nine block grants (including a preventative health and health services grant that consolidated six federal programs) and in the reorganisation cut approximately 25% of the funding for these services.³⁹ But, unlike what the AIDS scientific hubris trope would suggest, the Reagan administration did not cut research funding as well. On the contrary, Reagan oversaw a period of massive investment in biomedical research. And although the Reagan administration emphasised that this investment was intended to lead to medical technologies with promising commercialisation prospects, basic research (that is, fundamental research into scientific theories, as opposed to applied research that directly seeks to develop practical technologies) saw the largest increase in funding.⁴⁰ The loss of public health infrastructure that facilitated the spread of the AIDS epidemic in the 1980s and 1990s was born out of a political hubris, not a scientific one. Infectious disease continued to be a focus of scientific interest in the 1970s even as political support for large scale public health projects dwindled.

First formulated by US economist Walt Rostow in 1960, the development theory argued that the economic modernity that Western countries enjoyed is achieved through a set series of historical stages and that the passage of Global South countries through these stages could be

³⁹ Timothy Conlan, *New Federalism to Devolution: Twenty-Five Years of Intergovernmental Reform* (Washington, DC: Brookings Institution Press), 152-153.

⁴⁰ G.A. Keyworth, "Four Years of Reagan Science Policy: Notable Shifts in Priorities", *Science* (1984) Vol. 224, Issue 4644, 9-13. DOI: 10.1126/science.224.4644.9.

hastened by US economic aid and capital investment.⁴¹ High modernism and the development theory became intertwined in the so-called “epidemiological transition theory.” First formulated by Abdel R Omran in 1971, the epidemiological transition theory was the expression of scientific optimism and perhaps hubris that later narratives about the AIDS epidemic target.⁴² Omran argued that human history could be divided into three periods: the “Age of Pestilence and Famine” (the pre-modern period when epidemics, famine and wars were the primary cause of mortality), the “Age of Receding Pandemics” (the period beginning, at different points in different countries, between the 1920s and the end of WWII when circulatory diseases and cancers start to be more significant mortality causes) and, finally, the “Age of Degenerative and Man-Made Diseases” (when infectious disease was no longer a significant contributor to human mortality) whose beginning was imminent.⁴³ Omran’s theory appealed to the ideology of high modernism, to perceptions that, at least in the Global North, infectious disease had easy, technological solutions. Omran updated his theory in 1983 and admitted that, even in the final third stage of human history, “communicable diseases” remained a significant cause of death and disability.⁴⁴ Although it enjoyed some success in the 1980s, Omran’s theory was almost universally condemned in the 1990s.⁴⁵ And, while significant advances in the control of infectious diseases did take place in the Global North (as I have detailed), progress on public health issues in the Global South was much slower and this was relatively widely recognised by the 1970s when the failure of malaria and tuberculosis eradication campaigns was clear.

The Global South suffered from neoliberalism-driven cuts to public health as well, a process particularly sped up in the 1990s as the AIDS epidemic was spreading quickly in Africa. After the collapse of the Soviet Union (which provided significant amounts of technical and financial support

⁴¹ Walt Rostow, *The Stages of Economic Growth: A Non-communist Manifesto* (Cambridge, 1960).

⁴² Abdel R Omran, “The epidemiologic transition. A theory of the epidemiology of population change.” *Milbank Mem Fund Q.* 1971 Oct; 49(4):509-38.

⁴³ Omran, “The Epidemiologic Transition.”

⁴⁴ Omran, “The Epidemiologic Transition,” 313.

⁴⁵ Ailiana Santosa, Stig Wall, Edward Fottrell, Ulf Högberg, & Peter Byass, “The Development and Experience of Epidemiological Transition Theory over Four Decades: A Systematic Review” *Global Health Action* 7, no. 1 (2014): 23574 doi:10.3402/gha.v7.23574

to countries in the Global South), Global South countries became increasingly reliant on the International Monetary Fund (IMF) and the World Bank, both of which made international loans conditional on cuts to public services, including public health programmes. Simultaneously, neoliberal belief in the need to create a “civil society” in Global South countries that mirrored Western NGOs in order to achieve “development” meant that in the 1990s, Western international aid funding for healthcare services increasingly went to international NGOs rather than centralised, state-run healthcare systems.⁴⁶ Critical literature on the rise of foreign health aid in the Global South, particularly in African countries, has shown that shifting healthcare provision to international NGOs from centralised government funded providers almost inevitably leads to poorer healthcare provision and worsening public health.⁴⁷

Risk factor and neoliberalism

The term “risk factor” was coined in 1961 in an article analysing the influence of environment and lifestyle on heart disease incidence.⁴⁸ Risk factor changed older disease causation models such as the germ theory (discussed in Chapters 3 and 4). Instead of identifying distinct factors necessary and sufficient in themselves to cause disease, risk factor theories of disease causation posit that disease causation is influenced by a large number of factors that do not necessarily cause disease in individuals, but whose role in disease causation can be observed in large epidemiological studies.⁴⁹ The discovery of “risk factors” was accompanied by a strong shift towards the “risky lifestyles framework” in public health policy in the early 1970s, particularly in the US.⁵⁰ Within the risky lifestyles framework, disease causation was attributed to risky lifestyle choices (such as having unprotected sex or eating unhealthy foods) and individuals became the locus of both

⁴⁶ Meredith Turshen, “Privatizing Health Services in Africa” (New Brunswick: Rutgers, 1999);

⁴⁷ See, for example: Andrew Green & Ann Matthias *Non-Governmental Organizations and Health in Developing Countries* (New York: St Martin's Press, 1997).

⁴⁸ W Kannel, et al., “Factors of risk in the development of coronary heart disease: six-year follow-up experience – the Framingham study,” *Ann Intern Med.* 1961 Jul; 55:33-50. DOI: 10.7326/0003-4819-55-1-33

⁴⁹ Beverly Rockhill, “The Privatization of Risk” *American Journal of Public Health* 91, no. 3 (2001): 365-8. p.366

⁵⁰ Nathanson, *Disease Prevention as Social Change*, 6; James Pfeiffer, “International NGOs and Primary Health Care in Mozambique: The Need for a New Model of Collaboration,” *Soc Sci Med.* 2003 Feb;56(4):725-38.

disease causation and disease prevention responsibility.⁵¹ As has been the case since the introduction of the first public health policies, shifts in policy were driven both by new medical understandings and by practical considerations. A greater focus on risk factor disease causation models fitted the political needs of a desire to cut public spending born out of emergent neoliberalism in the late 1970s and 1980s. Issuing public health advice that encourages people to have less unprotected sex or eat less salt is substantially cheaper than improving urban sewage systems or funding free clinics. Moreover, risk factor disease causation models, particularly in their popular interpretation, emphasise that disease is born out of a pattern of behaviour that is fundamentally within the individual's control thus individuals, not the state, bear responsibility for the prevention of disease. This new understanding of disease prevention allows the state to retreat out of the private lives of liberal subjects in order to allow them to manage their own health. Anxieties about (re)emerging infectious disease have not prompted a return to large scale public health, instead the trend towards health self-management and away from large scale public health has only intensified since the 1980s. As the following section will show, proponents of (re)emerging infectious diseases as a distinct medical phenomenon in need of awareness and funding generally acknowledge the need for some kind of public health programmes, but their focus is increasing surveillance and preventing the flow of disease from the Global South to the North.

In 2000, the US National Intelligence Agency (NIA) published a report on "global infectious disease threat and its implications for the United States."⁵² The NIA report was partly prompted by the January 2000 UN Security Council session devoted to HIV/AIDS as a security threat in Africa. At this special Security Council session, speakers from African countries argued that more public health programmes were necessary to combat the epidemic as well as more international funding to run these programmes, while Al Gore (the vice-president of the US at the time) promised that the US will invest \$50 million into "the vaccine fund for global vaccinations and immunisation" in order to speed

⁵¹ Nathanson, *Disease Prevention*, 6.

⁵² National Intelligence Agency (NIA), *The Global Infectious Disease Threat and Its Implications for the United States* NIE 99-17D, January 2000.

up the development and eventual distribution of HIV vaccines.⁵³ But, while the conceptualisation of HIV/AIDS as security risk in Africa prompted the NIA report, the report itself was concerned with the danger of the broader category of (re)emerging infectious diseases which, as discussed in the preceding section, was conceptualised in opposition to HIV/AIDS. The NIA report acknowledged that HIV/AIDS posed a continued threat global and US security, but it cited “the opinion of the US Institute of Medicine” that the next major infectious disease threat will be a “previously unrecognised pathogen.”⁵⁴ The NIA report warned that “[m]any infectious diseases [...] originate outside US borders and are introduced by international travellers, immigrants, returning US military personnel or imported animals and foodstuffs” (p. 6) and advocated for new, more effective global systems of surveillance and response to infectious diseases (p. 36). The NIA’s warnings about the danger of immigrants bringing new pathogens to the US occurred against the backdrop of a broader trend of tightening immigration restrictions in the 1990s driven by anxieties that the mass migrations of refugees out of the Global South in the 1980s and the collapse of the Berlin Wall signalled a more general breakdown of international borders and heralded the arrival of a new Globalised world.

Despite conspiracy theories that hypothesised otherwise, by the late 1990s AIDS was recognised as a specific US public health crisis created by specific circumstances and risks in the US. This recognition was achieved through the sustained activism of people with AIDS and their supporters who pressured the US government to recognise AIDS as a public health issue and allocate funding to a broad range of public health and research programmes. But, as public interest in AIDS waned in the late 1990s after the discovery of effective combination anti-retroviral treatments and, importantly, after many of the activist groups that kept AIDS in the public eye disbanded or scaled down their activities, a different kind of contagion narrative began to emerge. While the success of combination anti-retroviral treatments fulfilled the scientific optimism of the 1980s, the apparent containment of the AIDS epidemic (at least in the US) did not seem to assuage fears of contagion. On

⁵³ UN Security Council, “Security Council Holds debate on impact of AIDS on peace and security in Africa” Press Release SC/6781 10 January 2000. <https://www.un.org/press/en/2000/20000110.sc6781.doc.html>

⁵⁴ NIA, *Global Infectious Disease Threat*, 54.

the contrary, new narratives about the danger of other contagious diseases, particularly Ebola, re-emerged. And this time they were much more pessimistic about modernity and human progress than 1980s AIDS narratives were.

AIDS: An Epidemic of Signification

The name of the disease we now call AIDS itself reflects the uniquely fraught place it occupies in medical and cultural history. AIDS and HIV are often used synonymously or concurrently when referring to the epidemic, although the two are distinct medical appellations. HIV (Human Immunodeficiency Virus) refers to the virus that can, but not always does, cause AIDS (or acquired immunodeficiency syndrome). The distinct names for the pathogen, latent or benign infection and malignant disease is relatively exceptional in late 20th century medical taxonomy and illustrate the fraught history of the disease. "Syndrome" has a long history as a medical appellation roughly synonymous with "disease," but by the latter half of the 20th century "syndrome" stopped being an exclusively medical appellation and became a term used "to mean anything unusual, abnormal, bizarre, or humorous, whether medical, social behavioural, or cultural."⁵⁵ The term's connotations of complexity, vagueness and bizarreness encapsulate the medical and cultural response to the early years of the AIDS epidemic.

The first cases of what would later be identified as AIDS came to the attention of US medical professionals through report published in June 1981 in the newsletter of U.S. Centers for Disease Control and Prevention (CDC).⁵⁶ A small number of young gay men presenting with pneumocystis pneumonia (PCP), a relatively rare form of pneumonia caused by fungal infection that generally only occurs in people who are immunosuppressed, confounded medical professionals because their young patients appeared otherwise healthy. A second cluster of strange cases of young gay men sick with Kaposi's sarcoma, an equally rare form of skin cancer that also typically occurs in people who

⁵⁵ Stanley Jablonski, "Syndrome – A Changing Concept," *Bulletin of the Medical Library Association* 80, no. 4 (1992): 323-27.

⁵⁶ Center for Disease Control and Prevention (CDC), "Pneumocystis Pneumonia - Los Angeles," *Morbidity and Mortality Weekly Report* vol. 45,34 (1996): 729-33.

are immunosuppressed, suggest a strong link between the new disease and gay male communities. By June 1982, this link became solidified in medical and popular imaginations after the publication of a report on a cluster of patients in Southern California that suggested that the new disease was a sexually transmitted infection transmitted between gay men. Steven Epstein has highlighted that much of the speculation about the origin and nature of AIDS in the early years of the epidemic was driven by assumptions about the unhealthfulness of gay men's "fast lane lifestyle" made popular by research into venereal disease transmission among gay men published in the 1970s.⁵⁷ In August 1982, the CDC officially identified the disease as Acquired Immune Deficiency Syndrome (AIDS). Despite this attempt to give the disease a new, "neutral" name, appellations that highlighted its connection to gay communities, including "Gay Plague," "Gay Cancer" and Gay-Related Immune Deficiency Syndrome (GRIDS), continued to be used in popular as well as medical publications.⁵⁸

Throughout the first decade of the epidemic, the CDC struggled to define AIDS and issued multiple, revised definitions. After the first definition in 1982, the CDC issued new definitions in 1985, 1987 and 1992. In 1982, there was no known specific cause for AIDS and, thus, no specific diagnostic test and the CDC first defined AIDS through infections with exceptionally rare opportunistic infections. The first definition stated that AIDS is diagnosed through the presence of "a disease, at least moderately predictive of a defect in cell-mediated immunity, occurring in a person with no known cause for diminished resistance to disease."⁵⁹ Diseases used for this diagnosis included Kaposi's sarcoma, pneumocystis pneumonia and other serious opportunistic infections.⁶⁰ The CDC argued that they could not define AIDS too broadly because this would lead to inaccurate epidemiological data and claimed that its definition of AIDS was merely a "surveillance case

⁵⁷ Steven Epstein, *Impure Science*, 50 also see: Steven Epstein, "Moral Contagion and the Medicalizing of Gay Identity: AIDS in Historical Perspective," *Research in Law, Deviance and Social Control* 9 (1988): 3-36.

⁵⁸ Nicky Dozier, Ron Ballentine, Stephen C. Adams, and Kingsley C. Okafor. "Acquired Immune Deficiency Syndrome and the Management of Associated Opportunistic Infections." *Drug intelligence & clinical pharmacy* 17, no. 11 (1983): 798-807.

⁵⁹ Center for Disease Control (CDC), "Update on Acquired Immune Deficiency Syndrome (AIDS) - United States," *Morbidity and Mortality Weekly Report*, 31 (Sept. 24, 1982): 507-8, 513-4.

⁶⁰ CDC, "Update."

definition that it should not be used to make decisions about clinical treatment.⁶¹ In practice, as Carol Levine and Gary L. Stein have shown,⁶² the CDC's definitions shaped how AIDS was defined by clinicians, researchers, activists, journalists, politicians, healthcare and social services providers because they were the only authoritative conceptualisation of the disease. Although there is no clinical reason why AIDS would cause otherwise rare and unusual opportunistic infections, as opposed to more ordinary ones, AIDS was imagined as a new disease unprecedented in its severity and manifestations and it became strongly linked to exceptional opportunistic infections. It also remained, even after the adoption of the AIDS appellation, strongly associated with gay young men. Other groups of patients with the disease, such as women and intravenous drug users, were less likely to become ill with the "classic" AIDS opportunistic infections, but despite activism from people with AIDS, the CDC only revised their definition in 1985 after a number of tests for HIV antibodies (with varying levels of accuracy) were developed. Under the new definition, AIDS was defined as present in persons with positive HIV antibody test results and at least one of a longer list of opportunistic infections and cancers.

The naming of the virus responsible for AIDS was even more fraught than that of AIDS. Viral infection was posited as a possible cause for AIDS almost as soon as the disease was identified,⁶³ however research into viral causes of AIDS was hampered by the relative absence of technologies capable of detecting retroviruses and assumptions about how viral infections "should" behave. For example, scientists assumed that whatever pathogen was causing AIDS in humans would also cause disease in other animals, but repeated attempts to cause AIDS in non-human animals (by injecting animals with tissues collected from people with AIDS) led nowhere. Although other species are infected by other immunosuppressant viruses, HIV itself does not cause AIDS in non-human species in ordinary circumstances.⁶⁴ The early search for the causative agent of AIDS were also hampered by

⁶¹ Carol Levine & Gary L. Stein, "What's in a Name? The Policy Implications of the CDC Definition of AIDS" *Journal of Law, Medicine and Ethics* 19, no. 3-4 (1991): 278-290.

⁶² Levine, "What's in a Name?"

⁶³ Epstein, *Impure Science*, 48.

⁶⁴ Epstein, *Impure Science*, 76.

the assumption that AIDS was a disease that primarily affected and was transmitted through blood. Particularly after 1982, when there was strong evidence that blood donations were one of the ways the disease could be transmitted, numerous attempts were made to isolate a pathogen in the blood of people with AIDS. However, these attempts failed because only a relatively small amount of the active virus is present in the bloodstream of people with AIDS.

The virus responsible for HIV was eventually discovered because a team of researchers at the Pasteur Institute in France tested lymph tissue from gay male patients not with AIDS, but with “lymphadenopathy syndrome,” a condition of chronically swollen lymph glands that some suspected might be linked to AIDS.⁶⁵ The failure of these experiments shows how much assumptions about how experimental medical science and contagious diseases are “meant” to work shapes our scientific and lay understandings of disease. HIV was eventually identified by competing teams of scientists in France and the US between 1983 and 1985. A central issue between the two teams was a patent filed by the American team (led by Robert Gallo) on behalf of the US government in 1984 for a diagnostic test that detected virus antibodies in blood samples. Pasteur Institute had already filed for a patent on a nearly identical test in France in September 1983 and in the US in December 1983. Given the huge need for a diagnostics test, the patent was expected to earn the US government at least \$5 million a year. In May 1986, the International Committee on Taxonomy of Viruses decided to create a new name for the virus, HIV (Human Immunodeficiency Virus) in order to resolve at least the debates over its name, if not those over who discovered it. After several years of controversy and legal action, Gallo finally admitted in 1991 that the virus he claimed to have identified in 1984 was, in fact, a sample that the Pasteur Institute had sent to him. Steven Epstein has analysed the lengthy process through which Robert Gallo and other AIDS scientists leveraged their professional networks in order to make HIV as cause of AIDS accepted medical knowledge.⁶⁶

⁶⁵ Epstein, *Impure Science*, 69-70.

⁶⁶ Epstein, *Impure Science*.

Ebola, AIDS & Outbreak Narrative

The fraught position of the HIV/AIDS epidemic in outbreak narratives is evident in the influence of Randy Shilts on two of the most influential popular scientific outbreak narratives: Laurie Garrett's *The Coming Plague: Newly Emerging Diseases in a World Out of Balance* (1994) and Richard Preston's *The Hot Zone: A Terrifyingly True Story* (1994). Published within months of each other, both bestsellers are indebted to Randy Shilts's *And The Band Played On* (1987). Like Shilts, Garrett and Preston combine the conventions of science journalism (including copious references to interviews with scientists and scientific literature) with more exciting fictional genres. But, while Shilts's book (for the most part) embraces melodrama as its main mode, Garrett and Preston create the "formula" of the outbreak narrative by combining science journalism with medical thriller, horror and science fiction in a manner that Shilts had only hinted at. Like *Emerging Infections* (1992), Garrett's *The Coming Plague* is a compendium of the dangers of a large number of new and (re)emergent diseases. These include swine flu, legionnaires' disease, hantaviruses and toxic shock syndrome, but the volume's most prominent focus is the global emergence of hemorrhagic fevers (including, lassa fever, Ebola, Bolivian hemorrhagic fever and Marburg virus) which is chronicled over multiple chapters. Garrett argued that the (re)emergence of these dangerous viruses in the Global South is due to an imbalance in "Earth's ecology," caused primarily by development in the Global South. Garrett's two long chapters on HIV/AIDS also chronicle at length theories about the disease's African origin and its spread among Global South countries.

Preston's book opens with a relatively conventional "Patient Zero" narrative, that transforms a minor Marburg hemorrhagic fever outbreak in Kenya in 1980 into something a horror / science fiction story of the explosion of a "human virus bomb."⁶⁷ To add drama and horror, Preston invents Charles Monet: French expat, amateur naturalist and the sole casualty of the Marburg virus outbreak. Monet becomes inflected after visiting Kitum Caveat, an eerie labyrinth of crystallised rain

⁶⁷ Richard Preston, *The Hot Zone*, (New York: Anchor Books, [1994] 1995), 23.

forest, where the virus “acquired Charles Monet as a host.”⁶⁸ As the alien “life form” multiplies, Monet becomes increasingly zombie-like: “[his] face lost all appearance of life and set itself into an expressionless mask, with eyeballs fixed, paralytic, and staring.”⁶⁹ Eventually he is little more than an “automaton,” with only “the deeper parts of the brain stem (the primitive rat brain, the lizard brain) still alive and functioning.”⁷⁰ Monet is able to walk and speak to others even after becoming this “automaton” so, even within the logic of Preston’s narrative, the validity of these medical details is highly questionable. But the obsessive focus on Monet’s body as a site of science fiction horror dehumanises him, as well as all other potential carriers of viral infections. Similarly, Preston claims that as Monet underwent “extreme amplification” (a term Preston claims to have borrowed from “military experts,” but which does not seem to appear anywhere other than in Preston’s work) and that his body became little more than liquified flesh swimming with “virus particles.”⁷¹

Although only one person is infected by the virus (Monet), *The Hot Zone* plays up the danger of contact with Monet’s infectious body and the role of modern technologies in spreading the contagion. Monet’s infection during a trip to a national park signals the lack of natural demarcation between urban, rural and wild or uninhabited territories in Africa that took place due to urbanisation, while the spread of modern transport and medical technologies in the Global South made it possible for Monet to get onto a plane and barge into a modern emergency room and expose a large number of people to his contagion. Preston goes as far as to describe the virus “coming out of every orifice” of Monet’s body in order to find a new host.⁷² However, Marburg and other haemorrhagic fever viruses are transmitted through direct contact with mucous membranes (such as the eyes, nose or mouth) or broken skin, there is little need for the virus to seek out “orifices” to infect others, but this specific imagery shows the outbreak narrative’s debt to the narrative tropes established by AIDS, both Patient Zero and the danger of “orifices” prone to disease.

⁶⁸ Preston, *The Hot Zone*, 13-14.

⁶⁹ Preston, *The Hot Zone*, 14-15.

⁷⁰ Preston, *The Hot Zone*, 19.

⁷¹ Preston, *The Hot Zone*, 18-19.

⁷² Preston, *The Hot Zone*, 24.

As I have suggested before, although narrated as an emergent threat by outbreak narratives, Ebola actually “emerged” before AIDS and the Ebola outbreaks of the 1970s had some influence on AIDS narratives. Ebola haemorrhagic fever was first identified in Zaire and Sudan in the summer of 1976. The 1976 outbreak was relatively limited: there were only around 600 reported cases (318 in Zaire and 284 in Sudan).⁷³ However, the disease’s high mortality rate (in Zaire, 88% of people infected died, including 11 of the 17 medical practitioners in a hospital that treated the infected patients) created significant concern about the disease and, particularly, the perceived newness of the Ebola virus. A New York Times story on the “deadly African virus” published in January 1977 was widely syndicated by US newspapers.⁷⁴ The article focused largely on describing the heroic efforts of the World Health Organisation to prevent the spread of the epidemic and understand the newly discovered Ebola virus.⁷⁵ The article was written by Lawrence K. Altman (*The New York Times* medical correspondent since 1969) and, not coincidentally, he also covered the AIDS epidemic for *The New York Times* throughout the 1980s. Altman is careful to note that the WHO has committed to pay up to \$200,000 to evacuate its scientists if they become ill while in Zaire or the Sudan. The article also references that “[e]pidemiologists believe that it is likely that the disease was spread by rodents” and that scientists are collecting tissue samples from “rats, other rodents, bats and 16 monkeys” in order to understand which animals carry the disease.⁷⁶

Much of the reporting on the AIDS epidemic in the early years was part of the science beat and science correspondents were often tasked with writing about the epidemic’s social and political aspects.⁷⁷ Thus, it is perhaps not surprising that, although the 1976 Ebola outbreak received relatively modest media coverage in the US, early AIDS narratives often make references to Ebola.

⁷³ Joel G. Breman et al, “The Epidemiology of Ebola Haemorrhagic Fever In Zaire, 1976,” *Journal of Infectious Diseases* (2016) Oct 15; 214(Suppl 3): S93–S101, doi: 10.1093/infdis/jiw207; WHO, “Ebola Haemorrhagic Fever in Sudan: 1976 Report of a WHO/International Study team” *Bulletin of the World Health Organization*, 6, no. 2 (1978): 247-270.

⁷⁴ Lawrence K. Altman, “HEALTH TEAM FIGHTS DEADLY AFRICAN VIRUS,” Jan 25, 1977, *The New York Times*. Accessed November 2019. <https://www.nytimes.com/1977/01/25/archives/health-team-fights-deadly-african-virus-medical-personnel-risk.html?searchResultPosition=2>

⁷⁵ Altman, “HEALTH TEAM.”

⁷⁶ Altman, “HEALTH TEAM.”

⁷⁷ Kinsella, *Covering the Plague*, 95-97.

For example, in “Hunting for the Hidden Killers: AIDS,” Walter Isaacson mentions that CDC’s “disease detectives” work on “some of the world’s most lethal microbes, including those that cause Lassa fever and Ebola virus, two maladies that produce severe internal bleeding and are native to Africa.”⁷⁸ Notably, Randy Shilts begins his account of the AIDS epidemic with the death of Dr Grethe Rask, a Danish doctor who worked in Zaire in the 1970s and died in 1977 from *Pneumocystis carinii*, one of the typical AIDS opportunistic infections (TBPO, 5-7). Shilts is careful to note that Rask worked “not far from Abumombazi,” one of the sites of the 1976 Ebola outbreaks (TBPO, 4). Shilts describes how “natives” were angry by foreign doctors banning “the traditional burials of the victims” and, clearly drawing a parallel with AIDS, he claims that the Ebola virus was spread primarily through “sex and blood” (TBPO, 4-5). Parallels between AIDS and Ebola were irresistible even before the African AIDS epidemic was identified because Ebola can so easily reflect stereotypes about Africa as site of disease and “primitive,” unhygienic habits that breed disease. After his description of the Ebola outbreak, Shilts muses about the likelihood of new mysterious viruses. Shilts writes,

[t]he battle between humans and disease was nowhere more bitterly fought than here in the fetid equatorial climate, where heat and humidity fuel the generation of new life forms. One historian has suggested that humans, who first evolved in Africa eons ago, migrated north to Asia and Europe simply to get to climates that were less hospitable to the deadly microbes the tropics so efficiently bred. (TBPO, 5)

Outbreak narratives effectively fulfil this quasi-apocalyptic vision. However, while Shilts frames Africa as the origin of new diseases simply because of its “fetid equatorial climate” (echoing 18th and early 19th century medical topography discussed in previous chapters), outbreak narratives portray (re)emerging infectious diseases as the inevitable consequence of progress in the Global South.

⁷⁸ Isaacson, “Hunting.”

Patient Zero & Immunity

The trope of “Patient Zero” is probably Shilts’s most enduring influence on outbreak narratives, although the trope has older origins in the myth of “Typhoid Mary.” However, unlike Mary Mallon (who underwent several attempts to reform her), Gaetan Dugas is beyond hope of reform throughout Shilts’s narrative. Wald’s account of Shilts’s creation of the “Patient Zero” trope by fictionalising the life of Gaetan Dugas, a Canadian airline steward who participated in a 1984 Centers for Disease Control and Prevent study on the epidemiology of AIDS, is comprehensive and I do not want to repeat the same analysis.⁷⁹ However, Wald emphasized strong links between Patient Zero to Typhoid Mary. It is important to note, however, that unlike Typhoid Mary (who was a healthy carrier of typhoid fever who infected the middle-class families she worked for), Gaetan Dugas is only a danger to his own community of gay and bisexual men, not to anyone outside of it. By 1987, when Shilts published *And the Band Played On*, cases of AIDS transmission through blood donations from gay donors were well known and Shilts devotes one of the chapters to these cases. Shilts could have created a “Typhoid Mary”-like myth out of these cases. Instead, throughout the book, Shilts attributes the AIDS epidemic to promiscuity within gay and bisexual male communities and Patient Zero is intended to reinforce this argument. “Patient Zero” is a myth about dangerous contagions within a relatively contained community of promiscuous gay and bisexual men. The immunity of heterosexuals from the dangers of Patient Zero reflects perceptions of the HIV/AIDS epidemic in the 1980s, but it also anticipates the emphasis on border quarantine in outbreak narratives.

As Patient Zero, Dugas is the true villain of Shilts’s account of the epidemic. According to Shilts, Dugas continued to use commercial bathhouses even after he became ill and had unprotected sex with countless men out a desire to prove that, even when he was sick, he was still “the prettiest one” (*TBPO*, 79). There is no evidence that Dugas played a particularly significant role in the US epidemic and the CDC’s March 1984 article following the study was not intended to prove otherwise. Nevertheless, Shilts writes a very compelling narrative about Dugas as the source of the

⁷⁹ Wald, *Contagious*, 213-63.

US epidemic. In the disturbing conclusion to his account of Dugas's life, Shilts acknowledges that Dugas's unique role is difficult to prove, but claims that

[i]n any event, there is no doubt that Gaetan played a key role in spreading the new virus from one end of the United States to the other. The bathhouse controversy, peaking so dramatically in San Francisco on the morning of his death, was also linked directly to Gaetan's own exploits in those sex palaces and his recalcitrance in changing his ways. At the time, Gaetan had been what every man wanted from gay life; by the time he died, he had become what every man feared. (*TBPO*, 439)

Although Shilts's cruel portrayal of Dugas places blame for the epidemic on him as a specific, particularly careless individual, Dugas is also the gay everyman of the 1970s. Shilts's narrative about gay and bisexual men creating a dangerous epidemic within their community through their carelessness and promiscuity was appealing not only because of homophobia (although homophobia undoubtedly had a large influence on the myth of AIDS as a gay disease), but because of changing disease causation models that emphasised lifestyle factors and individualised risks.

However, it would be a misleading to equate *And The Band Played On* only with its Patient Zero narrative. Although the book's early sections (between 1980 and 1983) are structured around Patient Zero and the developing outbreak of HIV/AIDS, Shilts then shifts focus to the efforts of activists and medical specialists to halt the epidemic and find a cure. Unlike the outbreak narratives of the 1990s, which consistently portray contagion as an issue of improper containment, *And The Band Played On* is deeply invested in the question of how to treat people already infected with HIV. Shilts passionately chronicles these efforts and the book ends with a number of small victories against the epidemic in 1987: Ronald Reagan and George Bush's speeches on HIV/AIDS and FDA's approval of AZT (azidothymidine), the first treatment with real promise to extend the lives of patients with AIDS (*TBPO*, 596-601). Given that it ends with the tentative promise that AZT will bring a form of resistance to those infected with HIV, we might read *And The Band Played On* as a

contagion narrative with an acquired immunity narrative thread, in many ways similar to the liberal anti-quarantine narratives of the 19th century. Despite his oftentimes deeply problematic portrayal of promiscuity within gay and bisexual communities, Shilts represents gay and bisexual communities as capable of change and reform. Moreover, Shilts is highly critical of the kind of nationalism that is reinforced by the pro-quarantine themes of the outbreak narrative. This is, perhaps, most obvious in the extensive meditation on the political future of the gay liberation movement and the loss of some of its radical optimism due to the epidemic. Shilts imagines this through the figure of Cleve Jones (a prominent activist in the gay liberation and people with AIDS movements):

In years past, Cleve and other citizens of Castro Street had looked ahead to a time when they had rooted out prejudice against gay people altogether and healed the lives that the prejudice had scarred. They might be old men by then, but they would be able to entertain each other with reminiscences of the old days when they had all believed they could change the world, and know that to a certain extent, they had. Many of those people were dead now, and Cleve accepted that most of his friends would be dead before they reached near old age. What hadn't changed for Cleve was the dream itself; what they had fought for, what Harvey Milk had died for, was fundamentally right, Cleve thought. It had been a fight for acceptance and equality, against ignorance and fear. It was that fight that had brought Cleve to Washington on this day. The numbers of AIDS cases measured the shame of the nation, he believed. The United States, the one nation with the knowledge, the resources, and the institutions to respond to the epidemic, had failed. And it had failed because of ignorance and fear, prejudice and rejection. The story of the AIDS epidemic was that simple, Cleve felt." (*TBPO*, 601)

This brief summary of the “simple” story of the AIDS epidemic highlights the many ways in which *And The Band Played On* deviates from the formula of the outbreak narrative. Although Wald has claimed that HIV/AIDS cannot be enclosed within an outbreak narrative because the epidemic defies any sense of “projected closure,” this is exactly what Shilts’s conclusion achieves.⁸⁰ Moreover, Shilts’s account also deviates from the outbreak narrative by so explicitly imagining the threat of the epidemic not only firmly situated within the nation, but caused by the nation’s shameful commitment to exclusive politics. Consistently, throughout the outbreak narratives of the 1990s, the threat of contagion is contained by social and geographic borders. The location of contagious dangers outside the nation, particularly in the Global South, reflects increasingly tense attitudes towards development and the Global South under neoliberal biopolitics.

Optimism about science’s power to prevent or at least control epidemic disease can be seen in the prevalence of imagery from Michael Crichton’s science fiction thriller, *The Andromeda Strain* (1969), in many early AIDS narratives. The presence of this imagery has often been interpreted in negative terms by AIDS activists. Donna Haraway and Paula Treichler have both criticised the prevalence of aggression and war metaphors in modern immunology and, in particular, the move of immunology discourse to “the realm of high science” through its use of the language of post-war communication warfare.⁸¹ As Haraway notes, in early scientific AIDS narratives, the disease is a form of “information malfunction or communication pathology,” not a hostile viral soldier, but a kind of malicious communication glitch.⁸² This language of communication technology malfunction recalls “high science” and postmodern warfare, as Haraway and Treitcher note, but it also recalls the language of science fiction. This is particularly notable because the popularity of science fiction grew steadily after the Second World War and science fiction films, in particular, enjoyed a period of sustained success in the late 1970s and early 1980s. *Star Wars* (1977, dir. George Lucas) and *Close Encounters*

⁸⁰ Wald, *Contagious*, 216-17.

⁸¹ Paula Treichler, *How to Have Theory*, 31-33; Haraway, “The Biopolitics of Postmodern Bodies.”

⁸² Haraway, “The Biopolitics of Postmodern Bodies,” 211-213.

of *the Third Kind* (1977, dir. Steven Spielberg), two of the early box-office hits of this period, imagined a future of communication technology progress and alien warfare for their audiences.

The Andromeda Strain (1969) did not enjoy quite as much popular success, but its plot about a rapidly mutating alien bacteria (code named “Andromeda”) that spreads and kills rapidly by infecting the bloodstream of human beings echoed so many AIDS narrative tropes that “Andromeda Strain” quickly became almost a by-word for AIDS. For example, a New York Times article from February 1983 (one of the first on the epidemic published in the paper) quotes Dr Abe M. Macher (infectious disease specialist at the NIH) saying, “[w]hen people discuss this syndrome at scientific meetings, it sounds like something out of *The Andromeda Strain*.”⁸³ Moreover, Treichler lists “An Andromeda strain with the transmission efficiency of the common cold” as number 9 on her list of 38 separate narratives or meanings that AIDS has generated.⁸⁴ Although Treichler provides sources for some of the more outrageous AIDS narratives (such as conspiracy theories about the disease being caused by a temporary exhibition of items from King Tut’s grave), Treichler does not cite a source for the Andromeda narrative, likely because references to Crichton’s novel were so widespread. And, while many references to *The Andromeda Strain* in AIDS narratives do little more than draw parallels between HIV and Crichton’s alien bacteria, a surprisingly large number of AIDS narratives cite the novel as an authoritative source of information on scientific processes.

Walter Isaacson’s “Hunting for the Hidden Killers: AIDS,” for example, begins with an epitaph from *The Andromeda Strain*,

They could not afford to jump to conclusions – any conclusions. Their only hope was to be grindingly, interminably thorough. Otherwise, they could pursue a course of investigation for hours or days, only to find it ended nowhere.⁸⁵

⁸³ Henig, Robin Marantz. “AIDS: A New Disease’s Deadly Odyssey,” *New York Times Magazine* (February 6, 1983).

⁸⁴ Treichler, *How To Have Theory*, 12.

⁸⁵ Isaacson, “Hunting.”

This section describes the thorough research process Peter Leavitt and Jeremy Stone (two of the scientists of *The Andromeda Strain*) undertook in order to identify the pathogenic agent of the mysterious epidemic they are investigating. Part III of Randy Shilts's *And The Band Played On* (the chapter that narrates with the first reported cases of the disease in the US) similarly starts with a lengthy quotation from Crichton's novel. The quotation, from *The Andromeda Strain*'s acknowledgements section describes the Andromeda strain crisis as a "scientific crisis" whose story must be told because the US "supports the largest scientific establishment in the history of mankind" and new discoveries with "important political and social overtones" are constantly made (TBPO, 51). The quote ends with a warning that the public must be made aware of the circumstances surrounding the Andromeda strain because "[i]n the near future, we can expect more crises on the pattern of Andromeda" (TBPO, 51).

The appeal of *The Andromeda Strain* as a source of authoritative scientific comes partly from the repeated narratorial insistence on realism in the book. The novel's acknowledgement section, for example, apologises for the complicated scientific issues the novel represents in full technical detail:

[t]his is a rather technical narrative, centering on complex issues of science. Whenever possible, I have explained the scientific questions, problems and techniques. I have avoided the temptation to simplify both the issues and the answers, and if the reader must occasionally struggle through an arid passage of technical detail, I apologize.⁸⁶

The Acknowledgements also contain a long list of invented military and scientific experts who, the narrator claims, consulted on the book to ensure its accuracy. Like Crichton's other novels (including the hugely popular *Jurassic Park* (1990) and *The Lost World* (1995)), *The Andromeda Strain* emphasize the plausibility of its scientific speculations, perhaps as a marketing strategy to set

⁸⁶ Michael Crichton, *The Andromeda Strain* (New York: Ballantine Books, [1969] 1993), 5. All further references to this text are from this edition and are given parenthetically.

Crichton's work apart from more mainstream science fiction. What is notable is that, although *The Andromeda Strain* could be read as an early example of an outbreak narrative, a book ostensibly about contagion and alien life, the "scientific questions" it explores relate more to communication and containment / sterilisation technologies than with microbiology. Although the novel begins by describing the outbreak of the Andromeda strain in the small town of Piedmont, Arizona, the plot quickly shifts focus to the scientists tasked with investigating Andromeda and finding a solution to the epidemic. Central to the plot is "Project Wildfire," a secret military research project intended to solve "the question of contamination" with alien micro-organism when human space technologies return to Earth after their missions. The project's laboratory, built in 1966 in the middle of the Nevada desert, is the site of the discovery of the true nature of Andromeda as well as of the potential disastrous spread of the bacteria (which is stopped at the last moment by the novel's hero, Dr Mark Hall). The narrative relishes in describing in detail the advanced technology of the lab and the complete isolation from the outside world this technology achieves:

[t]he plan [for the laboratory] consisted of a conical underground structure with five floors. Each floor was circular, with a central service core of wiring, plumbing and elevators. Each floor was more sterile than the one above; the first floor was nonsterile, the second moderately sterile, the third stringently sterile, and so on. Passage from one floor to another was not free; personnel had to undergo decontamination and quarantine procedures in passing either up or down. (TAS, 43)

The lab is served by a "large computer complex for data analysis" which can serve all levels of the lab at the same time because "for biologic problems, real time was unimportant in relation to computer time" (TAS, 87). This computer has advanced capabilities and is able to carry out advanced medical testing and diagnostics, carry out experiments, analyse different types of data and serve as a voice commanded personal assistant with a "luscious" voice, all at the same time. The Wildfire lab is also

equipped with advanced data visualisation technologies, including several robot-controlled light and electron microscopes and X-ray crystallography machines. These cutting-edge visualisation technologies are what allows the scientific team at Wildfire to identify Andromeda, while more typical medical experiments with animals have misleading results and disastrous consequences. Andromeda mutates in the animal autopsy room and breaches rubber isolation units of the lab because the bacteria is allowed to grow rapidly in tissue samples. The novel goes so far as to suggest that Andromeda itself could be a communication technology. Stone and Leavitt discuss whether Andromeda is not an attempt by an alien culture to “formally announce their existence” by sending a microbial organism to Earth that would have the potential to “grow into a complete communicating mechanism” once they reach Earth (TAS, 223). The novel does not resolve the mystery of whether this is what Andromeda is intended to do, but Andromeda looks like a miniature, sophisticated computer (it is “a perfect, six-sided hexagon, [...] interlocked with other hexagons on each side”), which encourages readers to speculate that it might be a technology rather than a naturally evolved organism (TAS, 220). Moreover, Wald argued that the visualisation technologies that form much of the focus of the outbreak narrative only make sense within a larger story of social belonging, they cannot “account for the spread of disease without registering the interactions that bear witness to the connections of human communities, which are conceived simultaneously on local, national, and global scales. The outbreak narrative manages the consequences, as it makes sense of, what the communicable disease makes visible”⁸⁷. This is precisely what visualisation technologies do not do in *The Andromeda Strain*. The novel’s epidemiologist is largely redundant as the Andromeda pathogen never escapes from the first human community it hits and is never transmitted between humans.

The Andromeda Strain ends with Dr Mark Hall’s heroic efforts to defuse a nuclear bomb set to destroy Wildfire lab and the release of Andromeda into the upper atmosphere of the Earth where the bacteria is happy to live unperturbed as long as humans leave it alone. Although the novel echoes Cold War panics about nuclear war, its narrative of scientific advancement and modernity is

⁸⁷ Wald, *Contagious*, 39.

relatively positive. Although the novel warns of possible future scientific crises, its ending also expresses hope for the restoration of a natural balance between humans and the pathogenic agents and the triumph of scientific heroism. This scientific optimism, as well as the innovative portrayal of an alien infection, made the novel so appropriate as a trope in early AIDS narratives. It is notable that the 2008 TV miniseries “reimagination” of the novel (also titled *The Andromeda Strain*) changes elements of the plot to tell a much more pessimistic narrative about human progress and technology. In the 2008 miniseries, Andromeda does not move to the upper atmosphere on its own. Instead of collaborating with the narrator to produce a scientific account of the crisis, in the miniseries the narrator (a journalist called Jack Nash) is hunted by military experts who want to cover up the crisis. Moreover, the outbreak is resolved not by the removal of Andromeda to the upper atmosphere (where it can peacefully co-exist with humans), but by scientists who discover that Andromeda’s biology does contain a messenger from an alien life form and that its message is that Andromeda is vulnerable to a specific species of earthly bacteria that only grows in underwater volcanos (*Bacillus infernus*). This would be an optimistic enough resolution, but the last episode of the miniseries reveals that the US government kept Andromeda samples in space and that a more virulent outbreak of Andromeda disease will take place in the future when environmental degradation will kill off all remaining reservoirs of *Bacillus infernus*.

The need for a new, more pessimistic ending in 2008 illustrates changing narratives about contagion and its relationship to human progress and modernity. Although the Andromeda strain became almost a by-word for AIDS in the 1980s, it is also notable that it was not adopted as a more general metaphor for (re)emerging infectious diseases. It is because, even in the most pessimistic version of the novel, Andromeda is a highly technically advanced virus, a sophisticated piece of communication technology. The villain of (re)emerging infectious diseases is the opposite of this advance technology – it is a primitive pathogen (re-)awakened by the progress of technology and its devastating infection proves once and for all that technological progress is meaningless. Although medical scientists warned of the danger of the (re)emergence of a large range of pathogens, Ebola

has captured the imagination of (re)emergence fears and features in more outbreak narratives than any other disease. Ebola is the opposite of Andromeda, it is a “primitive” disease that emerged because modernity attempted to penetrate where it has no place: “primitive” Africa.

Crichton peppers *The Andromeda Strain* with several anecdotes about imagined technological innovations, a technique he also uses in his other novels, perhaps most notably in *Jurassic Park* which imagines multiple innovations not only in the field of genetics, but of computer data storage and processing. One of the strangest anecdotes Crichton tells is that of the discovery of a universal antibiotic called Kalocin. Discovered in the 1960s, but kept secret by the US government, this universal antibiotic has the ability to “destroy all organisms built on a unicellular structure, or less” without affecting multicellular organ systems (TAS, 259). Kalocin is, thus, not only a universal antiviral and antibiotic, but a universal cure for cancer. Unfortunately, however, anyone who stops taking the drug dies within “six hours” of their last dose because Kalocin upsets the immunitary “balance” between humans and pathogenic micro-organisms that had evolved over many centuries. Crichton’s explanation for why Kalocin withdrawal must lead in death is shockingly flimsy, the novel states that the drug opens “the way to superinfection, the problem of new organisms, bearing new diseases” (TAS, 260). The drug is considered so dangerous that it cannot even be taken as treatment for the Andromeda Strain, the deadly alien contagion at the centre of the novel. But the Kalocin anecdote points to the ways in which *The Andromeda Strain* interrogates what is necessary to achieve immunity within a Cold War context obsessed with nuclear war. It is not a coincidence that the novel’s protagonist is forced to compete against time to disarm a nuclear bomb specifically. The novel is suffused with questions of responsibility, rationality and universal death – its “single man” hypothesis is also a testament to this preoccupation. The Andromeda Strain is alien to the world of the novel, but it is narrated in such unambiguously science fictional terms that race/migration status are impossible to assign to it.

Wald repeatedly cites from popular scientific accounts of (re)emerging infectious diseases, especially Garrett's *The Coming Plague*, as both sites of critique and reliable, entirely objective sources of information about the social changes that precipitated the 1990s rise in popularity of outbreak narratives. Like Garrett, Wald emphasises the influence of globalisation and, to a somewhat lesser extent, the HIV/AIDS epidemic in creating new anxieties about the borders of the nation and contagious disease.⁸⁸ Wald does not seem able to see outbreak narratives as anything other than inevitable responses to a natural fear of globalisation. Even her criticism of the rhetoric of disease originating in Africa/Asia as disturbing only goes so far as to say that this rhetoric "obscures the sources of poverty and of the "uneven development" that characterises globalisation."⁸⁹ In other words, Wald does not state that these places are not sources of infection, instead merely arguing that they are sources of infection through no fault of their own.

Throughout this chapter, I have attempted to stress that the distinction between HIV/AIDS contagion narratives and outbreak narratives is important because this distinction problematises attempts to narrate the AIDS epidemic as a "natural" source of generalised anxieties about contagion that, from the mid-1990s onwards, have been used to justify progressive surveillance and control of people from the Global South on the basis that the Global South is an inevitable source of disease. The next three chapters will demonstrate that the appearance of a new or re-emerging epidemic itself does not necessarily create contagion anxieties. Rather, throughout the 19th century, narratives about contagion in Britain were shaped by evolving conceptualisations of liberal individualism and the role of the modern state in the private life of its citizens. AIDS narratives and narratives of (re)emerging infectious diseases are similarly not rooted in inevitable fears of contagion, but in the discursive and material conditions of neoliberalism.

⁸⁸ Wald, *Contagious*, 37-38.

⁸⁹ Wald, *Contagious*, 45.

Chapter 2: The Gothic Dream of the Plague and Mary Shelley's *The Last Man* (1826)

"[w]hen disease, desolation, and death, begin to thicken around, and members of the medical faculty to share in the common calamity, reason becomes silent, and the phantom of contagion, like ghosts in darkness, takes undisputed possession of the unconfirmed mind."¹

"[t]he settlement of this question, especially if it should be established that the plague was epidemic and not contagious, would be of the highest importance to the interests of commerce, and the happiness of the world."²

This chapter will combine a historical examination of early 19th century anti-quarantine medical theories of the plague with a close reading of Mary Shelley's Gothic pandemic novel, *The Last Man* (1826), in order to demonstrate that a "reframing" of the plague in specifically Gothic terms was closely linked to the liberal project to shift the conceptualisation of the government's role in national and private health. Because it pre-dated any other legislation explicitly regulating public health, plague quarantine provided the ideological and structural basis for conceptualising health-based government interventions in the free market and private life in the early 19th century. Although the last known Black Plague epidemic in Britain ended in 1665, recurrent outbreaks in

¹ Charles Maclean, *Results of an Investigation Respecting Epidemic and Pestilential Diseases: Including Researches in the Levant Concerning the Plague* (London: Smith, Elder, and co. Cornhill, 1838), 77.

² *Hansard House of Commons Debates*, Vol. 39 cols. 425, 11 February 1819.

other European countries coupled with political instability prompted Parliament to pass successive Quarantine Acts regulating maritime trade and transport throughout the 18th century.³ This succession of Quarantine Acts might give the impression that government regulation of the movement of individuals and trade in the name of public health was already uncontroversial by the beginning of the 19th century, the period identified with the broader emergence of biopolitics. However, in the early decades of the century, a vocal anti-quarantine movement began to challenge the legitimacy of government interventions in the free market by attempting to popularise a Gothic narrative of the plague and plague quarantine as remnants of a Catholic, illiberal past. In this new Gothic imagination of the plague, the plague had never and will never be able to infect England because its civilised citizens and its cultivated atmosphere were already immune to the plague. Although the anti-quarantine movement had little success in changing quarantine legislation, they set the ground for the mid-century expansion of biopolitics into the lives and homes of working-class people by conceptualising resistance to disease as a property of individuals, rather than states. Whereas 18th century quarantine law conceptualised the state as a quarantine police tasked with containing contagion, the anti-quarantine movement succeeded in re-imagining liberal citizens themselves as the guardians of national health by imagining liberal subjecthood as impervious to ill-health (including contagion) through liberal self-surveillance and self-management. Written in the late 1820s as debate over the contagiousness of the plague and the necessity of plague quarantine was still ongoing, Mary Shelley's pandemic novel traces this transformation in the imagined role of the state in a contagion crisis.

The Last Man chronicles the sudden extinction of humanity through a plague pandemic alongside a liberal narrative of self-development of the novel's mysterious narrator and sole human survivor: Lionel Verney. The novel's perplexingly vague portrayal of the plague and of Lionel's apparent immunity to it have led critical readers to frame the novel through 19th century medical knowledge of communicable disease. Although Anne McWhir and Siobhan Carroll have argued in

³ Charles Mullett, "A Century of English Quarantine (1709-1825)," *Bulletin of the History of Medicine* 23 (1949); John Booker, *Maritime Quarantine: The British Experience, C.1650-1900* (London: Routledge, 2016).

favour of reading *The Last Man* as an explicitly anti-contagionist text, the stronger critical tendency has been to read the novel's pandemic plot as simply expressing widely felt anxieties over disease epidemics, particularly cholera and typhus.⁴ When the anti-contagionism of Shelley's writing is explored in detail by Peter Melville and Annika Mann, this anti-contagionism is linked only to the later miasmatic theories of "filth disease" of Thomas Southwood Smith and Edwin Chadwick.⁵ To date, no critical reading of *The Last Man* interprets it in relation to the Levantine plague and the plague quarantine debates of the early 19th century. Yet, the origin of the pandemic in Turkey, a location strongly associated with the Levantine plague (including during the 1819 inquiry), suggests a clear comparison between the Levantine plague and the novel's plague.⁶ Conversely, cholera was thought to be a disease unique to Southeast Asia specifically (not "the East" more broadly) during the first half of the 19th century.⁷ Moreover, reading the novel's plague as the Levantine plague entails much more than a slightly realignment of geography. I hope to show that *The Last Man* responds to political debate over plague quarantine and formulates immunity as a consequence of liberal individualism.

Often read simply as a pandemic narrative, *The Last Man* tells a complicated narrative of self-development. In particular, the novel vividly fictionalises many traumatic episodes in the lives of Shelley and her social circle and these autobiographical episodes are difficult to square with the novel's more obviously allegorical narrative about political change in the midst of a health crisis. However, the novel draws clear parallels between changes in modes of governance (ranging between monarchy, republicanism, democracy, theocracy, anarchy and including Lionel's own efforts to create an ideal society of isolated, small rural communities) and Lionel's efforts to direct his self-governance through the personal crises he encounters. The novel persistently returns to the

⁴ Anne McWhir, "Mary Shelley's Anti-Contagionism: *The Last Man* as "Fatal Narrative," *Mosaic: A Journal for the Interdisciplinary Study of Literature* (2002): 23-38; Siobhan Carroll, "Mary Shelley's Global Atmosphere," *European Romantic Review* 25, no. 1 (2014): 3-17.

⁵ Peter Melville, "The Problem of Immunity in *The Last Man*," *SEL Studies in English Literature 1500-1900* 47, no. 4 (2007): 825-846; Mann, *Reading Contagion*, 150-182.

⁶ For example: House of Commons, *Report from the Select Committee Appointed to Consider the Validity of the Doctrine of Contagion in the Plague*, Parliamentary Papers, 1819, 29-30.

⁷ Christopher Hamlin, *Cholera: The Biography* (Oxford University Press, 2006), 162-65.

questions of how to create a private, rational liberal self and how this rational self can manage traumatic experiences. Shelley not only reflects the liberal biopolitical discourses on the plague as Gothic, but echoes back disturbing tensions in the ideal of liberal selfhood and the ideological work the Gothic accomplishes within this ideal.

The final chapters of the book are particularly important to this reading of liberal individualism as source of immunity because they portray Lionel enjoying initial success in creating an ideal immunitary community among himself, Adrian and their two children (Clara and Evelyn). The novel states that the plague disappears from the world after all humans with the exception of Lionel, Adrian, Clara and Evelyn die. Yet, even this community is destroyed by disease when a “virulent typhus” seizes Evelyn, an episode that closely resembles the death of Shelley’s own son William in 1819.⁸ Evelyn’s death prompts Clara, Adrian and Lionel to sail to Greece and thus indirectly causes the deaths of Clara and Adrian in the shipwreck that echoes the deaths of Leigh Hunt and P.B. Shelley. Having described fiction as “wandering from all reality, lost itself in self-created errors” (*The Last Man*, 344) while his friends had still been alive, Lionel retreats in the world of Gothic Romance after becoming sole survivor. In nostalgic recollections of Ann Radcliffe’s Romances, Lionel discovers the Gothic as an aesthetic that can enable a contemplation of the past loss without dehumanisation. Lionel’s persistent appeals for readerly sympathy in this section can be read as an attempt to form the reader into the image of liberal selfhood now that Lionel has no political community left to shape. This narrative of political failure and personal survival exposes the tension at the heart of liberal biopolitics: between personal freedom and political organisation. In the broader context of the novel’s utilisation of the anti-quarantine movement’s embrace of the Gothic, this final nostalgic return to a seemingly apolitical Gothic of the 18th century poses a disturbing question about the political future of the Gothic mode. This political future will be further explored in Chapter 3 by tracing the welding of the Gothic mode to the language of social science

⁸ Mary Shelley, *The Last Man*, ed. Pamela Bickley (Hertfordshire: Wordsworth Editions, [1826] 2004), 347. All further references to this text are from this edition and are given parenthetically.

methodologies and the sanitary reform movement through the “domestication” and urbanisation of the Gothic in the 1830s and 1840s.

The first part of this chapter explores Parliamentary debates on plague quarantine in order to understand how early 19th century legislation intended to prevent epidemics was shaped by ideas of governance, freedom and the self-managing liberal self. The second part focuses on the representation of the plague in *The Last Man* and seeks to understand the medical and political resonances of this representation, while the third part analyses Shelley’s novel as a narrative of liberal development. The fourth and final part of this chapter discusses the representation of the reader in the novel and the centrality of reader affective response in Gothic Romance in order to argue that Shelley represents the affective experience of reading as a practice of liberal self-management.

Liberal Biopolitics

Since Erwin Ackerknecht proposed in 1948 that “all liberals” are suspicious of contagionism due to its associations with “bureaucratic powers,” critical literature regarded the elevation of anti-contagionist medical theories to state doctrine (through the mid-19th century “sanitary revolution”) as a result of the rise of liberalism in the early 19th century.⁹ The following analysis of Parliamentary debates on plague and smallpox quarantine in the first three decades of the century tells a more complex story about medical theories of contagion and the origins of liberal attempts to manage population health (or biopolitics). The early decades of the 19th century did see a redefinition of the meaning of governance (as largely intended to guarantee freedom from illegitimate authority) across the political spectrum in Britain.¹⁰ The specific reasons for this rise of liberalism in early 19th century Britain are beyond the scope of the current analysis,¹¹ but it is important to note that liberalism emphasises its origins as a distinctively modern mode of governance as opposed to

⁹ Ackerknecht, “Anticontagionism,” 9.

¹⁰ Goodlad, *Victorian Literature*, viii-ix.

¹¹ For a detailed exploration of the causes behind the rise of liberalism in 19th century Britain, see: William C. Lubenow, *Liberal Intellectuals and Public Culture in Modern Britain, 1815-1914: Making Words Flesh* (Woodbridge: Boydell Press, 2010), 9-27.

antiquated statist interventions in private life and relied on a reflexive, self-managing individual who can appropriately practice the freedom that liberalism guarantees.¹²

Although the early 19th century anti-quarantine movement sought to undermine contagionist medical theories, their anti-contagionist model for plague transmission was never fully accepted as medical knowledge. This is particularly obvious in the failure of anti-contagionists to persuade the 1819 Parliamentary inquiry into the validity of the doctrine of contagion (discussed in more detail below) that the plague is not contagious. In addition, although anti-contagionists successfully sowed doubts about the contagiousness of the plague, even they accepted the transmissibility of smallpox through person-to-person contact. Yet, despite the widespread belief in the contagiousness of smallpox, every legislative effort to regulate smallpox failed until the adoption of the 1840 Vaccination Act as part of a broader program of sanitary (implicitly anti-contagionist) legislation. The success of the mid-century sanitary reform movement's Gothic framing of contagion and "filth diseases" will be explored in Chapter 3. In this Chapter, I will examine the emergence of a new biopolitical conceptualisation of liberal selfhood shaped by the compelling anti-quarantine and anti-contagionist narrative of the plague as an illiberal Gothic threat. The paradox of the failure of plague anti-contagionism as medical theory and its success as political theory, coupled with the equally paradoxical failure of smallpox vaccine advocates to make the argument for inoculation regulation despite the acceptance of smallpox's contagionness point to the complex, occasionally paradoxical relationship between medical expertise and health policy. Although this thesis is not able to explore this relationship in the detail it deserves, the tense relationship between expert knowledge and policy will be a recurring theme throughout this thesis.

¹² Simon Gunn & James Vernon, eds., *The Peculiarities of Liberal Modernity in Imperial Britain* (Berkeley: University of California Press, 2011); Nikolas Rose, "Governing "Advanced" Liberal Democracies," in *Foucault and Political Reason: Liberalism, Neo-Liberalism, and Rationalities of Government*, eds. Andrew Barry, Thomas Osborne & Nikolas Rose (Abingdon: Routledge, 1996), 37-64, 41-2.

The Plague and the Gothic

Medical and political debate over the legality of quarantine erupted in the middle of the 1805 Gibraltar yellow fever epidemic. The 1800 Quarantine Act was intended to update quarantine regulation by replacing the patchwork of 18th century quarantine legislation with a single Act that allowed Parliament to enact quarantine measures against any “infectious Disorder of the Nature of the Plague.”¹³ Merchants and shipowners trading goods from Gibraltar argued that yellow fever was a distinct disease that did not have “the Nature of the Plague” and because of this their ships should not undergo quarantine.¹⁴ Parliament hastily repealed the 1800 Act and passed the nearly identical Quarantine Act of 1805 that resolved this debate by clarifying that quarantine could be used against “the plague, or any other infectious disease or distemper.”¹⁵ This, however, had only been the beginning of organised efforts to oppose quarantine legislation. The members of the Levant Company (merchants who traded goods from Mediterranean ports, including Italian, Spanish and Turkish ports) were particularly affected by quarantine legislation as cotton and wool imports from the Levant were thought to be main origin of European plague epidemics.¹⁶ The Levant Company and, to a lesser extent, the East India Company became vocal opponents of plague quarantine in the 1810s and pressured Parliamentary to carry out two special inquiries into the practice of quarantine, first on the contagiousness of the plague in 1819 and, later, in 1824, on the impact of quarantine on British trade. The work of anti-contagionist medical professionals, particularly Charles Maclean, played a large role in these legislative debates. And, although the 1819 and 1824 inquiries did little in the short term to sway dominant medical opinion away from the necessity of the practice of quarantine, they enabled anti-quarantine sentiments to gain popularity in the popular press.¹⁷

Rather than writing medical texts intended only for medical professionals, Charles Maclean seized

¹³ J.C. McDonald, "The History of Quarantine in Britain during the 19th Century," *Bulletin of the History of Medicine* 25 (1951): 22-44.

¹⁴ John Booker, *Maritime Quarantine*, 304.

¹⁵ *An Act for making further provision of the effectual performance of Quarantine 1805*.

¹⁶ Birsen Bulmuş, *Plague, Quarantines and Geopolitics in the Ottoman Empire* (Edinburgh: Edinburgh University Press, 2012), 50-57.

¹⁷ Catherine Kelly, "'Not from the College, but through the Public and the Legislature': Charles Maclean and the Relocation of Medical Debate in the Early Nineteenth Century," *Bulletin of the History of Medicine* 82, no. 3 (2008).

upon the Gothic mode as a means to communicate his new medical theories about the non-contagiousness of the plague during quarantine debates.

Charles Maclean

Maclean began his medical career as a surgeon employed by the East India Company in the 1780s and, when he left the company in 1796, he continued to work at the Calcutta General Hospital until 1798 when he returned to Europe.¹⁸ Maclean wrote several books detailing his anti-contagionist theories in this early period, including *A View of the Science of Life: On the Principles Established in the Elements of Medicine* (1801) which he co-wrote with John Brown.¹⁹ *A View* argued that only a small number of diseases, such as smallpox and measles, are truly contagious because contagious disease can only affect a person once and always manifests itself in the same way.²⁰ Instead, according to Brown and Maclean, most diseases thought to be contagious are actually caused by “excessive excitement” of the organs and could be cured with mercury treatments.²¹ Although Maclean is often discussed alongside miasmatic anticontagionists like Thomas Southwood Smith or Edwin Chadwick, his theories are best described as environmental rather than miasmatic.²² In fact, Maclean mocks the tendency of 18th century miasmatic theorists, such as Edward Nathaniel Bancroft and William Burnet, to assume that epidemic diseases “in every situation, as well where it does, as where it does not exist, depend upon Marsh Miasma.”²³ Instead, Maclean grounds his anti-contagionist theories in the 18th century environmentalist ideas, particularly associations between uncivilised/uncultivated geographies and disease. A belief that specific diseases originate in specific geographies was consistent with a broader trend towards environmentalist medicine begun in the

¹⁸ Mark Harrison, “Maclean, Charles (fl. 1788-1824)” in *Oxford Dictionary of National Biography* (Oxford University Press, 2004) <http://www.oxforddnb.com/view/article/17649>

¹⁹ Charles Maclean, *A View of the Science of Life; On the Principles Established in the Elements of Medicine, of that Late Celebrated John Brown* (Dover: N.H.Samuel Bragg, 1801).

²⁰ Maclean, *A View*, 155.

²¹ Maclean, *A View*, 164.

²² For example in: Michael Brown, “From Foetid Air to Filth: The Cultural Transformation of British Epidemiological Thought, Ca. 1780-1848,” *Bulletin of the History of Medicine* 82, no. 3 (2008): 515-44.

²³ Maclean, *Results*, 133.

18th century.²⁴ This new medical topography was particularly concerned with the “uncivilised” landscapes of Southeast Asia as a source of ill health, but it formulated a more generalised epidemiological dichotomy between civilised or cultivated land (as source of health) and uncivilised or uncultivated land (as source of disease).²⁵ However, Maclean went beyond accepted environmentalist theories in suggesting that the “civilised” geography of England is immune to the plague.

Catherine Kelly has suggested that, although historians have often attributed radical political motives to Maclean’s anticontagionism, Maclean deliberately began framing his anti-contagionist ideas through the language of anti-authoritarianism and anti-Catholicism later in his career in an effort to “relocate the debates on contagion from the medical sphere to the public sphere, where he believed he would have a better chance of achieving his goals.”²⁶ The issue of quarantine barely features in Maclean’s early medical texts. Around 1810, however, Maclean began to cultivate a close relationship with the East India Company and the Levant Company, the two main joint-stock companies that traded in the Mediterranean region. In 1815, Maclean made a research trip to Turkey (paid for by the East India Company) during which he worked in the Greek Pest Hospital in Constantinople in order to investigate the contagiousness of the plague. Maclean presented the book he published on the trip in 1817, *Results of an Investigation Regarding Epidemic and Pestilential Diseases*, to the court of directors of the East India Company and its members asked Lord Grenville to petition Parliament for a special inquiry into “the validity of the Doctrine of Contagion in the Plague.” This inquiry took place in 1819.

Eager to demonstrate that the plague could not be “imported” through trade, Maclean - joined by two other lower-profile anti-contagionist medical professionals (Thomas Foster and

²⁴James C. Riley, *The Eighteenth-Century Campaign to Avoid Disease*(Basingstoke: Macmillan, 1987); Caroline Hannaway, "Environment and Miasmata," in *Companion Encyclopedia of the History of Medicine*, eds. Roy Porter & W.F. Bynum (London: Routledge, 1993), 292-308.

²⁵ Mark Harrison, "Differences of Degree: Representations of India in British Medical Topography, 1820–c. 1870," *Medical History* 44, no. S20 (2000): 51-69.

²⁶ Kelly, "Not from the College," 548.

William Gladstone) - testified that even the well documented 1665-66 Great Plague of London had not been a genuine (Levantine) plague outbreak. This is a particularly strange claim because the Great Plague of London was a well-known historical event at the time, having significantly influenced medical and political thought about the plague throughout the 18th century. Even Maclean refers to the Great Plague of London as a (Levantine) plague epidemic in his medical writing.²⁷ In their 1819 testimony, however, the anti-contagionists contended that there is no record of the “importation” of the plague in 1665 and that the absence of “buboes and carbuncles” in some historical accounts of the outbreak throws doubt on the nosology of the disease.²⁸ According to Gladstone (whose testimony gives the most detailed explanation of the claim), the 1665-66 epidemic was not caused by the plague, but by a “sickness” triggered by “the narrowness of the streets, the filth of the city, the want of common sewers, and the state of the atmosphere at that period.”²⁹ Paradoxically, the belief that the genuine (Levantine) plague was caused by similar “vicissitudes of the atmosphere” was the central tenant of the anti-contagionists’ theories.³⁰ Why, then, did Maclean, Foster and Gladstone insist on the distinction between the Levantine plague and the plague-like “sickness” in the face of so much evidence of the contrary? Because this strange claim allowed them to assert that England already enjoys “immunity” from the (Levantine) plague due to its atmosphere and climate.³¹ In this new conceptualisation of plague transmission, modern civilisation rather than quarantine guarantees protection from the plague.

Although his extraordinary claim that England has always been immune to the plague is not repeated in his other texts, Maclean also explained the disappearance of the plague from Western European countries in the 18th century in terms of the greater level of civilisation and “cultivation.” In *Results*, Maclean argues that 16th and early 17th century European plague epidemics were caused by “[i]dleness, a deficiency of vegetable aliment, a camp life from the frequency of wars, famine, an

²⁷ Charles Maclean, *Evils of Quarantine Law* (London: T. and G. Underwood et. al., 1824), 347-48.

²⁸ House of Commons (HoC), *Report from the Select Committee appointed to consider the validity of the doctrine of contagion in the plague* (London: House of Commons, 1819), 22-3.

²⁹ HoC, *Report* (1819), 24.

³⁰ HoC, *Report* (1819), 10.

³¹ HoC, *Report* (1819), 10.

uncultivated and marshy soil, small cabins, and the want of cleanliness in dress, diet, and furniture,” while their disappearance was triggered by “the great change in the diet, and the manners, of the people.”³² However, denying that a well-documented plague epidemic had happened 150 years earlier was an unusual move. In *Results*, he also argues that epidemic diseases are most prevalent “in countries the least cultivated”³³ and, within “civilised” countries, epidemic diseases occur more in “the worst cultivated” districts and in the streets, houses and apartments that are “the farthest from salubrity” and “occupied by the poorest.”³⁴

His new claim might have been specifically intended to attract attention through its outrageousness, but it also reflects a wider tendency in early 19th century discourses on the history of the plague to ignore 17th and 18th century European plague epidemics and, instead, represent the plague as a uniquely Medieval (implicitly Gothic) phenomenon. This tendency to remove the plague to the Gothic past and imagine the plague in new, less symptom-specific ways allowed anti-quarantine medical practitioners and politicians to craft a compelling story about quarantine as a Catholic, uncivilised practice, implemented in order to prevent an uncivilised, almost mythical epidemic which could never exist in Britain. Although the Special Committee found no reason to suggest changes to the Quarantine Act after interviewing two dozen medical professionals (including Maclean), the 1819 inquiry marked an unprecedented shift towards a new kind of politicisation of quarantine and health under liberalism.

Unsurprisingly, both the 1819 inquiry into the validity of the contagiousness of the plague and the 1824 inquiry into the impact of quarantine on trade found little compelling medical evidence in favour of ending the practice of quarantine. However, the 1825 Quarantine Act loosened some of the penalties for quarantine breaches and, by the late 1820s, anti-contagionism began to gain popularity even among the medical establishment which had rejected Maclean’s ideas. The spread

³² Charles Maclean, *Results of an Investigation Respecting Epidemic and Pestilential Diseases* (London: Thomas & George Underwood, 1817), 309.

³³ Maclean, *Results*, 247.

³⁴ Maclean, *Results*, 259-260.

of cholera and yellow fever epidemics to England in the 1830s, in spite of quarantine legislation, likely did more to influence the falling popularity of quarantine. However, the 1819 and 1824 inquiries offer a window into the beginnings of the gradual abandonment of the practice of quarantine in favour of a “civilised” biopolitics of liberal self-surveillance. This shift has been identified within historical accounts of the plague by Marie Faye Getz as a Gothic epidemiology of the plague.

Kelly has also argued that Maclean sought to win over the public with an “exciting story in which the hero, Maclean, contracts and survives the plague.”³⁵ The narrative appeal of both *Results* and Maclean’s testimony during the 1819 inquiry is undeniable, although Maclean is notably reluctant to describe his own experiences of being seized with the plague. He does portray himself as a hero in an “exciting story” throughout *Results*, but his enemies are the Catholic Church, the Turkish government and the contagionist medical establishment – not the plague. *Results* is structured in two parts: first, a compelling account of the development of Maclean’s research (including lengthy passages about his work before the 1815 trip) called “Preliminary Discourse” and, secondly, five more technical and less personal books that analyse the origin and history of beliefs in contagion, their many faults and dangerous consequences, and the Catholic conspiracy behind their popularity. Maclean represents himself as a heroic, objective scientist continuing to pursue his work of saving countless people from epidemic diseases first against the “ill-concealed indisposition of the Turkish government” towards his work along with the “more active, and dangerous, but not more open hostility of the executive agents of the pest hospital” in Constantinople³⁶ - and, later, against his “secret and anonymous defamers,” members of the medical profession who submit “clandestine unfounded and irrelevant denunciations [of his work] to government offices.”³⁷ The second, more technical part of the book argues that the doctrine of contagion itself hardly differs from “fabulous legends concerning ghosts.”³⁸ He suggests that belief in the contagiousness of the plague originated

³⁵ Kelly, “Not from the College,” 554.

³⁶ Maclean, *Results*, 46.

³⁷ Maclean, *Results*, 130-131.

³⁸ Maclean, *Results*, 75-77.

in rumours spread by the Pope during the Council of Trent, when, in 1547, he wanted to remove the Council to Bologna and used the pretext of the contagiousness of the plague epidemic in Trent as an excuse to do so.³⁹ Maclean further argues that the delusion of contagion is responsible for the deaths of many because it has encouraged family and friends to abandon sick loved ones.⁴⁰ Although “Preliminary Discourse” and *The Last Man* differ very significantly in tone, they both portray a similar narrative of heroic survival in a series of governance systems that maintains the plague, and both appeal to an emerging discourse of the plague as governance problem. This discourse is even more obvious in the 1819 inquiry into the contagiousness of the plague. Roger Cooter⁴¹ and Michael Brown⁴² have argued that the “diffusiveness” of Maclean’s theories allowed him to better challenge the medical establishment and its contagionist medical theories. Yet, to describe Maclean’s disease causation theories merely as “diffuse” does not fully capture his shrewdness: Maclean shifted his plague ideas in order to further his political and economic aims.

Many critics have noted the unclear, somewhat contradictory description of the plague in Shelley’s *The Last Man* and have argued that this unclarity is meaningful to the novel’s politicisation of disease. Robert Lance Snyder, for example, has argued that the plague remains “an irreducible phenomenon that both challenges and defines the limits of rational understanding” until the end of the novel⁴³ and Peter Melville has claimed that “there appears to be no rhyme or reason” for either the plague or Lionel’s immunity to it.⁴⁴ Jan Plug has gone further and argued that the absence of internal consistency in the novel’s portrayal of the plague indicates that the novel does not “simply put forth a critique of a certain ideology,” but attempts to create a way to overcome it.⁴⁵ As the next

³⁹ HoC, *Report* (1819), 12.

⁴⁰ Maclean, *Results*, 429-30.

⁴¹ Roger Cooter, “Anticontagionism and History’s Medical Record,” in *The Problem of Medical Knowledge: Examining the Social Construction of Medicine*, eds. Peter Wright & Andrew Treacher (Edinburgh: Edinburgh University Press, 1982), 97.

⁴² Brown, “From Foetid Air to Filth,” 522-23.

⁴³ Robert Lance Snyder, “Apocalypse and Indeterminacy in Mary Shelley’s *The Last Man*,” *Studies in Romanticism* 17, no. 4 (1978), 435-52.

⁴⁴ Melville, “The Problem of Immunity.”

⁴⁵ Jan Plug, *Borders of a Lip: Romanticism, Language, History, Politics* (State University of New York Press, 2003), 160.

section's analysis of the portrayal of the plague in the novel will demonstrate, Lionel's vague descriptions of the plague in *The Last Man* resemble Maclean's theories about the plague's symptoms and its mode of transmission.

Gothic Epidemiology

Faye Getz focuses her analysis of the Gothic epidemiology of the plague on the work of Justus Hecker and his popular medical history of the plague, *The Black Death in the Fourteenth Century* (1832, 1833).⁴⁶ Hecker's medical history replaces the multiple interpretations given to plague outbreaks between the 14th and 18th centuries⁴⁷ with a single narrative of the Black Plague as a Byronic, supernatural "force for historical change and progress" that ended the Middle Ages and ushered in modernity and nation states.⁴⁸ Like Maclean and Shelley, Hecker's medical history relied on a Gothic tropes and emphasised the creepy or bizarre aspects of the disease. The central theme of Gothic epidemiology is the incongruity between epidemic disease and modernity; the plague belongs so fully to the dark past that the end of plague epidemics also marks the beginning of modernity (as the Renaissance). Thus, like Maclean, Hecker is reluctant to acknowledge the existence of plague outbreaks in Europe well into the 17th century. Although he does not argue this position as explicitly as Maclean, Hecker's book does explain that the Black Plague has been absent in Europe after the 15th century not because of quarantine laws, but because of "the increasing cultivation of the earth, and the advancing order in civilised society."⁴⁹ In fact, Hecker argues, the Black Plague itself is a test of how civilised a nation has become because epidemics push nations to "either attain a higher degree of moral worth, or sink deeper in ignorance and vice."⁵⁰ Civilisation, to both Hecker and Maclean, is a political and biological process.

⁴⁶ Getz, "Black Death."

⁴⁷ Getz, "Black Death," 270.

⁴⁸ Getz, "Black Death," 275-276.

⁴⁹ I.F.C. Hecker, *The Black Death in the Fourteenth Century*, trans. B.G. Babington (London: A. Schloss, 1833), 164-168.

⁵⁰ Hecker, *The Black Death*, 3.

“Medical topography,” an understanding that specific kinds of diseases originated in specific geographies, emerged within a broader trend of environmentalist medicine in Europe in the 18th century partly as a response to recurrent, unpredictable plague epidemics.⁵¹ In Britain, interest in medical topography intensified particularly in the period between 1790 and 1830 and was intimately tied to efforts to codify and understand the “diseased” geography of imperial India.⁵² The representations of the plague as generated by uncultivated / uncivilised landscapes in Europe’s Gothic past fit within a wider project to (re)imagine the histories of European countries and their colonies within a large scale timeline of progress in which colonies lagged behind and recapitulated the European past.⁵³ Hecker emphasises, rather than explains away, the supernatural aspects of older narratives about the plague and reproduces many of the more bizarre episodes in the epidemic, and this aesthetic Gothic-ness helps Hecker represent the plague as temporary and distant.

It would be tempting to read Maclean and Hecker’s anticontagionist theories about the immunity of civilised environments (such as England) as proof of an early conceptualisation of the nation as an immunological ecosystem, in the Metchnikovian sense of immunity, defined as a relationship between self and non-self. In his conclusion, Hecker even compares the protective, anti-plague properties of civilisation to Jenner’s smallpox vaccine.⁵⁴ Ed Cohen and Fuson Wang have argued that immunity-as-defence conceptualisation of the nation already existed in the 1820s.⁵⁵ However, it is important to note that Hecker never attempts to explain either the plague or civilisation’s immunitary effects in the terms of any specific, coherent medical theory. On the contrary, he describes the plague as a Byronic supernatural phenomenon: plague epidemics are

⁵¹ Riley, *The Eighteenth-Century Campaign*; Hannaway, "Environment and Miasmata," 292-308.

⁵² Mark Harrison, "Differences of Degree," 54-5; Lloyd Stevenson, "Putting Disease on the Map: The Early Use of Spot Maps in the Study of Yellow Fever," *Journal of the History of Medicine and Allied Sciences* 20, no. 3 (1965), 226-61.

⁵³ Vijay Prashad, "Native Dirt/Imperial Ordure: The Cholera of 1832 and the Morbid Resolutions of Modernity," *Journal of Historical Sociology* 7, no. 3 (1994): 66-111; Thomas R. Metcalf, *Ideologies of the Raj* (Cambridge University Press, [1995] 2001).

⁵⁴ Hecker, *The Black Death*, 169.

⁵⁵ Cohen, *A Body Worth*.

created by “the Destroying Angel” waving “over man and beast his flaming sword.”⁵⁶ Similarly, Maclean discusses immunity to the plague in a clearly pre-Metchnikovian sense of general healthfulness, not successful isolation of the self from an infectious Other. In *The Evils of Quarantine* (1824), for example, Maclean claims that soldiers forced to work “in the midst of the pestilential air” are often immune to the plague, not because they often sleep shut up in barracks, but precisely because they are stout and healthy men, “in the prime of life” and without fear of contagion.⁵⁷

Moreover, Cohen, Wang and Wing Lau have argued that the popularisation of smallpox inoculation and vaccination at the start of the 19th century led to immunity acquiring new meanings as a model for conceptualising the nation as an enclosed, biopolitical space. However, from the 18th century onwards, smallpox was regarded alongside measles and scarlet fever, as a disease with a very specific contagious etiology. All three diseases shared not only a contagious mode of transmission, but also the unique feature of only being contracted once, and were therefore called once-in-life diseases. This unique feature made smallpox, measles and scarlet fever inoculation possible.⁵⁸ Even anticontagionists like Maclean did not deny that these once-in-life diseases were transmitted through person-to-person contact. In fact, Maclean drew upon the acknowledged contagiousness of once-in-life diseases to support his argument that the plague (and other epidemic diseases) could not be contagious because it is possible to contract the plague more than once.⁵⁹ Moreover, despite the growing popularity of smallpox inoculation and vaccination, legislative attempts to regulate smallpox failed until the 1840 Vaccination Act. Although the Royal College of Physicians had already issued a report confirming the superior effectiveness and safety of vaccination over inoculation in 1807,⁶⁰ legislative projects to regulate inoculation and impose

⁵⁶ Hecker, *The Black Death*, 2.

⁵⁷ Maclean, *Evils of Quarantine*, 356.

⁵⁸ Only smallpox inoculation and, particularly, the Suttonian method tend to be remembered because the Suttonian method was the most commercially successful version of inoculation in the 18th century, but attempts to create measles and scarlet fever inoculation methods were also made. Francis Home in *Medical Facts and Experiments* (1759) describes his lengthy experiments to develop a measles inoculation method. See: Francis Home, *Facts and Experiments* (London: A Millar, A. Kincaid & J. Bell, 1759), 253-288.

⁵⁹ HoC, *Report* (1819), 8.

⁶⁰ Lucas Pepys, “Report of the Royal College of Physicians of London, on Vaccination. With an Appendix, Containing the Opinions of the Royal College of Physicians of Edinburgh and Dublin; and of the Royal Colleges

quarantine on recently inoculated children or those ill with wild smallpox in 1808,⁶¹ 1813⁶² and 1815⁶³ failed to gain enough support in Parliament. Throughout Parliamentary debates on these legislative proposals, the contagiousness of smallpox itself was not challenged. Instead, the reluctance to legislate the disease stemmed from the continued popularity of the Suttonian method of inoculation among the gentry⁶⁴ and the consequent perception that inoculation and vaccination were rival, but equally valid practices competing on a free medical marketplace.⁶⁵

If knowledge of the contagiousness of smallpox was not enough to generate political support to legislate smallpox, how does contagion function as both a medical and a political category? The debate on the contagiousness of the plague shows how the anti-quarantine movement used contagion as a vehicle for their political ideas about the nature of governmentality and free market, as anti-contagionist medical theories began to take shape in Britain. For the rest of the 19th century, narratives about contagion and the Gothic tropes those narratives used will be entangled with contemporaneous liberal biopolitics.

Plague and Liberal Selfhood

Because Lionel is reluctant to describe the “variety of disease, desertion, famine, despair and death” (p. 213) that took place during the pandemic, the actual mechanics of the cause and spread of the plague in *The Last Man* are left uncertain. Only one thing is clear: “the plague was not what is commonly called contagious, like the scarlet fever, or extinct small-pox, was proved” (p. 185). Despite this clear anti-contagionist position, most recent criticism on *The Last Man* has read the

of Surgeons of London, of Dublin, and of Edinburgh,” *The Medical and physical journal* vol. 18,102 (1807): 97-111.

⁶¹ “A Bill to Prevent the Spreading of the Infection of the Small-Pox,” Parliamentary Papers, 1808, vol. 1 (287)

⁶² *Parliamentary Debates*, House of Lords, 1st Series, Vol 26, 30 June 1813, Hansard.

⁶³ “A Bill to prevent.”

⁶⁴ Zwanenberg, “The Suttons,” 78.

⁶⁵ In 1815, a new vaccination bill was discussed in the House of Commons. The 1815 bill aimed to provide a national system of free vaccinations under the central supervision of the National Vaccine Board and run by medical practitioners contracted by local poor law authorities. The 1815 bill received a second reading in Commons, but was rejected in Lords because the proposal to set up a national institution to supervise and license medical practitioners would unfairly hamper market competition for medical services. See: Brunton, *The Politics of Vaccination*, 18.

novel as a text primarily concerned with contagion and inoculation. As Peter Melville notes,⁶⁶ this critical tendency to read *The Last Man* in relation to ideas about inoculation and immunity was begun by Robert Lance Snyder, but issues of immunity, inoculation and contagion play a role in all critical readings of the novel through the perspective of medical knowledge.⁶⁷ These readings interpret the plague either as a symbol for smallpox (within the context of inoculation and immunity gaining new medical and political meanings)⁶⁸ or cholera (within the context of increased anxieties over imperial decline following the first cholera pandemic).⁶⁹ Anne McWhir's work on Shelley's anti-contagionism is a notable break from this critical tradition, although McWhir describes Shelley's position as that of a miasmatic anti-contagionist, despite that there are no clear representations of miasmatic transmission within the novel. Furthermore, McWhir argues that the novel's plague should be read as a symbol for a broad range of epidemic diseases, including smallpox, yellow fever, bubonic plague, malaria and various fevers because the words "plague" and "pestilence" were sometimes used to describe these diseases.⁷⁰ McWhir's main primary source for explaining Shelley's anti-contagionism as a medical theory is Alexander Philips Wilson's *A Treatise on Febrile Diseases* (1809). Philips Wilson argued that typhus (not the Levantine plague) can be transmitted by "the effluvia of the living body" that "come putrid by stagnation" in crowded places (such as a hospital, jail or transport ship)⁷¹ and McWhir suggests that Shelley bases her representation of contagious "effluvias" in the novel on a similar understanding of disease transmission.⁷² Attempts to read the plague as typhus (also repeated partially by Peter Melville)⁷³ are somewhat unpersuasive given that

⁶⁶ Melville, "The Problem," 826.

⁶⁷ Snyder, "Apocalypse."

⁶⁸ Melville, "The Problem of Immunity."

⁶⁹ Bewell, *Romanticism*; Audrey A. Fisch, "AIDS, Deconstruction," in *The Other Mary Shelley*, eds. Fisch, Mellor, and Schor (Oxford University Press, 1993), 270; Joseph W. Lew, "The Plague of Imperial Desire: Montesquieu, Gibbon, Brougham, and Mary Shelley's the Last Man," in *Romanticism and Colonialism: Writing and Empire, 1780-1830*, eds. Tim Fulford & Peter Kitson (Cambridge: Cambridge University Press, 1998); Ben Richardson, "Cosmopolis Fever: Regionalism and Disease Ecology in Mary Shelley's *The Last Man*," in *Gothic Britain: Dark Places in the Provinces and Margins of the British Isles*, eds. William Hughes & Ruth Heholt (Cardiff: University of Wales Press, 2018).

⁷⁰ McWhir, "Mary Shelley," 23-4.

⁷¹ Alexander Philip Wilson Philip, *A Treatise on Febrile Diseases* (Winchester: Robbins, 1801), 438.

⁷² McWhir, "Mary Shelley," 31.

⁷³ Meville, "The Problem of Immunity," 832-833.

the novel quite explicitly represents typhus as a separate disease from the plague. The novel describes the death of Lionel's son, Evelyn, "under the ravages of a virulent typhus" well after the end of the epidemic (p. 214). Although the novel invites readings of the plague as the Levantine plague, recent critical engagements with *The Last Man* have been reluctant to read the novel as a plague text. Clayton Carlyle Tarr's work is perhaps a notable exception, although it only discusses *The Last Man* as a "plague novel" in order to analyse early 19th century discourses of fiction as a form of contagion.⁷⁴

My emphasis on the close resemblance between Shelley's plague and contemporary anti-quarantine theories of the Levantine plague is born not out of a desire to ascribe Shelley's novel more historically accurate language, but rather to acknowledge the biopolitical implications of an anti-quarantine portrayal of a Levantine plague epidemic specifically in the early 19th century. Although smallpox, cholera, typhus and other epidemic diseases attracted significant attention during the first decades of the 19th century, none were associated with an uncivilised past far away from the modern, liberal present in the manner that the Levantine plague was. Nor were such other diseases so closely bound up with legislation and legislative debate as that described earlier in this chapter. If *The Last Man* narrates the failure of all attempts by centralised government to contain the plague, and the lone survival of the rational, self-managing subject, it also tells a story about a new kind of biopolitical selfhood; one whose survival relies on the civilised values of self-surveillance and self-management, not on the Gothic machinery of the state as quarantine police. How, then, are Charles Maclean's anti-contagionist theories reflected in Shelley's novel?

The Nature of the Plague

These biopolitical implications are made clear in Lionel's only real description of the plague's mode of transmission referenced earlier:

⁷⁴ Clayton Carlyle Tarr, "Infectious Fiction: Plague and the Novelist in *Arthur Mervyn* and *The Last Man*," *Studies in the Novel* 47, no. 2 (2015).

That the plague was not what is commonly called contagious, like the scarlet fever, or extinct small-pox, was proved. It was called an epidemic. But the grand question was still unsettled of how this epidemic was generated and increased. If infection depended upon the air, the air was subject to infection. As for instance, a typhus fever has been brought by ships to one sea-port town; yet the very people who brought it there, were incapable of communicating it in a town more fortunately situated. But how are we to judge of airs, and pronounce—in such a city plague will die unproductive; in such another, nature has provided for it a plentiful harvest? In the same way, individuals may escape ninety-nine times, and receive the death-blow at the hundredth; because bodies are sometimes in a state to reject the infection of malady, and at others, thirsty to imbibe it. These reflections made our legislators pause, before they could decide on the laws to be put in force. The evil was so wide-spreading, so violent and immedicable, that no care, no prevention could be judged superfluous, which even added a chance to our escape. These were questions of prudence; there was no immediate necessity for an earnest caution. England was still secure. (184-185)

This extended description of the plague's mode of transmission highlights that the most immediate context of transmission medical theories was the need for legislators to "decide on the laws to put in force." Yet, it also highlights the plague as a threat still external to the safety and security of England. In the paragraph immediately following the plague's description, Lionel admits that although "no prevention could be judged superfluous, which even added a chance to our escape," English legislators did not immediately take any preventive measures because the disease had not yet spread to Western Europe and "[w]e could not fear – we did not" (p. 186). Instead, "[t]he English spirit awoke to its full activity, and [...] set itself to resist the evil [of the plague]" by raising subscriptions for emigrants and merchants bankrupt by the disruption of trade (p. 186). Lionel's speculations about the plague's means of transmission hints at the necessity to take preventive

measures, but seemingly only in order to then assert the incompatibility of such measures with English liberal modernity. Notably, the spread of the plague in England is foreshadowed by a return to pre-modern political structures. After the pandemic destroys “the prosperity of the nation” by disrupting international trade, Ryland (the political leader of the country as Lord Protector) chooses to abandon his modernisation plans and instead ally himself to the aristocracy by giving in to their demands of increased power within the Protectorate in order to secure their vote for a “twelvemonths’ bill, which levied twenty per cent on all the rent-rolls of the country” (p. 188). Moreover, the “great revulsive stream” of English, Italian and Spanish refugees who follow in the news of the plague in Europe helps stage a different kind of return to a Gothic past by recalling the French Revolution: as “at the conclusion of the eighteenth century” when “the English unlocked their hospitable store, fore the relief of those driven from their homes by political revolution” (189). After these scenes, the narrative jumps forward in time to the following summer when the first plague cases occurred in London (190).

Before discussing the broader implications of the plague narrative of *The Last Man*, it is important to note that several of the elements of the portrayal of the plague resemble anti-quarantine plague theories and, thus, suggest the Gothic epidemiology of the anti-quarantine movement. Firstly, the distinction between contagious and epidemic diseases is precisely what is at stake in the writing of anti-quarantine doctors and politicians. As discussed earlier, comparisons between small-pox and, to a lesser extent, scarlet fever and the plague were also frequent in the texts of Charles Maclean and other anti-quarantine writers. Lionel tentatively describes “the air” as “subject to infection” mirroring Maclean’s repeated assertions that epidemics are caused by the air.⁷⁵ This passage, like Maclean’s writing, links the plague to the general quality of the air, rather than miasmas as a specific kind of unhealthy airs.⁷⁶ Furthermore, the description of the plague affecting individuals differently because “bodies are sometimes in a state to reject the infection of

⁷⁵ Maclean, *Results*, 3-4.

⁷⁶ Siobhan Carroll has argued that air and atmosphere are a current theme in the novel, although that this is indicative of the novel’s miasmatic theory of disease transmission. See: Carroll, “Mary Shelley’s.”

malady, and at others, thirsty to imbibe it” resembles Maclean’s theories of plague immunity induced by rigorous health. Elsewhere in the novel, Lionel describes the “rigid limbs,” “distortion of his face” and “stony eyes lost to perception” of the first victim of the plague he encounters (207) and this generality in the representation of plague symptoms further links the novel to Maclean’s description of the plague as capable of “embrac[ing] almost all the symptoms which the living body is capable of exhibiting.”⁷⁷ Maclean further argued that the plague is caused by excessive excitement of the organs⁷⁸ and throughout *The Last Man* Shelley relates the plague to excessive mental excitement. Most significantly, an especially vivid scene in the novel directly compares mental excitement with the plague: a man becomes overwhelmed by “intense fear” while witnessing the “frantic gestures and thrilling words” of a maniac who describes the devastation of the plague (p. 210). As the maniac fixes the man with his gaze, the peasant “began to tremble, [...] his knees knocked together; his teeth chattered” then “[h]e at last fell down in convulsions” and the maniac declares that the man has the plague (p. 210). An almost identical scene takes place towards the end of the novel, when Lionel is overcome by a “sickness of the soul” as news of the death of a man from the plague spread around the small remaining band of survivors: “[m]y knees knocked together, my teeth chattered, the current of my blood, clotted by sudden cold, painfully forced its way from my heavy heart” (p. 318).

The Last Man marks a significant departure from the tradition of plague writing through its full embrace of the Gothic and the removal of recognisable contemporary political and medical debates (over the contagiousness of the plague or the effectiveness of quarantine, for example) to a temporally confusing, quasi-dystopian setting. The significance of this relocation of the plague within a Gothic setting and plot structure is evident when considering how central practical interventions in current political and medical debates were to older plague texts. For example, the two texts that Shelley’s narrative draws from in its portrayal of the plague, Daniel Defoe’s *A Journal of the Plague Year* (1722) and Charles Brockden Brown’s *Arthur Mervyn* (1799), are both set during recognisable,

⁷⁷ HoC, *Report* (1819), 9.

⁷⁸ For example: Maclean, *Results*, 80-82.

relatively recent epidemics: the 1665-66 Great Plague of London and the 1793 yellow fever epidemic in Philadelphia. Moreover, Defoe and Brocken Brown's texts claim that, despite their fictional embellishments, they represent the plague faithfully and offer practical advice on how to survive it. *A Journal* was one of a relatively large number of new "factual, practical works" on the plague published in 1722 in response to anxieties created by the Marseille plague outbreak of 1721-22 and the possibility that the outbreak will spread to London.⁷⁹ It thus recounts the Great Plague of London through a mix of historical fact, wild rumour and practical advice. *A Journal* encourages its readers to regard the book as "a direction to themselves to act by" more than "a history of [the narrator's] actions" if they are "brought to the same distress."⁸⁰ The emphasis on advice shows Defoe's awareness of the publishing need for practical texts on the plague as well as, perhaps, a desire to reassure his readers that they would be able to survive a new epidemic.⁸¹ Defoe also supported the 1722 Quarantine Act and his contagionist, pro-quarantine beliefs are reflected in the book's many instructions about how to avoid contact with infection.⁸² Similarly, although it contains significant Gothic elements,⁸³ *Arthur Mervyn: Memoirs from the Year 1793* (1798) purports to be "a brief but faithful sketch of the condition" of Philadelphia during the 1793 yellow fever epidemic.⁸⁴ In the Introduction, Charles Brocken Brown describes the novel as a response to "the medical and political discussions which are now afloat in the community" about the plague epidemic and his attempt to participate in these discussions by selecting "such incidents" that are "most instructive and remarkable."⁸⁵ The even older 16th and 17th century tradition of religious writing about the plague identified by Margaret Healy portrayed the plague in vivid, horrific detail with the explicit

⁷⁹ Robert Mayer, "The Reception of a Journal of the Plague Year and the Nexus of Fiction and History in the Novel," *ELH* 57, no. 3 (1990): 531.

⁸⁰ Daniel Defoe, *A Journal of the Year of the Plague*, ed. Cynthia Wall (London: Penguin Classics, 1722, 2003), 10.

⁸¹ Margaret Healy, "Defoe's Journal and the English Plague Writing Tradition," *Literature and Medicine* 22, no. 1 (2003): 37.

⁸² Healy, "Defoe's Journal."

⁸³ Emily Waples, "'Invisible Agents': The American Gothic and the Miasmatic Imagination," *Gothic Studies* 17, no. 1 (2015).

⁸⁴ Charles Brockden Brown, *Arthur Mervyn Or, Memoirs of the Year 1793*, eds. Philip Barnard & Stephen Shapiro (Indianapolis, IN: Hackett, [1798] 2008), 3.

⁸⁵ Brown, *Arthur Mervyn*, 3.

intention to encourage spiritual “reformation”⁸⁶ and identify specific sinners who have caused national ill health.⁸⁷ Although Shelley does not explicitly reference these 16th and 17th century English plague pamphlets, they demonstrate that plague texts have engaged in medical and political debates and conceptualised the disease as a moral and biological threat to the nation more than 200 years before *The Last Man* was written. Critics have rarely commented on this relationship between *The Last Man* and earlier plague texts, other than to assert that Shelley’s text is a radically departure from them⁸⁸ or that Shelley used these texts as factual sources for her novel.⁸⁹ But Lionel’s rejection of the horror of these other modes of writing the plague are key to understanding his perception of the plague as Gothic and his attempts to manage his responses to the pandemic.

Like the Byronic plague in Hecker’s medical history, the plague seems quasi-supernatural and is personified as a remorseless goddess. Adrian describes being “hung on the wheel of the chariot of plague; but she drags me along with it, while, like Juggernaut, she succeeds in crushing out the being of all who strew the high road of life” (p. 317). When the plague epidemic seems to disappear, Lionel describes the plague as a snow queen who “abdicated her throne and despoiled herself of her imperial sceptre among the ice rocks that surrounded us” (p. 340). Neither Lionel nor his readers are ever able to come to a conclusive answer about what causes the plague, how it spreads or why it ceases. The disease strikes randomly and affects people differently, to return to Lionel’s remark that “individuals may escape ninety-nine times, and receive the death-blow at the hundredth; because bodies are sometimes in a state to reject the infection of malady, and at others, thirsty to imbibe it” (p. 185). It seems to kill everyone who develops active symptoms of the disease - with the exception of Lionel and Martha. Martha, an old woman from the village of Little Marlow, attributes her survival to hope which was “better than a doctor’s prescription, and every thing that could sustain and enliven the spirits, of more worth than drugs and mixtures” (p. 216). Again, the novel associates plague immunity with emotional balance - and associates the latter with

⁸⁶ Healy, “Defoe’s Journal,” 27.

⁸⁷ Healy, “Defoe’s Journal,” 28.

⁸⁸ Snyder, “Apocalypse and Indeterminacy,” 436.

⁸⁹ McWhir, “Mary Shelley’s.”

decentralised, liberal government. Lionel finds Martha when he decides to “go from village to village, seeking out the rustic archon of the place, and by systematising their exertions, and enlightening their views, encrease both their power and their use among their fellow-cottagers” as a means to develop an alternative mode of governance to replace the frequent depositions and abdications of the “regal elections” of central government (p 217). Martha rules Little Marlow from the alms-house where she lives by doling out advice and admonitions to the crowds who seek her help (p. 216). Lionel never mentions the rural quasi-utopia of Little Marlow again.

The unfolding plague epidemic in Mary Shelley's *The Last Man* highlights this interdependence between humans and their political, natural and supernatural environments within liberal biopolitics. In the novel, the plague is a biological phenomenon that can only be controlled through liberal self-control. The novel explores potential alternatives to liberalism as a means of containing contagion, but unfailingly finds such alternative political systems to be unsafe. At different points in the novel, the plague appears to have different modes of transmission as well as different symptoms. Even more confusingly, it seems to have different political meanings: its first outbreak is clearly triggered by imperial expansion, but England's retreat away from the outside world does little to stem the epidemic and the disease's rapid spread around the world itself could be read as a form of biological colonialism. The contradictions in Shelley's portrayal of the plague have prompted Robert Lance Snyder to argue that, even at the end of the novel, the plague remains “an irreducible phenomenon that both challenges and defines the limits of rational understanding.”⁹⁰

The Last Man is, above all, radically pessimistic about the possibility that political structures could protect citizens from epidemic disease. This is a stark departure from 18th century narratives about the plague that held out the hope that the plague can be eventually contained by political and medical technologies. The survivors of the first year of the epidemic are initially optimistic and hope that “after long suffering and bitter experience, some panacea might be discovered” (p. 215).

⁹⁰ Snyder, “Apocalypse and Indeterminacy.”

However, the closest thing to a heroic scientific figure is Merrival, an astronomer, who while everyone “awaited the plague,” chooses to speak “of the state of mankind six thousand years hence” rather than address any current concerns (p. 220). Despite its futuristic setting, the novel is largely uninterested in the evolution of technology. Instead, *The Last Man* is more interested in the future of political structures in England and the first volume narrates the parallel development of Lionel’s self-managing selfhood and England’s transition from monarchy to republicanism. Adrian (the son of the last king who abdicated shortly before his death) and Lord Raymond (“the sole remnant of a noble but impoverished family” p. 30) represent different kinds of political leadership and governance. Before the pandemic, Raymond is elected as Lord Protector of England, a republican position equivalent to that of king. Raymond intends to use the Protectorship to build countless “canals, aqueducts, bridges, stately buildings, and various edifices for public utility,” abolish “the state of poverty” and banish disease (p. 84). In an anticontagionist understanding of disease, this ambitious project of the improvement of waterworks and elimination of poverty is exactly what ought to have stopped the epidemic. Yet, the epidemic itself is triggered by Raymond’s unending ambition to act as a good political leader. When even his dog refuses to enter plague-stricken Constantinople, Raymond’s ambition and impatience wins out and he unleashes the pandemic on the world outside Asia when the city explodes and collapses around him (p. 198). Raymond’s ambitious anticontagionism is replaced by Adrian’s compassionate contagionism. Unlike Raymond’s sanitarian projects, Adrian attempts to “introduc[e] systematic modes of proceeding in the metropolis” that would keep the population calm by raising “high the barrier between contagion and the sane” (p. 215). As the pandemic progresses, theocracy and anarchy also briefly hold sway over the population as political systems. However, all attempts to contain the contagion through political structures fail to arrest the epidemic. This failure of all political structures makes Lionel’s immunity all the more significant.

Like the plague’s mysterious nature, Lionel’s curious ability not to be affected by the disease is never fully explained in the novel. The main critical tendency has been to interpret Lionel’s

embrace of a dying “half clad” black man as a moment of inoculation that confers Lionel immunity. Jan Plug and Fuson Wang have read the scene as illustrative of Shelley’s belief that cosmopolitan or anti-racist values form an effective inoculation against the disease of colonial expansion.⁹¹ Wang specifically links medical theories of vaccination and the use of non-human animals in producing vaccination lymph to colonial anxieties and reads *The Last Man*’s infection scene as an attempt to recapitulate the “long history of vaccination,” from inter-racial inoculation experiments to inter-species vaccination.⁹² Peter Melville also creates a detailed analysis of the scene through the lenses of 19th century vaccination and inoculation medical theories.⁹³ However, as the first part of this chapter has demonstrated, smallpox and the plague were understood in markedly different ways in early 19th century medical and political debates. Smallpox was nearly universally acknowledged to be contagious (although controversy remained over whether inoculation or vaccination were more effective), however smallpox was not seen as a disease warranting government intervention in private life and property. Meanwhile, debates over the transmission method of the plague became increasingly heated in the same period because of the legislation and quarantine put in place to control plague transmission. As I have already shown, much of the debate over the plague centred on the issue of whether the plague and smallpox could be equated with each other. Given that the two diseases were, for the most part, represented as very different entities in medical and political discourses, it does not make sense to read the plague in *The Last Man* as merely a symbol for smallpox. Lionel’s immunity to the plague would be better explained through early 19th century discourses of the immunising power of “cultivation” and liberal self-management.

Lionel, the novel’s main distinctive narrative voice, becomes a self-managing, modern subject in the novel’s first volume as Adrian’s love and the cultivation of his intellect through poetry and philosophy transforms him from an untaught shepherd boy into a worthy, modern citizen (p.

⁹¹ Fuson Wang, “We Must Live Elsewhere: The Social Construction of Natural Immunity in Mary Shelley’s *The Last Man*,” *European Romantic Review* 22, no. 2 (2011); Plug, *Borders of a Lip*.

⁹² Fuson Wang, “We Must Live Elsewhere.”

⁹³ Melville, “The Problem of Immunity,” 831.

23). Both of Lionel's parents die when he was 5. His father, a man of obscure extraction and unflinching wit, left his widow and two young children with nothing except debts. His mother, a gentle and kindly cottage-girl, died shortly afterwards from hard labour and "naturally delicate health" (p. 9). After becoming an orphan, Lionel, as the oldest of two siblings, is put in the service of a farmer and works as a shepherd-boy until at age 16 he encounters Adrian, the young Earl of Windsor. Lionel feels "subject" to Adrian almost immediately, his pride and strength subdued by "the honeyed accents of this blue-eyed boy" (p. 20). Adrian restores Lionel and his younger sister, Perdita, to their upper class status and his kindness and gentleness makes Lionel want to become kind, compassionate and soft. This need for transformation makes Lionel restless and as he wanders the hills, he imagines himself born anew, as his "plastic soul was remoulded by a master hand, which [he] neither desired nor was able to resist" (21). Lionel's unlettered mind is caught in the fever of knowledge and Adrian leads him "to participate in that cultivation which graced his own intellect" (23). Over the course of the rest of the first volume, Lionel's childish love of independence and freedom are transformed into a more measured liberal attachment to self-management and freedom from illegitimate governance. This first volume also stages the rivalry between Adrian and Lord Raymond and the transformation of Britain from a monarchy into a republic before the pandemic.

While critical readings of the scene with the Black servant seem to suggest that Lionel is the only person immune to the plague in the novel because he is the only one to receive the plague's inoculation, a closer reading of the novel reveals that this immunity is not unique to Lionel. Adrian is also unaffected by the disease although he comes into contact with countless people infected by it through his various roles in governance. In the last few chapters of the novel, Lionel, Adrian and the men's children Clara and Evelyn are "the last of the species" (339) while "Plague vanished from the earth" (340). They try to rebuild their lives and enjoy life again in the "paradisiacal retreat" of Lake Como (345), but their hopefulness lasts only until Evelyn is "seized with sudden fever" and dies of typhus within a fortnight (347). After his death, Lionel, Adrian and Clara decide to continue their

journey to Rome, but in Venice Clara persuades them to set sail for Greece instead. Their ship is caught in a storm on the way there and both Adrian and Clara are lost at sea. The deaths of Evelyn, Adrian and Clara are caused by twists of fate rather than the plague.

The Last Man also contains a political dream of the plague town, a self-managing rural community made up of civilised individuals who do not need statist intervention. Earlier when Lionel had travelled to London with the intention of joining Adrian in running the quarantine bureaucracy, managing thus far to contain the contagion in the metropolis, he decides to return home after encountering someone with the plague for the first time. This encounter reminds him that,

[t]hose writers who have imagined a reign of peace and happiness on earth, have generally described a rural country, where each small township was directed by the elders and wise men. This was the key of my design. Each village, however small, usually contains a leader, one among themselves whom they venerate, whose advice they seek in difficulty, and whose good opinion they chiefly value. I was immediately drawn to make this observation by occurrences that presented themselves to my personal experience. (215)

It is while attempting to create this ideal rural country that Lionel meets Martha, the village elder who had survived the plague and proven that immunity is not exclusive to Lionel, and further, that such immunity is not triggered by an inoculation, but by adopting the values of cultivation and self-management. Most of the second volume details the efforts of Lionel and Adrian to create a form of governance that promote these values. Such attempts fail as the plague collapses all political structures and the novel turns from explorations of political debates about the value of republicanism vs monarchy, to a highly emotional and nostalgic mode as Lionel's efforts to promote self-management turn from his fellow citizens, to the future readers of his text.

The Reader in *The Last Man*

Lionel is a highly self-aware narrator who positions his account of the plague in opposition to popular plague narratives that emphasise vivid, horrific details in their bid to faithfully represent the epidemic. Instead, Lionel argues, the excitement that the horror of these gruesome details creates actually serves to remove the reader from the real experience. As this chapter has already discussed, the novel portrays “excitement” as a diseased mental state mirroring Maclean’s medical theories about the plague as mental excitement. Consequently it is important to note Lionel’s continued quest throughout the narrative to find an alternative to these “exciting” narratives. When first encountering someone suffering from the plague, Lionel reflects on how reading about the plague had not prepare him for witnessing it:

I had never before beheld one killed by pestilence. While every mind was full of dismay at its effects, a craving for excitement had led us to peruse De Foe's account, and the masterly delineations of the author of *Arthur Mervyn*. The pictures drawn in these books were so vivid, that we seemed to have experienced the results depicted by them. But cold were the sensations excited by words, burning though they were, and describing the death and misery of thousands, compared to what I felt in looking on the corpse of this unhappy stranger. This indeed was the plague. (206-7)

At a later point in the narrative, Lionel again rejects the readerly appetite for tales about “the variety of disease, desertion, famine, despair, and death” and positions his account as a means to “escape from the mosaic of circumstances, by perceiving and reflecting back the grouping and combined colouring of the past” (212-13). Lionel writes that through his account he is “able to escape from the mosaic of circumstances” (213) and by narrating “the virtues of [his] companions” in his early life he is able to relive those years and no longer be alone (372). Lionel’s insistence on avoiding the horror

of the epidemic and his attempt, instead, to represent it as a means to contemplate the past align Shelley's novel with, in Edmund Burke's terms, Gothic terror rather than horror.⁹⁴

In *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and the Beautiful* (1757), Burke draws a distinction between terror and horror in relation to the sublime and the beautiful. Horror is an overwhelming emotion that takes over the mind when confronted with "[t]he ideas of pain, sickness, and death,"⁹⁵ while terror "is in all cases whatsoever, either more openly or latently, the ruling principle of the sublime."⁹⁶ Thus, horror cannot be pleasurable; however, because terror forms the basis of the experience of the sublime (a heightened astonishment that is the strong emotions humans can experience), terror can produce delight when the danger or pain it represents is kept at a distance.⁹⁷ The distinction is a relatively minor point in Burke's aesthetic theory, where the separation between horror and terror becomes highly meaningful was in early 19th century theoretical debates about the Gothic. Ann Radcliffe's essay, "On the Supernatural in Poetry" (1826), was particularly influential in drawing the borders between terror and horror. Radcliffe identified her own work with terror and that of Matthew Lewis, author of *The Monk* (1796), with horror. Although "On the Supernatural in Poetry" was only published posthumously (in 1826), Radcliffe and other women writers of her generation, including Mary Shelley, already positioned themselves (with varying degrees of visibility) in opposition to the horror Gothic of *The Monk*, as Ellen Moers has demonstrated in her analysis of Female Gothic.⁹⁸ While Shelley's *Frankenstein* is a foundational text of the Female Gothic tradition as Moers analyses it, it is harder to read the centrality of the seemingly masculine issues of governance and geopolitics in *The Last Man*, not to mention the ambiguous gendering of its narrator, as a straightforward example of the Female Gothic. How, then, can we read *The Last Man*'s rejection of the horrors of Defoe and Brocken Brown,

⁹⁴ For exploration of terror and horror, see: Carol Margaret Davison, *Gothic Literature 1764-1824* (Cardiff: University of Wales Press, 2009), 90.

⁹⁵ Edmund Burke, *A Philosophical Inquiry into the Origin of Our Ideas of the Sublime and Beautiful* (New York: Harper & Brothers, [1757] 1844).

⁹⁶ Burke, *A Philosophical Enquiry*.

⁹⁷ Burke, *A Philosophical Enquiry*, 72.

⁹⁸ Davison, *Gothic Literature*, 90-93.

as indicative of its broader political commitments in relation to governance and biopolitics? Lionel's repeated attempts to find a way to narrate the plague as sublime illustrate a desire for the text to act as a kind of emotional self-education for the future reader, a call for the reader to experience the novel as terror and desire to become a rational liberal self, as Lionel did when Adrian first showed him kindness.

In contrast to the medical advice and overt interventions in medical and political debates in Defoe and Brocken Brown, the two main narrators of *The Last Man* only frame their narratives in highly personal terms. For the "decipherer" who authors the Introductions, as well as for Lionel, writing is a highly personal experience, fraught with strong emotions. The decipherer explains that they have adapted and translated Lionel's narrative from a set of ancient "Sibylline leaves" they found in a now inaccessible cave while on a trip to Naples in December 1818 (3). The decipherer then describes how adapting the narrative served as an escape from the world:

My labours have cheered long hours of solitude, and taken me out of a world, which has averted its once benignant face from me, to one glowing with imagination and power. [...] I confess, that I have not been unmoved by the development of the tale; and that I have been depressed, nay, agonised, at some parts of the recital, which I have faithfully transcribed from my materials. Yet such is human nature, that the excitement of mind was dear to me, and that the imagination, painter of tempest and earthquake, or, worse, the stormy and ruin-fraught passions of man, softened my real sorrows and endless regrets, by clothing these fictitious ones in that ideality, which takes the mortal sting from pain. (4)

Jennifer Wagner-Lawlor has argued that this passage in the Introduction acts as an invocation of readerly sympathy and shows that the ultimate aim of the text is the reader's sympathetic identification with Lionel (mirrored through the decipherer), and through this sympathy the book

attempts to “re-civilise the world with compassionate beholders.”⁹⁹ While I would broadly agree with Wagner-Lawlor’s assertion, it should be emphasised that the sympathy the novel aims to achieve is a liberal mode of self-governmentality.¹⁰⁰

Gothic, Affect, Biopolitics

In the last chapter of the novel, Lionel reaches Rome alone. Believing himself to be the last human being left alive, he wanders the ruins of city in a scene that is the counterpoint to Raymond’s charge into the besieged Constantinople. Where the deadly ruined Ottoman capital is the scene of Orientalised horror recalling Percy Shelley’s *The Revolt of Islam* (1818) and imperial Gothic fictions, the Rome of the last pages of *The Last Man* is “the capital of the world, the crown of man’s achievements” (p. 366). Lionel encounters the deserted city as the scene of a Gothic romance. Among the ancient ruins, Lionel re-imagines the history of the city as a Gothic romance and relives his own childhood as a romance:

The Coliseum, whose naked ruin is robed by nature in a verdurous and glowing veil, lay in the sunlight on my right. Not far off, to the left, was the Tower of the Capitol. [...] I strove, I resolved, to force myself to see the Plebeian multitude and lofty Patrician forms congregated around; and, as the Diorama of ages passed across my subdued fancy, they were replaced by the modern Roman; the Pope, in his white stole, distributing benedictions to the kneeling worshippers; the friar in his cowl; the dark-eyed girl, veiled by her mezzera; the noisy, sun-burnt rustic, leading his herd of buffaloes and oxen to the Campo Vaccino. The romance with which, dipping our pencils in the rainbow hues of sky and transcendent nature, we to a degree gratuitously endow the Italians, replaced the solemn grandeur of antiquity. I remembered the dark monk, and floating figures of "The Italian," and how my boyish blood had thrilled at the description. I called to mind Corinna ascending the Capitol

⁹⁹ Jennifer A. Wagner-Lawlor, "Performing History, Performing Humanity in Mary Shelley's the Last Man," *SEL Studies in English Literature 1500-1900* 42, no. 4 (2002): 768.

¹⁰⁰ Amit S. Raj, *The Rule of Sympathy: Sentiment, Race, and Power 1750-1850* (New York: Palgrave, 2002).

to be crowned, and, passing from the heroine to the author, reflected how the Enchantress Spirit of Rome held sovereign sway over the minds of the imaginative, until it rested on me—sole remaining spectator of its wonders. (368-9)

After the shock of trauma, his experience of the past in Rome is what gives him a meaningful context in which to understand the temporality of loss and trauma. Lionel forces himself to remember the “Plebeian multitude and lofty Patrician forms” who used to populate the ancient ruins and “the modern Roman” in order to relive “the romance with which [...] we to a degree gratuitously endow the Italians” (p. 368). Lionel experiences Rome’s past through Gothic romance because, as Maggie Kilgour has shown, Gothic romance idealises the “wholeness” of the past (medieval) world, in contrast to the atomistic bourgeois present, and thus encapsulates Lionel’s experience of the past as more whole through his own Gothic text.¹⁰¹

In doing so Lionel explicitly references two of the biggest influences on early 19th century English imagination of Italy: Ann Radcliffe’s Gothic romance *The Italian* (1797) and Germaine de Staël’s *Corinne, ou l’Italie* (1807), both of which are fictional travelogues of Italy. Staël’s novel is the story of Corinne, a half-English half-Italian improvisatrice, who has to choose between romantic love and artistic fulfilment, and identifies Corrine’s spontaneous creativity with Italy and Italian culture more broadly. *Corinne* was published in England in an anonymous translation only a few months after its publication in French. The novel came to be read as a myth of female artistic talent and had a huge influence 19th century English women poets, including Felicia Hemans (1793-1835), Letitia Elizabeth Landon (1802-1838), Maria Jane Jewsbury (1800-1833) and Elizabeth Barrett Browning (1806-1861). Shelley’s other writing on Germaine de Staël, particularly the biography of de Staël she published, show that Shelley was interested in the parallels between improvised poetry and female oracles in Ancient Greece.¹⁰² In Lionel’s vision of the “the Enchantress Spirit of Rome” passing from Corinne (the improvisatrice) to Germaine de Staël (the author) then to himself and, implicitly,

¹⁰¹ Kilgour, *The Rise of the Gothic Novel* (London: Routledge, [1995] 2006), 11.

¹⁰² Lucy Morrison, “Writing the Self in Others’ Lives: Mary Shelley’s Biographies of Madame Roland and Madame De Staël,” *Keats-Shelley Journal* 53 (2004).

further on to the Cumaean Sybil who writes down his narrative then to the modern day decipherer, he recreates the circular temporality of the whole novel through an aerial (if, perhaps, not miasmatic) image. In doing so, he reinforces a reading of the novel as a part of and continuing the Gothic romance tradition.

Literary and medical narratives about epidemic disease have often been analysed as a genre particularly good at reflecting biopolitical understandings of the nation. Bruno Latour, for example, has argued that the invention of germ theories relied on an understanding of contagious disease as a “national danger,” and Priscilla Wald has demonstrated that 20th century narratives about contagion act as imaginaries of the nation.¹⁰³ In particular, Wald has shown that “outbreak narratives” – named after Robin Cook’s medical thriller *Outbreak* (1987) which set out most of the outbreak genre’s conventions – represent shared vulnerability to contagious micro-organisms as a component of national belonging because, while they show the global circulation of contagious disease, they represent contagion as reinforcing the biological ties that unite citizens within the nation.¹⁰⁴ The ending of *The Last Man* makes readings that politicise contagion difficult as the conclusion of Lionel’s narrative seems to seek to depoliticise his earlier experiments in governance by centring instead his feelings of grief and loss and a Gothic dream of the past. However, a seemingly apolitical Gothic dream of the plague as too distant and too Gothic to affect cultivated England was exactly the discourse that underlaid the lessening of quarantine regulation and the failure of other legislation aimed at containing contagion in the first 3 decades of the 19th century. Chapter 3 will explore how in the 1830s and 1840s, the sanitary reform movement and its scientific texts led to a new Gothic subgenre that again sought to use the Gothic to intervene in medical and political debates: the Urban Gothic.

¹⁰³ Bruno Latour, *The Pasteurization of France*, trans. Alan Sheridan & John Law (Cambridge, MA: Harvard University Press, [1984] 1993), 91-2.

¹⁰⁴ Wald, *Contagious*, 52-53.

Chapter 3: Edwin Chadwick's Gothic Sanitary Reports and Working-Class Illiberal Subjectivities

[T]his is the *Old Town*, and the people of Manchester emphasise the fact whenever anyone mentions to them the frightful condition of this Hell upon Earth; but what does that prove? Everything which here arouses horror and indignation is of recent origin, belongs to the *industrial epoch*.¹

The Gothically contagious slums and cellars of *Mary Barton* (1848) by Elizabeth Gaskell and *Bleak House* (1853) by Charles Dickens mark a profound transformation in the Gothic genre. The fiction of Gaskell and Dickens relocates the “scenes of terror” of the Gothic Romance to the modern city through a “conscious appropriation” of earlier Gothic tropes in the portrayal of older, poorer urban districts as labyrinthine sites of violence, criminality, degeneration and contagion.² This new subgenre, identified by Robert Mighall, Allan Pritchard and Julian Wolfreys as the “Urban Gothic,” first emerged in the late 1830s and 1840s in the tales of urban poverty, crime and adventure in Dickens's *Oliver Twist* (1837-39) and G.W.M. Reynolds' *The Mysteries of London* (1844-45).³ However, the Urban Gothic reached its highpoint in the 1850s, particularly in *Bleak House*.⁴ More than a straightforward transplantation of the Gothic to the city, the Urban Gothic imagines

¹ Friedrich Engels, *The Condition of the Working Class in England*, ed. David McLellan (Oxford University Press: [1845] 1999), 65. [emphasis in the original]

² Robert Mighall, *A Geography of Victorian Gothic Fiction: Mapping History's Nightmares* (Oxford: Oxford University Press, 1999), 30-1.

³ Mighall, *A Geography*, 69-78; Allan Pritchard, “The Urban Gothic of *Bleak House*,” *Nineteenth - Century Literature* 45, no. 4 (1991); Julian Wolfreys, “Towards a Phenomenology of the Urban Gothic: The Example of Dickens,” in *London Gothic: Place, Space and the Gothic Imagination*, eds. Lawrence Phillips & Anne Witchard (London: Continuum, 2010).

⁴ See: Mighall, *A Geography*, 69-70.

modernity as a source of Gothic horror in a far more explicit manner than Gothic fiction had previously attempted. In particular, Urban Gothic stages scenes of terror in the dilapidated and labyrinthine old neighbourhoods of working-class people, and does so to underscore the fact that urban terrors are caused by industrial modernity itself.

The Urban Gothic, thus, portrays a new Gothic made up, not of spaces overlooked by progress, but instead Gothically resurrected by industrial modernity from much further away. The iconic opening scene of *Bleak House*, which imagines “a Megalosaurus, forty feet long or so, waddling like an elephantine lizard up Holborn Hill” through the impenetrable smog created by countless chimney-pots (*BH*, 3), is an exemplar of this Gothic resurrection of the distant past through modern technologies. The opening scene also hints at the long-term influence of the Urban Gothic, in particular what Robert Mighall identified as its transformation of pathology and atmosphere (especially in the sense of contaminating or contagious atmosphere) into canonical Gothic tropes.⁵ *Bleak House*’s use of Urban Gothic trope has been explored in relative detail by the analyses of Mighall, Wolfreys and Pritchard, while explorations of *Mary Barton* as a Gothic text, while not using the precise terminology of the Urban Gothic, have analysed some of its Urban Gothic features, such as its portrayal of dwellings of working-class people as underground cellars full of “foetid” smells and “dark loneliness.”⁶ My intention is not to repeat these analyses of *Bleak House* and *Mary Barton*, but rather to contribute to the field of Victorian Urban Gothic research by arguing that the Urban Gothic speaks to a new imagination of working-class subjectivities as unmodern and illiberal, generated by the mid-century sanitary reform movement and its liberal biopolitical surveillance and regulation of working-class people’s dwellings. This chapter will analyse a pair of sanitary reports as Urban Gothic texts at length in order to argue that the conventions of the Urban Gothic were more strongly shaped by Edwin Chadwick than by Gothic Romances.

⁵ Mighall, *A Geography*, 71.

⁶ Elizabeth Gaskell, *Mary Barton*, ed. Sally Barton (Hertfordshire: Wordsworth Editions, [1848] 2012), 57. All further references to this text are from this edition and are given parenthetically.

The origins of the Urban Gothic have long been linked to rapid industrialisation and urban migration in the early 19th century. Pritchard, for example, notes that the Gothic architecture of *Bleak House* reflects “the condition of England,” while Wolfreys contends the Urban Gothic is “a screen onto which the materiality of the early nineteenth-century metropolis is projected,” and Mighall argued persuasively that the Urban Gothic was enabled by a new imagination of poor districts as decaying, labyrinthine spaces, in contrast to the modernity of new urban planning projects and middle-class suburbs.⁷ For this argument Mighall draws on Richard Maxwell’s analysis of Paris and London as two cities undergoing similar processes of modernisation and public works in the early 19th century.⁸ In the absence of Napoleon’s drive to modernise and bureaucratise, however, the most significant impetus to modernise London public spaces actually dates from the 1860s and 1870s.⁹ Maxwell and Mighall’s description of London’s slums suggests that they were merely neighbourhoods where new buildings had not been built. However, the Gothic characteristics of slums or rookeries cannot be explained as a simple consequence of the age of its buildings. Most of the notorious slums of the capital were made up of a mix of old and new builds and in new cities (such as Manchester or Glasgow) slums were made up almost entirely of new (19th century) buildings.¹⁰ This chapter will argue that the Urban Gothic is the most visible fictional outgrowth of a new imagination of working-class subjectivities as incongruous with rationality and liberal individualism and, consequently, liberal modernity. This shift towards Gothicised imaginations of working-class subjectivities is emblematic of what Mary Poovey has discussed as “disciplinarian individualism” (a Foucauldian term).¹¹ Like the emergence of the liberal immunitary self detailed in Chapter 2, changing perceptions of working-class subjectivities were enabled by a compellingly Gothic narrative about contagion as both source and consequence of illiberalism. Much of the ideological work of Gothicising working-

⁷ Wolfreys, “Towards A Phenomenology,” 9; Pritchard, “The Urban Gothic,” 434-436; Mighall, *A Geography*, 27-40.

⁸ Richard Maxwell, *The Mysteries of Paris and London* (University of Virginia Press, 1992).

⁹ Asa Briggs, *Victorian Cities* (Berkeley: University of California Press, 1993), 311-360.

¹⁰ Asa Briggs, *Victorian Cities*, 24-9.

¹¹ Poovey, *Making A Social Body*, 112.

class subjectivities took place in scientific and polemical texts, rather than fiction. This chapter will examine Edwin Chadwick's pair of sanitary reports (*Report on the Sanitary Condition of the Labouring Population of Great Britain* published in 1842 and the *Supplementary Report on the Results of a Special Inquiry into the Practice of Internment in Towns* published a year later) as emblematic of this work.

Poovey has argued that, in the 1830s and 1840s, liberal subjectivities were reimagined to accommodate a higher degree of disciplinary surveillance and regulation typical of the growth of biopolitics. Poovey argued that this occurred through "disciplinary individualism" (a Foucauldian term), a type of individualism that "promised freedom in exchange for voluntary submission to those laws by which liberty was defined."¹² Poovey argued that the emergence of disciplinary individualism is particularly visible in Poor Law reform because the New Poor Law paradoxically deprived working-class individuals of agency in order "to ensure that they could act freely – according, that is to the laws of the market."¹³ Yet, the example of New Poor Law also points to the issues inherent in analysing liberal individualism as the only model of subjectivity created by the emergence of biopolitics. Poovey was interested in the consolidation of class identities against the background of the emergence of disciplinary individualism and reads the texts of the sanitary reform movement (especially Chadwick's sanitary reports) as key to gendered class identities. However, Poovey argued that the sanitary movement (and other proponents of biopolitics) envisioned a single, unified model of subjectivity (liberal individualism) that merely acted upon different classes in different ways. This chapter seeks to refine Poovey's analysis further through a closer focus on the formation of working-class subjectivities as a distinct (il)liberal category through the use of Gothic tropes. I will argue that liberal biopolitics represents working-class people as incongruous with liberal individualism in order to justify the coercive nature of the new regimes for the surveillance and regulation of working-class people that were created through Poor Law reform and sanitary reform.

¹² Poovey, *Making A Social Body*, 103.

¹³ Poovey, *Making A Social Body*, 107.

As Chapter 2 has shown in its analysis of the growth of the anti-quarantine movement, state intervention in private life and the free market for the purpose of health promotion was highly contentious in the first half of 19th century. This was the case even when, as in the case of plague quarantine, both mainstream medical knowledge and legislative tradition supported the necessity of such intervention. The extensive set of surveillance and regulation measures proposed by the sanitary reform movement were not easily accepted. As Christopher Hamlin has also contended, it is implausible to argue that a decline in sanitation and living standards caused by rapid urbanisation and industrialisation in itself inevitably led to Chadwick's sanitary revolution.¹⁴ Rather, the expansion of public health bureaucracy in the 1840s and 1850s was, in theory and in practice, intended to intervene specifically in the private lives of working-class people.

Chapter 4 will trace the expansion of biopolitical regulation and surveillance to middle-class populations (in particular, middle-class women) towards the end of the century through the Contagious Diseases Acts (1864, 1866, 1869) and the rise of eugenics. This chapter, however, will explore the reimagination of working-class subjectivities as opposed to or incompatible with liberal individualism. More specifically, this chapter will examine how portrayals of working-class people (and their dwellings) as sources of political and pathological contagion in sanitary reports and Urban Gothic fiction sought to portray working-class people as explicitly pre-modern subjects incapable of political agency. Writing about Chadwick's reports as a set of contagion narratives might, at first, be contentious because the sanitary reform movement is often portrayed as staunchly anti-contagionist. Chadwick and other members of the sanitary reform movement did oppose contagionism as a pro-quarantine medical and political ideology. However, as Margaret Pelling has asserted, complete opposition to all transmission through contagion was rare in the 19th century.¹⁵ Chadwick's reports repeatedly make reference to contagious diseases (as the following close readings will show). Moreover, beyond Chadwick's complicated contingent

¹⁴ Hamlin, *Public Health*, 9-11.

¹⁵ Pelling, "Contagion/Germ Theory/Specificity."

contagionism, the more important question that his appeal to Gothic contagion asks is: how can we understand Chadwick's rejection of illiberal quarantine as the basis for his embrace of significantly more violent technologies of surveillance and separation within the wider context of liberal biopolitics? Chadwick's apparently paradoxical opposition to contagionist quarantine illustrates the centrality of a vision of Britain as (broadly) already "cultivated," a "modern" liberal country in which the new industrial working-classes were zombies returned from a a primitive, Gothic past.

Chadwick's reports repeatedly return to the horror of contagion because contagion encapsulates the horror of working-class people's incongruity with modernity and their potential for political radicalism and upheaval. By the 1830s, anti-quarantine discourses had associated a Gothicised vision of contagious disease with threats to liberal modernity: as Shirley Samuels, Priscilla Wald and Peta Mitchell have noted, the metaphor of contagion was often used to mean the spread of politically charged, particularly revolutionary ideas in the aftermath of the first French Revolution.¹⁶ Moreover, Alain Corbin has shown in *The Foul and the Fragrant* (1986) that in the 1830s bodily smells became stigmatised as a mark of the working classes and, by conjunction, of disease and immorality.¹⁷ In Chadwick's reports, the bad smells of working people are created by their damp, drafty dwellings, blocked up street sewers, mounds of human refuse and decaying vegetable scraps left to rot next to human dwellings and, most dangerous of all, dead human bodies allowed to stay in human dwellings. These horrific olfactive images recur again and again in both reports and are repeatedly linked to the spread of transmittable disease. Describing working-class people's homes as contagious allowed Chadwick to draw implicit parallels between working-class people's living conditions, the morality of their domestic lives and their propensity for political violence. In doing this, Chadwick uses contagion tropes and narratives in order to continuously overlap and confuse contagion and miasma.

¹⁶ Shirley Samuels, "'Plague and Politics in 1793': Arthur Mervyn." *Criticism: a Quarterly for Literature and the Arts* 27, no. 3 (1985): 225; Wald, *Contagious*, 13-14. Mitchell, *Contagious Metaphor*, 44.

¹⁷ Alain Corbin, *The Foul and the Fragrant: The Sense of Smell and its Social Image in Modern France* (Basingstoke: Picador, 1986), 142.

The first half of the 19th century saw an unprecedented growth in efforts by working-class social and political organisations, including the Chartist movement and trade unions (which were decriminalised in 1824), to assert their political agency. As Hamlin and others have argued, these new demands for political agency and the social and political unrest they accompanied were part of the reason why sanitary reform held appeal as a solution to social and political (not merely sanitary) problems.¹⁸ It is not my intention to argue that working-class people were easily or immediately captured by the new illiberal subjectivities created by Chadwick and Urban Gothic fiction. Rather, the focus of this chapter is middle-class texts' use of the Gothic to reimagine working-class subjectivities as illiberal in the context of new public health interventions. Chadwick's vision of centralised bureaucracy was controversial, even among the middle class, and this controversy led to Chadwick losing his position in the centralised bureaucracy he dreamt up in 1854. Chadwick was well aware of the unpopularity of his ideas and his sanitary reports were intended to be vehicles to promote his bureaucratised imagination of working people's illiberal subjectivities to a middle-class audience rather than transparently report on working people's lives to other bureaucrats. In an unprecedented move, Chadwick made sure to distribute three copies of his report to every board of health in the country in order to encourage readers to consult his reports. Chadwick's sanitary reports deviate significantly from the technical blandness of the majority of Parliamentary special inquiries reports. Like Maclean's anti-quarantine writing, Chadwick's reports tell an engaging narrative about a hero who sets out to explore the terrors and pleasures of working-class neighbourhoods. In their form and content, the sanitary reports utilise non-realistic modes and create the vocabulary for a new Gothic sub-genre: the Urban Gothic. Exploring Chadwick's reports alongside the Urban Gothic and, moreover, reading all of these texts as Gothic – that is, intended to produce diverse effects of sympathy, horror and pleasure, rather than hold up a mirror to reality – reveals the aesthetic and ideological

¹⁸ Hamlin, *Public Health*, 84.

connections between representations of working-class subjectivities as source of contagion and horror in all three sets of texts.

It is difficult to measure the true extent of the influence of Edwin Chadwick's *Report on the Sanitary Condition of the Labouring Population of Great Britain* (1842) and its *Supplementary Report on the Results of a Special Inquiry into the Practice of Internment in Towns* (1843). Chadwick produced both reports in his role as Poor Law Commissioner, but unlike reports of Parliamentary special inquiries, both reports list Chadwick as the sole author. Although Pam Morris and Lauren Goodlad have cautioned against ignoring other participants in the sanitary reform movement by focusing solely on Chadwick, compared to the wide-ranging influence of Chadwick's texts, sanitary reports published before 1842 received only modest public attention.¹⁹ The publication of the reports and their role in the sanitary reform movement is closely intertwined with Chadwick's career. Born to a middle-class family in Manchester and trained as a barrister, Chadwick's career as a social reformer and bureaucrat was launched in 1829 with the publication of a highly influential article titled "Preventive Police" that argued that the main objective of policing should be the prevention of crime, not punishment for crimes that have already occurred.²⁰ This article attracted the attention of Jeremy Bentham who, recognising Chadwick's commitment to the principles of utilitarianism, facilitated Chadwick's appointment to the Royal Commission into the Operation of the Poor Laws. The Commission shaped the Poor Law Amendment Act of 1834 which replaced the older, 17th and 18th century system of outdoor relief with a more centralised, rational and efficient system of indoor relief in workhouses designed on the principle of "less eligibility," that is, that living conditions in workhouses would always be worse than the living conditions of the worst paid workers. The principle of "less eligibility" was intended to "encourage" working-class people to make the "rational" choice to work rather than

¹⁹ Goodlad, *Victorian Literature*, 86-116; Pam Morris, *Imagining Inclusive Society in 19th-Century Novels: The Code of Sincerity in the Public Sphere* (Baltimore: Johns Hopkins University Press, 2004), 34-5.

²⁰ Lucia Zedner, "Policing Before and After the Police: The Historical Antecedents of Contemporary Crime Control," *British Journal of criminology* 46, no. 1 (2005).

rely on poor relief, although its main effect was the pauperisation of large numbers of working-class people.²¹

As detailed in Chapter 2, compared to Continental Europe, state regulation of public health issues was deeply unpopular in Britain in the first decades of the 19th century because measures to regulate health were popularly seen as affronts to privacy and the free market. The establishment of workhouses through the 1834 Act also set up Britain's first public health institutional structures. Workhouses had to be inspected by workhouse medical officers to ensure their cleanliness and Poor Law unions employed doctors to treat workhouse inmates and established infirmaries and isolation hospitals were established in conjunction with workhouses (sometimes even treating non-pauper patients with contagious diseases).²² Political support for the New Poor Laws relied on the promise that the new system would lower poor rates. Due to this, although the central principle of the New Poor Law was to discourage outdoor relief, Poor Law Commissioners had to recognise that outdoor relief was more cost-effective and, from the late 1830s onwards, they allowed medical officers to treat patients in their own homes.²³ By the middle of the century, medical relief (both in and outside of workhouses) was a major part of Poor Law bureaucracy.^{24,25} Thus, the New Poor Laws created the bureaucratic structures for widespread health intervention and surveillance, as well as a conceptualisation of such interventions that was not modelled on quarantine and thus was not at odds with liberalism.

When the Poor Law Commission was established in 1834 in order to oversee outdoor relief in England and Wales, Chadwick was appointed as secretary to the Commission and he authored the two sanitary reports as part of his work for the Commission. Chadwick's writing

²¹ David Englander, *Poverty and Poor Law Reform in Nineteenth-Century Britain, 1834-1914: From Chadwick to Booth* (London: Routledge, 1998), 11-14.

²² Porter, *Disease, Medicine and Society*, 51-55.

²³ Brunton, *The Politics of Vaccination*, 22.

²⁴ Ruth G. Hodgkinson, *The Origins of the National Health Service: The Medical Services of the New Poor Law, 1837-1871* (Berkeley: University of California Press, 1967), 267-272.

²⁵ Martin Daunton, *Wealth and Welfare: An Economic and Social History of Britain, 1851-1951* (Oxford University Press, 2007), 528.

about sanitary reform was shaped both by a strong belief in preventative policing and by the new coercive surveillance of working people's lives already enforced by the New Poor Laws. After the publications of the two reports, Chadwick focused his political energies on advocating for a Public Health Act. The Public Health Act that became law in 1848, however, failed to live up to most of Chadwick's concerns and promises in the sanitary reports. The 1848 Act established a Central Board of Health similar to the Boards of Health set up during cholera outbreaks (including one in 1848 that likely accelerated the passing of the Act) but which, like the cholera Boards of Health, had limited authority, no funding and allowed local authorities to establish their own local Boards of Health in other (limited) circumstances.²⁶ The first report of the Central Board of Health, co-authored by Chadwick, Thomas Southwood Smith (who acted as the medical advisor), Lord Morpeth and Lord Shaftesbury, argued for the effectiveness of sanitary measures against cholera and the dangers of quarantine.²⁷ While quarantine (modelled after plague quarantine) entailed the confinement of people and their goods within quarantined off areas and surveillance of the borders of these areas, the sanitary system established first by the (temporary) 1846 Nuisances Removal and Diseases Prevention Act allowed medical officers to continuously inspect working-class people's homes looking for poor sanitary conditions and individuals who were ill while allowing (seemingly) healthy working-class individuals to carry on working outside their homes. How did the sanitary reform movement make such technologies of routine surveillance possible? How could the proponents of sanitary reform claim that their system was more liberal than quarantine? Their claims hinged on conceptualising the contagiousness of working-class people as a consequence of working people's illiberal subjectivity.

Critics writing about the social problem novel genre, which includes Gaskell's *Mary Barton* and Dickens's *Bleak House*, have noted the close relationship between Chadwick's

²⁶ Hamlin, *Public Health*, 275-301.

²⁷ House of Commons (HoC), *Report by General Board of Health on Measures for Execution of Nuisances Removal and Disease Prevention Act and Public Health Act, to July 1849* (London: William Clowes & Sons, 1849).

sanitary reports and the representation of working people's living conditions in this genre.²⁸²⁹ However, as Joseph Childers has pointed out, these studies in mid-Victorian literature focus on factual connections between Parliamentary reports and fiction or on the impact of fiction on real life reform campaigns, not on how the two kinds of texts influenced each other and the mode of social realism.³⁰ Childers argued that this influence was mutual and that Chadwick's sanitary reports were shaped by realist fiction and its project of ordering and representing reality in writing with verisimilitude.³¹ Yet, of the realist novels Childers quotes as influential over the genre of Parliamentary sanitary reports, only one (*Oliver Twist* (1837)) was actually written before the publication of Chadwick's first report in 1842 and it was only in the 1851 Preface of the novel that Dickens claimed the novel supported sanitary reform.³² Through a focus on the specific political and medical contexts of the 1840s and early 1850s, I want to argue for the recognition of the stylistic influence of Chadwick's reports on Gaskell and Dickens's novels (which can be read both as social problem novels and as Urban Gothic novels).

However, unlike Childers, I read Chadwick's influence as more significant when it comes to the non-realistic stylistic features of the novels. Like the fictions of Gaskell and Dickens and, as Mary Elizabeth Hertz has demonstrated, Chadwick is deliberate in the use of horror to portray working-class homes and neighbourhoods in his two reports.³³ Michelle Elizabeth Allen has also demonstrated that the "sensational nature of much sanitary literature" and the titillating pleasure of gazing into the horror of the lives of working people are partly responsible for the appeal of the sanitary reform movement among middle class readers.³⁴ Chadwick's reports were

²⁸ Patrick Brantlinger, "Bluebooks, the Social Organism, and the Victorian Novel," *Criticism: a Quarterly for Literature and the Arts* 14, no. 4 (1972).

²⁹ Sheila M. Smith, *The Other Nation: The Poor in English Novels of the 1840s and 1850s* (Oxford: Clarendon, 1980).

³⁰ Joseph W. Childers, *Novel Possibilities: Fiction and the Formation of Early Victorian Culture*, New Cultural Studies (Philadelphia: University of Pennsylvania Press, 1995), 78-9.

³¹ Childers, *Novel Possibilities*, 78-80.

³² Childers, *Novel Possibilities*, 78.

³³ Mary Elizabeth Hertz, *Literary Remains: Representations of Death and Burial in Victorian England* (New York: State University of New York Press, 2009), 17.

³⁴ Michelle Elizabeth Allen, *Cleansing the City: Sanitary Geographies in Victorian London* (Ohio University Press, 2007), 2.

not the first texts of the sanitary reform movement to represent a relationship between urban sanitary conditions and transmittable disease, but Chadwick portrays contagion as more explicitly Gothic and much more central to working people subjectivities than previous texts.

Contagion in Sanitary Reports

Chadwick's reports seem, at first, to offer a remarkably straightforward explanation for disease causation. In the introductory summary of the 1842 report's findings, Chadwick claims that, "atmospheric impurity, occasioned by means within the control of legislation" is "the main cause of the ravages of epidemic, endemic, and contagious diseases among the community, and as aggravating most other disease."³⁵ But even this statement is puzzling. Chadwick's reference to "contagious diseases" in an argument for environmental causes as the sole origin of all diseases is puzzling because anti-contagionists tended to not refer to contagious diseases at all. For example (as explored in Chapter 2), Charles Maclean referred to the plague as an epidemic, rather than contagious disease. In fact, both reports reproduce little of the lively debate around the validity of miasmatic or contagionist understandings of disease among contemporary medical professionals. Chadwick was a barrister with no medical training who saw medical professionals as an obstacle to sanitary reform because of their vested interest in a population riddled with disease.³⁶ Consequently, the reports use medical professionals only as sources of eye-witness accounts of working people's lives, not as authoritative sources of medical knowledge about how disease is generated and transmitted. As this section will illustrate, a confusion between contagious and environmental disease causes is a recurring key feature of Chadwick's representation of diseased sanitary conditions and will become a key feature of the Urban Gothic of fiction writers. In particular, Chadwick repeatedly links once-in-life diseases, whose contagiousness was uncontroversial, to environmental or sanitary causes.

³⁵ Edwin Chadwick, *Report to Her Majesty's Principal Secretary of State for the Home Department, from the Poor Law Commissioners, on an Inquiry into the Sanitary Condition of the Labouring Population of Great Britain*, (London: W. Clowes & Sons, 1842), 4.

³⁶ Porter, *Disease, Medicine and Society*, 59.

The confusion between contagionism and anti-contagionism is reflected in the design of Chadwick's sanitary research. In order to compile evidence of working people's living conditions and health, the Poor Law Commission sent a circular letter to all medical officers of Poor Law Unions in England and Wales urging them to report back the numbers of cases of "contagious and infectious disease" they have treated alongside information on their "situation and state of residence" as well as any other observations they had on "the subject of the health of the labouring classes in connexion with what may appear to [them] to be available sanitary regulations."³⁷ The circular advised medical officers that, while "various forms of continued fever" have been the focus of sanitary reports on London, officers working in rural districts should note "the prevalence of ague, and of small-pox, and scarlet fever [...] when the causes promoting their prevalence appear removable."³⁸ While "ague" was a general term for a wide range of febrile disorders whose transmission cannot be pinned down to a single mode, smallpox and scarlet fever were uncontroversially contagious. As discussed in Chapter 2, anti-contagionist writers, such as Maclean, even used smallpox specifically as the model for contagious diseases in order to argue that epidemic diseases cannot be contagious because they differ too much from smallpox. Because Chadwick asked Medical Officers to report cases of smallpox and scarlet fever alongside observations on working people's living conditions, the 1842 *Report* repeatedly draws implicit associations between the two. For example, Chadwick cites the description of a Mr Aaron Little, medical officer of the Chippenham union, of the parish of Colerne, which might seem like "the most healthy village in England," but it is actually "the most unhealthy":

The filth, the dilapidated buildings, the squalid appearance of the majority of the lower orders, have a sickening effect upon the stranger who first visits this place. During three years' attendance on the poor of this district, I have never known the small-pox, scarlatina, or the typhus fever to be absent. The

³⁷ Chadwick, *Report* (1842), xiv-xvi.

³⁸ Chadwick, *Report* (1842), xiv.

situation is damp, and the buildings unhealthy, and the inhabitants themselves inclined to be of dirty habits.³⁹

Although neither Mr Little nor Chadwick explicitly link the damp, unhealthy dwellings and the “dirty habits” of the poor in Colerne to their perpetual smallpox, scarlatina and typhus outbreaks, this account links them implicitly.

There are at least two dozen examples in Chadwick’s *Report* of explicit or strongly implicit eyewitness accounts linking smallpox and scarlet fever to sanitary conditions. Their cumulative effect is to significantly blur the line between contagious and non-contagious disease. Other examples include the lengthy account of a Mr Anderson (described by the report as a solicitor) of the “combination of unwholesome circumstances” related to sewage and sanitation that mean that Inverness is almost never free of “malignant fever” and that the fever “occasionally [...] breaks out in some of its most contagious and dangerous forms, such as measles, scarlet and typhus fever, and sometimes even small-pox.”⁴⁰ Or, claims by a Mr Bland that after “all offending deposits” and all pest-houses were cleaned in Macclesfield due to anti-cholera measures, there were very few cases of “fever of the worst or contagious form” until the next spring when a “severe return of contagious diseases” and “a very fatal epidemic small-pox” occurred.⁴¹

Cultural analyses of the sanitary reform movement and its texts have tended to emphasise the importance of cholera epidemics on the emergence and success of the movement and the new working-class subjectivities it formed. Elizabeth Wilson, for example, has argued that through an increased association between dirt, disease and immorality in Victorian culture, “spiritual and bodily taint” and “the spread of cholera and the spread of evil” became inseparable phenomena.⁴² Similarly, Mary Poovey, writing about James Phillips Kay’s influential pamphlet, “The Moral and Physical Condition of the Working Classes Employed in the Cotton Manufacture in

³⁹ Chadwick, *Report* (1842), 11.

⁴⁰ Chadwick, *Report* (1842), 43.

⁴¹ Chadwick, *Report* (1842), 37.

⁴² Elizabeth Wilson, *The Sphinx in the City: Urban Life, the Control of Disorder, and Women* (Berkeley: University of California Press, 1991), 94.

Manchester" (1832), argued that "cholera provides the metaphor that draws all of society's problems into a single conceptual cluster" and suggests the existence of a shared social body through which disease could travel from the poor to the rich.⁴³ However, Kay published two versions of his pamphlet. While the second version includes a lengthy introduction detailing the horrors of the cholera, the first version, written in 1832 before a cholera outbreak took place in Manchester, makes only one reference to the disease.⁴⁴ Kay did not make substantial changes to the body of his pamphlet after writing the new introduction, cholera as a specific disease did not do much to change his message. Kay's pamphlet aimed to use the statistical research of the newly founded Manchester Statistical Society to "minutely investigat[e] the state of the working classes" and "unreservedly" expose the evils of the current manufacturing system.⁴⁵ Like Chadwick, Kay rallied against "the confined air and noxious exhalations" of working people's dwellings,⁴⁶ but his pamphlet argued that the biggest danger to the "exhausted artisan" is the "contagious example which the Irish have exhibited of barbarous habits and savage want of economy."⁴⁷ Kay, thus, enacts the confusion between contagious disease and immorality that Wilson analyses, but cholera epidemics specifically are less significant to this confusion than Wilson argued. What is significant is a generalised sense of menacing contagion that refers both to disease and morality. Although cholera epidemics were traumatic events on a national scale and brought renewed attention to the issue of sanitation, it would be wrong to ignore the significance of other diseases.

Cholera epidemics rarely feature in Chadwick's sanitary reports precisely because Chadwick's goal was not to expand emergency medical policing measures implemented during epidemics. By the 1850s, there was relative political and public support for emergency sanitary measures during cholera outbreaks due to the ideological and legislative precedent of plague quarantine. Chadwick wanted to make these sanitary measures a routine part of the surveillance

⁴³ Mary Poovey, *Making A Social Body*, 58.

⁴⁴ James Phillips Kay, *The Moral and Physical Condition of the Working Classes Employed in the Cotton Manufacture in Manchester* (London: James Ridgway, 1832), 23.

⁴⁵ Kay, *The Moral and Physical Condition*, 1.

⁴⁶ Kay, *The Moral and Physical Condition*, 15.

⁴⁷ Kay, *The Moral and Physical Condition*, 12.

and regulation of working-class people and, in order to drive up support for this, his reports attempted to create a sense that working-class neighbourhoods are perpetually teeming with contagious disease, regardless of cholera outbreaks. This is why Chadwick's *Report* mainly references the "invasion of cholera" in order to discuss the effectiveness of temporary sanitary measures taken after the 1846 Nuisances Removal and Diseases Prevention Act. The circular letter Chadwick sent to dispensary surgeons and medical practitioners in Scotland shows how Chadwick guided medical professionals to supply him with their views not on the horror or extent of cholera in their districts, but on the effectiveness and means of administering sanitary measures similar to those practiced during cholera epidemics. It stated that,

[t]he spread of contagious diseases is greatly facilitated in many towns by the extreme filth of lodging-houses to which mendicants and vagrants resort [...] measures of medical police have been resorted to on the occurrence of epidemic fevers, and at the period of the invasion of cholera, for cleansing and white-washing these habitations at the expense of the inhabitants. The Commissioners request you to state under what circumstances you conceive such measures might be usefully resorted to, and under what superintendence, and whether the expense should fall on the owners of such habitations or on the inhabitants generally [...].⁴⁸

The reference in this passage to "contagious diseases" caused by the "extreme filth" again blurs the line between different diseases and their modes of transmission. As this discussion has shown, Chadwick continuously blurs the lines between different diseases and their modes of transmission and instead of focusing on any one disease, they narrate working people's environments as taken over by a generalised sense of menacing, uncontrollable Gothic contagion.

⁴⁸ Chadwick, *Report* (1842), xviii.

Chadwick's reliance on the overlap or confusion between miasmatic and contagionist understandings of disease to express the visceral horror of unsanitary living conditions is particularly clear in *A Supplementary Report* (1843). Published a year after the original report, *A Supplementary Report* was the outcome of a House of Commons Select Committee special investigation into burial practices and their impact on public health in cities. The investigation, chaired by William Mackinnon, was intended to redress the omission of the issue of burials in Chadwick's original *Report* and followed on public debates around burial practices in cities sparked by G.A. Walker's 1839 book, *Gatherings from Graveyards, Particularly in London: With a Concise History of the Modes of Interment among Different Nations, from the Earliest Periods*. G.A. Walker, a London surgeon, argued that there was a strong connection between epidemic disease and intramural internment and campaigned for reforming legislation around burial.⁴⁹ Walker described undertaking his investigation into burial practices out of a belief that "burial places in the neighbourhood of the living" were the "harbingers, if not the originators of pestilence," as well as "the cause, direct or indirect, of inhumanity, immorality, and irreligion."⁵⁰ Although *Gatherings from Graveyards* issues stern warnings about the dangers of the practice of human burials near human dwellings, Walker's book is also an enjoyable world history of burial practices with Gothic echoes. Walker argued that the highly dangerous practice of internment in churches was opposed by "the authorities of councils and the decrees of Popes" in Catholic countries, but quickly gained popularity there after the 8th century out of a strong desire for increasingly more magnificently decorated crypts, for example.⁵¹

While the geographic focus of G.A. Walker's reformism was graveyards (and their effects on the surrounding areas), Chadwick's *Supplementary Report*, like his first report, focuses largely on the working-class home due to his wider concerns about working-class domesticity and its role in the national economy.⁵² Mary Poovey has persuasively argued that Chadwick focuses on the

⁴⁹ Hotz, *Literary Remains*, 13.

⁵⁰ G.A. Walker, *Gatherings from Graveyards; Particularly Those of London* (London: Longman &co, 1839), iii.

⁵¹ Walker, *Gatherings from Graveyards*, 225-6.

⁵² Hotz, *Literary Remains*, 17-18.

working-class home as the source of urban disease at the exclusion of other working-class urban spaces (such as factories or pubs) in order to normalise a “proper” middle class domesticity and emphasise the role of the disruption of domesticity by typically all-male trade unionist organisations to the violence of political unrest.⁵³ In fact, Chadwick goes so far as to dismiss some of Walker’s concerns over graveyards. He claims that the biggest danger comes from the miasma the body generates in the first two days after death, typically before it is buried. In *A Supplementary Report*, Chadwick even cites accounts that narrate the same disease as caused, alternatively, by miasmatic and contagionist transmission. For example, a Dr Copeland recounts treating an “advanced in life” gentleman who became ill with a “malignant fever” after visiting a dissenting chapel where with burial grounds underneath its foundation.⁵⁴ After falling ill from the “rush of foul air” from the chapel crypt, he infects his wife by sleeping with her. Dr Copeland then quarantines the rest of the family and cautions that if either one of them had “gone into a crowded hospital with that fever, it would have become a contagious fever.”⁵⁵

In *A Supplementary Report*, the threat of contagion repeatedly blends with the danger of immorality. Mr. Wild, “an undertaker, residing in the Black Friars Road, London” describes how labouring families kept bodies in their homes for five to twelve days, even in the cases “in cases where the death has occurred from fever or any contagious disease”:

[t]hey would keep them much longer if it were not for the undertaker, who urges them to bury them. In cases of rapid decomposition of persons dying in full habit there is much liquid; and the coffin is tapped to let it out. I have known them to keep the corpse after the coffin had been tapped twice, which has, of course, produced a disagreeable effluvium. This liquid generates animal life very rapidly; and within six hours after a coffin has been tapped, if the liquid escapes, maggots,

⁵³ Poovey, *Making a Social Body*, 120-125.

⁵⁴ Edwin Chadwick, *A Supplementary Report on the Results of a Special Inquiry into the Practice of Internment in Towns* (London: W. Clowes & Sons, 1843), 14.

⁵⁵ Chadwick, *Supplementary Report* (1843), 14.

or a sort of animalculo, are seen crawling about. I have frequently seen them crawling about the floor of a room inhabited by the labouring classes, and about the tressels on which the tapped coffin is sustained.⁵⁶

The visceral horror of this passage (the liquid oozing from the coffin, the maggots crawling over the floor and, presumably, over the bodies of sleeping humans) matches, if not exceeds, the horror of *Bleak House's* description of the vermin parasites of Tom-All-Alone's. It also resonates strongly with the scenes of Gothic horror in *Mary Barton*, particularly those of children's deaths which, like Chadwick's report, elicit sympathy and revulsion more strongly than the anonymous menace of Tom-All-Alone's.

As the earlier analysis of underground spaces in *A Supplementary Report* has shown, the central concern of this sanitary report is the horrific disruption dead bodies cause to working-class domesticity, their Gothic disruption of the domestic sphere and the subsequent contamination of the inhabitants with disease and immorality. The presence of dead bodies in the home not only spreads contagious disease, but, even more importantly, leads to a "reckless avidity for immediate enjoyment"⁵⁷ and the removal of "that wholesome fear of death which is the last hold upon a hardened conscience."⁵⁸ Chadwick makes numerous references the dangers of wives having to leave the home to make funeral preparations shortly after their husband's deaths in what Poovey has interpreted as a thinly veiled reference to women becoming prostitutes after the death of men in their lives. Chadwick's contempt for working people's burial practices was only made possible by an increased class differentiation in perceptions of and reactions to death (middle and upper-class families increasingly used the services of private undertakers). Coupled with "a growing perception that the body and soul were no longer considered a continuous entity," this led to the working-class corpse becoming "a source of

⁵⁶ Chadwick, *Supplementary Report* (1843), 39-40.

⁵⁷ Chadwick, *Supplementary Report* (1843), 45.

⁵⁸ Chadwick, *Supplementary Report* (1843), 46.

disease to be expunged from society.”⁵⁹ Chadwick’s use of the Gothic mode is not restricted to somatic horror, however. Like Urban Gothic fiction, Chadwick borrows several tropes from the Gothic Romance. The next section will examine the portrayal of contagion and architectural tropes in Chadwick and the Urban Gothic.

Urban Gothic Architecture

Within Gothic criticism, Gothic tropes and imagery present in the fiction of Elizabeth Gaskell and Charles Dickens have generally been read as a means of expressing politically charged, reformist ideas, in part due to a critical tradition of reading of the Gothic mode as capable of subverting or challenging realism. Diana Wallace, for example, has argued that the Gothic “gave Gaskell a different kind of language” which allowed her to “develop a sophisticated proto-feminist critique” of power structures.⁶⁰ In a similar vein, Lucy Sheehan has asserted that Gaskell invokes “the specter of the Gothic” in order to critique “representation as a shared literary and political form,”⁶¹ and Jill L. Matus has contended that Gaskell used Gothic imagery in *Mary Barton* in order to describe extreme psychological states.⁶² Writing about Gaskell’s Gothic short fiction, rather than her novels, Rebecca Styler also argued that the Gothic gives Gaskell “a symbolic language to explore the theme of evil” and, as such, Gaskell uses the Gothic to make moral propositions.⁶³ David Punter and Glennis Byron encapsulate the critical consensus on Dickens’s use of the Gothic mode when they argue that he “appropriates the Gothic in the service of both realism and polemic.”⁶⁴ Allan Pritchard, likewise, asserts that Dickens deploys the tropes of “Gothic horror fiction” in *Bleak House* in order to narrate the “unprecedented subject of the great modern city and its horror.”⁶⁵ Julian Wolfreys claims that Dickens’s writing about

⁵⁹ Hotz, *Literary Remains*, 15.

⁶⁰ Diana Wallace, *Female Gothic Histories: Gender, Histories and the Gothic* (Cardiff: University of Wales Press, 2013), 73.

⁶¹ Lucy Sheehan, “Trials of Embodiment: Being a Gothic Body in *Mary Barton*,” *Victorian Review* 38, no. 1 (2012): 36.

⁶² Jill L. Matus, “Mary Barton and North and South” in *The Cambridge Companion to Elizabeth Gaskell*, ed. Jill L. Matus (University of Cambridge, 2007), 38-9.

⁶³ Rebecca Styler, “The Problem of ‘Evil’ in Elizabeth Gaskell’s Gothic Tales,” *Gothic studies* 12, no. 1 (2010).

⁶⁴ David Punter & Glennis Byron, *The Gothic* (Oxford: Blackwell, 2004), 28.

⁶⁵ Pritchard, “Urban Gothic,” 433.

London “has recourse to a Gothic ‘turn’” in order to “give expression to that for which there is no language” in the context of the city’s rapid social and economic transformation.⁶⁶ Robert Mighall further asserts that Dickens uses the Gothic “as a rhetorical structure and metaphorical repertoire” in the service of his “progressive and reformist agenda.”⁶⁷

Bleak House has also enjoyed considerable attention among critical accounts of the role of realist novels in engendering forms of liberal self-identity and individualism in the context of the expansion of biopolitics.⁶⁸ D.A. Miller’s Foucauldian reading of realist novels as technologies of disciplinary power that help fashion the reader into a liberal subject has been particularly influential. Miller argued that *Bleak House* portrays the Chancery as a form of Panopticon surveillance and the disturbing blurring of boundaries between the carceral (the Court of Chancery) and the domestic space of the middle-class home (Bleak House) in the novel is intended to inure the reader to the necessary “rhythms of bourgeois industrial culture,” which require the periodic abandonment of the domestic.⁶⁹ Later Foucauldian readings of the novel argue that *Bleak House* was instrumental in creating new liberal conceptualisations of the domestic and public spheres (Pam Morris and Laurean Goodlad) and the population (Emily Steinlight).⁷⁰ These Foucauldian assessments of *Bleak House* place Dickens’s novel within a strictly realist male tradition and implicitly imagine this tradition as the main cultural discourse that shaped liberal subjectivities. My main contention with these readings is that they do not explicitly account for the non-realist aesthetic elements in *Bleak House* which, as I will demonstrate, the novel borrows from the scientific literature of the sanitary reform movement as much as from Gothic Romances. Morris, Goodlad and Steinlight portray Chadwick’s New Poor Laws and sanitary reform as a broad project to modernise the British state through centralised bureaucratic

⁶⁶ Wolfreys, "Toward a Phenomenology," 13-14.

⁶⁷ Mighall, *A Geography*, 86.

⁶⁸ Miller, *The Novel and the Police* (Berkeley: University of California Press, 1988), ix.

⁶⁹ Miller, *The Novel*, 81-83.

⁷⁰ Morris, *Imagining Inclusive Society*, 111-135; Goodlad, *Victorian Literature*, 86-117; Emily Steinlight, *Populating the Novel: Literary Form and the Politics of Surplus Life*. Ithaca, NY: Cornell University Press, 2018, 4-5.

rationality and do so in order to read this project in the work of mid-century realist writers. This view ignores the fact that Chadwick's modernising project had a sole focus: the lives of working-class people. As discussed in Chapter 2, a liberal view of England as already "cultivated" and modern and, thus, already immune to the plague was central to the anti-quarantine movement of the 1820s. To mid-century liberal anti-contagionists like Chadwick, the bureaucracy of quarantine was similarly anachronistic and irrational, as is particularly obvious in the 1849 anti-quarantine *Report by the General Board of Health, on the Measures Adopted for the Execution of the Nuisances Removal and Disease Prevention Act* that Chadwick co-authored.⁷¹

Gothic Geographies

Robert Mighall observes that one of the defining features of the Urban Gothic is the portrayal of working-class neighbourhoods as "analogous to the castles, convents, and Bastilles of the 'medieval' Catholic continent" depicted in earlier Gothic Romances.⁷² Like the slums and rookeries of Reynolds, Dickens and Gaskell's fiction, the working-class homes of Chadwick's sanitary reports are "anachronistic anomalies, vestigial stains on the city's modernity."⁷³ The reports describe at length the malignant influence of decaying Gothic buildings on the health of those who live in or near them. The 1842 report is full of condemnations for old, ill-constructed houses. For example, a Dr Barham describes how sanitary conditions in the town of Truro are particularly bad in the "large proportion of the older houses" which lack communicating drains and, at most, have gutters that collect refuse in pools and lead to "a concentrated solution of all sorts of decomposing refuse" being "allowed to soak through and thoroughly impregnate the walls and ground adjoining."⁷⁴ *Report* also takes issue with more obviously Gothic architecture. For example, describing the tenements surrounding Durham Castle, a Mr. Nicholas Oliver recounts how in the "ancient" city,

⁷¹ HoC, *Report by the General Board of Health* (1849).

⁷² Mighall, *A Geography*, 50.

⁷³ Mighall, *A Geography*, 50-51.

⁷⁴ Chadwick, *Report* (1842), 7.

[t]he streets are very narrow, and the houses are built so much behind each other that the entrance to a great many of the dwellings is by a passage, lane, or alley, either a steep ascent or descent, where, from want of receptacles and sewers, filth is allowed to accumulate, and there necessarily is a constant emanation of foetid effluvia. The majority of these houses are very old and in a dilapidated state, several not being weather proof.⁷⁵

Likewise, a Mr. Brown describes how the ruins of Barnard Castle cause “the most obstinate cases of typhus and other epidemics” because its moat was not “sufficiently drained” and the “thick and big walls of the ruins” retain the damp.⁷⁶

Perhaps the most famous illustration of the Urban Gothic’s portrayal of dirt, disorder and disease coexisting in working people’s homes is *Bleak House*’s Tom-All-Alone’s, a tenement slum that seems like a liminal space between life and death⁷⁷ where Jo lives, “that is to say, Jo has not yet died” (*Bleak House*, 289). The street is described in visceral language recalling Chadwick’s descriptions of overwhelming dampness and fever:

It is a black, dilapidated street, avoided by all decent people, where the crazy houses were seized upon, when their decay was far advanced, by some bold vagrants who after establishing their own possession took to letting them out in lodgings. Now, these tumbling tenements contain, by night, a swarm of misery. As on the ruined human wretch vermin parasites appear, so these ruined shelters have bred a crowd of foul existence that crawls in and out of gaps in walls and boards; and coils itself to sleep, in maggot numbers, where the rain drips in; and comes and goes, fetching and carrying fever and sowing more evil in its every footprint than Lord Coodle, and Sir Thomas Doodle, and the Duke of

⁷⁵ Chadwick, *Report* (1842), 20.

⁷⁶ Chadwick, *Report* (1842), 21.

⁷⁷ Sabine Schülting, *Dirt in Victorian Literature and Culture: Writing Materiality* (London: Routledge, 2016), 91.

Foodle, and all the fine gentlemen in office, down to Zoodle, shall set right in five hundred years—though born expressly to do it. (*BH*, 189)

Tom-All-Alone has all the elements of Urban Gothic fiction. The inhabitants of its labyrinthine geography are an undifferentiated “swarm of misery” on which “vermin parasites” feed then carry fever and evil to the whole city. It is here that Inspector Bucket exclaims “Here’s the fever coming up the street!” when he sees Smallweed being carried by a crowd (*BH*, 268) and it is from here that smallpox spreads to Bleak House and its inhabitants. Thus, Tom-All-Alone’s contagious danger is central to its Gothicism. In an evocative passage later in the novel, the street becomes embodied as the ghostly Tom and enacts its revenge on the “proudest of the proud” when discussions in Parliament about the slum fail to lead to any changes:

There is not a drop of Tom’s corrupted blood but propagates infection and contagion somewhere. [...] There is not an atom of Tom’s slime, but a cubic inch of any pestilential gas in which he lives, not one obscenity or degradation about him, not an ignorance, not a wickedness, not a brutality of his committing, but shall work its retribution, through every order of society, up to the proudest of the proud, and the highest of the high. (*BH*, 533)

However, just like ancient cities are the object of criticism in Chadwick’s *Report*, *Bleak House* also describes Chesney Wold, the seat of the Dedlocks, as profoundly unhealthy due to its overwhelming dampness. “The rain is ever falling” on the Ghost’s Walk, the haunted terrace of the house and the weather is so rainy that “the liveliest imagination can scarcely apprehend its ever being fine again” (*BH*, 72). Dampness is not directly linked to disease among inhabitants of Chesney Wold, but that might be partly because the house is empty for most of the novel. However, dampness does mark the house out as a Gothic, haunted space. During the autumn when it rains constantly, the whole house fills with a “cold, blank smell of a little church” which “suggest[s] that the dead and buried Dedlocks walk there in the long nights and leave the flavour

of their graves behind them” (BH, 344). As already mentioned, in language that mirrors the portrayal of the labyrinth of London streets, Chesney Wold is described as a “labyrinth of grandeur” full of “[a] waste of unused passages and staircases” and where “a maid screams if an ash drops from the fire, takes to crying at all times and seasons, becomes the victim of a low disorder of the spirits, and gives warning and departs” (BH, 737).

Allan Pritchard has argued that *Bleak House* relocates the traditional elements of the Gothic to an urban setting by portraying the isolated rural Gothic world of Bleak House infected by the urban contagion of the city slum carried by Jo.⁷⁸ Yet, in the earlier description of Chesney Wold, dampness plays the role that Jo’s disease does later and creates a relationship between urban poverty and rural wealth as Gothic experiences. The novel’s famous opening paragraph describes London in “implacable November weather,” covered in so much soot and mud that “it would not be wonderful to meet a Megalosaurus, forty feet long or so, waddling like an elephantine lizard up Holborn Hill” (BH, 3). Allan Pritchard also notes the similarity between Dickens’s portrayal of cellars as Gothic locales and the importance of “subterranean settings” in 18th century Gothic novels,⁷⁹ but as I have shown this Gothic motif is mediated by Chadwick’s earlier use.

Chadwick pioneered the use of the Gothic mode in scientific or realist texts and his influence on Dickens’s use of the Gothic mode is clear in the central importance of contagious living spaces as a Gothic tropes in *Bleak House*. Although the novel places more emphasis on describing the exterior Gothic geography of the modern city, the novel also uses contagion as a means of linking domestic spaces across a fractured urban geography. The “Tom” in Tom-All-Alone’s is probably poor Tom Jarndyce, the likely owner of the abandoned buildings in the slum and one of the original suitors of Jarndyce v Jarndyce, who was driven to suicide by the delays in the suit. The labyrinthine slum of Tom-All-Alone not only comes to stand for the justice system

⁷⁸ Pritchard, “Urban Gothic,” 436-47.

⁷⁹ Pritchard, “Urban Gothic,” 440.

of *Bleak House* (via synecdoche), but the labyrinth of the Chancery is what creates the slum and Bleak House⁸⁰ and, notably, the reason for the Chancery having influence over both spaces is the original domestic dispute between the Jarndyces. Tom Jarndyce's lack of a wife and family is also part of the reason for the decay of Bleak House, which is rescued by the domestic skills of Esther (whose benevolent domesticity is also made to shine in the Jellybys mess).

Underground Labyrinths: Chadwick

Chadwick's use of the Gothic mode is perhaps most obvious in his focus on cellars (which conjure up caverns and catacombs) and old buildings are a disproportionate focus of condemnation in *Report on the Sanitary Conditions and A Supplementary Report*. Both Chris Baldrick and Sara Wasson have noted that a "claustrophobic sense of enclosure in space" is a defining feature of the Gothic.⁸¹ The underground spaces visited by Chadwick's reports are profoundly claustrophobic and Chadwick often narrates contagion as claustrophobic in itself. For example, in the 1842 report, Chadwick cites a Dr. Baron Howard who recounts that in Manchester cellars are small and damp and "often crowded with inhabitants to excess" and, because of this, they are "the source of many diseases, particularly catarrh, rheumatic affections, and tedious cases of typhus minor."⁸² Mr. Howell ("one of the council of the Society of Civil Engineers") recounts witnessing two houses in his parish in which the cellars were "full of night-soil, to the depth of three feet" which had accumulated from "the over-flow of the cesspools" and which "more or less infected" the neighbourhood around them.⁸³ Dr. Duncan (working in Liverpool) recounts making a home visit to a family of 13 sick with typhus who all lived in one cellar without a bed and "lay on the floor, and so crowded, that I could scarcely pass between them."⁸⁴ The same Dr. Duncan relates later in *Report* that he knows of one cellar in "Lace-street"

⁸⁰ Mighall, *A Geography*, 73-74.

⁸¹ Sara Wasson, *Urban Gothic of the Second World War: Dark London* (Basingstoke: Palgrave Macmillan, 2010), 3-4; Chris Baldrick, "Introduction" to *The Oxford Book of Gothic Tales*, ed. Chris Baldrick (Oxford University Press, [1992] 2009), xix.

⁸² Chadwick, *Report* (1842), 18.

⁸³ Chadwick, *Report* (1842), 45.

⁸⁴ Chadwick, *Report* (1842), 45.

where water “oozes” from “the court privies” and collects “not less than two feet in depth,” while in another “this stinking fluid” was “discovered below the bed where the family slept.”⁸⁵

Both of these brief accounts go beyond condemning the unsanitary conditions of cellars to suggest that cellars have a particularly vivid horror to which working people have become insensible: the stinking ooze is discovered by the visiting medical officer, but not by the family sleeping on top of it. The overcrowded underground apartments of working people Gothically echo the labyrinthine caverns and catacombs of 18th century Gothic novels such as *The Monk* (1796) or *A Sicilian Romance* (1790). In these 18th century fictions, underground spaces hide secrets and facilitate risky encounters. In *The Monk*, the “Labyrinth of terrors” of the catacombs of St Clare is the site of sexualised violence (Ambrosio’s confinement and rape of Antonia), unnatural attachment to the dead (Agnes kissing the body of her dead baby and refusing to allow it to be buried) and dangerous revolt (the start of the nuns’ violent mob) to take place. All three of these terrors are described in Chadwick’s reports. Sexual immorality and unnatural attachment to dead bodies are a particular concern in *A Supplementary Report*, in which (as this chapter will detail later on) Chadwick describes countless instances of families eating and sleeping next to their dead loved ones and repeatedly alludes to the sexual improprieties this unnatural closeness to the dead prompts. Peter Brooks and Terry Castle have argued that in 18th century Gothic, underground spaces suggest a new kind of fascination, engendered by the French Revolution, with the personal and political unconscious, with “what may lie hidden in lower dungeons of institutions and mental constraints.”⁸⁶ Chadwick’s reports make working-class people’s intimate lives the object of a similar fascination as the reports present Chadwick’s findings as an adventurous journey through the labyrinth of working people’s homes.

⁸⁵ Chadwick, *Report* (1842), 31.

⁸⁶ Peter Brooks, “Virtue and Terror: *The Monk*,” *ELH*, vol 40, no 2 (summer, 1973); Terry Castle, *The Female Thermometer: Eighteenth Century Culture and the Invention of the Uncanny* (Oxford University Press, 1995).

Although Chadwick begins the 1842 report by reproducing a stark table of mortality statistics for the year 1838,⁸⁷ this is one of only a few examples of the use of statistics in the sanitary reports. Instead of statistically distilling the information sent to him by his informants, Chadwick takes the reader on a journey around the country and quotes lengthy, often repetitive descriptive passages from eye-witness accounts. This is reflected in the structure of *Report*: all chapters are structured in subsections on specific locales. For example, the first chapter on the “general condition of the residences of the labouring classes, where disease is found to be the most prevalent” is split into 26 sections relating living conditions in Cornwall, Dorset, Bedford, Essex, Leicester, Stafford, Durham, villages on the Scottish border, Glasgow, Edinburgh and several other regions.⁸⁸ These accounts tell similar stories about “the varied forms in which disease attendant on removable circumstances appears from one end of the island to the other,”⁸⁹ but they do so not through statistics, but through very specific descriptions of particular streets or houses. This structure gives readers a sense that they have experienced these claustrophobic places alongside the narrator. Dickens utilises a similar technique to describe the city of London in *Bleak House* and give readers a sense of travelling through a labyrinth. For example, towards the end of the narrative, Esther describes travelling quickly “through such a labyrinth of streets” while being driven through London that she “lost all idea where we were, except that we had crossed and re-crossed the river” (*BH*, 652). However, as I will discuss, Dickens also describes the abandoned Chesney Wold, the ancient residence of the Dedlocks, in similar terms as “[a] labyrinth of grandeur, less the property of an old family of human beings and their ghostly likenesses than of an old family of echoings and thunderings” (*BH*, 737).

Urban Gothic and Domestic Space

Crowded cellars are also a horror-filled Gothic locale in Gaskell's Urban Gothic fiction. In *Mary Barton*, the Davenports live in a filthy cellar apartment which is “very dark” and full of a

⁸⁷ Chadwick, *Report* (1842), 2.

⁸⁸ Chadwick, *Report* (1842), xxiii.

⁸⁹ Chadwick, *Report* (1842), 5.

“foetid” smell. (MB, 57). Its windows are “broken and stuffed with rags” and the “damp, nay wet, brick floor” allows “the stagnant, filthy moisture of the street” to ooze up into the family’s living space (MB, 57). This filthy apartment fosters a “low, putrid, typhoid kind” of fever common in Manchester which is caused by “miserable living, filthy neighbourhood, and great depression of mind and body” (MB, 58) and which first kills Ben Davenport then, through the kindness of John Barton and George Wilson who nurse the sick Davenports, reaches the Wilson twins. Nataalka Freeland argued that, although this description of urban filth responds to a middle-class “prurient interest” in the living conditions of working people, Gaskell refrains from blaming “the failures of working-class homes to conform to middle-class ideals” on the moral failings of working-class people, instead suggesting that these are the “direct result of industrial economy.”⁹⁰ Freeland cites passages from George Sims’s *Horrible London* (1889) and Arthur Morrison’s *A Child of Jago* (1896) to argue that there was a widespread belief among Victorians that working-class people choose to be dirty, against which Gaskell is assumed to be writing.⁹¹ However, both Sims and Morrison were writing at the end of the century when the link between urban poverty, filth, disease and criminality was interpreted as the result of a process of working-class people’s biological degeneration.⁹²

A more obvious intertext for Gaskell’s mid-century portrayal of filth and disease is Chadwick’s reports which, like Gaskell’s fiction, portray working people as both participants in and victims of lack of sanitation. Chadwick’s reports continuously draw connections between the poor living conditions of labouring people and their tendency towards immorality, violence and criminality. However, unlike fin-de-siècle degenerationists who saw working people’s criminality as an immovable biological reality, both Chadwick and Gaskell are with concerned with how changing sanitary conditions lead to changes in morality and behaviour. Both Chadwick and

⁹⁰ Nataalka Freeland, “The Politics of Dirt in *Mary Barton* and *Ruth*,” *Studies in English Literature, 1500-1900* 42, no. 4 (2002): 801.

⁹¹ Freeland, “The Politics of Dirt,” 802-3.

⁹² William M. Greenslade, *Degeneration, Culture and the Novel: 1880-1940* (Cambridge University Press, 1994), 51-52.

Gaskell understand lack of sanitation and consequent contagiousness as a feature of an illiberal subjectivity, but imagine this subjectivity as malleable through reform. The role of trade unions (which were often, though not always, all-male) in the political crises of the 1830s led to a belief that industrialisation triggered a crisis for “the ordinary lower-class Man” which led him to violent political organisations.⁹³ This sense of a crisis facing the ordinary man is precisely what drove early proponents of the sanitary reform movement, such as James Phillips Kay, to issue warnings about the physical, moral and spiritual health of working-class men. This is also why the sanitary reform movement centred on concerns about the health and wellbeing of working-class men of working age and largely ignored women and children’s health. *Report on the Sanitary Condition* links “the predominance of a young and violent majority” at the “meetings held by torchlight in the neighbourhood of Manchester” by trade unionist to the premature deaths of “men of mature age” who could exercise “a restraining influence” on younger workers.⁹⁴ Chadwick’s *Report* also condemns drunkenness as the cause of “a large class of crimes and disorders” and links the inhabitants of filthy cheap lodging-houses (where alcohol was sold cheaply) to the spread of infectious diseases, such as fever, small-pox and measles, and to “riotous and disgusting” behaviour.⁹⁵ Christopher Hamlin has shown that this shift to diseases of filth occurred for pragmatic and ideological reasons, including the cost-effectiveness of building and repairing sewage systems compared to other kinds of interventions and the belief among members of the Poor Law Commission that sanitary regulation would help limit the costly practice of Poor Law doctors prescribing food as medicine.⁹⁶

The portrayal of trade unionism as a source of Gothic disruption of the domestic in both Gaskell and Chadwick’s texts illuminates their shared conceptualisation of the contagion of dangerous political ideas as well as ill health as a key feature of the working man’s crisis. Lucy

⁹³ Hamlin, *Public Health*, 84-85.

⁹⁴ Chadwick, *Report* (1842), 201-202.

⁹⁵ Chadwick, *Report* (1842), 363.

⁹⁶ Christopher Hamlin, “Edwin Chadwick, “Mutton Medicine,” and the Fever Question,” *Bulletin of the History of Medicine* 70, no. 2 (1996).

Sheehan has claimed that the “continual spectral presence” of Gothic monstrous bodies in *Mary Barton* raises the spectre of the monstrous disintegration of the body politic during eighteenth-century political revolutions.⁹⁷ However, the more obvious political crisis which haunts Gaskell’s novel is the fear of violent trade unionism. The murder of Harry Carson (which becomes the central focus in the second half of the novel) is itself a Gothic doubling of the assassination of a Manchester mill-owner in 1831. Although Gaskell denied that the death of Thomas Ashton served as the specific inspiration for the novel,⁹⁸ there are many similarities between the two deaths as Judith Flanders has pointed out.⁹⁹ Even if Carson’s murder was not intended to closely mirror that of Ashton, many of Gaskell’s readers would have been familiar with the controversy around Ashton’s murder¹⁰⁰ and would have read Carson’s murder into the novel. Even earlier in the novel, workers organisations are represented in Gothic tropes. John Barton only begins joining clubs and becomes “an active member of the trades’ union” after his wife’s horrific death in childbirth which leaves him “stupified,” “like a stock or a stone, so rigid, so still” (*MB*, 20). Without her good influence binding him “down to the gentle humanities of earth” (*MB*, 22) and full of anger at the death of his son from scarlet fever and hunger, the gloomy and obstinate John Barton becomes “a Chartist, and ready to do any thing for his order” (*MB*, 24). Trade unionist gatherings he begins to attend are described in particularly sinister terms. When Mary watches her father waiting to be called to a meeting by one of his trade unionist friends, she sees “sights which haunted her in her dreams”:

[s]trange faces of pale men, with dark glaring eyes, peered into the inner darkness, and seemed desirous to ascertain if her father were at home. Or a hand and arm (the body hidden) was put within the door, and beckoned him away. (*MB*, 110)

⁹⁷ Sheehan, “Trials of Embodiment,” 39-40.

⁹⁸ Shirley Foster, ‘Introduction’ in *Mary Barton* (Oxford: Oxford University Press, 2006), vii-xxvi, xix.

⁹⁹ Judith Flanders, *The Invention of Murder; How the Victorians Revelled in Death and Detection and Created Modern Crime* (London: Harper Press, 2011), 87.

¹⁰⁰ Flanders, *The Invention of Murder*, 85-6.

Like pale ghosts, the “desperate members of Trades' Unions, ready for any thing” take John away from his daughter and his home and corrupt him, eventually forcing him to choose between committing murder or breaking his trade union oath. Like Chadwick’s reports, this Gothicised representation of trade union members reflects a particularly mid-century discourse of working-class political activity as rooted in a contagious disruption of domesticity.

Gaskell describes the deaths of the Wilson twins from the “ghoul-like fever” which first killed Mr Davenport (*MB*, 70) in shocking detail. The twins are uncanny figures to begin with because they seemed “to have but one life divided between them,” they are “helpless, gentle, silly children” who have to be nursed and cared for later than other children (*Mary Barton*, p. 70). When Mary finally visits the Wilsons, she witnesses their deaths which are described in even more detail than Mrs Barton’s death in childbirth:

there sat Mrs. Wilson in the old rocking-chair, with one sick, death-like boy lying on her knee, crying without let or pause, but softly, gently, as fearing to disturb the troubled, gasping child; while behind her, old Alice let her fast-dropping tears fall down on the dead body of the other twin, which she was laying out on a board, placed on a sort of sofa-settee in a corner of the room. (*MB*, 71)

By comparison, in *Bleak House* children’s deaths from disease are described in significantly less horrific terms. When Esther visits the brickmaker’s wife with Ada and Mrs. Pardiggle, she describes it as one of “a cluster of wretched hovels [...] with pigsties close to the broken windows and miserable little gardens before the doors growing nothing but stagnant pools” (*BH* 92). In this “damp, offensive” house, Esther witnesses the brickmaker’s wife attempting to rock a baby who was already dead. Although the sudden recognition of the child’s death is a jolt of Gothic horror, the baby itself is described as a “tiny sleeper” around whom she “seemed to see a halo shine [...] through Ada’s drooping hair” (*BH* 97).

Smallpox in *Bleak House*

If the “ghoul-like fever” haunts the working-class neighbourhoods of *Mary Barton*, in *Bleak House*, working-class locales and subjectivities are prey to a nameless contagion. Critical readers have tended to interpret this disease as smallpox, due to the references to facial scars and the extremely contagious nature of the disease, although some have argued that the disease is actually typhus.¹⁰¹ Regardless of what specific disease Dickens intended to represent, the penetration of contagion into the domestic haven of Bleak House is one of the novel’s key moments. Contagion creeps into Bleak House after Jo is driven out of London by both the institutional cruelty of policemen and Mrs Snagsby’s marital suspicions. The boy falls ill and is taken in by a pair of cottagers. There he is found by Esther and Charley who attempted to take him to Bleak House when the cottagers cannot take care of Jo anymore. John Jarndyce agrees to gain Jo admission to a hospital in the morning and, in the meanwhile, allows Jo to sleep in the “wholesome loft-room by the stable.” (*BH*, 372). Jo mysteriously disappears during the night, never to be heard of again, but Charley becomes ill with the disease. Esther, aware of how dangerous the disease could be to other Bleak House inhabitants (particularly, Ada Clare), quarantines both herself and Charley in order to care for Charley. Esther herself falls ill as soon as Charley recovers and Charley has to care for her during her difficult illness. So far, *Bleak House* might be interpreted as a relatively straightforward tale about the necessity of quarantine and division between the classes more generally. I will argue, however, that the smallpox (or typhus) outbreak illustrates instead the immunitary power of liberal self-development.

Although the contagious disease is traumatic for Esther, it also acts as a key moment of transition and self-development for her. Throughout the first half of the novel, Esther continuously tries to make and unmake herself in order to overcome her illegitimate origin. As a child, Esther is cruelly urged by her aunt to embrace “[s]ubmission, self-denial, diligent work” in order to prepare “for a life begun with such a shadow on it” because she is an illegitimate child.

¹⁰¹ Gilian West, “*Bleak House*: Esther’s Illness,” *English Studies* Vol 73, 1 (1992): 30-34.

After this, Esther strives to repair the fault of her birth by making herself “industrious, contented, and kind-hearted” in an attempt to “win some love” for herself (*BH*, 16-17). The bout of contagious disease (caused by Esther’s kindness towards both Jo and Charley) finally completes this process of intentional self-development and allows Esther to become a fully matured, liberal individual. The novel makes this process of self-development in the midst of contagious illness very explicit. Esther survives the disease, but is physically disfigured and, like Margaret in *Mary Barton*, becomes temporarily blind, but better able to understand herself and others. Delirious with fever, Esther hallucinates that she is at once a child, an elder girl and John Jarndyce’s “little woman,” and becomes “oppressed” not only “by cares and difficulties adapted to each station, but by the great perplexity of endlessly trying to reconcile them” (*BH*, 418). Her recovery marks the reconciliation of her illegitimate past with her domestic present (as Jarndyce’s housekeeper) and her happy future as Allan Woodcourt’s wife. The bout of illness allows Esther to recognise her love for John Jarndyce, when he first comes to visit her: she sees that “his tenderness was so precious to [her]” that she loved him “as if he had been [her] father” (*BH*, 422). Interpreting the disease as smallpox cements this reading as one bout of smallpox would have literally made Esther acquire immunity to the pathogen in the future.

My reading of Esther’s illness as an acquired immunity trope is significantly more optimistic than those of other critical readers. For example, Michael Gurney has argued that the spread of the disease (which he identifies as smallpox) in *Bleak House* emphasises the contagious danger of connections between different classes.¹⁰² Gurney also argued that the large number of diseases described in *Bleak House* can be seen as a symptom of Dickens’s posture as a “social pathologist” who “dissects his nation,” and uses disease as “a physical manifestation and consequence of society’s sickness.”¹⁰³ Similarly, Mary Wilson Carpenter contends that Dickens portrays a middle-class character like Esther sick with smallpox in order to emphasise that the

¹⁰² Michael S. Gurney, “Disease as Device: The Role of Smallpox in *Bleak House*,” *Literature and Medicine* 9, no. 1 (1990): 79.

¹⁰³ Gurney, “Disease as device,” 79.

increasing use of vaccination itself was not enough to isolate the middle-classes from the rotting, infectious slums where the smallpox epidemic of 1837-40 killed many working people.¹⁰⁴ Robert Mighall similarly reads the smallpox epidemic in *Bleak House* as illustrative of class-based contagion or contamination fears and contends that a “fearful recognition” of the proximity between classes and their different living spaces as well as the “melodramatic possibilities” of this proximity form the basis of the Urban Gothic mode.¹⁰⁵ However, it is notable that smallpox never poses a serious risk to Ada, Richard or any of the other resolutely middle-class inhabitants of Bleak House. Jo is not even allowed to sleep in the house and there is no risk of him coming into contact with any of the household. Instead, the disease only inflects Esther and Charley who have had direct contact with Jo. Moreover, somewhat paradoxically, the absence of proximity between classes was a source of great anxiety to mid-century social and sanitary reformers and this troubles interpretations of inter-class proximity as inevitably anxious.

The “two nations” were one of the most prominent themes of the social problem novels of the 1830s and 1840s.¹⁰⁶ The phrase “two nations” refers to a perceived rift in new industrial cities between “the rich and poor” that undermined supposedly harmonious “traditional” relationships between the classes. It has its origins in Benjamin Disraeli’s *Sybil, or The Tale of Two Nations* (1845), which describes the relationship between the two nations as one devoid of “intercourse” or “sympathy” because the rich and the poor are “as ignorant of each other’s habits, thoughts and feelings as if they were dwellers in different planets.”¹⁰⁷ In an early sanitary report (published in 1832), James Phillips Kay expressed a similar worry that the “disruption of the natural ties has created a wide gulph [sic] between the higher and lower orders of the

¹⁰⁴ Mary Wilson Carpenter, *Health, Medicine, and Society in Victorian England* (Santa Barbara, CA: ABC CLIO, 2010), 94-96.

¹⁰⁵ Mighall, *A Geography*, 40.

¹⁰⁶ For an in-depth analysis of “two nations” in social problem novels see: Josephine M. Guy, *The Victorian Social-Problem Novel: The Market, the Individual and Communal Life* (Basingstoke: Macmillan, 1996), 117-185.

¹⁰⁷ Spencer E. Wellhofer, ““Two Nations”: Class and Periphery in Late Victorian Britain, 1885-1910,” *American Political Science Review* 79, no. 4 (1985): 977-993:977.

community, across which the scowl of hatred banishes the smile of charity and love.”¹⁰⁸ Although critical readers have tended to read the spread of contagious disease in *Bleak House* primarily through the Esther smallpox (or typhus) episode, an earlier incident similarly holds potential for contagious danger, but the novel resolves this contagious danger through inter-class sympathies instead. *Bleak House* mocks the middle-class vogue for visiting (largely prompted by “two nations” concerns) for most of the novel, but it allows for genuine inter-class sympathies when Jenny’s baby dies. Like any astute sanitary inspector, Esther remarks that “[n]o effort had been made to clean the room – it seemed in its nature almost hopeless of being clean,” but she also notes that the dead baby had been “washed, and neatly dressed in some fragments of white linen” (*BH*, 97). This contrast, as well as the contrast between Dickens’s text and Chadwick’s gruesome descriptions of corpses in working-class homes, signals a working-class subjectivity capable of reform (including sanitary reform). As the women comfort Jenny on the death of her child, the scene sets up sympathy between middle- and working-class women as angelic, almost magical for both classes: when Ada lifts Esther’s handkerchief from the baby, Esther sees “a halo shine around the child through Ada’s drooping hair as her pity bent her head” (*BH*, 97). Like Jo, Jenny’s baby is a victim of poor sanitation and when Esther takes back her handkerchief she could have carried the infection of working people’s homes to the “proper” middle-class domesticity of Bleak House.

However, the handkerchief plays a different narrative role. Instead of carrying contagion, the handkerchief plays an instrumental role in establishing the connection between orphan Esther and aristocratic Lady Dedlock. As Mighall has argued, this does reveal the narrative parallels the novel creates between the circulation of secrets and that of Gothic contagion, as well as between domestic disruption and Gothic decay. Not coincidentally, Jo’s ill-fated excursion outside of London is precipitated by Mr Tulkinghorn’s quest to find out the truth about Lady Dedlock’s secret visit. Contagious objects seem to be what makes the connection between Lady

¹⁰⁸ Kay, *The Moral and Physical Condition*.

Dedlock and Esther possible in the labyrinths of Chesney Wold and London. But reading Chesney Wold as equally Gothic as Tom-All-Along's in the geography of *Bleak House* raises questions about how central the urban world really is to the novels we call Urban Gothic. Critical writing on British Urban Gothic to date has tended to focus on London specifically. Even an essay by Robert Mighall promisingly titled "Gothic Cities" only explores London as representative of British Urban Gothic.¹⁰⁹ Given the extensive use of Urban Gothic tropes in Gaskell's Manchester-set *Mary Barton* discussed in this chapter, it is time to, at the very least, reassess the centrality of London in criticism of the subgenre and expand analyses of the Urban Gothic to more provincial locales. But this chapter has also argued for reading Chadwick's pair of sanitary reports published in 1842 and 1843 as important influences on the Urban Gothic's use of Gothic tropes. It did so in order to suggest that the unifying factor in Urban Gothic fiction is, not its urban locale, but a conceptualisation of Gothic contagion formulated by Chadwick to encapsulate the multiple dangers (moral, political, criminal) of working people's illiberal subjectivities and their defective domesticity. Most literature on the Urban Gothic acknowledges the importance of contagious pathology to the subgenre, however, while still privileging the urban setting as the main defining feature. Chadwick narrates the disturbing dangers of Gothically infectious, underground spaces across Britain and, although most of his eyewitness accounts come from medical professionals in provincial cities and towns because these locales are more likely to have Poor Law Unions, the reports also describe working people's homes in rural locations as subject to Gothic infection.

What does this indistinction between the urban and the rural mean for Chadwick's influence on the Urban Gothic? Is it time, perhaps, to revise how the Urban Gothic is defined to reflect more clearly its focus on working-class people as sources of Gothic horror rather than urban geographies (in a general sense)? While these broader questions go beyond the scope of the current analysis, I want to stress that a recognition of Chadwick's central influence on the Urban Gothic affects how we can read the Urban Gothic as a political mode. Chadwick's sanitary

¹⁰⁹ Robert Mighall, "Gothic Cities," in *The Routledge Companion to the Gothic*, eds. Catherine Spooner & Emma McEvoy (London: Routledge, 2007), 54.

reports create the trope of Gothic contagion in order to further the expansion of disciplinary technologies of surveillance and segregation over working people's lives as part of an expanding liberal biopolitics. Although these liberal biopolitics also discipline middle-class people, they do not do so in the same way. The class-neutral biopolitical social body described in the work of Mary Poovey or Emily Steinlight simply does not exist yet – at least not in the texts of Chadwick or Gothic novelists. For, although contagion unites the worlds of *Bleak House* and *Tom's-All-Alone's*, both Esther and Charley survive smallpox, while Jo and Jenny's baby remain anonymous victims of the contagion.

The same impulse to make the connections between different classes and urban spaces visible underwrites Chadwick's reports. Although Chadwick believes that disease is caused by atmospheric impurity, the reports go to great lengths to describe in detail the carriers of foul air, not atmosphere itself. Various kinds of effluvia, dampness, rot, refuse and decaying dead bodies are described again and again as a means of making the transmission of the disease a visible, experiential Gothic image. In doing so, Chadwick's texts relate a scientific truth by appealing to the Gothic mode to an even larger extent than Dickens or Gaskell's fictional texts do. In other words, Chadwick's reports show that scientific truthfulness, at least when it comes to the scientific truthfulness of contagion, can appeal to non-realist modes.

Chapter 4: Vampiric Blood and Reproductive Biopolitics

This chapter seeks to examine the shifting focus of liberal biopolitics from hygiene and sanitation to reproduction at the end of the 19th century. Having explored the contentious political debates that surrounded the introduction of relatively limited public health interventions in the first half of the 19th century in the last two Chapters, it might seem difficult to imagine that by the end of the century the rise of eugenics made possible radical, wide-ranging interventions in private health as the realm of reproduction gradually became engulfed by biopolitics. Although the eugenics movement only had two decisive legislative victories in England (the Mental Deficiency Act of 1913 and, to a somewhat lesser extent, the Elementary Education (Defective and Epileptic Children) Act of 1914), eugenics enjoyed growing social and political influence between the 1880s and the start of the First World War and, importantly, eugenics helped to shift ideas about what kinds of state interventions were permissible.¹ In order to carry out this analysis of the internal swings within biopolitics as liberalism began to lose popularity at the close of the century, I will examine the sudden popularity of vampire fiction of the 1890s and, in particular, the new emphasis on the trope of contagious vampirism in 1890s vampire fiction. I will demonstrate, first of all, that the popularity of vampire fiction in the 1890s illustrates the new political urgency around issues of sexual immorality and inheritance prompted by the rise of eugenics. But, secondly, I aim to demonstrate

¹ Havery G. Simmons, "Explaining Social Policy: The English Mental Deficiency Act of 1913," *Journal of Social History* 11, no. 3 (1978); Jayne Woodhouse, "Eugenics and the Feeble-minded Parliamentary Debates of 1912-14," *History of Education* Vol. 11, 2 (1982); Lucy Bland & Lesley A. Hall, "Eugenics in Britain: The View from the Metropole," in *The Oxford Handbook of the History of Eugenics*, eds. Alison Bashford & Philippa Levine, (Oxford University Press, 2010).

that the eroticised portrayal of the overlapping categories of contagion and inheritance, and the ambiguous, Gothicised representation of science and scientific professionals in vampire fiction, point to the tenuous position of liberal individualist subjectivities in the new eugenic focus of turn-of-the-century biopolitics. Eugenic biopolitics's encroachment into the reproductive lives of middle-class individuals did not occur easily or inevitably, as this chapter will demonstrate; it was the result of considerable political and public debate which, this chapter will argue, often fixed on the question of the regulation and criminalisation of prostitution.

The publication of Mary Elizabeth Braddon's short-story 'Good Lady Ducayne' in 1896, and of *The Blood of the Vampire* by Florence Marryat and *Dracula* by Bram Stoker a year later in 1897 mark the late 1890s as a particularly fertile period for English-language vampire fiction.² Stoker's novel, in its multitude of adaptations and rewritings, has become a beloved piece of popular culture as well as a key text for the field of Gothic Studies. However, my intention is to analyse all three vampiric texts of the 1896-97 as examples of the fin-de-siècle vampire Gothic's shift towards writing contagion into vampirism. Like Carol A. Senf, Elaine Showalter, Tabitha Sparks and Martin Willis, I read the Contagious Diseases Acts and the political debates that surrounded them as central to understanding a new discourse of vampiric contagion.³ However, unlike other critical accounts of vampire fiction, my analysis aims to contextualise vampiric contagion through a longer-term history of medical and political conceptualisations of venereal disease and blood. In examining the influence of the Contagious Diseases Acts on vampire fiction, we cannot ignore the fact that the Contagious Diseases Acts had been successfully repealed for several years before the publication of the wave of vampire fiction in the late 1890s. If the CDAs are truly emblematic of a new overwhelming fear of

² Mary Elizabeth Braddon, "Good Lady Ducayne" (1896) *The Strand Magazine* (February 1896): 1-24; Bram Stoker, *Dracula*, ed. David Rogers (Hertfordshire: Wordsworth Editions, [1897] 1993); Florence Marryat, *The Blood of the Vampire* (London: Hutchinson, 1897). All further references to "Good Lady Ducayne," *Dracula* and *The Blood of the Vampire* are from the editions cited here and are given parenthetically.

³ Carol A. Senf, *The Vampire in Nineteenth Century English Literature* (Madison, WI: University of Wisconsin Press, 1988); Elaine Showalter, *Sexual Anarchy: Gender and Culture at the Fin de Siècle* (London: Bloomsbury, 1991); Tabitha Sparks, "Medical and the Return of the Contagious Diseases Acts in Stoker and Machen," *Nineteenth-Century Feminisms* 6 (2002); Martin Willis, "The Invisible Giant," *Dracula*, and Disease," *Studies in the Novel* 39, no. 3 (2007).

contagion through sexual contact (which is also visible in vampire fiction), why did they only ever apply to a very limited military jurisdiction and why was the campaign against the CDAs so successful?

Eugenics, a social movement for the improvement of humankind by managing human reproduction to promote superior inheritable traits, grew in the 1880s and 1890s, partly (although not completely) through the growing influence of Darwinist theories about genetic inheritance and inheritable traits.⁴ In Britain, the most vocal proponents of eugenics were the professional middle-classes and, although British eugenics was also concerned with issues of race and ethnicity, much of the eugenic rhetoric was directed at managing the reproduction of working-class people.⁵ Eugenics, thus, both opposed and grew out of the liberal biopolitics of the first half of the 19th century. Eugenicians argued that national health and wellbeing were reliant on individual reproductive choices and, thus, that individual reproductive choices can never be a truly private matter. But the growth of eugenics was also made possible by working-class illiberal subjectivities created by the interventionist, techno-bureaucratic liberalism that emerged in the late 1860s and 1870s as a number of regulations dreamt up by mid-century sanitary reformers finally came into force. The 1866 Sanitary Act is particularly important in this context as it gave local authorities the power to regulate sewage facilities and made overcrowding, lack of ventilation and excessive smoke in private dwellings or factories punishable legal nuisances.⁶ Further public health regulation, such as the 1875 Artisans' and Labourers' Dwellings Improvement Act (which allowed local authorities to buy up and demolish slums in the name of public health), demonstrate that from the 1860s onwards, some level of state regulation of sanitary aspects of public health was relatively widely accepted.

Moreover, although mid-century sanitary reformers had expressed distrust towards medical professionals, by the 1860s public health policy was heavily reliant on medical experts for

⁴ Diane B. Paul, "Darwin, Social Darwinism and Eugenics," in *The Cambridge Companion to Darwin*, eds. Jonathan Hodge & Gregory Radick (Cambridge University Press, 2003).

⁵ Bland & Hall, "Eugenics in Britain," 215-16.

⁶ Rob Baggott, *Public Health: Policy and Politics* 2nd edition (Basingstoke: Macmillan, [2000] 2011), 35-6.

implementation. In particular, local authorities needed medical professionals to survey local areas, identify health problems and help enforce regulation.⁷ The Contagious Diseases Act of 1864 (further alternations and amendments of the Act were passed in 1866 and 1869) reflects the growing influence of medical expertise as the recommendations of high profile medical professionals offered the justification for the CDAs's expansive surveillance of women in public spaces. It would be tempting to regard the CDAs as evidence that the rise of eugenics was little more than an extension of the influence of scientific experts. However, the following analysis of the success campaign to repeal the CDAs seeks to complicate this interpretation of the CDAs and argue that liberal technocratic bureaucracy was not the only force reshaping biopolitics in this period. The anti-CDAs campaign was so successful particularly because it was able to capitalise on growing anti-scientific sentiments spurred on by the backlash against Darwinism and the growing anti-vivisectionist movement. Moreover, perhaps the greatest success of the anti-CDAs campaign was not the repeal of the Acts itself, but the criminalisation of solicitation in 1885 (through the Criminal Law Amendment Act). Most of the anti-CDAs campaigners believed that police surveillance of prostitutes was necessary – not on public health grounds, but because prostitution is sinful and immoral and the proliferation of prostitution harmed the moral fabric of the nation.

It is difficult to square anti-CDAs campaigners' support for the Criminal Law Amendment Act or for reform institutions (in which suspected prostitutes were reformed through constant surveillance by middle-class ladies) with their image as fighters for women's liberation from the violent surveillance of the police and medical establishment. But this chapter will argue that the anti-CDAs campaign is illustrative of the role of middle-class feminists in helping reshape liberal biopolitics and making room for an interventionist, more conservative governmentality. Penelope Deutscher has asserted that feminist movements significantly contributed to the "biopoliticisation of reproduction and maternity" at the end of the 19th century through their push for a "form of a feminist preoccupation with population rate, the future of the people, species, race or nation, and

⁷ Baggott, *Public Health*, 36.

the “quality” of reproduction.”⁸ I will argue that a new focus on reproduction and the future of the nation is precisely what is at stake in the anti-CDAs campaign. Although pro-regulation medical professionals anticipated this focus in their arguments for the need to regulate and scrutinise prostitutes, sexuality, reproduction and inheritance only become united in a coherent narrative about the future of the nation in the rhetoric of the anti-CDAs campaign. This chapter will discuss evolving perceptions of blood and blood transfers as a medium for reproduction and reproductive inheritance and “infantile syphilis” as a public health issue to illustrate how sexuality, reproduction and inheritance became biopoliticised in unique ways by the opponents of the CDAs.

Contagious Diseases Acts and Liberal Biopolitics

The success of the highly public campaign to repeal the CDAs raises many questions about how the Acts functioned within the larger bureaucracy of liberal biopolitics. If the campaign to repeal the Acts aimed to and succeeded in freeing working-class women from police and medical scrutiny, why was the similar campaign against compulsory vaccination (which policed working-class children and their parents) far less successful?⁹ Although the repeal campaign has often been seen as an early feminist attempt by women to wrestle control away from the medical profession, the campaigners attitudes towards the regulation of prostitution are more complex.¹⁰ Paula Bartley has demonstrated that the majority of the support for the CDAs repeal campaign came from social and religious reformers whose primary opposition to the Acts stepped from a belief that the Acts did not punish prostitutes enough.¹¹ Instead, reformers supported (mostly religious) reform institutions that sought to teach working-class women the model of middle-class domesticity through strict regimes of moral education and manual work. These institutions were not dissimilar to workhouses. By the 1880s, the CDAs repeal campaigners increasingly joined the “social purity” movement as an

⁸ Penelope Deutscher, “Reproductive Politics, Biopolitics and Auto-immunity: From Foucault to Esposito,” *Journal of Bioethical Inquiry* 7, no. 2 (2010): 218.

⁹ For an overview of the not very successful anti-compulsory vaccination campaign, see: Durbach, *Bodily Matters*.

¹⁰ For example: Judith R. Walkowitz, *Prostitution and Victorian Society: Women, Class, and the State* (Cambridge University Press, 1982); Mary Spongberg, *Feminizing Venereal Disease: The Body of the Prostitute in Nineteenth-Century Medical Discourse* (New York University Press, 1998).

¹¹ Paula Bartley, *Prostitution: Prevention and reform in England, 1860-1914* (London: Routledge, 2012).

acknowledgement of the failure of “reform work” spread among campaigners. The “social purity” movement’s arguments in favour of curbing prostitution through public education and aggressive criminalisation of illicit or “sinful” sexuality had obvious appeal for many of the campaigners.¹² The proto-eugenic “social purity” movement’s highly visible moral panics around child prostitution and “White Slavery” led to the passage of the 1885 Criminal Law Amendment Act that created a number of new sexual offences, including solicitation and “gross indecency”, in the name of the “protection of Women and Girls.” Although it was initially a largely overlooked part of the Act, Section 11 of the Criminal Law Amendment Act (also known as the Labouchere Amendment) became notorious in 1895 when it was used to convict Oscar Wilde of “gross indecency” and sentence him to two years of hard labour. It is difficult to measure the full effects of the 1885 Criminal Law Amendment Act on working-class women, partly because police forces were reluctant to enact the Act (as they were keenly aware that wrongful solicitation arrests were deeply unpopular), despite efforts by local “social purity” groups to use the Act to pressure women to join reform institutions and lobby local police forces to detain “known” prostitutes.¹³ The apparent feminist success of the CDAs repealed in 1886, thus, cannot be seen outside of the context of the significant increase in disciplining of illicit sexuality after the 1885 Criminal Law Amendment Act.

The simultaneous adoption of 1885 Criminal Law Amendment Act and the repeal of the CDAs also pointed to a new conceptualisation of role of the state in resolving social and health issues through interventions in private life. In the late 1870s and 1880s, under the influence of Socialism and New Liberalism, the British state began to, on the one hand, provide a wider range of social services and interventions (largely through local authorities) and, on the other, more decisively regulate issues around both health and morality.¹⁴ In particular, the 1875 Public Health Act finally gave local authorities real power to react to local public health crises, including the ability to enact by-laws for compulsory building standards for new streets and buildings, fine water companies and

¹² Bartley, *Prostitution*, 112.

¹³ Bartley, *Prostitution*, 162-65.

¹⁴ For historical overview of this process, see: Rodney Barker, *Political Ideas in Modern Britain: In and After the Twentieth Century* 2nd ed (London: Routledge, [1978] 1997), 15-31.

private landlords, and purchase, repair and build public sewers.¹⁵ A decade later, the 1889 Infectious Diseases (Notification) Act made infectious disease notification mandatory in London and optional in other parts of the United Kingdom.¹⁶ The Infectious Diseases (Notification) Act applied to all householders extending the gaze of bureaucratic sanitarianism beyond the homes of working-class people, however, the so-called “filth” diseases still made up the bulk of the list of notifiable diseases. Notably in the context of the CDAs, venereal diseases were not notifiable diseases.¹⁷ These new interventions in public health were driven by a larger project of biopolitical management than the relatively narrow working-class focus of mid-century utilitarian sanitary reform and imagined the whole urban landscape as a space in need of order. The exact reasons for this gradual reconceptualisation of the liberal state as more directly responsible for the mental, physical and moral conditions of its people are complex and subject to considerable debate in historical literature and rehearsing these debates is beyond the scope of this chapter. What this chapter does explore is how evolving discourses around blood and contagion in relation to venereal disease as indicative of the transition towards an “enlarged state” conceptualisation of liberal governmentality.

Prostitution as Public Health Issue

First passed in 1864, amended to expand their jurisdiction in 1866 and 1869 and eventually repealed in 1886, the Contagious Diseases Acts allowed police to arrest suspected prostitutes. If found to be infected with a venereal disease during a medical examination, detained women could then be placed in medical institutions for up to two years, while healthy women were free to go. The CDAs were military legislation, prompted by concerns about the health of army troops following the disastrous Crimean War (1854-6), including mounting concerns around venereal diseases following the 1858 Royal Commission on the Health of the Army.¹⁸ As military legislation, the CDAs reflect the special role played by the military (as disciplinary apparatus) as a model for the expansion of

¹⁵ Baggott, *Public Health*, 32-3.

¹⁶ Graham Mooney, "Public Health versus Private Practice: The Contested Development of Compulsory Infectious Disease Notification in Late-Nineteenth-Century Britain," *Bulletin of the History of Medicine*. 73 (2) (199).

¹⁷ Mooney, "Public Health."

¹⁸ Walkowitz, *Prostitution*, 74.

biopolitics. However, it is important to stress that the CDAs were not, primarily, intended to be legislation that interfered with reproduction: they were intended to improve the health of adult men in the military, not of their children. Yet, the Acts normalised managing sexuality and reproduction.

The relationship between prostitution and venereal disease became highly visible in England after the 1857 publication of William Acton's *Prostitution, Considered in its Moral, Social and Sanitary Aspects, in London and other Large Cities*. Modelled after sanitary reports and informed by Acton's work as a venereal disease specialist, *Prostitution* (1857) argued for a scientific approach to regulating prostitution in order to lower the high incidence of venereal disease among both army troops and the wider public. Acton examined prostitution both as a social, legal and public health issue and offered an overview of statistics on prostitution, sociological theories about the origin of prostitution, diseases caused by prostitution and existing legislation around prostitution around the world.¹⁹ In doing so, Acton responded to religious and secular prostitution abolitionist thinking with a scientific understanding of prostitution as public health threat.²⁰ Acton supported the introduction of the CDAs, but not the harsher regulationist regimes in Continental Europe.²¹ Even after the 1866 and 1869 amendments, the CDAs only applied to a relatively small number of garrison and seaport towns.²² Their limited jurisdiction is also why the CDAs were relatively uncontroversial until 1867 when proposals to expand the Acts to civilian populations were circulated by the Association for Promoting the Extension of the Contagious Diseases Acts.²³ These proposals brought the CDAs to the attention of social and religious reformers who had already begun asking for prostitution reform in 1850s and prompted a large repeal campaign, ultimately led primarily by women's organisations.²⁴

¹⁹ William Acton, *Prostitution Considered in Its Moral, Social, and Sanitary Aspects in London and other Large Cities and Garrison Towns* 2nd edition (London: John Churchill & Sons, 1870).

²⁰ Walkowitz, *Prostitution*, 44.

²¹ Carpenter, *Health, Medicine, and Society*, 83-84.

²² Walkowitz, *Prostitution*, 7-9.

²³ Walkowitz, *Prostitution*, 79.

²⁴ Walkowitz, *Prostitution*, 71.

Contagious Diseases Acts & Repeal

The contagiousness of venereal diseases was largely invisible in the public debates around the CDAs, but the Acts criminalised sexual behaviour on the basis of the contagiousness of syphilis and gonorrhoea and reinforced associations between prostitution and contagion by mobilising these discourses around the already contentious issue of female sexuality. Paradoxically, for all their opposition to medical practitioners, the campaign for the repeal of the CDAs used contagion tropes in their description of prostitution to ask for a fuller criminalisation of prostitution on the basis of public morality, rather than public health. This discourse of prostitution as moral contagion was already present in the literature of anti-prostitution campaigners before the CDAs. A large number of (mostly religious) organisations aimed at rescuing and rehabilitating “fallen women” began to appear in the 1850s. The most notable of these, the Church Penitentiary Association (founded in 1852 as an umbrella organisation for Church of England institutions) and the Reformatory and Refuge Union (the Evangelical equivalent of the CPA, founded in 1856) helped to run hundreds of institutions in which thousands of women lived.²⁵ Social reformers understood prostitution as a social and moral problem largely stemming from the immoral behaviour of individual prostitutes and they objected to the CDAs due to their focus on physical disease instead of immorality and their consequent lack of jurisdiction over healthy women.

Thus, in the anti-prostitution sermons, lectures and pamphlets of 1840s and 1850s reformers such as William Bevan, Thomas Guthrie, Ralph Wardlaw and William Tait, common morality and the social order, rather than public health, were at stake in the use of contagion tropes.²⁶ For example, William Bevan’s 1843 lecture on prostitution in Liverpool, describes prostitution as a “system of unmitigated pollution and woe”²⁷ and its spread in the city as the “spread of the infection.”²⁸ Bevan describes prostitutes as having almost “every variety” of disease,

²⁵ Bartley, *Prostitution*, 26-27.

²⁶ Walkowitz, *Prostitution*, 37-39.

²⁷ William Bevan, *Prostitution in the Borough of Liverpool: A Lecture Delivered in the Music Hall, June 3, 1843* (Liverpool: B. Smith et. al, 1843), 5.

²⁸ Bevan, *Prostitution*, 11.

including rheumatism, erysipelas, fevers, cutaneous and pulmonary disorders as well as the “virus” of syphilis.²⁹ Yet, in Bevan’s account prostitutes seem to die within “six years,” not from disease but from the “gnawings of conscience” that “can no longer be banished from that thoughts that quickly pass, and feverishly burn within them.”³⁰ In Bevan’s account, disease is merely evidence of the sinfulness of prostitution, the chief danger and the focus of reform around prostitution is sin itself. Like James Phillips Kay’s portrayal of the “contagious” immorality of Irish workers in his pamphlet, *The Moral and Physical Condition of the Working Classes* (1832) discussed in Chapter 3, social reformers who wrote about the “Great Social Evil” of prostitution in the 1840s and 1850s did not see public health regulation as a means to control prostitution, but used the medicalised language of contagion in order to argue for the moral and spiritual harms of prostitution.³¹

Although public health was at the heart of the CDAs, even explicitly anti-CDAs groups such as Ladies National Association for the Repeal of the Contagious Diseases Acts opposed the CDAs largely on the basis of public immorality and vice and ignored the medical aspects of the Acts. For example, although the LNA advocates voiced horror at the indignity and violence of the medical examinations, they did so through melodramatic narratives in which women were victimised by men’s immorality, rather than by raising questions about the scientific value of medical examinations.³² Contagion became an even more pervasive trope in the writing of the campaign against the CDAs. A sample of these contagion tropes can be seen in *The Shield*, the weekly circular published by the Ladies National Association for the Repeal of the Contagious Diseases Acts, that regularly published letters and excerpts from national and regional publications.. A letter from “a gentleman engaged as a Missionary” in Chatham and Rochester published in July 1870 describes how because of the Acts,

[g]irls are brought into Chatham from the surrounding districts to be examined.

Many of them are prevailed upon by the girls they meet to remain here, and very

²⁹ Bevan, *Prostitution*, 14.

³⁰ Bevan, *Prostitution*, 15.

³¹ Walkowitz, *Prostitution*, 32.

³² Judith R Walkowitz, *City of Dreadful Delight: Narratives of Sexual Danger in Late-Victorian London* (University of Chicago Press, 1992), 92.

often, though healthy when they come, are infected with disease in the town within a week. How can this be called “stamping out” the disease?³³

An October issue in the same year (1870) reproduces a letter supposedly sent by Giuseppe Mazzini to “an English lady” in which the Italian writer and politician condemns the Acts as “the germ of a moral disease far more terrible than the physical evil” of contagious disease and a moral “cancer” which will infect “the very blood of your nation” if it is neglected.³⁴ This language echoes both the CDAs and pre-1860s moral literature opposing prostitution.

Blood and Contagion

In the spring of 1871, Francis Galton, famed statistician and founder of the field of eugenics, read a paper at the Royal Society categorically disproving Charles Darwin’s theory of pangenesis. The paper, which quickly led to widespread mockery of pangenesis, described a series of (at the time unprecedented and unusual) blood transfusion experiments on rabbits:

I knew that the operation of transfusion of blood had been frequently practised with success on men as well as animals, and that it was not a cruel operation – that not only had it been used in midwifery practice, but that large quantities of saline water had been injected into the veins of patients suffering under cholera. I therefore determined to inject alien blood into the circulation of pure varieties of animals (of course, under the influence of anaesthetics), and to breed from them, and to note whether their offspring did or did not show signs of mongrelism. If Pangenesis were true, according to the interpretation which I have put upon it, the results would be startling in their novelty, and of no small practical use; for it would become possible to modify varieties of animals, by introducing slight dashes of new blood, in ways important to breeds. [...] I have now made experiments of

³³ Anonymous, “Intelligence from the Subjected Districts,” *The Shield: the Anti-Contagious Diseases Acts Association's Weekly Circular*, Monday, April 11, 1870, 43. *19th Century UK Periodicals*.

³⁴ Anonymous, “A GREAT SOCIAL PERIL,” *The Shield: the Anti-Contagious Diseases Acts Association's Weekly Circular*, October 1, 1870, 242. *19th Century UK Periodicals*.

transfusion and cross circulation on a large scale in rabbits, and have arrived at definite results, negating, in my opinion, beyond all doubt, the truth of the doctrine of Pangenesis.³⁵

In *The Variation of Animals and Plants under Domestication* (1868), Darwin had suggested that inheritable traits are transmitted to offspring through tiny particles he called “gemmules”: these are continuously shed by each bodily organs and migrate to the gonads from there, once conception occurs, gemmules go on to form the associate body part they came from. Darwin called this his theory of pangenesis, but his ideas are remarkably similar to heredity theories proposed by many thinkers since Hippocrates.³⁶ Darwin’s writing gives few details about how the gemmules’ migration occurs, but Galton became convinced that the particles travel through blood. He expected that by transfusing the blood of different breeds of rabbits into each other and waiting for their mixed offspring to be born, he would be able to prove once and for all that blood contains inheritable traits. To his, and Darwin’s, surprise, Galton actually demonstrated the opposite: blood transfusions have no effect on inheritable traits. A purely mechanical conceptualisation of blood (as nothing more than an inert fluid) already enjoyed widespread acceptance among British medical professionals in the 1880s due to the growing popularity of saline solution transfusions, which Galton alludes to briefly as well.³⁷

Yet, although Galton resolutely disproved pangenesis, cultural associations between blood, blood exchanges, disease and inheritance continued to grow for the rest of the century. “Blood” in general gained new cultural prominence as it became synonymous with individual ethnic groups or races in the work of eugenic writers such as Galton. Galton’s definition of eugenics itself relied on this meaning of blood. In *Inquiries into Human Faculty and Its Development* (1883), Galton argued in

³⁵ Francis Galton, “Experiments in Pangenesis, by Breeding from Rabbits of a Pure Variety, into Whose Circulation Blood Taken from other Varieties Had Previously Been Largely Transfused,” *Proceedings of the Royal Society of London*, Vol. 19 (1870 - 1871): 395.

³⁶ Ute Dei Deichmann, “Gemmules and Elements: On Darwin’s and Mendel’s Concepts and Methods in Heredity,” *Journal of General Philosophy of Science* 41 (2010): 96-8.

³⁷ Kim Pelis, “Blood Standards and Failed Fluids: Clinic, Lab, and Transfusion Solutions in London, 1868-1916” *History of Science* 39, no. 2 (2001): 186-87.

favour of the new term “eugenics” he was proposing by stating that, “[w]e greatly want a brief word to express the science of improving stock [...] which, especially in the case of man, takes cognisance of all influences that tend in however remote a degree to give to the more suitable *races* or *strains of blood* [emphasis added] a better chance of prevailing.”³⁸ Other uses of “blood” in *Inquiries* include: “the movements of commerce have introduced fresh and vigorous blood into various parts of England” and that the white inhabitants of North America had “more of European blood than is to be found in any one of the great European kingdoms of England, France, Italy, Germany, and Austria.”³⁹ This meaning of “blood” was not entirely new, just like the belief that blood transfusions can carry some of the traits of the blood donor to the blood receiver, but “blood” gained new resonances and new meanings in the context of growing eugenic thought and growing attention to venereal diseases as inheritable forms of ill-health. As the next section will show, venereal diseases and, particularly, infantile syphilis were also not new discoveries of the 1870s and 1880s. Both blood and infantile syphilis simply gained new meanings as reproduction (including, sexuality and inheritable traits) became the focus of new anxieties about the future of the race and the nation. Nowhere is the curious persistence of the belief that blood transfusion is contagious more obvious than in fin-de-siècle vampire fiction. As this chapter will demonstrate, this persistence shows not only the emergence of the eugenic movement, but a broader shift in biopolitics towards a focus on reproduction, rather than hygiene and sanitation.

Blood in Vampire Fiction

The publication of Mary Elizabeth Braddon’s short-story “Good Lady Ducayne” in 1896 and of *The Blood of the Vampire* by Florence Marryat and *Dracula* by Bram Stoker a year later in 1897 mark the end of the 19th century as a vampiric highpoint. And not only are vampires suddenly more popular, but contagion becomes a central focus of vampire fiction. As Felix Oinas and Paul Barber have demonstrated, folk beliefs in a living corpse or soulless body that feeds on the blood of the

³⁸ Francis Galton, *Inquiries into Human Faculty and Its Development* (London: J.M. Dent & Co, 1907), 24-5.

³⁹ Galton, *Inquiries*, 201; 205.

living were relatively widespread in the 18th and 19th centuries, particularly in Central and Eastern Europe.⁴⁰ However, the vampires of Eastern European folklore were generally not contagious, rather their vampirism was the result of an unnatural birth (being born with teeth already showing, for example), life (being a witch or a werewolf) or death (such as suicide).⁴¹ Similarly, prior to the 1890s, English language literature did not typically portray contagious vampiric blood. The vampire antagonists of John William Polidori's "The Vampyre," James Robinson Planché's stage adaptation of Polidori's play, *The Vampire* (1820), the penny dreadful *Varney the Vampire* (1845-1847) and Joseph Sheridan Le Fanu's *Carmilla* (1871-1872) are not contagious. They inflict suffering and death unto their victims and, in the unique case of *Varney the Vampire*, curse their victims into vampirism, but the transformation into the undead does not explicitly occur through an exchange of bodily fluids. As I will explore in more detail below, the three vampire fictions of the late 1890s I have cited portray the transformation of their female antagonist into a vampire through blood and place significant emphasis on the horror of these women spreading vampirism further either through blood-sucking or through procreation.

One explanation for the sudden clustering of contagion anxieties around vampiric blood is that the portrayal of vampirism in novels such as *Dracula* is analogous to sexually transmitted diseases and that venereal diseases became the focus of widespread contagion anxieties in the context of growing awareness of "germ theory" disease causation theories. In particular, Martin Willis has read exchanges of bodily fluids in vampire fiction as illustrative of the growing awareness of germ theory.⁴² However, Michael Worboys has shown that germ theories were still comparatively unpopular in Britain until the 1900s.⁴³ The absence of references to "germs" or other types of pathogens in vampire fiction raises questions about the extent to which these texts really align themselves with germ theories. This chapter will argue that the prominence of contagion anxieties

⁴⁰ Felix Oinas, "Eastern European Vampires," in *The Vampire: A Casebook*, ed Alan Dundes (Madison, WI: University of Wisconsin Press, 1998), 47.

⁴¹ Oinas, "Eastern European Vampires," 48-49.

⁴² Willis, "The Invisible Giant."

⁴³ Worboys, *Spreading Germs*.

around blood in vampire fiction is indicative of a change in cultural attitudes towards venereal disease, but that this change has little to do with new medical theories. Rather, towards the end of the 19th century, the transmission of venereal diseases became circumscribed into a new imaginary of Gothic reproductive danger to the nation. Similarly, it is misleading to read the passage of the CDAs (first in 1864 then amended in 1866 and 1869) as driven by new discoveries in germ theory. The contagiousness of venereal diseases was a long-held belief and no significant revolution in the diagnosis and treatment of venereal diseases took place in the 1860s. Rather, there was a new awareness of transmittable venereal disease and, by association, sexuality and reproduction as an area of governance. The second and third chapters of this thesis have explored the emergence of English biopolitical bureaucracy around contagion in the middle of the 19th century shaped by the influences of liberal opposition to quarantine, the New Poor Laws and sanitarianism. The surveillance of working-class women's bodies and enforced medical examinations of the CDAs might appear to be simply another step in the uniform escalation of the liberal biopolitics after the mid-century "sanitary revolution." To some extent, they are. The CDAs would not have been tolerated as legislation if sanitary reform had not already routinised the sanitary surveillance of working-class people. However, as this chapter details, understanding the CDAs merely as an expansion of the liberal biopolitics of the sanitary movement overlooks both the limited scope of the CDAs and the role of eugenic (and proto-eugenic) thought in shaping fin-de-siècle conceptualisations of contagion and blood.

Eugenic and proto-eugenic movements, including the anti-CDAs campaign, shifted the meaning of contagion and blood towards moral contamination and issues of inheritance, despite the lack of medical conceptualisations of the role of blood in reproduction and inheritance. I will argue that this shift is indicative of a broader shift away from liberal interventions driven by medical expertise towards a more interventionist state that prioritises the morality as well as the hygiene of its population. This chapter ends by asking what the Gothicised portrayal of medical professionals and scientific experimentation in vampire fiction can tell us about the role of scientific expertise and

professionalism in the enlarged state of the 1890s. The largely critical portrayal of medicine in *fin-de-siècle* fiction has often been interpreted as indicative of a general tendency within the Gothic mode to act as a critique or subversion of scientific rationality, yet the previous two chapters of this thesis have demonstrated 19th century scientific and political texts often used the Gothic mode for its ideological and affective effects. The complex portrayal of science and scientific professionalism in *fin-de-siècle* vampire fiction offers the opportunity to revisit the issue of the relationship between the Gothic and science. First, however, I will demonstrate that the vampire fictions I discuss are concerned with these ambiguous meaning of blood as contagious bodily fluid, illicit sexual practice and monstrous lineage as a sign of the tension between liberal individualism and the eugenic shift in biopolitics.

Although some folk beliefs associate vampires with epidemics and vampirism was imagined as circulating similarly to what we would now describe as a contagious disease, the ability to transform others into vampires through the bodily exchange of fluids via the vampire bite is not an inherent part of the vampire myth. In his study of the history and origin of folk beliefs in vampirism, Paul Barber argued that during the 18th and 19th century, outbreaks of epidemic diseases in Central and Eastern Europe were sometimes attributed to a vampire.⁴⁴ The first victim of the disease was thought to cause the other cases and, out of what seems like quasi-contagionist beliefs, people destroyed possessions of this first victim in order to prevent the vampire from returning to spaces they occupied while alive. However, according to Barber, only the first victim was thought to be a vampire, subsequent victims of epidemic diseases were not vampires themselves. Oinas similarly notes that a common feature of Eastern European folklore is the belief that the vampire attacks their own family first (working from near to distant relatives) before moving on to other members of the community.⁴⁵ The contagiousness of vampirism itself only emerged as a distinct trope at the end of

⁴⁴ Paul Barber, *Vampires, Burial, and Death: Folklore and Reality* (New Haven: Yale University Press, 1988), 35-37.

⁴⁵ Oinas, "Eastern European Vampires," 47-48.

the 19th century and this distinct trope reflects a new kind of concern with contagion as a moral and social problem connected to issues of the nation / race.

Literary critics have sometimes attempted to define all vampires in English language literature as contagious. Carol A. Senf, in her influential book on vampires in 19th century English literature, defines the vampire as “a reanimated corpse that perpetuates its unnatural existence by feeding on blood, an act of parasitism that drains the victim’s life force and transforms the victim into a vampire.”⁴⁶ But a brief examination of vampirism in fiction before the 1890s will demonstrate that this definition is inappropriate. Even Senf’s reference to parasitism points to imaginative work required to create the contagious vampirism trope and the absence of a natural model for vampirism as a bodily, not spiritual, disease. Parasites are symbiotic beings that feed on other species, parasites cannot attack organisms of their own species or turn their hosts into parasites. The only English language texts published prior to 1896 that clearly depicts a vampire victim’s transformation into a vampire is *Varney the Vampire* (1845-47), a serialised horror narrative likely written by James Malcolm Rymer. Varney, the vampiric antagonist of the penny dreadful, kills Clara Crofton by biting her neck and drinking her blood. Later in the narrative, Clara’s dead body is revived as a vampire, but only after Varney disguised in “a large murky looking cloak” and resembling “a spirit of the dead rather than a living person” breaks into the vault where she was buried.⁴⁷ The narrative omits what Varney does in the vault, but strongly implies that something more than death by vampire bite is necessary for the vampiric transformation. Varney kills numerous other people, but only Clara becomes a vampire and Varney’s account of his own metamorphosis into a vampire has nothing infectious about it. After betraying the royalist cause to Cromwell and killing his son in a fit of passion, Varney (whose name was Mortimer while he was alive) is struck down by a mysterious “great force.” He awakes in his grave two years later to a “deep and solemn voice” who tells him that he has “poisoned the pure font of mercy” by killing “that being sacredly presented to your care

⁴⁶ Senf, *The Vampire*, 142.

⁴⁷ James Malcolm Rymer, *Varney, the Vampyre*, ed. Dick Collins (Hertfordshire: Bibliophile Books, [1845-47] 2010), 1088.

by the great Creator of all things” and must live as a cursed, undead being from now on.⁴⁸ This explanation for vampirism closely resembles folk beliefs about vampirism as a curse, while the subplot of Varney’s attempt to seduce Clara and her subsequent transformation might parallel the Elinor Mortimer subplot of Charles Maturin’s *Melmoth the Wanderer* (1820). *Varney the Vampire* lays the groundwork for *fin-de-siècle* vampire fiction through its representation of biting and seduction as part of the vampiric transformation process, but it does not yet portray a contagious vampirism.

Senf and Martin Willis have also read Sheridan Le Fanu’s *Carmilla* (1871-72) as an example of vampirism modelled on contagious disease.⁴⁹ However, if *Carmilla* is a narrative about vampiric infection, it is a miasmatic infection that leads to death, not vampiric metamorphosis. *Carmilla*’s early victim, Bertha, is not turned into a vampire and there is no mention of the threat of vampiric contagion in Baron Vordenburg’s account of vampirism. There are, however, several references in the text to infection and to an invading “strange epidemic.”⁵⁰ Willis relates these references to a “common mid-Victorian medical discourses on the discoveries of infection by microscopic observation” and the emerging medical consensus on contagionist germ theory.⁵¹ However, although Willis argued persuasively that there are many references to visibility and disease in *Carmilla* and that these could be read as reflections of microscopic discourse, there are no references to microscopes, microscopic images, infectious pathogens or contagion in the text itself.⁵² Willis notes that *Carmilla* gives Laura a charm that is “an antidote against the malaria” and this charm likens *Carmilla*’s infection to malaria, but malaria was the paradigmatic miasmatic disease until the 1880s.⁵³ There are several further references to miasmatic infection in the novel. For example, *Carmilla* tricks Laura into allowing her into her room through the “fumigated” charm by

⁴⁸ Rymer, *Varney*, 1151.

⁴⁹ Senf, *The Vampire*, 51-6; Martin Willis, “Le Fanu’s ‘Carmilla’, Ireland, and Diseased Vision,” in *Essays and Studies 2008: Literature and Science*, ed. Sharon Ruston (Cambridge, UK: Boydell & Brewer, 2008): 111-30.

⁵⁰ Sheridan Le Fanu, *In A Glass Darkly* (Hertfordshire: Bibliophile Books, [1872] 1995), 234.

⁵¹ Willis, “Le Fanu’s,” 112-121.

⁵² Willis, “Le Fanu’s,” 121-122.

⁵³ Le Fanu, *In A Glass*, 239.

explaining that the antidote infused in it naturally repels the “complaints, wandering in the air” – the irony of this scene is that Carmilla herself is an “evil spirit” wandering in the air with the air of the charm.⁵⁴ The languid exhaustion and the “fatal seizures” described by the Gratz doctor as the main symptom of the vampiric disease point again to malaria (thought to kill people through fatigue) as well as, perhaps, to cholera (associated with sudden seizures). Moreover, describing the epidemic, Laura’s father mentions that “[t]hese poor people infect one another with their superstitions, and so repeat in imagination the images of terror that have infested their neighbors.”⁵⁵ Superstitious belief in contagion replicating the effects of infection was a very common trope of anti-contagionist literature, as discussed in Chapter 2. Like *Varney the Vampire*, *Carmilla* lays the groundwork for the trope of contagious vampiric infection without offering a clear representation of this – because contagion and venereal disease had not achieved the cultural prominence they will towards the end of the century.

Reading *Dracula* as a text that speaks to the concerns of turn-of-the-century medicine is hardly a critical innovation. Stoker’s *Dracula*, in its multitude of adaptations and rewritings, has become a beloved piece of popular culture as well as a central text in Gothic studies, if not its most canonical novel. Alongside the critical tradition of reading the novel as a response to the CDAs (typified by the work of Tabitha Sparks and Martin Willis), the novel has more often been read through the lenses of emerging Victorian “brain sciences,” including psychology and sexology.⁵⁶ Robert Mighall has influentially argued that the representation of monstrosity and illicit sexuality in Bram Stoker’s novel reflects already existing attempts in the field of sexology to explain the monstrous as the pathological result of illicit sexual behaviours (such as masturbation, homosexuality and incest).⁵⁷ Mighall reads the use of case studies of vampires and other “monsters” in sexological texts such as Krafft-Ebing’s *Psychopathia Sexualis* (1886) as an attempt to demystify

⁵⁴ Le Fanu, *In A Glass*, 239.

⁵⁵ Le Fanu, *In A Glass*, 230.

⁵⁶ Anne Stiles, *Popular Fiction and Brain Science in the Late Nineteenth Century* (Cambridge University Press, 2012), 50-84.

⁵⁷ Robert Mighall, “Sex, History and the Vampire,” in *Bram Stoker: History, Psychoanalysis and the Gothic*, eds Andrew Smith & William Hughes (Basingstoke: Macmillan, 1998), 64.

monstrosity and impose a scientific order onto supernatural or bizarre phenomena.⁵⁸ Yet, the vampire of *Psychopathia Sexualis* (1886) is not the undead being of folk beliefs or Gothic fiction, but (as Mighall explains) a real life notorious criminal: Sergeant Francois Bertrand, variously called “The Vampire,” “Ghoul” and “Werewolf” by the popular press after he was caught disinterring and mutilating corpses from Paris graveyards in 1847.⁵⁹ Mighall argued that the inclusion of such “monsters” is strange because sexologists should have wanted to “establish a distance between the science of sexology and the discourse of folklore, sensational journalism, or imaginative fiction.”⁶⁰ As the current thesis has argued throughout, 19th century scientific writing did not have the strict norms of late 20th century scientific writing and, instead, often engaged with non-scientific modes, particularly in debates of politically and socially significant issues. *Psychopathia Sexualis* does claim to be a specialist text intended for “earnest investigators in the domain of natural science and jurisprudence,” but the Translator’s Preface to the first English translation states that “it cannot be denied that a pornographic interest on the part of the public is accountable for a part of the wide circulation of the book” showing that the broader appeal of the book was evident to its publishers at least after the initial run.⁶¹ Meegan Kennedy has shown that the Gothic mode had a persistent influence on the genre of medical case history in the 19th and early 20th century, despite a strong desire from some medical writer to obscure the fascination with “the curious” in order to strive for objectivity and professionalism.⁶² The structure of *Psychopathia Sexualis* reflects precisely the legacy of the genre of the curious case: the study is structured as a long series of “curious” cases of sexual pathology (the “General Pathology” and “Special Pathology” sections) prefaced by a loose theoretical framing (“Fragment of a Psychology of the Sexual Life”).⁶³ Rather than sexology attempting to subdue the vampire to its superior scientific rationality, the vampire was the focus of public fascination in many different genres.

⁵⁸ Mighall, “Sex, History,” 65-66.

⁵⁹ Mighall, *A Geography*, 212-225.

⁶⁰ Mighall, *A Geography*, 222.

⁶¹ Richard von Krafft-Ebing, *Psychopathia Sexualis*, trans Charles Gilbert Chaddock (Philadelphia: F.A. Davis, 1920 [1886]), vii.

⁶² Meegan Kennedy, “The Ghost in the Clinic,” 327-328.

⁶³ Krafft-Ebing, *Psychopathia Sexualis*, xi-xiv.

Critics of *Dracula* have also often noted the highly sexualised portrayal of blood and exchanges of blood because the novel contains a large number of such scenes. Christopher Craft, for example, has argued that in the novel the transfusions are “displaced marital (and martial) penetrations” and Troy Boone has contended that “the transfer of blood stands for sexual intercourse” in the novel.⁶⁴ The novel (as Craft and Boone note) also links blood transfusions to marriage: most explicitly, Arthur Holmwood describing Lucy Westenra as “his wife in the sight of God” because of his blood transfusion to her (*D*, 239). Lucy is the particular focus of blood exchanges in the novel. After she becomes ill with what are now very recognisable symptoms of vampire disease (lack of appetite or energy, disturbed sleep etc), Dr Jack Seward is called upon to diagnose her condition and he attempts to do so by testing “the quality of her blood” (*D*, 156). As her condition worsens, Professor Van Helsing (the mentor of Dr Seward) is summoned to her bedside and he diagnoses her as at risk of dying “for sheer want of blood to keep the heart’s action as it should be” (*D*, 168). Van Helsing then proposes a course of blood transfusions to save Lucy and he performs three transfusions as gifts to Lucy from her suitors (Arthur Holmwood, Jack Seward, Quincey Morris) and an addition transfusion with his own blood. As already noted, Arthur interprets this act of donation as a marriage and, later, as a vampire Lucy calls him “husband” (*D*, 288). After her vampiric transformation, Lucy continuously attempts to infect Arthur: on her deathbed, Lucy begs Arthur to kiss her only for Van Helsing to “[swoop] upon him, and catching him by the neck with both hands, dragged him back with a fury of strength” (*D*, 222). As a vampire, Lucy is also described as having a “blood-stained mouth” and having a mouth “smeared with a crimson foam” (*D*, 289, 294). Lucy’s attempts to kiss Arthur also echo the portrayal of the female vampires in *Dracula*’s castle earlier on in the novel and Jonathan Harker’s “languorous ecstasy” as one of them kisses his neck (*D*, 257).

⁶⁴ Troy Boone, “He Is English and Therefore Adventurous’: Politics, Decadence, and *Dracula*,” *Studies in the Novel* 25 (1993), 88; Christopher Craft, “Kiss Me with Those Red Lips’: Gender and Inversion in Bram Stoker’s *Dracula*.” *Dracula: The Vampire and the Critics*, ed. Margaret L. Carter (Ann Arbor & London: UMI Research Press, 1988);

Yet, although Lucy plays a larger role in the novel's blood exchanges, the most explicit description of blood as contagion in the novel is Dracula's attempt to transform Mina Murray into a vampire. Dracula feeds on her blood and, in a frightening speech, describes his intention to turn her into a vampire:

You know now, and they know in part already, and will know in full before long, what it is to cross my path. They should have kept their energies for use closer to home. Whilst they played wits against me—against me who commanded nations, and intrigued for them, and fought for them, hundreds of years before they were born—I was countermining them. And you, their best beloved one, are now to me, flesh of my flesh; blood of my blood; kin of my kin; my bountiful wine-press for a while; and shall be later on my companion and my helper. (*D*, 393-4)

Dracula then cuts a vein in his own chest and presses Mina's mouth to the wound forcing her to "either suffocate or swallow" his blood. This extraordinary scene of (attempted) vampiric metamorphosis is, of course, suffused with a huge number of sexualised meanings. But, it also suggests that vampirism triggers a racial change: Mina becomes Dracula's flesh, blood and kin.

The sense of vampiric blood as racial threat is also centre stage in *The Blood of the Vampire*. The vampire protagonist of *The Blood of the Vampire* is Harriet Brandt, a "Creole" heiress who "sucks dry" those who show her affection. She travels to Europe from Jamaica unmarried, unchaperoned and friendless after receiving a vast inheritance. Her wealth aligns her to what Nina Auerbach has termed the "gentrified female vampires" of the turn of the century who embody growing anxieties about young middle- and upper-class women's sexuality in the age of the New Woman.⁶⁵ However, the novel's portrayal of vampirism reflects Harriet's position as a mixed race African Caribbean woman who is "as an individual, racial and national menace for British subjects."⁶⁶

⁶⁵ Nina Auerbach, *Our Vampires, Ourselves* (University of Chicago Press, 1995), 79-80.

⁶⁶ Giselle Liza Anatol, *The Things That Fly in the Night: Female Vampires in Literature* (New Brunswick, NJ: Rutgers University Press, 2015).

Dr Phillips, the novel's "good physician," diagnoses Harriet's vampirism and explains that her mother was bitten by a vampire bat while pregnant – thus portraying Harriet's vampirism as the result of blood-borne vampiric contagion (*TBotV*, 274). But the novel continuously plays on the ambiguity of the meaning of the blood as bodily fluid and lineage. Dr Phillips also explains that Harriet can never marry because her father, Henry Brandt, was an exceptionally cruel experimentalist who was expelled from Swiss hospitals because even those "renowned for being the foremost in Vivisection and other branches of science that gratify the curiosity and harden the heart of man" could not tolerate his cruelty (*TBotV*, 113). After setting up a laboratory in Jamaica, he carried out countless experiments on his slaves that eventually triggered a slave revolt, killing both him and Harriet's mother (*TBotV*, 114). There is little description of Brandt's experiments in the novel, but the novel heavily implies that Harriet's dangerous blood is the result of some form of medical experimentation carried out on her and that it is the consequence of her father's dangerous lineage.

Harriet is not only described as the result of animal-human reproduction (given that her mother was infected through a bat bite), but her facial features are described in animalistic terms. She has a large mouth and sharp teeth (*TBotV*, 7) as do the female vampires in *Dracula's* castle. Even more uncannily, Lucy (as a vampire) is described as "growling over" a dead child "as a dog growls over a bone" (*D*, 288). Lady Ducayne is an even more extreme example, she is described as an amalgam of different parts of animals: "an ermine mantle," a "plumed bonnet," a "peaked" nose, a "pointed chin" and "claw-like fingers" (*GLD*, 11). The sexualised hybrid monstrosity of Harriet and the female vampires of *Dracula* and "The Good Lady Ducayne" links them to a whole host of pollution and contagion anxieties. In particular, the hybrid female vampires of these vampire texts are emblematic of the wider incidence of the "abhuman" in fin-de-siècle Gothic.⁶⁷ Kelly Hurley has linked the exuberance of abhuman bodies (such as vampires) in fin-de-siècle Gothic to a "general anxiety about the nature of human identity" generated by late Victorian scientific disciplines, particularly evolutionism, criminal anthropology degeneration theory, sexology and pre-Freudian

⁶⁷ Hurley, *The Gothic Body*, 4-5.

psychology.⁶⁸ Hurley stops short of arguing that the Gothic had “direct influence” on the sciences, but points to the ‘gothicness’ of a wide range of scientific knowledges and practices.⁶⁹ As the current analysis has shown, Gothic and scientific discourses influence each other and the position of science as hegemonic discourse in the late 19th century was not nearly as secure as it is today. Highly politicised portrayals of illicit sexuality as contagion and pollution within the “social purity” movement had an, as of yet, largely unacknowledged influence on the growing popularity of the “abhuman”. This will be explored in the next section of the chapter.

Despite the ambiguity surrounding Harriet’s own vampire transformation, she is very clearly coded as an eugenic threat: she kills young people and men who want to marry her. These victims do not themselves become vampires, but the anxiety that Harriet will marry and become pregnant before the death of her husband and, thus, produce more vampires underlies the novel’s dramatic tension. Dr Phillips warns Ralph Pennell against Harriet’s “terrible proclivities” and the “black blood,” which she has inherited from her parents (*TBotV*, p. 198). At the end of the novel, Harriet writes a letter to her friend, Margaret Pullen, explaining that she will commit suicide because she has “sucked dry” her new husband (Anthony Pennell) and through her death “the curse of heredity which [her parents] laid upon [her] may be mercifully wiped out” (*TBotV*, 318).

Similar eugenic anxieties also loom over the sudden ending of Braddon’s “Good Lady Ducayne” in which the innocent protagonist, Bella Rolleston, is encouraged by her vampire employer to marry. In “Good Lady Ducayne,” vampire transformations are explicitly imagined through blood transfusions. In Braddon’s story, Bella is a young girl from a lower-middle class background is rescued from genteel poverty by the aristocratic Lady Ducayne who hires her as a companion and takes on a tour of Italy. During their travels, Bella gradually loses her good health and it becomes apparent that Lady Ducayne’s Italian doctor (Dr Parravinici) has drugged her with chloroform and drained her blood in order to transfuse it to Lady Ducayne. Luckily, Bella befriends Herbert Stafford,

⁶⁸ Hurley, *The Gothic Body*, 5.

⁶⁹ Hurley, *The Gothic Body*, 5-6.

a young M.D. graduate, who discovers the puncture marks on Bella's arms and identifies them as the result of "experimental surgery." Stafford confronts Lady Ducayne and her doctor and Lady Ducayne agrees to let Bella go. She gives the girl a check for a thousand pounds and urges to "Go and marry your doctor" (GLD, 57). Heather Braun has noted that in this "anticlimactic, antiromantic" ending is indicative of a desire to "suppress" the problem of "odd women," lower middle class women who could not find employment or a suitable marriage.⁷⁰ But Braddon also hints at the possibility that Lady Ducayne's bloodsucking has transformed Bella permanently. The text of the story ends with the remark that Stafford promised that "the word 'mother-in-law' has no terrors for him" (GLD, 59). This strangely suggestive ending hints that there might be other terrors in their marriage.

In *Dracula*, the three female vampires who accompany Dracula (and whose relationship to him is never made completely clear) are described as uncannily beautiful and capable of immediately triggering both 'burning desire' and 'deadly fear' in Jonathan Harker (D, 56). Harriet Brandt, the psychic vampire of *The Blood of the Vampire*, makes the men around her 'faint and sick' (*Blood of the Vampire*, p. 105) and struck 'dumb with admiration' (p. 215). Although Lady Ducayne does not have the youthful beauty of these other female vampires, she has "a face so wasted by age that it seemed only a pair of eyes and a peaked chin" although those eyes are "unnaturally bright" (GLD, 11) and full of "an invincible horror" (GLD, 23). Lady Ducayne could be interpreted as a representation of the aged female prostitute whose body is made horrific by disease and crime. Literary criticism on female vampirism in *Dracula* has generally focused on the threat of what Nina Auerbach has called the "gentrified female vampires" (like Lucy Westenra in *Dracula*) who embody late 19th century anxieties over the New Woman and respectable middle-class women.⁷¹ Female vampires in all three vampire texts discussed are a major threat to respectable middle-class women. Bella Rolleston is almost drained of life by Lady Ducayne and Margaret Pullen loses her baby and almost her life to Harriet Brandt, but their contagiousness and strong associations with money (both Lady Ducayne and Harriet

⁷⁰ Heather L. Braun, "Idle Vampires and Decadent Maidens: Sensation, the Supernatural, and Mary E. Braddon's Disappointing Femmes Fatales" in *Antifeminism and the Victorian Novel: Rereading Nineteenth-Century Women Writers*, ed. Tamara S. Wagner (Amherst, NY: Cambria Press, 2009).

⁷¹ Auerbach, *Our Vampires*, 79-80.

Brandt are described as having almost infinite wealth)⁷² strongly link them to female prostitutes. Carol Margaret Davidson has shown that female prostitution was frequently linked to both syphilitic infection and immense wealth in anti-Semitic literature in the 19th century and, given the influence of anti-Semitic texts on fin-de-siècle vampire fiction which has been documented by Halberstam, her arguments for reading female vampires as prostitutes are persuasive.⁷³

As hereditary diseases became more central to eugenic discourse, the threat of the spread of disease and that of the racial pollution began to overlap in the figure of the migrant (usually Jewish) prostitute, the Gothic monster of the White Slavery moral panic. Although the highpoint of this panic came after 1899, popular discourses around disease, prostitution and immigration set the stage for White Slavery to become a significant international issue. In 1880, Alfred Dyer (a committed abolitionist and Butler's ally) published a pamphlet entitled, 'The European Slave Trade in English Girls. A Narrative of Facts' based on an investigation he carried out with George Gillet and Mary Steward (a member of the Ladies National Organisation for the Repeal of the Contagious Diseases Acts) into what they claim was the widespread practice of Belgian brothel owners kidnapping and imprisoning child prostitutes from England.⁷⁴ Dyer went on to publish *Slavery Under the British Flag* (1886), a virtual tour through British colonies where prostitution was practiced, in which he again emphasised the similarities between the slave trade and prostitution.⁷⁵ Even earlier, the *Shield* carried advertisements for *The White Slavery of Europe*, by Pastor T. Borel (translated by Joseph Edmondson) in January 1877.⁷⁶ But W.T. Stead's immensely popular sensationalist series of articles on child prostitution, "The Maiden Tribute of Modern Babylon," was the publication that initiated the British White Slavery moral panic in July 1885. The sensationalist investigation claimed

⁷² Carol Margaret Davidson, "Blood Brothers: Dracula and Jack the Ripper," in *Bram Stoker's Dracula: Sucking Through the Century, 1897-1997*, eds. Carol Margaret Davidson and Paul Simpson-Housley (Toronto: Dundurn Press, 1997), 156.

⁷³ J Halberstam, *Skin Shows: Gothic Horror and the Technology of Monsters* (Durham: Duke University Press, 1995), 86-107.

⁷⁴ Alfred Dyer, *The European Slave Trade in English Girls: A Narrative of Facts* (London: Dye Brothers, 1880).

⁷⁵ Richard Phillips, *Sex, Politics and Empire: A Postcolonial Geography* (Manchester University Press, 2006), 38-42.

⁷⁶ Anonymous, "WHITE SLAVERY OF EUROPE." *The Shield: the Anti-Contagious Diseases Acts Association's weekly circular*, January 6, 1877, 4. *19th Century UK Periodicals*.

that the purchase of “many thousands” of innocent white girls and women as slaves “not for labour, but for lust” happened every year in London.⁷⁷ Stead used the Gothicised imagery of prostitutes as maiden tributes to the Minotaur monster of lust as well as the language of slavery to draw parallels between white prostitutes and the treatment of enslaved Black people, a rhetorical move that had also been enacted earlier in the century by campaigners for workers’ rights.

English women were the initial focus of most publications on White Slavery, but anxieties over English women being sold, either at home or abroad, were gradually replaced by fears of foreign (particularly Jewish) women being sold into England as a result of a more general trend towards anxious eugenic thinking. In particular, social purists saw adult foreign prostitutes as the source of ‘the continued vice in England’ and repeatedly emphasised the links between increased Jewish immigration from Eastern Europe and Jewish prostitutes. Arnold White, one of the key eugenic writers of the turn-of-the-century, reinforced these fears over Jewish immigration in his 1899 book, *The Modern Jew*.⁷⁸ After 1899, concerns about the international traffic in White Slaves were significant enough for several international conferences on the issue to be held. At the 1902 Paris conference, representatives from sixteen European governments ratified the International Convention for the Suppression of the White Slave Traffic.⁷⁹ In England, the chief effect of the convention was a renewed focus by social purists as well as the Home Office (which opened a special branch to investigate the White Slave traffic) on rescuing young women newly arrived in England from Europe.⁸⁰ The concern over Jewish migration to England has obvious echoes in the anti-Semitic narratives of vampiric invasion in *Dracula* and the plot of Marryat’s novel illustrates how vampire fiction can reflect this eugenic meaning of blood.

⁷⁷ William T. Stead, “The Maiden Tribute of Modern Babylon IV: The Report of our Secret Commission.” *Pall Mall Gazette* 8 July 1885, 1–7.

⁷⁸ Paul Knepper, ““Jewish Trafficking” and London Jews in the Age of Migration,” *Journal of Modern Jewish Studies* 6, no. 3 (2007).

⁷⁹ Bartley, *Prostitution*, 170–171.

⁸⁰ Bartley, *Prostitution*, 171.

Syphilis Transmission & Blood

The distinction between blood-borne pathogen, evil air or a curse as the source of vampirism in folk beliefs and fiction might seem almost too small to be meaningful. However, if Le Fanu wrote a miasmatic vampire fiction at the height of public debates on the Contagious Diseases Acts and Braddon, Stoker and Marryat wrote contagious vampires a decade after the repeal of the CDAs, the role of the CDAs in creating new anxieties around contagion is less straightforward than literary scholarship has suggested so far. Fin-de-siècle vampire fiction obsessively portrays blood specifically as a vehicle for contagion pointing to a new discourse around contagious blood that is not specifically addressed in the CDAs. There were no attempts in the CDAs or other 19th century legislation to regulate blood transfusions or criminalise other exchanges of bodily fluids. How did a change of focus on blood-borne transmission in conceptualisations of venereal disease relate to legislative attempts to restrict syphilis transmission?

Even anti-contagionist writers thought that syphilis was transmitted through person-to-person contact well before the end of the 19th century. In the 18th century, syphilis, the pox or lues venerea were conceptualised as the same disease passed on through transmissible “poison” created by the wombs of promiscuous women then transmitted to men, rather than as a living organism. Moreover, throughout most of the 18th century, venereal diseases were recognised as painful and potentially deadly medical conditions. Kevin Patrick Siena has demonstrated that London petitions for beds for pox treatment in charitable medical institutions consistently outnumbered beds available throughout the 18th century, particularly in the first half of the century.⁸¹ Siena has also shown that charitable medical provision for venereal disease increased significantly after the 1740s but, with a few notable exceptions, medical treatments for venereal disease did not have an exclusive focus on prostitution or feature moral re-education as major part of treatment.⁸² The theory of spontaneous generation was widely popular between 1670 and 1750, but after 1750, the

⁸¹ Kevin Patrick Siena, *Venereal Disease, Hospitals, and the Urban Poor* (University of Rochester Press, 2004), 220-222.

⁸² Siena, *Venereal Disease*, 214-16.

disease was popularly thought to have originated in America and transmitted from there to England through person-to-person transmission of infectious “matter.”⁸³ The matter, poison or virus of the disease was thought to enter the body through wounds or ulcers or through particularly inflamed or thin skin.

By the late 1840s and 1850s, the question of whether lues venerea, syphilis and gonorrhoea were distinct diseases or distinct manifestations of the same disease occupied medical writers while inoculation experiments by pathologists in Continental Europe, including Daniel Cornelius Danielssen and Philippe Ricord, demonstrated that, like smallpox, venereal disease could be transmitted through bodily fluids, such as pus and blood. In this period, English medical and popular press were particularly occupied with panic over whether working-class wet-nurses could transmit syphilis to middle- and upper-class babies.⁸⁴ England lacked state funding for large laboratories that enabled the experimental work of pathologists abroad, but English medical practitioners were increasingly aware of transmission and inoculation experimental work through publications as well as training abroad. Notably, William Acton studied in Paris with Philippe Ricord and his popular *A Practical Treatise on Diseases of the Urinary and Generative Organs in both Sexes* (first published in 1841, reprinted in 1851 and 1860) discusses lues venerea and syphilis inoculation experiments Acton carried out at the Female Venereal Hospital in Paris.⁸⁵

As previously discussed, the issue of syphilis in infants became increasingly contentious at mid-century as medical and public opinion turned against wet-nursing as a practice in the 1840s. The first (1841) edition of *A Practical Treatise* discussed “syphilis in children” only in a very brief chapter focused largely on debates around different transmission theories (through wet nurses or parents).⁸⁶

⁸³ Siena, *Venereal Disease*, 17-21.

⁸⁴ John C. Egan, “Instance of Disease Contracted from a Nursed Child: With a Few Remarks on the Question - ‘Is Secondary Syphilis Contagious?’” *Lancet* 2 (1845); Hector Gavin, “A Report Relative to the Question, Is Secondary Syphilis Contagious?” *Lancet* 4.4 (1846); Erasmus Wilson, “Clinical Illustrations of Cutaneous Syphilis, Having Especially Reference to Its Pathology and Treatment,” *Lancet* 2 (1850); J.C. Christophers, “On Syphilis,” *Lancet* 1.1. (1852).

⁸⁵ William Acton, *A Practical Treatise on Diseases of the Urinary and Generative Organs in both Sexes* 2nd edition (Philadelphia: J.B. Lippincott & Co, 1858), 209-210.

⁸⁶ William Acton, *A Practical Treatise on Diseases of the Urinary and Generative Organs in both Sexes* (London: Henry Renshaw, 1841), 404-407.

The 1858 edition devotes a much longer chapter to “infantile syphilis” and discusses at length both transmission theories (arguing this time more clearly in favour of transmission from both parents not wet-nursing) and the difference between the symptoms and treatments of infantile and adult syphilis.⁸⁷ The changes in subsequent editions of *A Practical Treatise* demonstrate the emergence of “infantile syphilis” as a distinct diagnostic label in the late 1850s and early 1860s. Historical analyses of venereal diseases in Britain have tended to focus on the period after 1870.⁸⁸ The focus on the later decades of the century is driven both by the fact that significant technological innovations in study of venereal disease occurred after 1870 (in particular, the discovery of the pathogenic cause of gonorrhoea in 1875) and by a feminist historiographical tradition that interprets the CDAs as a means for medical professionals to assert control over women’s bodies through erroneous medical knowledge. Mary Spongberg’s influential book, *Feminizing Venereal Disease*, argued that throughout most of the 19th century, medical writers only regarded women as capable of transmitting venereal disease and that, consequently, “the medical profession in Great Britain turned a blind eye to children with acquired syphilis” and “positively ignored children with symptoms of congenital syphilis.”⁸⁹⁹⁰ Spongberg attributes the eventual emergence of medical theories about men as carriers of syphilis to the “feminist” (in Spongberg’s estimation) campaign to repeal the CDAs.⁹¹

However, the debate on syphilis transmission through wet-nursing already brought public attention to syphilis in children in the 1840s. There was considerable disagreement among medical professionals on whether wet-nurses or parents (one or both) were responsible for cases of syphilis in infants. William Acton, the Gothic antagonist of much of the materials of the CDAs repeal campaign, argued that men can be carriers of syphilis in the 1841 edition of *A Practical Treatise*. His revised and expanded 1860 section on “infantile syphilis” not only acknowledges syphilis in children and gives detailed information about its symptoms and treatments, but specifically describes

⁸⁷ Acton, *A Practical Treatise* (1858), 540-587.

⁸⁸ Notable examples include Brandt, *No Magic Bullet*; Anne R. Hanley, *Medicine, Knowledge and Venereal Diseases in England, 1886-1916* (Cham: Palgrave Macmillan, 2017).

⁸⁹ Spongberg, *Feminizing Venereal Disease*, 5-7.

⁹⁰ Spongberg, *Feminizing Venereal Disease*, 143.

⁹¹ Spongberg, *Feminizing Venereal Disease*, 143-44.

frequently seeing cases of “dissipated husband[s] [who] communicates syphilis to his wife and child.”⁹² Another sign of the growing recognition of syphilis as a disease of children among medical professionals is the inclusion of syphilis as a cause for death for under-5s in 1862 mortality data tables of the 1864 Annual Report of the Registrar General of Births, Deaths and Marriages in England.⁹³ However, although published after the first Contagious Diseases Act came into force in 1864, rather than attribute syphilis to prostitution, the 1864 Annual Report describes syphilis as an enthetic disease or zymotic poison (both general terms for infectious diseases) and explains its high mortality rate using the tropes of Gothic sanitarianism established by Chadwick’s reports two decades later. The 1864 report states:

[s]yphilis is the most fatal of the enthetic diseases; which, with stricture of the urethra, was the reported cause of 1444 deaths; while only one person died of hydrophobia and 4 of glanders. The deaths from hydrophobia were 11, 16, 14 in the years 1853-4-5; and 3,4,1 in the years 1860-1,2. The diminution of the deaths from this painful disease are justly referable to police regulations, and show to what an extent enthetic diseases and zymotic diseases generally may be brought under control by good sanitary regulations. Zymotic poisons, as dangerous as mad dogs, are still allowed to be kept in close rooms, in cesspools, and in sewers, from which they prowl, in the light of day and in the darkness of night, with impunity, to destroy mankind.⁹⁴

Why did prowling women take the place of zymotic poisons in turn-of-the-century Gothic-medical accounts of syphilis? Medical textbooks on venereal disease published in the 1880s discuss syphilis as a blood-borne infection, but their descriptions of the “clinical facts” of syphilis do not differ radically from Acton’s.⁹⁵

⁹² Acton, *A Practical Treatise* (1860), 556.

⁹³ *Registrar General of Births, Deaths and Marriages in England Twenty-fifth Annual Report* (1864), 122-23.

⁹⁴ *Registrar General of Births, Deaths and Marriages in England Twenty-fifth Annual Report* (1864), 185.

⁹⁵ For the “clinical factors” of syphilis as a blood-borne disease, see: Charles R Drydale, *The Nature and Treatment of Syphilis and the Other So-Called ‘Contagious Diseases’* (London: Balliere, Tindall and Cox, 1880),

Medical professionals acknowledged syphilis in children as a health problem in the 1840s and, by the 1860s, sanitary bureaucracy began to do the same. However, at the time of the passing of the first Contagious Diseases Act in 1864, infantile syphilis as a public health issue was conceptualised as simply another one of a long list of “filth” diseases that negatively impacted working-class people because of their unhygienic dwellings. As Mary Spongberg writes, infantile syphilis was conceptualised as a specific public health problem only in the late 1880s and 1890s when the CDAs repeal movement and the social purity movement popularised a rhetoric of prostitution and syphilis as threats to “women and children.”⁹⁶ However, this transformation of infantile syphilis into a public health issue occurred not because of the absence of medical knowledge before the 1880s, as Spongberg argued. Medical professionals were well-aware of syphilis transmission to children, but this transmission was not conceptualised as a particularly serious or unique problem by sanitarianist liberal biopolitics. The CDAs were never intended to be a wide-ranging public health measure. Like the 1846 Nuisances Removal and Diseases Prevention Act adopted swiftly after a cholera outbreak (discussed in Chapter 3), the CDAs were intended to be emergency sanitary measure to address a very specific and restricted problem (ill-health among military troops following the Crimean War). The movement to oppose the CDAs created a public discourse that wide-ranging action was needed to “protect women and children” from the moral and physical contagion of prostitution.

Transfusions

Blood transfusions presented the ideal vehicle for experimentation with blood as a marker of kinship or racial identity for Gothic writers – just as they had for Francis Galton earlier in the century. Analysing the portrayal of blood transfusions in *Dracula*, Aspasia Stephanou and Anthony Bale have argued that the novel portrays blood as an unstable signifier, placed between older,

38-45; Alfred Cooper, *Syphilis and Pseudo-Syphilis* (London: J. and A. Churchill, 1884), 19-22.

⁹⁶ Spongberg, *Feminizing Venereal Disease*.

metaphorical meanings and a new, rational and scientific understandings.⁹⁷⁹⁸ Anne McWhir has similarly argued that the novel portrays blood transfusion as the modern, scientific counterpoint to ritual scenes of shedding or draining of blood in the novel thus demonstrating that the line between scientific modernity and ancient superstition is significantly blurred in *Dracula*.⁹⁹ In a similar vein, Catherine Oakley has argued that both *Dracula* and "Good Lady Ducayne" show that blood transfusions are "readily configured as medical innovation" in *fin-de-siècle* medical Gothic fiction although the older, "residual" connotations of blood as life, vitality and renewal remained a key theme of the Gothic.¹⁰⁰ Oakley uses the representation of blood transfusion in medical Gothic as a starting point for a broader discussion of the "residual" meanings of present day blood transfusion and rejuvenation.¹⁰¹ The tendency to read 19th century blood transfusion as synonymous to or, at least, very similar to late 20th and 21st century blood transfusions is also evident in the emphasis on the modernity and scientific-ness of these procedures in Oakley, McWhir and Stephanou's arguments.

However, blood transfusions were not imagined as modern, scientific procedures in the closing decades of the 19th century. Although blood transfusions enjoyed some popularity in the US and some Continental European countries, after around 1880 British doctors began to vastly preferred transfusions with saline solutions, this trend lasted until after World War I.¹⁰² Following the advocacy of blood transfusions by James Blundell (who taught on the midwifery course at Guy's Hospital from 1818 to 1834), British doctors began experimenting with treating women suffering from post-partum haemorrhage with blood transfusions from (typically male) human donors in the 1820s and 1830s.¹⁰³ The practice was still too dangerous to spread outside of obstetrics (where it

⁹⁷ Aspasia Stephanou, "A 'Ghastly Operation': Transfusing Blood, Science and the Supernatural in Vampire texts," *Gothic Studies* 15, no. 2 (2013): 56; Anthony Bale, "Dracula's Blood," in *The Cambridge Companion to Dracula*, Luckhurst Roger ed., (Cambridge University Press, 2017): 104-113.

⁹⁸ Stephanou, "A 'Ghastly Operation,'" 58.

⁹⁹ Anne McWhir, "Pollution and Redemption in *Dracula*," *Modern Language Studies* (1987): 32-33.

¹⁰⁰ Oakley, "Towards Cultural Materialism," 7.

¹⁰¹ Oakley, "Towards Cultural Materialism," 10-12.

¹⁰² Stephanou, "A 'Ghastly Operation,'" 54-55.

¹⁰³ Pelis, "Blood standards," 186-87.

was the only effective treatment for fatal post-partum haemorrhage) because blood clots often caused instruments to malfunction or patients to become sick or die. These dangers as well as a general shift towards a mechanical understanding of the blood's role as a vehicle for materials to circulate in the body (rather than life-giving fluid) led to an increase in popularity of blood substitutes in Britain in the 1880s. Saline solutions were successfully used to treat cholera during successive epidemics between 1846 and 1860 and this led to a belief that saline solution could also be an effective treatment for blood loss, particularly given that post-partum haemorrhage and severe dehydration from cholera were described in similar terms as "shock", "exhaustion" or "collapse." In the early 1880s, Sidney Ringer (who taught at the University College Hospital in London) developed "Ringer's Solution," a carefully measured combination of salts in solution which mimics the chemical composition of blood itself, through a series of experiments on "detached" animal hearts (which could be kept beating by being perfused with Ringer's Solution).¹⁰⁴ Ringer's discovery and the perceived relative safety of saline solutions (which did not cause blood clots or malfunctioning equipment) led to the widespread replacement of blood transfusions with saline solutions in Britain, particularly in surgery.¹⁰⁵

Thus, by the time fin-de-siècle vampire fiction was published, British writers and readers were more likely to regard blood transfusions as an antiquated and dangerous practice than a rational, modern technology. For example, Charles Egerton Jennings' transfusion textbook, *On the Transfusion of Blood and Saline Fluids* (first published in 1883) begins with a chapter on the history of transfusion in which he argued that transfusion is a perfect example of "empirical treatment [...] adopted before a rational basis is known."¹⁰⁶ Jennings's book was widely used to teach the techniques of transfusion and became more pro-saline transfusions as it went through subsequent reissues in 1884 and 1888. However, even the first edition portrayed blood transfusion as a potentially outdated practice that relies equally on the machinery of the modern surgical theatre

¹⁰⁴ Pelis, "Blood standards," 194.

¹⁰⁵ Pelis, "Blood standards," 194.

¹⁰⁶ Charles Egerton Jennings, *On Transfusion of Blood and Saline Fluids* 2nd edition (London: Bailliere, Tindall & Cox, 1883), 8-9.

and on poorly understood ancient beliefs. Although transfusions are central plot points in both *Dracula* and “Good Lady Ducayne,” neither one of the texts describe the process of transfusion in detail. Rather, they portray transfusions as processes suffused with the supernatural. *Dracula* avoids describing any specifics of “the operation” of blood transfusion although it portrays several such scenes. The silence around the mechanics of transfusion itself is perhaps explained by Dr Seward’s remark that, although Arthur wanted to talk about how his transfusion made Lucy his wife, “[n]one of us said a word of the other operations, and none of us ever shall” (*D*, 239). Transfusions are described in slightly more detail in “Good Lady Ducayne.” In particular, Bella describes her strange dreams of,

whirring of wheels that went round in her brain, a great noise like a whirlwind, but rhythmical like the ticking of a gigantic clock: and then in the midst of this uproar as of winds and waves she seemed to sink into a gulf of unconsciousness, out of sleep into far deeper sleep--total extinction. And then, after that blank interval, there had come the sound of voices, and then again the whirr of wheels, louder and louder--and again the blank--and then she knew no more till morning, when she awoke, feeling languid and oppressed. (*GLD*, 29)

This description imagines blood transfusion through a combination of mechanical and natural imagery: the gigantic clock and rhythmical whirl of wheels as well as the noise of winds and waves. It, thus, portrays blood transfusion as a combination between medical science and the supernatural. This reading is reinforced by Lady Ducayne’s own description of Parravicini’s methods as “dangerous quackery” and her desire to hire a “new man, [...] a discoverer like Pasteur, or Virchow” (*GLD*, 53). Together with Lady Ducayne’s very advanced age (which suggests that Parravicini had kept her alive through blood transfusions for several centuries), the text suggests that blood transfusions are relics of an outdated, less scientific form of medical science.

These readings of blood transfusions suffused with the supernatural in *Dracula* or “Good Lady Ducayne” as attempts to bring the supernatural under the control of science begin to seem as unconvincing as reading the inclusion of “monsters” in sexological tracts as a similar attempt to impose a scientific discourse on the supernatural. The parallels between blood transfusions and vampiric bloodsucking in fin-de-siècle vampire fiction point to a blurred boundary between medical practice and supernatural belief, but do so not because the science of blood transfusions was a hegemonic discourse, but perhaps because (as Charles Egerton Jennings states) medical writers themselves believed blood transfusions to be a practice born out of folk beliefs. This points to broader questions about the critical portrayal of scientific knowledge and technologies in Gothic fiction, the relationship between science and the Gothic and, not lastly, the role of technological innovations in the spread of liberal biopolitics. I will aim to explore these in the next part of this chapter.

William Hughes has identified the “Medical Gothic” as a Gothic subgenre (initiated by Mary Shelley’s *Frankenstein* (1818)) that represents Gothic tropes “successfully and systematically imbricated” with contemporary medical knowledge and practice.¹⁰⁷ Hughes seeks to redress the focus on sexual pathology and fin-de-siècle fiction in earlier work by Mighall and Kelly Hurley¹⁰⁸ by examining a range of 19th century Medical Gothic literature that engages with the theme of the discourse and ethics of medical knowledge and practice.¹⁰⁹ Hughes, however, still focuses primarily on fin-de-siècle Gothic fiction that portrays medical professionals as Gothic villains and patients as victims of disempowering medical practices: *Dracula*, *Heart and Science* (1883) by Wilkie Collins, *The Strange Case of Dr Jekyll and Mr Hyde* (1886) by Robert Louis Stevenson, *The Great God Pan* (1894) by Arthur Machen and *The Island of Dr Moreau* (1896) by H.G. Wells.¹¹⁰ Not coincidentally, this period was characterised by a loss of trust in the natural sciences, driven partly by a backlash against

¹⁰⁷ William Hughes, “Victorian Medicine and the Gothic,” in *The Victorian Gothic: An Edinburgh Companion*, eds Andrew Smith & William Hughes (Edinburgh University Press, 2012): 187.

¹⁰⁸ Hurley, *The Gothic Body*.

¹⁰⁹ Hughes, “Victorian Medicine.”

¹¹⁰ Hughes, “Victorian Medicine.”

Darwinism begun in the 1870s and by the growing support for anti-vivisection, anti-vaccination and CDAs repeal campaigns in the 1880s and 1890s.¹¹¹ *Fin-de-siècle* Gothic specifically cannot be read as an uncomplicated subversive space within which hegemonic science can finally be critiqued, but as part of a larger discursive context within which ideas about the ethics and role of science in society were continuously debated. This dialogic understanding of the Gothic is precisely the kind of reading Sara Wasson calls attention to in the introduction to the May 2015 special issue of *Gothic Studies* dedicated to Medical Gothic by stressing the two-way influence between medicine and the Gothic.¹¹² And, while nowadays medicine might be regarded as (in Wasson's words) the 'triumph of modernity',¹¹³ public opinion towards medicine was far less uniformly positive in the 1880s and 1890s. Like *fin-de-siècle* Medical Gothic texts (including the vampire fictions discussed in this chapter), the publications of anti-vivisection, anti-vaccination and anti-CDAs campaigners depicted medical professionals and medical experimentation as Gothic, monstrous or supernatural. This use of the Gothic mode points to yet another discourse in which the Gothic did ideological work. But it also suggests that the Medical Gothic cannot be read as simply a reflection of or reaction to medical practices and discourses, but as part of a broader cultural context.

Vampire Doctors

Gothic in anti-prostitution materials: Josephine Butler

While prostitutes become Gothicised as supernatural, infectious monsters in *fin-de-siècle* texts, as I have hinted at in the earlier discussion of anti-CDAs literature, medical practitioners are the other figure who is Gothicised in the debates surrounding prostitution. This Gothicisation begins to occur in the mid-century texts of social reforms and is noted by William Acton. In a passage from *Prostitution Considered in Its Moral, Social, and Sanitary Aspects* (1858, 1870) often cited as a

¹¹¹ Roy MacLeod, "The 'Bankruptcy of Science' Debate: The Creed of Science and Its Critics, 1885-1900." *Science, Technology, & Human Values* 7, no. 4 (1982): 3.

¹¹² Wasson, "Useful Darkness," 1.

¹¹³ Wasson, "Useful Darkness," 2.

representation of Acton's own views on prostitution, Acton mocks the overdramatic, overly Gothic language in which prostitutes are described in religious and social reform literature:

[a] woman who, whether sound or diseased, is generally pretty and elegant – oftener painted by Nature than by art – whose predecessors castaway the custom of drunkenness when the gentleman of England did the same – and on whose backs, as if following the poet's direction, *in corpore vili*, the ministers of fashion exhibit the results of their most egregious experiments.¹¹⁴

Like the female vampires of Braddon, Stoker and Marryat's fiction, prostitutes are half-animal mythical creatures capable of poisoning young men. They are also worthless corpses, "in corpore vili," a phrase used to refer to dead bodies which could legally be used for dissection and thus subject to the cruel experiments of fashionable young men. This vivid passage brings together several Gothic tropes in its portrayal of prostitutes: they are half-animal, half-human, not-quite-alive and possess a monstrous sexuality. But it also points out that the other major trope of this subgenre is grotesque medical experimentation.

The figure of the Gothic doctor overwhelmed by his sexual urges and his (often) sexualised desire to carry out bizarre and unethical experiments is common in anti-vivisection materials in the 1870s.¹¹⁵ As Mary Ann Elston has shown, by the 1880s there was a great deal of overlap between anti-prostitution and anti-vivisection organisations.¹¹⁶ In the literature of prostitution abolitionists, doctors gain even more Gothic attributes because the enforced medical examinations of the CDAs are described as sexualised, polluting acts and doctors are associated with mysterious, elite international groups set on imposing their atheist belief in reason and the 'rational management' of prostitution, over the religiously motivated desire for the abolition of prostitution as sin.

¹¹⁴ Acton, *Prostitution*, 28.

¹¹⁵ Coral Lansbury, "Gynaecology, Pornography, and the Antivivisection Movement," *Victorian Studies*, Vol. 28 (1985).

¹¹⁶ Mary Ann Elston, "Women and Anti-Vivisection in Victorian England, 1870-1900," in Nicolaas A. Rupke ed., *Vivisection in Historical Perspective* (London: Routledge, 1987).

For example, In Josephine Butler's letter to J.J. Garth Wilkinson (reprinted in Wilkinson's pamphlet), Butler describes the enforced medical examinations of suspected prostitutes mandated by the CDAs in Gothic terms:

[t]hese are the words I hear so often: 'IT IS SUCH AWFUL WORK; THE ATTITUDE THEY PUSH US INTO FIRST IS SO DISGUSTING AND SO PAINFUL, AND THEN THESE MONSTROUS INSTRUMENTS, - OFTEN THEY USE SEVERAL. THEY SEEM TO TEAR THE PASSAGE OPEN FIRST WITH THEIR HANDS, AND EXAMINE US, AND THEN THEY THRUST IN INSTRUMENTS, AND THEY PULL THEM OUT AND PUSH THEM IN, AND THEY TURN AND TWIST THEM ABOUT; AND IF YOU CRY OUT THEY STIFLE YOU WITH A TOWEL OVER YOUR FACE'. These are the very words they use, also these: 'it causes pain like *labour* across the back and loins; and you feel the instruments pressing up to your stomach, making you quite sick, THEY PUSH THEM UP SO FAR'.

[capitals in the original]¹¹⁷

The 'monstrous instruments' of the doctors seem to enact both surgery and rape on the women who are forced to submit to the examinations. This passage reuses the metaphor of medical science and practice as rape that was widely used in British antivivisection literature after 1880.¹¹⁸ Moreover, given the contagious concerns of the CDAs, Butler's letter implies repeatedly that doctors pollute the women they examine who are 'never free from pain' after the procedure. Besides this contagious discourse, Butler also strongly associates doctors with an international elite, hinting at anti-Semitic tropes. In another frequently cited letter Josephine Butler sent to J.J. Garth Wilkinson (which Wilkinson reprinted in his pamphlet entitled 'The Forcible Introspection of Women of the Army and Navy by the Oligarchy Considered Physically'), Butler melodramatically describes medical examinations as a disgusting and painful process. Butler even wonders bombastically if 'the

¹¹⁷ Josephine Butler, *Josephine Butler and The Prostitution Campaigns: Diseases of the Body Politic*, eds. Jane Jordan & Ingrid Sharp, Vol I (London: Routledge, 2003), 21-2.

¹¹⁸ Elston, "Women and Anti-Vivisection."

executioners of the early Christian martyrs ever devise anything more foul than all this.”¹¹⁹ This description is highly charged with an implicit accusation that male doctors are sexually and morally polluting the bodies of their women patients.¹²⁰ Thus, even though Butler argued against speculum examinations as a medical procedure, her argument opposes them on the basis of morality, not health. Just as anti-CDAs literature rarely discusses contagion as a health issue, Butler avoids the issue of the merits (or lack thereof) of these examinations as medical treatments.

In her memoir of the repeal campaign, *Personal Reminiscences of a Great Crusade* (1896), Butler describes the repeal campaign as a religiously motivated crusade to stop ‘the world-wide evil of State Regulation of Vice’ and prevent the ‘Governments of the civilised world’ from bowing down to ‘the great god of so-called medical science.’¹²¹ Central to Butler’s account of the repeal campaign is the claim that legislation which aims to regulate (rather than criminalise) prostitution is an ‘International Project’ pushed forward by international medical organisations, such as the International Medical Congress.¹²² This emphasis on a foreign elite of doctors as the originators of ‘the evil of State Regulation of Vice’ was central to the repeal campaign despite the fact that the CDAs were significantly narrower in scope than regulationist legislation introduced in France by Napoleon and were passed as a result of very specifically English anxieties over the health of military troops in the 1860s. As Ailise Bulfin and others have shown, fears of foreign control (including invasion anxieties and reverse colonisation) of England were widespread towards the end of the 19th century and the repeal campaigners’s narrative of an international elite of godless doctors imposing regulationist legislation on England fit with these wider anxieties.¹²³ As an example of this rhetoric, Butler’s memoir quotes at length from a sermon spoken by Rev. C. S. Collingwood, Rector of Southwick, Sunderland, at the Abolitionist Congress in York in June, 1874. Rev. Collingwood encourages fellow abolitionists to “carr[y] the war into the enemy’s country’ by establishing relations

¹¹⁹ Butler, “Josephine Butler,” 21-2.

¹²⁰ Walkowitz, *City of Dreadful Delight*, 92.

¹²¹ Josephine Butler, *Personal reminiscences of a great crusade* (London: H. Marshall & Sons, 1886), 60-61.

¹²² Butler, *Personal Reminiscences*, 60-61.

¹²³ Ailise Bulfin, *Gothic Invasions: Imperialism, War and Fin-de-Siècle Popular Fiction* (Cardiff: University of Wales Press, 2018).

with Abolitionists in other European countries to help fight the hostile pressure against the Abolitionist coming not only from British doctors, but from 'a sort of international League of doctors, supported by the institutions of Continental Europe.'¹²⁴ He goes on to encourage his listeners to observe "the world-wide schemes of the enemy" who will not stop,

till the whole world is under their regulations; and they have hitherto got all they wanted, until they touched the sacred soil of England. [...] 'What,' we may imagine them saying ' what are trifling checks at the Cape of Good Hope, or in the United States, or in Bombay? What is a temporary delay in England to a party whose plans embrace the whole wide world? There are plenty of other fields to occupy. Only keep up a steady fire upon England; she is the centre of the position; carry England and you are masters of the world.'¹²⁵

This passage clearly represents Regulationist legislation as an attempt by foreign powers to "carry England" and become "masters of the world," and in doing so it emphasises England's position as the centre of the world due to its imperial power and influence as well as an inherent vulnerability to foreign attack which stems precisely from its imperial power.

As I have briefly mentioned before, following the Vaccination Act of 1873 which made vaccination compulsory (on penalty of a fine), exchanges of bodily fluids through vaccination was subject to intense debate as there was considerable resistance to the compulsion, particularly among working-class people who could not afford to pay the fine. Jules David Law, Martin Willis and Nadja Durbach have linked the representation of vampiric infection through exchanges of blood in *Dracula* to these debates.¹²⁶ Improvements in microscopy led to numerous, but fruitless attempts to identify a smallpox micro-organism in the 1870s and 1880s.¹²⁷ It is important to note as well that, although the smallpox virus remained unknown, the risk of infection with other diseases from

¹²⁴ Butler, *Personal Reminiscences*, 62-63.

¹²⁵ Butler, *Personal Reminiscences*, 63.

¹²⁶ Durbach, *Bodily Matters*, 138-39; Jules Law, *The Social Life of Fluids: Blood, Milk, and Water in the Victorian Novel* (Ithaca, N.Y.: Cornell University Press, 2010), 156-7; Willis, "The Invisible Giant."

¹²⁷ Worboys, *Spreading Germs*, 245.

vaccine lymph was considered serious enough by 1891 for Sydney Monckton Copeman (the head of the National Vaccine Establishment at the time) to advocate for the use of glycerinated calf lymph in vaccines, the addition of glycerine (an antiseptic) being intended as a means to sterilise the vaccine lymph from “septic, tubercular and syphilitic germs.”¹²⁸ Fears of epidemic diseases being transmitted through humanised lymph (also known as arm-to-arm vaccination) led in 1899 to the creation of the Royal Commission on Vaccination in Britain which deliberated on the effectiveness and safety of vaccination until 1896 before issuing an ambiguous report. Nadja Durbach, however, cautions against reading *Dracula* as an explicitly anti-vaccination text given that anti-vaccinators who portrayed vampiric-like doctors never referred directly to the immensely popular novel or its titular character.¹²⁹

Rather, Durbach has argued that, like the campaign to repeal the Contagious Diseases Acts, anti-vaccinators articulated their anxieties about vaccination through shared “gothic sensibilities” which deployed Gothic tropes (primarily, the vampire and the vivisectionist) to represent and critique the bureaucracy of enforced vaccination.¹³⁰ However, another important distinction between the anti-vaccination and the anti-CDA movements is that the anti-CDA movements managed to portray the threat of the Acts as a threat to the fabric of the nation and interweaved their campaign into the growing emphasis on eugenic biopolitics at the end of the century. Moreover, although the vampire-doctors of both *The Blood of the Vampire* and “Good Lady Ducayne,” seem to reflect and reinforce powerful anxieties about bodily violation, degeneration and sexual pollution, Van Helsing, however, is a more ambiguous figure. In particular, Van Helsing is able to navigate both scientific knowledge and religious / folk superstition in his diagnosis of vampirism and heroic fight against it. The role of medical professionals in expanding the reach of biopolitics over human life processes in the 19th century has been one of the recurring themes of this thesis. What the exploration of the history of 19th century history of biopolitics over the last three chapters

¹²⁸ Worboys, *Spreading Germs*, 246.

¹²⁹ Durbach, *Bodily Matters*, 142.

¹³⁰ Durbach, *Bodily Matters*, 138.

has demonstrated, however, is that it is difficult to see medical and scientific professionals as playing any one straightforward, clear role in this process and medical professionals are not all-powerful villains, but actors vulnerable to the push and pull of biopolitics. Perhaps Van Helsing's dual commitment to medical science and folk superstition which ultimately saves the day illustrates precisely this ambiguous position.

Chapter 5: Contagion in EcoGothic Fiction

Margaret Atwood's *MaddAddam* Trilogy (2003, 2009, 2013) and Cormac McCarthy's *The Road* (2006) have been singled out as environmentalist texts with the power to educate readers on climate change by turning the "graphs and scientific jargon" of environmental science into emotionally compelling fiction¹ and "[impel] the reader to act, to direct the future by transforming the here and now."² So great is the perceived didactic potential of these texts that they have been used to teach climate change³ and both authors have become central figures in the canon of climate fiction (cli-fi) although they have written few other explicitly climate conscious texts.⁴ Environmentalist-oriented critics have bemoaned the absence of literary engagement with climate change since Lawrence Buell argued that "the environmental crisis involves a crisis of the imagination" in *The Environmental Imagination* (1995).⁵ Atwood and McCarthy's texts seem to have

¹ Rebecca Tuhus-Dubrow, "Cli-Fi: Birth of a Genre," *Dissent* 60, 3 (2013): 58-61, <https://doi.org/10.1353/dss.2013.0069>.

² Mark Bosco, "The Apocalyptic Imagination in *Oryx and Crake*," in *Margaret Atwood: The Robber Bride, The Blind Assassin, Oryx and Crake*, ed. J. Brooks Bouson (London & New York: Continuum, 2010), 156-71, 158.

³ Examples of pedagogical uses of Atwood and McCarthy's novels include: Sasha Matthewman, *Teaching Secondary English as if the Planet Matters* (London: Routledge, 2010), 124-137; Sean Murray, "The Pedagogical Potential of Margaret Atwood's Speculative Fiction: Exploring Ecofeminism in the Classroom," in *Environmentalism in the Realm of Science Fiction and Fantasy Literature*, ed. Chris Baratta (Cambridge: Cambridge Scholars Publishing, 2011), 111-125; Krista Karyn Hiser, "Pedagogy of the Apocalypse," in *Transformations: The Journal of Inclusive Scholarship and Pedagogy* 21, no. 1 (Spring/Summer 2010): 154-162.

⁴ Overviews of the cli-fi canon include: Adam Trexler & Adeline Johns-Putra, "Climate change in literature and literary criticism," in *Wiley Interdisciplinary Reviews: Climate Change* 2, no. 2 (2011): 185-200; Astrid Bracke & Margu rite Corporaal, "Ecocriticism and English Studies: An Introduction," in *English Studies* 91, no. 7 (2010): 709-712; Adeline Johns-Putra, "Climate change in literature and literary studies: From cli-fi, climate change theater and ecopoetry to ecocriticism and climate change criticism," in *Wiley Interdisciplinary Reviews: Climate Change* 7, no. 2 (2016): 266-282.

⁵ Lawrence Buell, *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture* (Harvard University Press, 1995), 2.

Calls for more climate aware literary fiction also include: Bill McKibben, "What the warming world needs now is art, sweet art." *Grist*, April 22, 2005. Accessed July 2018. <https://grist.org/article/mckibben-imagine/> and

finally resolved this crisis by representing the impending ecological crisis of climate change through a wide range of ecoGothic tropes. Yet, despite a wealth of climate conscious readings of their texts, neither Atwood nor McCarthy portray climate change as we might currently recognise it. That is, as an increase in the temperature of the global atmosphere caused by the greenhouse gas effect. Rather, in both *The MaddAddam Trilogy* and *The Road*, the crisis that humans are forced to confront is one of failed containments of contagion. This apparent contradiction between global warming readings of the novels and their narrative content raises questions about the activist and educational potential of climate fiction: how can texts that do not portray climate change be effective pedagogical tools to teach climate change? This chapter does not aim to answer this question, but rather to understand the appeal of contagion narratives to ecoGothic fiction and, in particular, the reasons why the liberal individualistic narrative of acquiring immunity through rational self-governance that disappeared from contagion narratives in the outbreak narrative (as Chapter 1 argued) re-emerged in climate fiction. I will argue that, in the face of the unique representational challenges posed by the climate crisis, contagion and acquired immunity serve as tropes to make survival in the climate crisis representable as a series of individualist choices.

Overlapping fears of contagion and contamination are one of the central themes of *The MaddAddam Trilogy* and *The Road*. As I will demonstrate, although neither follow the conventional formula for such narratives, their plot is shaped by contagion to a large enough extent that they can productively be read as contagion narratives and share many of the features of the outbreak narratives identified by Priscilla Wald and discussed in Chapter 1. The centrality of contagion to *The MaddAddam Trilogy* and *The Road* has not been explored in depth in other critical literature on climate fiction. This chapter, thus, seeks to integrate ecoGothic readings of the fiction of Margaret Atwood and Cormac McCarthy with an analysis of their use of contagion tropes in order to show that

Robert Macfarlane, "The Burning Question." *The Guardian*, September 23, 2005. Accessed July 2018. <https://www.theguardian.com/books/2005/sep/24/featuresreviews.guardianreview29>.

contagion is key to their representation of environmental degradation as caused by a Gothic resurgence of personal trauma. In particular, I am concerned with how ecoGothic fiction focused on climate change explores the issue of agency, both the agency of the natural world and that of neoliberal individuals living in a time of crisis. Simon C Estok's highly effective theorising of ecophobia as fear of "the agency of the natural environment" has become a major focus of ecoGothic critical analyses and I aim to build on these critical insights.⁶ However, my reading of Atwood and McCarthy's climate ecoGothic texts emphasises the fact that because climate fiction attempts to urge readers to action, it must carry out an interrogation of agency, exploring both humanity's inability to carry out pre-emptive action to prevent future environmental crises and an ecophobic narrative of environmental catastrophe as expression of nature's terrorist agency. Although ecoGothic critical analyses have tended to emphasise the portrayal of nature as full of malicious and independent agency, whilst, as I will show, Atwood and McCarthy's ecoGothic texts portray do a natural world full of malicious intent, equally they seek to trouble the idea of a clear separation between human and natural agency given that climate change science positions humans as "geological agents," capable of "changing the most basic physical processes of the earth."⁷

Legal and public discourses around preventing climate change centre around the issue of pre-emptive action (that is, action against a threat that will take place in the unknowable future) and Amitav Ghosh has claimed that the "crisis of imagination" of climate change is caused precisely by the difficulty of portraying an uncertain future in a manner that compels people to action in the present.⁸ Atwood and McCarthy's novels resolve this representative crisis and engage with the public discourse around pre-emptive action by utilising narratives of contagion to relocate the future

⁶ Simon C. Estok, "Theorizing in a Space of Ambivalent Openness: Ecocriticism and Ecophobia," in *ISLE: Interdisciplinary Studies in Literature and Environment* 16, no. 2 (2009): 203-225, 207-8.

⁷ Naomi Oreskes, "The Scientific Consensus on Climate Change: How Do We Know We're Not Wrong?" in *Climate Change: What It Means for Us, Our Children, and Our Grandchildren*, ed. Joseph F. C. Dimento and Pamela Doughman (Cambridge, Mass.: MIT Press, 2007), 65-100, 93.

⁸ Amitav Ghosh, *The Great Derangement: Climate Change and the Unthinkable* (University of Chicago Press, 2016), 9-11.

global crisis of climate change to a traumatic past breakdown of the family. Outbreak narrative tropes portray contagion agents as hybrid, abhuman subjects and signal the return of a colonial repressed, thus allowing for a relocation of the climate crisis. Moreover, the centrality of colonialism to outbreak narratives (as explored in Chapter 1) allows Atwood and McCarthy's texts to explore how personal trauma is linked to national trauma. Public discourses around new emerging diseases as a terrorist threats allow the two texts to narrate the environmental catastrophe as an act of (bio)terrorism echoing ecophobic fears of Nature as a malicious agent and a terrorist. However, even these terrorists plots engage with the question of how much of nature's agency is actually human. Ultimately, *The MaddAddam Trilogy* and *The Road* do not so much issue a warning about the future climate crisis, but question the meaning of trying to act to prevent this crisis.

Climate EcoGothic and Contagion

Dawn Keetley and Matthew Wynn Sivils have defined the EcoGothic as a "literary mode at the intersection of environmental writing and the gothic" which "typically presupposes some kind of ecocritical lens."⁹ David Del Principe, defining the EcoGothic as an approach to reading the Gothic as much as a distinct subgenre within it, has argued that the EcoGothic takes an explicitly "nonanthropocentric position" in order to interrogate "the role that the environment, species, and nonhumans play in the construction of monstrosity and fear."¹⁰ Keetley and Wynn Sivils, Andrew Smith and William Hughes, David Del Principe and Tom Hillard have all stressed the importance of the notion of "ecophobia" to the EcoGothic.¹¹ First defined by Simon C Estok as "the contempt and fear we feel for the agency of the natural environment" omnipresent in Western cultures which

⁹ Matthew Wynn Sivils & Dawn Keetley, "Introduction: Approaches to the Ecogothic," in *Ecogothic in Nineteenth-Century American Literature*, ed Matthew Wynn Sivils and Dawn Keetley (London: Routledge, 2017), 1-20, 1.

¹⁰ David Del Principe, "Introduction: The EcoGothic in the Long Nineteenth Century," in *Gothic Studies* 16, no. 1 (2014): 1-8, 1.

¹¹ Del Principe, "Introduction", 1-2; Wynn Sivils & Keetley, "Introduction," 2-3; Andrew Smith & William Hughes, "Introduction: Defining the EcoGothic," in *EcoGothic*, eds Andrew Smith & William Hughes (Manchester University Press, 2013), 10-11; Tom J. Hillard, "From Salem Witch to *Blair Witch*: The Puritan Influence on American Gothic Nature," in *EcoGothic*, eds Andrew Smith and William Hughes (Manchester University Press, 2014), 104-5.

“makes looting and plundering of animal and nonanimal resources possible,” ecophobia has also been further theorised as ecoanxiety, a more specific set of overwhelming fears generated by current environmental crises, particularly climate change.¹² Estok has maintained that ecophobia finds expression in narratives which overestimate the agency and malicious intent of nonhuman agents and Smith and Hughes have found that persistent yet failed attempts to confront and control the “blankness” of nature are a main theme in EcoGothic fiction.¹³

Describing the 19th century origins of EcoGothic representations of nonhuman agency, Keetley and Wynn Sivils write that “there is no better example of the agentic nonhuman” in EcoGothic fiction than the “mystic vapor” which “reeked up” from the decaying house of Edgar Allan Poe’s “The Fall of the House of Usher” (1839).¹⁴ Keetley and Sivils read this vapour as one of several malicious environmental agents who threaten the humans in the text, but to Poe and his 1830s readers familiar with miasmatic theory, malicious vapours occupied a more complex place in the relationship between humans and their natural environment as they could have both environmental and human origins.¹⁵ As Linda Lorraine Nash has demonstrated, although there was “widespread agreement” among 19th century American physicians that miasmatic diseases are more common in “low-lying, swampy places” and that they can be caused by “fogs and bad smells,” miasmas were also widely thought to originate from non-white communities whose “vice and unclean habits” created “miasmatic effluvia” which then spread to white communities.¹⁶ Christopher Hamlin has also shown that, although historical accounts often stress a clear differentiation between contagion and miasmatic theory, most 19th century British physicians thought transmittable diseases had

¹² Estok, “Theorizing in a Space,” 208; Susan J. Tyburski, “A Gothic Apocalypse: Encountering the Monstrous in American Cinema,” in *EcoGothic* (Manchester University Press, 2013), 148.

¹³ Estok, “Theorizing,” 211; Smith & Hughes, “Introduction,” 3-4.

¹⁴ Wynn Sivils & Keetley, “Introduction,” 12.

¹⁵ David E. Sloane, “Usher’s Nervous Fever: The Meaning of Medicine in Poe’s ‘The Fall of the House of Usher,’” in *Poe and His Times: The Artist and His Milieu*, ed. Benjamin Franklin Fisher IV (Baltimore: Edgar Allan Poe Society, 1990).

¹⁶ Linda Nash, *Inescapable Ecologies: A History of Environment, Disease, and Knowledge* (Univ of California Press, 2006), 67-69.

compound causes - in other words, environmental factors (particularly climate and temperature) facilitated person-to-person transmission, and environmental miasma could carry effluvia from other infected bodies.¹⁷ Thus, vapours, effluvias, and other types of noxious airs do not simply signal a malicious agency in the natural environment, but rather an uncanny space of hybrid exchange between the human and the environmental. Public “hyper-attentiveness” to atmosphere caused by fears around disease epidemics have helped shaped the strong preoccupation with atmosphere and climate in American Gothic, as Emily Waples has revealed.¹⁸ It is thus, perhaps, not surprising that as Gothic fiction regains a preoccupation with climate (due to eco-anxiety around climate change), it would do so through narratives about contagion. The human-environmental hybridity of 19th century contagious atmospheres is important to note because contemporary ecoGothic texts explore tensions around human-nonhuman hybridity.

Borrowing a term from William Hope Hodgson, Kelly Hurley has identified hybrid human beings (“slug-men, snake-women, ape-men, beast-people, octopus-seal-men, beetle-women, dog-men, fungus-people”) in fin-de-siècle Gothic with the “abhuman,” a “not-quite-human subject” whose morphic potential continuously threatens to become an animal Other.¹⁹ She links the centrality of the “abhuman” in fin-de-siècle Gothic to new materialist scientific and medical understandings of the human body as well as racial tensions and anxieties born out of colonialism and degenerationist theories.²⁰ Del Principe and Dawn Keetley and Matthew Wynn Sivils have read the abhuman as exemplary of an ecoGothic preoccupation around humanity’s relationship with the natural world, particularly in view of evolutionary theories and discoveries.²¹ In post-HIV/AIDS contagion discourses, viruses have become abhuman subjects and have come to inhabit a hybrid

¹⁷ Christopher Hamlin, “Predisposing Causes and Public Health in Early Nineteenth-Century Medical Thought,” *Social History of Medicine* 5, no. 1 (1992): 43-70.

¹⁸ Emily Waples, “‘Invisible Agents’: The American Gothic and the Miasmatic Imagination,” *Gothic Studies* 17, no. 1 (2015): 13-27, 16.

¹⁹ Kelly Hurley, *The Gothic Body: Sexuality, Materialism, and Degeneration at the fin de siècle* (Cambridge University Press, 2004), 4-5.

²⁰ Hurley, *The Gothic Body*, 66-74.

²¹ Del Principe, “Introduction,” 2; Wynn Sivils & Keetley, “Introduction,” 4.

space between humans and their natural environment. HIV was the first virus whose ability to integrate human DNA and change it was discovered, which means viruses become virus-human hybrids through infection and have the ability to hybridise human beings.²² It is not a coincidence that in *The MaddAddam Trilogy*, Crake develops a deadly virus (JUVE) in parallel with a new species of humans (the Crakers) under the same umbrella of Project Paradise. Both the virus and the Crakers are intended to manipulate human evolution and reshape humanity into a more sustainable species. Similarly, in *The Road*, the survivors of the novel's nuclear winter seem to have mutated into a new human species, either "living like an animal" like the old man Ely or degenerating into carnivore cannibals.²³

Moreover, as Susan Sontag has argued, political and medical discourses around AIDS have invested the virus with human-like agency ("the virus can 'lurk' for years" before attacking, for example) and described its behaviour through "science-fiction narratives" which emphasise both its agency and potential supernatural (even extra-terrestrial) nature.²⁴ Mireille Rosello has noted a similar usage of science fiction aesthetics in visual representations of HIV to narrate both the virus's apparent invulnerability (its spikes can "penetrate fragile membranes without allowing anything to penetrate its solid core") and its beauty and heroism.²⁵ In science-fiction-like representations of HIV, the virus is "not the villain or the enemy but one of the players" in a sci-fi game of infection from which human difference and human suffering are both removed.²⁶ JUVE is closely identified with the science fictional images Rosello finds in representations of HIV. In the only detailed description of the virus, Jimmy/the Snowman calls it the "usual melting gumdrop with spines" (397-98). Although there is no single, explicit contagious agent in *The Road*, there are lingering beautiful description of

²² Theresa Marie MacPhail, "The Viral Gene: An Undead Metaphor Recoding Life," *Science as Culture* 13, no. 3 (2004): 325-345.

²³ Cormac McCarthy, *The Road* (London: Picador, [2006] 2009), 185. All further references to this text are from this edition and are given parenthetically.

²⁴ Sontag, *Illness as Metaphor*, 101.

²⁵ Mireille Rosello, "Pictures of a Virus: Ideological Choices and the Representation of HIV," *French Cultural Studies* 9, no. 27 (1998): 337-349, 340-41.

²⁶ Rosello, "Pictures," 341.

the ever-present ash which is the text's contamination and contagion vector (spreading disease even without being an organism which can suffer from the disease). This also echoes Rosello's analysis of the beauty and heroism of viruses in contagion discourses. Attempts to theorise the origin of HIV and other new emerging diseases have also been dominated by anxieties around hybridity between humans and other species.²⁷ Priscilla Wald has shown that in increasingly eco-conscious narratives about new emerging diseases, infectious agents are often characterised as agents of the revenge of "Nature herself" on humans in response to imminent environmental crisis.²⁸ Infectious agents are, then, both uncanny abhuman subjects acting as a malicious natural agency.

Part of the success of Atwood and McCarthy's ecoGothic representation of climate change is due to their use of contagion narratives to explore anxieties around human and nonhuman agency. In *The MaddAddam Trilogy* and *The Road*, contagion is initially an agent of environmental revenge against human exploitation of the natural world, but gradually becomes a more morally ambiguous hybrid of human and nonhuman agency as the contagion narrative explores issues around natural and acquired immunity. In Atwood's trilogy, the ecophobic plot of nature's revenge is more explicit as JUVE (the trilogy's viral threat) is spread by Crake to cause the extinction of humanity and put an end to humanity's unsustainable exploitation of natural resources. However, towards the end of *MaddAddam*, it is revealed that God's Gardeners originally stole the virus from HelthWyzer (a biotech corporation) to kill Adam One and Zeb's abusive father. This means not only that Crake is not the original creator of JUVE, but that its origin and purpose are less of a triumphant narrative of the supremacy of human agency and science over endlessly malleable nature, and more of a darkly Gothic tale about the inevitable resurgence of childhood trauma and the hybrid abhuman agency of viral agents, since JUVE is both a viral monster in its own right and the expression of trauma. The two brothers (Adam One and Zeb) are the founders of the trilogy's two environmentalist groups (God's

²⁷ Susan Knabe, "Coincidences and Likely Stories: Perverse Desire and Viral Exchange in the 'Origin' of AIDS" in *Economies of Representation 1790-1900: Colonialism and Commerce*, ed. Leigh Dale and Helen Gilbert (Aldershot: Ashgate, 2007), 59-72.

²⁸ Wald, *Contagious*, 44-5.

Gardeners and MaddAddam) who inspire Crake's Paradise Project. The novel suggests even their environmentalism can be interpreted as a reaction to or resurface of childhood trauma given that their father (The Rev) is a literal fossil fuel worshipper.

In *The Road*, contagion is a less obvious theme, but concerns about contagion and contamination with the novel's polluted atmosphere dominate the text and narratives about chemical and radioactive contamination overlap and rework the conventions of outbreak narratives. Moreover, a central concern of *The Road* is the moral purity or, in my reading, the natural immunity of the Son. I read *The Road* as a narrative of acquired and lost immunity as the father is initially resistant to the contagion and contamination of the new world, but gradually loses this immunity as he is forced to commit more acts of violence. The novel persistently returns to the polluted and polluting atmosphere which contaminates everything and the continuous falling of "soft ash" in which "everything pal[es] away into the murk" (*The Road*, 2). This ongoing contamination embodies the portrayal of the natural environment in the novel as what Susan J. Tyburski has described as "an alien entity utterly indifferent to the fate of humanity."²⁹ But, as the novel draws increasingly close parallels between environmental decay, the protagonist's consumptive illness and the breakdown of his family, it becomes difficult to maintain such a strict separation between the environmental and the human, as the different kinds of contagions (bacterial, chemical and emotional contagions) hybridise the two. Because of this, the polluting atmosphere of the novel can be read as an abhuman viral subject although it is not a virus. Tyburski, writing about the 2009 film adaptation of *The Road*, has argued that the question of how to maintain human agency in the face of crisis is at the heart of *The Road*, and Adeline Johns-Putra has demonstrated that in the growing body of critical readings of *The Road* as a climate change narrative, the man's love and care for his son is generally read as an ethic of "caring for the future" and a call to pre-emptive action to help secure the climate future.³⁰

²⁹ Tyburski, "A Gothic Apocalypse," 147.

³⁰ Tyburski, "A Gothic Apocalypse," 153; Adeline Johns-Putra, "My Job is to Take Care of You": Climate Change, Humanity, and Cormac McCarthy's *The Road*," *Modern Fiction Studies* 62, no. 3 (2016): 519-540.

Thus, both texts explore the issue of the possibility of human agency through contagion narratives in which human and viral agents become hybridised to the point where it becomes difficult to discern between human, natural and abhuman will.

Pre-empting Emergence

The concept of pre-emptive action has its origins in international law where it means a state's legal right to take retaliatory military action before it is attacked as long as it has knowledge of an imminent attack.³¹ Its best known use in the contemporary period was in justifications for military action in the War on Terror (the US-led war aiming to destroy the global "network of terrorists" after 9/11) against terrorist threats which were both still emerging and not yet full known.³² However, discourses of pre-emptive emergence are part of a larger trend towards conceptualising the future as fundamentally defined by a sense of uncertain danger and risk, which emerged towards the end of the 20th century. Ulrich Beck has shown that imaginations of the future became preoccupied with an excessive sense of risk in late modernity, largely as a consequence of greater awareness of the danger of environmental destruction (through catastrophic events such as the Chernobyl disaster and climate change).³³ Moreover, although pre-emptive action originates in international conflict law, some of the most prominent contemporary examples of legislating pre-emptive emergence are found in environmental legislation around preventing climate change. The United Nations Framework Convention on Climate Change (UNFCCC) (signed in 1992) and the Kyoto Protocol (signed in 1997) explicitly frame their efforts to counteract climate change as taking action in "the absence of certainty."³⁴ Partly under pressure from anti-climate-change lobbying groups (who continue to deny the scientific evidence of climate change), mainstream discourses of action on

³¹ Inge Mutsaers, *Immunological Discourse in Political Philosophy: Immunisation and Its Discontents* (London: Routledge, 2016), 67-8.

³² Cooper, *Life as Surplus*, 124.

³³ Beck, *Risk Society*, 20-25.

³⁴ Cooper, *Life as Surplus*, 83-84.

environmental destruction has used the language of “action in the absence of conclusive evidence of problem.”³⁵

Amitav Ghosh has argued the difficulty of portraying the uncertain future threat of climate change in a manner that compels people to action in the present constitutes a “crisis of imagination” in efforts to prevent climate change.³⁶ Accounts of climate change, even in scientific literature, policy documents, and legislation, narrate climate change as an uncertain future event which cannot be fully known. For example, the IPCC (Intergovernmental Panel on Climate Change) Emissions Report published in 2000 plots four different “storylines” of the progress of climate change which are explored in 12 different and, according to the report, equally probable scenarios.³⁷ In the description of these storylines and scenarios, the report explains that:

By 2100 the world will have changed in ways that are difficult to imagine - as difficult as it would have been at the end of the 19th century to imagine the changes of the 100 years since.³⁸

Mainstream environmentalist narratives about preventing climate change can resort not only plotting the future as a multitude of competing, equally possible scenarios, but to plotting the past as the only point of view from which the climate future can be properly understood. However, projecting climate change into either the future or the past poses challenges to conceptualising human action on climate change in the present. Rosemary Randall has argued that there are two types of narratives about climate change in the public discourse, one about loss caused by climate change and one about solutions to climate change.³⁹ These two narratives almost never intersect.

³⁵ Luigi Pellizzoni, “Risk” in *Critical Environmental Politics*, ed. Carl Death (London: Routledge, 2014), 198-208.

³⁶ Ghosh, *The Great Derangement*, 9-11.

³⁷ Nebojsa Nakicenovic, Joseph Alcamo, A. Grubler, K. Riahi, R. A. Roehrl, H-H. Rogner, and N. Victor. *Special Report on Emissions Scenarios (SRES): A Special Report of Working Group III of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2000), 3-4.

³⁸ Nakicenovic, *Special Report*, 4.

³⁹ Rosemary Randall, “Loss and Climate Change: The Cost of Parallel Narrative,” *Ecopsychology* 1, no. 3 (2009): 118-129.

Instead, climate change loss narratives are displaced from Western audience either in time (taking place in an unrecognisable future) or space (away from a Western audience). But, as has often been noted by postcolonial historians, including Dipesh Chakrabarty and Johannes Fabian, European thinking about locations which are geographically remote from Europe often implies a “denial of coevalness” of non-European peoples who are represented as living in a past period of (implicitly European) history.⁴⁰ Thus, the geographically “remote” spaces Randall identifies in climate change loss narratives are also temporally remote. Popular environmentalist texts, such as Paul Ehrlich’s *Population Bomb* (1968), have even deployed images of seemingly pre-modern Third World to imply that as a consequence of environmental crisis, the First World will have to return to its pre-modern past.⁴¹ Climate ecoGothic texts appeal to these discourses of environmental destruction as a return to the past as well as to Gothic tropes about the return of a repressed past to interrogate anxieties around pre-emptive action and, more specifically, around the possibility of human agency against a crisis which has been narrated as both impossible to know and already passed.

Contagion and Contamination

As this thesis has already discussed, Priscilla Wald has defined “outbreak narratives” as formulaic narratives about the discovery of a new infectious disease (typically in the global South), its spread through global communication networks and its eventual containment through the actions of the military and scientific professionals.⁴² Chapter 1 of this thesis has argued that outbreak narratives are a specific sub-genre of contagion narratives shaped by the growing influence of neoliberal biopolitics in the late 1980s. While previous chapters have interpreted contagion narratives through other lenses, because of the high cultural visibility of outbreak narratives (as

⁴⁰ Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference* (Princeton University Press, 2009); Johannes Fabian, *Time and the Other: How Anthropology Makes Its Object* (Columbia University Press, 1983).

⁴¹ Cheryl Lousley, “Narrating a Global Future: *Our Common Future* and the Public Hearings of the World Commission on Environment and Development,” in *Global Ecologies and the Environmental Humanities: Postcolonial Approaches*, eds. Elizabeth DeLoughrey, Jill Didur and Anthony Carrigan (London: Routledge, 2015), 245-267, 255.

⁴² Wald, *Contagious*, 2-3.

Wald identifies them) in the 1990s, Wald's work offers an important interpretive framework through which to read the contagion narratives of ecoGothic fiction. In particular, Wald has further identified the portrayal of colonialism in outbreak narratives as noting that:

an increasingly interconnected world disturbs the lair of an archaic entity, a virus depicted as lying in wait, and thereby brings modernity itself into conflict with a forgotten past, emblemized by a disease against which contemporary technology is (initially) ineffective: the return of a colonial repressed.⁴³

Although neither *The Road* nor *The MaddAddam Trilogy* align with this definition perfectly (particularly in their pessimistic portrayal of technology's powerlessness in the face of crisis), they both adopt and rework many of these conventions and feature contagion as a main theme. In particular, although both texts are set in the future, they portray the emerging danger of climate change as a contagion which is "an archaic entity" and threatens "the return of a colonial repressed." As Fred Botting, Mark Edmundson and Allan Lloyd-Smith have shown, narratives about the disturbing return of the past to the present have long defined the Gothic as a literary mode.⁴⁴ Moreover, because outbreak narratives "articulat[e] community on a national scale, as it identifies the health and well-being of those legally within the borders of the state and its worthy representatives," they are productive sources for Gothic explorations of national identity and crisis.⁴⁵

Outbreak narratives facilitate these explorations on both a national and personal scale. The contagion tropes I have identified in *The MaddAddam Trilogy* and *The Road* explore anxieties around personal agency in the face of environmental disaster by portraying climate crises as the consequence of highly personal, as well as political and national traumas. In particular, both texts

⁴³ Priscilla Wald, "Future Perfect: Grammar, Genes and Geography," *New Literary History*, 31(4) (200): 681-708.

⁴⁴ Botting, *Gothic*, 2-3; Mark Edmundson, *Nightmare on Main Street: Angels, Sadomasochism, and the Culture of Gothic* (Cambridge, Mass.: Harvard University Press, 1999), 5; Allan Lloyd-Smith, "Nineteenth-Century American Gothic," in *A New Companion to the Gothic*, ed. David Punter (Malden, MA: Wiley-Blackwell, 2012), 163-176, 163.

⁴⁵ Wald, *Contagious*, 33.

show the breakdown of the heteronormative family as a source of trauma. As Mel Y Chen and Noel Sturgeon have shown, the danger of environmental degradation is often imagined in mainstream environmentalist discourses as a threat to a “natural” heterosexual domesticity.⁴⁶ Particularly in the aftermath of HIV/AIDS paranoia around the danger posed by infections spread by non-heterosexual and racial Others to heterosexual families, outbreak narratives began to explore anxieties around illicit sexuality.⁴⁷ The intertwining of familial trauma, contagion and environmental destruction in *The MaddAddam Trilogy* and *The Road* reworks Gothic conventions about the past and the cultural baggage of contagion narratives post-HIV/AIDS. Read as an ecoGothic narrative, it also questions the meanings of human agency in the face of an environment that has already been irreversibly changed by human action, in which there are no longer any clear lines between human and environmental agency.⁴⁸

Given that much of its plot revolves around Crake’s engineered pandemic apocalypse, *The MaddAddam Trilogy* is a more obviously contagious text than *The Road*. Contagion is one of the text’s main themes and surfaces again and again as a vector for emotional and political entanglements between humans, as well as between humans and abhuman Others. *Oryx and Crake* (2003), the first novel in the series, opens with three brief chapters tracing Jimmy the Snowman’s daily routine in the post-apocalypse, but quickly reverts back to the pre-apocalyptic past and his earliest memory. This is of a “huge bonfire” in which his father is burning “an enormous pile of cows and sheep and pigs.”⁴⁹ Although his father reassures him that the animals are nothing more than “steaks and sausages” as they are already dead, Jimmy feels anxious for them and guilty even though the explosive spectacle attracts him (OC, 35). He asks his father if he can keep one of the

⁴⁶ Mel Y Chen, *Animacies: Biopolitics, Racial Mattering, and Queer Affect* (Duke University Press, 2012), 160-61; Noel Sturgeon, *Environmentalism in Popular Culture: Gender, Race, Sexuality, and the Politics of the Natural* (Tucson: University of Arizona Press, 2009), 39-41.

⁴⁷ Wald, *Contagious*, 85-6.

⁴⁸ Oreskes, “The Scientific Consensus,” 93.

⁴⁹ Margaret Atwood, *Oryx and Crake* (London: Virago, [2003] 2013), 31. All further references to this text are from this edition and are given parenthetically.

horns, but he is busy discussing with a colleague whether the “new” bug that killed the animals was an act of bioterrorism or corporate sabotage (OC, 38). This brief scene encapsulates how *The MaddAddam Trilogy* uses contagion as a metaphor for a return to the past (the bonfire is Jimmy’s first memory), traumatic relationship to others, both animals (Jimmy oscillates between anxiety, guilt and taking pleasure in their deaths) and humans (Jimmy is emotionally needy and his parents ignore him) and the complicated intersection between corporate, medical and environmental interests from which dangerous new viral bioforms emerge.

Although contagion is not the focus of most of the narrative in the three novels, episodes revolving around it appear again and again as pressure points which expose tensions between the characters’ contradictory emotional attachments to the past and attempts to assert their own agency. Viral agents are not only the impersonal agents of nature’s revenge of most outbreak narratives, but are created and used by humans to further personal goals thus intertwining viral and human agency. For example, Jimmy’s mother decides to leave her family and become a bioterrorist after they move to a HelthWyzer corporate compound whose architecture mimics Italian Renaissance buildings (OC, 40). This is the family’s third move - and as Jimmy’s father moves up the corporate ladder, the aesthetic of the compound they live in moves further back in history. The motivations of Jimmy’s mother are never made explicit, but her escape from the compound is mirrored by the attempted breach a few weeks before they move in by a (woman) bioterrorist with a “vicious Ebola or Marburg splice, one of the fortified hemorrhagics” hidden in a hairspray bottle (OC, 60). The culprit was caught quickly, and, like Jimmy’s mother, she was spraygunned and killed (OC, 61). This episode foreshadows the escape of Jimmy’s mother from the compound and its corporate-domestic entrapment, as well as the escape (and subsequent return) of Lucerne and Ren from a similar corporate compound. In both of these escapes, women struggle to reconcile their current roles with their histories (as ethical bioscientist or corporate wife) and attempt to assert their agency

in the face of what the novel portrays as an impossible task of either truly overcoming or returning to the past.

Contagion is a less prominent theme in *The Road*, but contagion and contamination are recurring themes through the omnipresence of ash, soot and debris in the air, and the text continuously invests the amorphous mass of debris in the atmosphere with hostile indifference to the plight of the human characters, if not malicious agency. In public discourse as well as in fiction, there are significant overlaps between narratives portraying contagion and contamination. Writing about the lead contamination in children's toys panic in 2007, Mel Y Chen argued that although lead contamination is technically not contagious, media reports focusing on the transnational movement of contaminants (from China to the US) strongly resembled reporting of the 2002 SARS epidemic.⁵⁰ Chen goes on to compare the lead panic with fears, in late 19th and early 20th century San Francisco, that opium dens operating in Chinatown would spread disease and argued that, historically, contamination and outbreak narratives have shared the same features although chemical contamination is not contagious.⁵¹ In *The Road*, these fears of contagion and contamination are particularly highlighted through facemasks which most of the characters, including the man and his son, wear each time they walk the road. The novel opens with the narrator removing his "cotton mask" and wiping his nose while surveying the horizon for "any movement" before returning to find that the boy has "pulled away his mask in the night" (*The Road*, 3). Like Jimmy's earliest memory, this episode constructs the relationship between the main characters and their environment through contagion and attempts to assert human agency as a containment of contagion – the man is in a constant struggle to protect his son from the dangers of both the environment and other people, while his trusting and generous son carelessly pulls off his mask. When the son does put his mask back on he reveals that he "had found some crayons and painted his facemask with fangs" (*TR*, 13).

⁵⁰ Chen, *Animacies*, 169.

⁵¹ Chen, *Animacies*, 169-171.

Reminiscent of vampires and other Gothic cannibal and abhuman subjects, the fangs ironically signal the ways in which the contagious environment and the constant need to wear facemasks it has created have fundamentally mutated the humans who live in it even when they refuse the cannibalism of the hostile gangs.

Concerns about contamination/contagion are shared by the other characters in *The Road*: the early refugees of the “first years” die shrouded in clothing and wearing “masks and goggles” (TR, 28) and among the group of cannibals they meet on the road, some are wearing “canister masks” and one has a biohazard suit, although all are filthy and coughing abhuman figures (TR, 62). Facemasks themselves combine contagion and contamination concerns and, as Burgess and Mitsutoshi has shown in their analysis of historical trends in facemask wearing in Japan, they take on multiple, sometimes contradictory meanings as a barrier to a variety of public health dangers, including (often at the same time) contagion and contamination from airborne pollutants.⁵² The novel repeatedly describes its noxious atmosphere as inescapable, the taste of the “grainy air [...] never left your mouth” (TR, 20) and contaminated as much by the relics of the past world as by toxic chemicals and dangerous pathogens:

The ashes of the late world carried on the bleak and temporal winds to and fro in the void. Carried forth and scattered and carried forth again. Everything uncoupled from its shoring. Unsupported in the ashen air. Sustained by a breath, trembling and brief. (TR, 12)

Although *The Road* is not an epidemiological text in the same way that the texts analysed by Wald are, the novel does track the spread of an environmental (bacterial and/or chemical) and emotional contamination through flashbacks of the man’s past (including to the catastrophic event which caused the extreme change in climate his world experiences) and through scenes the two main

⁵² Adam Burgess & Mitsutoshi Horii, “Risk, Ritual and Health Responsibilisation: Japan’s ‘Safety Blanket’ of Surgical Face Mask-Wearing,” *Sociology of health & illness* 34, no. 8 (2012): 1184-1198.

characters encounter on the road. The man's worsening respiratory disease, which I will analyse later as performatively consumptive, also tells an epidemiological tale of the progress of infection towards death, regardless of whether we read his infection as bacterial (tuberculosis bacteria), viral (flu virus), chemical (airborne pollutants or radioactive materials) or emotional (the man collapses under the weight of the trauma he has experienced).

Johns-Putra explains that climate readings of *The Road* are encouraged by the novel's recurrent theme of parental love and care and cultural (rather than textual) associations between parental care and the environmental crisis.⁵³ The trajectory of the climate apocalypse of the novel coincides with the breakdown of the main characters' family. The child is born "a few nights" after the initial event (*TR*, 61) and flashbacks return to his mother's suicide / familial abandonment as the epitome of the societal breakdown which followed that event. The man's chronic cough is also linked to his episodic flashbacks. The first time he coughs blood ("[o]n the gray snow a fine mist of blood") they are walking through the ruins of a resort town right after he realises that his wife was right and "the boy was all that stood between him and death" (*TR*, 30). The juxtaposition between the bloody cough and flashbacks of the past ironically twists the man's realisation that his son is what is keeping him alive by showing (through the bloody cough) that paternal love cannot make him survive. Because tuberculosis (TB) retains a large part of the popular imagination of disease, and the bloody handkerchief is an immediate consumptive death warrant, both the man and the reader know that he is about to die as soon as he starts to cough up blood.⁵⁴ This trope was initiated largely by Charles Armitage Brown's myth-making retelling of John Keats self-diagnosis with consumption after coughing arterial blood in October 1820⁵⁵ and, later, by successive adaptation of Alexandre Dumas *fil's* hugely successful novel and play *La Dame aux camelias* (1849/52), including Verdi's opera *La Traviata* (1853), in which the main character's consumption is signalled through her bloody

⁵³ Johns-Putra, "My Job."

⁵⁴ Sontag, *Illness*, 9.

⁵⁵ Clark Lawlor, *Consumption and Literature: The Making of the Romantic Disease* (Boston, MA.: Springer, 2006), 134-5.

cough.⁵⁶ In *The Road*, the origin of the man's cough is never clearly signalled. But, whether it is caused by bacterial or viral infection or by chemical contamination, his symptoms are those of a consumptive and the reader knows that the man is doomed from the first scene of the bloody cough. This knowledge not only invests the man with a kind of Romantic heroism, but reinforces the theme of the exploration of human agency in the face of the inevitable, linking the man's current disease with his personal trauma and with the environmental trauma of the catastrophic climate change. In a later episode in *The Road*, the man has another bloody coughing fit after a flashback of the clocks stopping when the apocalyptic event hit earth ("the clocks stopped at 1:17") and the birth of his son which immediately followed (*TR*, 54). From this dream of the past, he wakes up coughing, and coughs "till he tasted blood and he said her name aloud" (56). The taste of blood recalls his wife's suicide with a flake of obsidian (*TR*, 60) as well as the bloody birth of the son (*TR*, 61). In the only flashback which describes her physical appearance, the wife/mother is a model of consumptive chic:⁵⁷ "his pale bride" has "nipples pipeclayed and her rib bones painted white" and looks at him with "downturned eyes" (*TR*, 17). The abhuman subject of contagion spreads and hybridises both humans and their natural environment and, towards the end of the narrative, questions the meaning of the artificial separation between the two.

In both *The MaddAddam Trilogy* and *The Road*, the contagious crisis is not resolved through the successful containment and defeat of the viral threat by the military and medical establishment as it is in Wald's analysis of outbreak narratives.⁵⁸ As Tyburski has shown, in EcoGothic fiction, the monstrous environment cannot be easily subdued by human ingenuity.⁵⁹ In the novels I discuss, contagion as the source of environmental destruction is not defeated by technological icons of modernity (science and technology, including medicine and weaponry) or by humans developing a

⁵⁶ Sontag, *Illness*, 11.

⁵⁷ Sontag, *Illness*, 28-29; Carolyn A. Day, *Consumptive Chic: A History of Beauty, Fashion, and Disease* (London: Bloomsbury, 2017), 81-100.

⁵⁸ Wald, *Contagious*, 2-3.

⁵⁹ Tyburski, "A Gothic Apocalypse," 154.

more sustainable relationship to their natural environments, but by an attempted return to the heterosexual family and the social and political norms it upholds. Although the past is the source of trauma, it is also a place of irresistible appeal to the characters of Atwood and McCarthy's novels. The protagonist of *The Road* has to carefully guard himself against dreams and teach himself how to "wake himself from just such siren worlds" of memories of his wife and lush natural world because they are "the call of languor and of death" (TR, 17). The man also oscillates between teaching his son about the pre-apocalyptic world and allowing him to have "his own fantasies" about that past (TR, 55). This ambivalent portrayal of personal and national memory and amnesia is encapsulated in the man's warning to his son that "you forget what you want to remember and you remember what you want to forget" (TR, 11).

In *Oryx and Crake*, Jimmy struggles to find a way to live in the catastrophic present and retreats in flashbacks of his relationships with Crake and Oryx. At the beginning of the book, he feels overwhelmed by the emptiness of the world and the "fragments of past time" which are all that is left of Crake and Oryx (OC, 13). Even in *MaddAddam*, when Jimmy finally meets the other survivors and Toby treats his infected foot, Jimmy still needs a long time to recover and return to the present.⁶⁰ Both Jimmy and the man also succumb to an infection when they can no longer resist the seduction of the past. The narratives of both *The MaddAddam Trilogy* and *The Road* conclude in similar ways with a return to the previously lost heterosexual family through the death of its contagious protagonists. *MaddAddam* concludes with the birth of the first Craker-human babies and the death of Toby, who had taught the Crakers to read and write out of fear that the history of the pandemic will be lost when she dies. *The Road* ends with the man finally succumbing to his consumptive disease and thus allowing the son to join a new (presumably Christian) heterosexual family. Through these circular endings Atwood and McCarthy both question the possibility of human agency in the

⁶⁰ Margaret Atwood, *MaddAddam* (London: Virago, 2014), 178. All further references to this text are from this edition and are given parenthetically.

face of inevitable cyclical changes in the natural environment, but also suggest a natural affinity between the environmental and specific social and political regimes. Because of this, although personal trauma is a major theme in both texts, the portrayal of human and natural agency in *The MaddAddam Trilogy* and *The Road* can only be fully analysed by exploring the social and political categories that the texts inscribe onto natural catastrophe and the agency of the natural world.

Contagion as Terrorism

Since the 1980s, as Chapter 1 has detailed, new contagious diseases, particularly viruses, have increasingly been portrayed as a threat to national security equivalent to terrorism. In 2000, the US National Intelligence Council warned that “new and emerging infectious diseases” will pose a major threat to US and global security because the end of the Cold War has facilitated more cross-border travel.⁶¹ The usage of the language of terrorism to encourage action against infectious diseases (even before the launch of the global War on Terror in 2001) has important implications for how new contagious threats are conceptualised and represented. As Cooper and Mutsaers show, formulating biological crises as risks to national security enables governments to militarise medical care and research and to depoliticise crises as natural phenomena caused by viral agents, rather than political ones stemming from unequal access to clean water, adequate nutrition and medical care.⁶²

Within the context of Gothic representations of both contagious disease and environmental crises, the incorporation of infectious diseases into the language of terrorism contributes to an eco-phobic understanding of the natural world as perpetually full of unknown dangers. Just as terrorist violence can erupt at any point, the contagious revenge of nature can strike any time.⁶³ For example, Madeline Drexler writes that “Mother Nature herself” is “the most menacing bioterrorist” when it

⁶¹ Cooper, *Life*, 51.

⁶² Mutsaers, *Immunological*, 130-34; Cooper, *Life*, 74-100.

⁶³ Sandra G. Gompf, Jordan Lewis, Eknath Naik, & Kaley Tash, “The Infectious Disease Physician and Microbial Bioterrorism,” in *Microorganisms and Bioterrorism*, ed. Burt Anderson, Herman Friedman & Mauro Bendinelli, (Boston, MA: Springer, 2006), 31-38, 31.

comes to the field of infectious disease, particularly when it comes to new flu viruses.⁶⁴ Or, in 2012 US and Dutch scientists genetically engineered a bird flu virus to make it highly contagious and test the possibility of such a virus existing. They were prevented from publishing their research by the Dutch government (who invoked European export control legislation) because it could be used by bioterrorists, but the virologists claimed this research is legitimate because Nature itself is the biggest terrorist of all.⁶⁵ Frederick Buell also argued that ongoing technological advancement and ecological challenges have created the sense that a previously balanced, almost symbiotic relationship human development had once enjoyed with antagonistic microbes has now been disturbed.⁶⁶ This narrative of human development disturbing an “ancient” relationship between humans and microbes closely resembles the outbreak narratives Wald analyses. Moreover, although this portrayal of nature as terrorist might seem antithetical to an environmentalist ideal of preserving (pristine, benign, even benevolent) Nature, it is increasingly popular in ecologically oriented Gothic fiction.⁶⁷ Benjamin Svetkey has also demonstrated that from the mid-90s “mother nature” gradually replaced the ethnically Other villains of the Cold War as the main antagonist of action cinema, largely as a consequence to the increased visibility of environmentalism.⁶⁸ Priscilla Wald has also shown that at the end of the Cold War, biohorror fiction began to combine the threat of terrorism and that of infection in plots about new pandemics.⁶⁹ Wald identifies this resurgence in the popularity of bioterror plots as symptomatic of a return of a repressed “sense of responsibility for the effects of inequities in the flow of global capital” whose resurgence was caused partly by the

⁶⁴ Madeline Drexler, *Emerging Epidemics: The Menace of New Infections* (London: Penguin, 2010), 18.

⁶⁵ Mutsaers, *Immunological*, 70.

⁶⁶ Frederick Buell, *From Apocalypse to Way of Life: Environmental Crisis in the American Century*, 2nd ed. (London: Routledge, 2005), 122-23.

⁶⁷ Tyburski, “A Gothic Apocalypse.”

⁶⁸ Matthew Schneider-Mayerson, “Disaster Movies and the ‘Peak Oil’ Movement: Does Popular Culture Encourage Eco-Apocalyptic Beliefs in the United States?” in *Journal for the Study of Religion, Nature and Culture* 7, no. 3 (2013): 289-314, 298.

⁶⁹ Priscilla Wald, “Bio Terror: Hybridity in the Biohorror Narrative, or What We Can Learn from Monsters” in *Contagion: Health, Fear, Sovereignty*, eds Bruce Magnusson and Zahi Zalloua (University of Washington Press, 2013), 199-122.

higher visibility of environmentalism.⁷⁰ The cultural imaginary of viral terrorism is linked to environmentalist discourses in multiple ways.

Both Margaret Atwood and Cormac McCarthy's contagion narratives are framed around plots about terrorism. Unlike more conventional portrayals of bioterrorism in biohorror fiction, Margaret Atwood's portrayal of bioterrorism in *The MaddAddam Trilogy* emphasises, particularly in the second (*The Year of the Flood*) and third (*MaddAddam*) novels of the series, the domesticity of bioterrorism. The MaddAddamites and God's Gardeners, the splinter bioterrorist organisations portrayed in the novel, are religious sects who live in communes in which children are raised communally and domestic chores are shared among members. Both novels spend more textual space discussing these domestic arrangements and the domestic drama they give rise to than the ideologies or political machinations within both groups. In fact, the ideologies of the two groups (including the large extent to which they worked together and supported Crake's plan to make humanity extinct) are only revealed in the second half of *MaddAddam*. Although the MaddAddamites are more politically radical, they emphasise the importance of domestic duties and portray survival in the apocalypse as a well-managed domesticity. Most of the members of both groups join the organisation as a result of the breakdown of their families. Toby ends up with the God's Gardeners after both her parents die and she has a run in with a violent fast-food restaurant owner following her move to the city and creation of a new identity for herself. Lucerne becomes a God's Gardener because she is dissatisfied with her marriage and begins an affair with Zeb. She eventually leaves the organisation because she is unhappy with her relationship with Zeb and wants to report one of the other Gardeners to the police for sexually abusing her daughter. Zeb and Adam One, the leaders of God's Gardeners and the MaddAddamites (each representing violent and non-violent approaches to environmentalism) grow up together as half-brothers and their involvement in environmentalism is heavily influenced by their upbringing in a strict religious family which quite

⁷⁰ Wald, "Bio Terror", 111.

literally worships fossil fuels. For all his genius and social remoteness, Crake/Glenn also turns to bioterrorism as the result of domestic trauma – his father kills himself by jumping off a highway overpass (OC, 214-15). In two different versions of this story Crake tells, his father is either killed by his corporate employer because he started to have ethical doubts about their work (OC, 215) or by his wife's lover (OC, 249). Crake also tells Jimmy that his father's work on infectious diseases sparked his own scientific interests (OC, 215; MA, 288).

Similarly, in *The Road* the plot strongly suggests parallels between terrorism and environmental destruction. The catastrophic event that triggers the climate apocalypse of the narrative universe is described only very vaguely:

The clocks stopped at 1:17. A long shear of light and then a series of low concussions. He got up and went to the window. (TR, 54)

The stopping of clocks (the explosion shockwave damaged mechanical clocks at both Hiroshima and Nagasaki and stopped clocks have been a large part of the iconography of nuclear strikes) and the flash of light have led to John Cant to interpret the event as a nuclear strike.⁷¹ Given the novel's insistence that the breakdown of centralised political structures and decent of humanity into indiscriminate violence is inevitable, reading its catastrophic event as terrorist violence is plausible. Bragard, Dony and Rosenberg and Jesse Kavadlo have argued that while *The Road* warns of the distinctly Cold War danger of "nuclear Holocaust," the novel's omnipresent ash and dust recalls ash covered images of Ground Zero and links the threat of terrorism to that of a nuclear strike.⁷² If the catastrophic event is a nuclear strike, this also links into the novel's theme of contagion and

⁷¹ John Cant, *Cormac McCarthy and the Myth of American Exceptionalism* (Abingdon: Routledge, 2008), 268; Karen Barad, "Troubling Time/s and Ecologies of Nothingness: Re-turning, Re-memembering, and Facing the Incalculable," in *New Formations* no. 92 (2017): 56-86, 59-60.

⁷² Veronique Bragard, Christophe Dony & Warren Rosenberg, "Introduction" in *Portraying 9/11: Essays on Representations in Comics, Literature, Film and Theatre*, eds. Veronique Bragard, Christophe Dony and Warren Rosenberg (Jefferson, NC: McFarland, 2011), 1-10, 4; Jesse Kavadlo, "9/11 Did Not Take Place: Apocalypse and Amnesia in Film and *The Road*," in *The Popular Culture Studies Journal* (2013): 61-83, 73.

contamination as, although radiation is not contagious in the conventional sense, radiation poisoning has often been feared as contagious in the popular imagination of nuclear war.⁷³

These overlapping narratives of contagion, environmental destruction and terrorism link the personal trauma of the characters to terrorism as a national trauma after 9/11. Richard Gray,⁷⁴ Lydia Cooper⁷⁵ and Jesse Kavadlo⁷⁶ have read *The Road* as a post-9/11 novel which reflects the “sense of crisis that seemed to haunt the West, and the United States in particular” after 9/11. Although there are few critical analyses which link *The MaddAddam Trilogy* to terrorism (despite the centrality of bioterrorism to its plot), Atwood has stated in interviews that she started writing *Oryx and Crake* as a direct response to 9/11.⁷⁷ The other national trauma which haunts the texts of *The MaddAddam Trilogy* and *The Road*, as an example of environmental agency becoming fused to the vengeful agency of past trauma, is colonialism.

Heather J. Hicks has read post-apocalyptic literary fiction, including *The MaddAddam Trilogy* and *The Road*, as attempts to rewrite the script of colonial exploration and survival of Daniel Defoe’s *Robinson Crusoe* (1719).⁷⁸ Despina Kakoudaki has proposed reading disaster and apocalyptic films as racial melodramas whose main story is not the conflict between humanity and a non-human catastrophic threat, but “the racial encounter” between distinct human groups.⁷⁹ Through narratives which stage virtue as the attribute of different kinds of disaster survivors, disaster and apocalyptic films “participate in and fundamentally affect the cultural discourses on race.”⁸⁰ McCarthy’s *The Road* is a perfect example of apocalyptic narrative which, while not naming the racial identities of its

⁷³ Spencer R. Weart, *Nuclear Fear: A History in Images* (Harvard University Press, 1988), 110-111.

⁷⁴ Richard Gray, *After the Fall: American Literature Since 9/11* (West Sussex: Wiley-Blackwell, 2011), 39-40.

⁷⁵ Lydia Cooper, “Cormac McCarthy’s *The Road* as Apocalyptic Grail Narrative,” in *Studies in the Novel* 43, no. 2 (2011): 218-236.

⁷⁶ Kavadlo, “9/11,” 73-4.

⁷⁷ Margaret Atwood, *Writing With Intent: Essays, Reviews, Personal Prose 1983-2005* (New York: Carroll & Graf, 2005), 284-286.

⁷⁸ Heather J. Hicks, *The Post-Apocalyptic Novel in the Twenty-First Century: Modernity beyond Salvage* (Basingstoke, Hampshire: Palgrave Macmillan, 2016), 1-26.

⁷⁹ Despina Kakoudaki, “Spectacles of History: Race Relations, Melodrama, and the Science Fiction/Disaster Film” in *Camera Obscura* 17, no. 2 (2002): 109-153.

⁸⁰ Kakoudaki, “Spectacles,” 118-119.

characters, posits survival in the post-apocalypse through a series of encounters between distinct and opposing groups. As most critical responses to the novel have noted, the man and his son are strongly identified as “the good guys” in the novel, even when they make morally ambiguous choices.⁸¹ Hicks has argued that cannibalism is central to the novel’s plot as a means of drawing a distinction between the two protagonists and the “savage” inhumanity of the other survivors (given that the horror of cannibalism is associated with non-European peoples), although the text never explicitly describes them as racially Other.⁸² Hicks has also noted that the novel describes the first year after the apocalypse through the image of people “half immolate and smoothing in their clothes [l]ike failed sectarian suicides” (TR, 32-33) and that this reference echoes the imagery of terrorism after 9/11.⁸³

The novel’s scarred natural environment also bears signs of colonialism. The man and his son come across “small cairns of rock by the roadside” these “lost patteredans” which were “common in the north, leading out of the looted and exhausted cities, hopeless messages to loved ones loves and dead” (TR, 188). Although the man calls these “signs in gypsy language,” cairns have a long history as trail markers in Indigenous cultures.⁸⁴ These now unreadable signs signal not only the current decay of Western culture, but a long history of previous environmental disasters brought about by colonialism which destroyed non-Western cultures. Although neither *The Road* nor *The MaddAddam Trilogy* could be described as straightforwardly anti-colonial, their narratives irresistibly return to the histories of colonialism to mediate the problematic of environmental disaster as expression of natural agency.

⁸¹ Gray, *After the Fall*, 47.

⁸² Hicks, *The Post-Apocalyptic Novel*, 81-82.

⁸³ Hicks, *The Post-Apocalyptic Novel*, 83.

⁸⁴ William W. Fitzhugh, “Mongolian Deer Stones, European Menhirs, and Canadian Arctic Inuksuit: Collective Memory and the Function of Northern Monument Traditions,” in *Journal of Archaeological Method and Theory* 24, no. 1 (2017): 149-187.

The MaddAddam Trilogy and *The Road* share a tendency to represent the post-apocalyptic world as post-racial. There are few references of the races of main characters in the novels and in the rabidly neoliberal and tech-loving society in which Crake and Jimmy spend their childhood, the only form of discrimination which seems to have survived is prejudice against those interested in literature and the arts. The first two novels of the series have references to vicious gangs in the “darkest pleeblands” whose names suggest race – the “Blackened Redfish”, “Asian Fusions” and “the Tex-Mexes” – but even those references imply a kind of post-racial fusion of currently distinct racial identities. Several of the characters surgically or genetically alter their race when they are on the run (for example, Toby becomes Tobiatha, “less angla, more Latina” by changing her skin tone and eye colour (TYF, 312)) suggesting that science has made race a malleable category. Crake gives his Children different skin colours and makes it physically impossible for his creations to “register skin colour” and thus to imagine racism, which at Paradise is referred to as “pseudospeciation” (OC, 358). But these narrative efforts to overcome race as a representational problem in the post-apocalypse actually suggest that race is a valid category of scientific knowledge and experiment. Crake would not be able to experiment with eliminating the Crakers’ ability to imagine racism if the tendency to see people with different skin colours as belonging to different races (and to then become prejudiced against them) was not an innate biological feature of human brains. Crake also engineers his Crakers in “all available skin colours” (OC, 355), suggesting again that race is a biological category which can easily be manipulated by genetic engineering. While in *The Road*, the cannibals are the racially Othered group whose savagery highlights the virtue of the protagonists, in *The MaddAddam Trilogy* the Crakers (despite their overt racial diversity) are repeatedly represented as a racial Other.

The Crakers’ perfect adaptability to the environment, their appearance and their oral, “tribal-like” culture strongly suggest an association between them and Indigenous peoples. The text has several references to the Crakers as Indigenous people. When Ivory Bill discusses Crake’s motivations for creating the Crakers with other MaddAddamites, he claims that Crake “would have

seen the Crakers as indigenous people, no doubt, and Homo sapiens sapiens as the greedy, rapacious, Conquistadors" (MA, 171). At the beginning of *Oryx and Crake*, Jimmy quotes an unspecified early 20th century anthropologist to himself when trying to decide how to talk to the Crakers: "[w]hen dealing with indigenous peoples, you must attempt to respect their traditions and confine your explanations to simple concepts" (OC, 170). Overt references to the Crakers as Indigenous are highly ironic, as it is obvious to the reader that the Crakers are the introduced and, perhaps invasive, species like the other biotech hybrids which take over the world after the JUVE pandemic. However, these references and the symbiosis between the Crakers and JUVE point to how the JUVE pandemic could be read as the resurgence of a colonial repressed, a natural punishment for the exploitation of natural resources and Indigenous people that colonisers spread in American. Nevertheless, because of the irony implicit in portrayals of the Crakers, it is difficult to read them in a positive light as genuine Indigenous people. Instead, they are abhuman subjects with many animalistic characteristics because Crake hybridised them with several different animal species, including rabbits and other apes. This disturbing hybridity and its location in a colonial-like setting is a feature of many outbreak narratives.⁸⁵ And, as Susan Knabe has demonstrated, narratives around the origin of HIV/AIDS have repeatedly returned to "the spectres of illicit and perverse sexuality" and to "trade in bodies – both animal and human – for research pleasure and profit."⁸⁶ Knabe also demonstrated that even scientific publications have long rhetorically linked the disease with geographically and racially Othered locations, although the epidemic was first identified in the US. Origin stories narrating the virus's first cross-species transmission to humans from apes (including chimpanzees, red-capped mangabeys, and green monkeys) through contamination with infected animal blood, through either hunting and preparing meat, or bestiality, are widely perceived as authoritative.⁸⁷ The Crakers' hybridisation with other ape species thus makes them both

⁸⁵ Wald, *Contagious*, 46-7.

⁸⁶ Knabe, "Coincidences," 60.

⁸⁷ Jacob Heller, "Rumors and Realities: Making Sense of HIV/AIDS Conspiracy Narratives and Contemporary Legends," *American Journal of Public Health* 105, no. 1 (2015): 43-50.

ideal agents of contagion (although they never catch JUVÉ) and bearers of a repressed colonial past come back to haunt the human survivors.

Thus, in both McCarthy's *The Road* and in Atwood's *MaddAddam Trilogy*, terrorism, colonialism and environmental disaster are juxtaposed through contagion narratives. This points, not only to the malleability of contagion as a cultural narrative, but to the ways in which anxieties around terrorist violence, legacies of colonialism and racism and environmentalism have increasingly become welded together into a shared crisis over human agency's ability to control the future, due to what Ulrich Beck has identified as risk society.⁸⁸ Ecophobic tendencies towards attributing malicious intent to the natural world and interpreting natural disasters as proof of human agency's failure to control the natural world clash against environmentalist discourses which define climate change as a phenomenon caused by human actions and, particularly, one which human agency is urged to action against. EcoGothic texts which turn an ecocritical lens on the Gothic tendency to reflect and rework public anxieties and create narratives in which environmental disasters are caused by abhuman hybrids of human and natural agency.

⁸⁸ Beck, *Risk Society*, 20-25.

Conclusions

This thesis has sought to understand the ideological implications of narratives of contagion in the context of the emergence and evolution of biopolitics in England in the 19th and late 20th century. This highly interdisciplinary project draws from and contributes to scholarship from medical history, medical humanities, cultural theory and gothic studies. In the last 20 years, contagion and immunity have been the subject of renewed scholarly interest in these fields, partly as a result of the HIV/AIDS epidemic and partly as a consequence of the rise in concerns over (re)emerging infectious diseases (which this thesis has also explored). This project conceptualised a close connection between the expansion and development of biopolitics and contagion narratives and takes Foucault's argument that efforts to manage the transmission of contagious disease and, in particular, quarantine, played a key role in establishing a discursive and ideological justification for biopolitics as its jumping off point.¹ Current interpretive models for contagion narratives and the concept of immunity in medicine and law, including the influential analyses of Priscilla Wald and Ed Cohen, have tended to implicitly or explicitly assume that both contagion and immunity have had stable meanings that have changed little over time.

However, the huge variety I discovered in historical contagion narratives once I began to read primary texts showed me that only do contagion narratives tend to fail to meet the conventions of the "outbreak narrative" formula, but analysing contagion narratives from different historical periods shows a clear pattern of historical change in step with changes in how contagious diseases are conceptualised as an object of biopolitical governance. This thesis has argued that the expansion

¹ Foucault, *Discipline and Punish*, 197-98.

of biopolitics into human life and liberalism's (at least notional) ideological commitment to restraining state intervention into private life has historically created strong tensions within liberal biopolitics. This, I have argued that, has meant that historically contagion narratives have played a role in navigating these tensions by conceptualising acquired resistance or immunity to transmittable disease as an attribute of liberal individuals and, equally, by portraying governmental interventions into private life with the purpose of managing or containing contagion as a necessary, education corrective to lack of self-governance, rather than an extension of interventionist quarantine.

This thesis began with two, inter-linked research questions: how do contagion narratives frame contagion as politically meaningful in debates not only over health and disease, but over good political values and the meaning of good governance? And what has been the role of liberal and neoliberal ideals of governance and individualism in shaping the biopolitics of contagion? The middle chapters of this thesis (2, 3 and 4) explored these very explicitly by tracing the historical emergence of liberal biopolitics in the 19th century through changing contagion narratives, as well as the particular role of liberal individualism in this process. Chapter 2 traced the influence of the anti-quarantine movement on the emergence of liberal biopolitics in England at the beginning of the 19th century. Exploring attitudes towards plague contagion and plague quarantine through the lens of Mary Shelley's pandemic novel, *The Last Man* (1826), this chapter argued that contagion narratives that reframed the plague as a Gothic threat contributed to a shift towards liberal biopolitics in conceptualisations of public health models away from the interventionist model of plague quarantine. This chapter also explored a number of anti-quarantine texts and their Gothic portrayal of the plague in order to argue that a new feature of English liberal individualism was the conceptualisation of immunity or resistance to disease as an attribute of "civilisation" and self-government. Not lastly, Chapter 2 argued that, rather than being a historical oddity, this conceptualisation of immunity as an attribute of liberal individualism significantly shaped the discourse that surrounded public health in liberal biopolitics.

Chapter 3 explored the origins of the Urban Gothic genre and linked the rise of Gothic representations of working-class people's homes in urban centres to a changing conceptualisations of working people's subjectivities as illiberal and incongruous with modernity. This chapter focused on reading Edwin Chadwick's influential sanitary reports as Urban Gothic texts in order to demonstrate that Chadwick not only influenced the themes and content of Urban Gothic fiction, but crafted a new style of writing (the Urban Gothic) in order to persuade readers of the necessity of the sanitary regulation measures he was proposing - both in terms of the health of cities, but, more importantly, as a tool to reform the morality and political inclinations of working-class people. Chapter 4 explored the shift from sanitary regulation to reproduction and sexuality within liberal biopolitics as well as the beginnings of liberalism's loss of influence and popularity. I have argued that it is important to consider the impact of both the Contagious Diseases Acts (CDAs) (1864-1886) and the successful campaign for the repeal of the Acts on the regulation of sexuality and reproduction. This chapter argued that, while the anti-CDA campaign has been interpreted as a backlash against medical authority (and, thus, state surveillance of public health), the CDA repeal should be seen in the wider context of a reorientation of political attitudes towards a biopolitics of reproduction and the state as moral, not scientific, authority. Close readings of the portrayal of blood and medical professionals in Mary Elizabeth Braddon's short-story "Good Lady Ducayne" (1896), *The Blood of the Vampire* (1897) by Florence Marryat and *Dracula* (1897) by Bram Stoker, interspersed with analyses of conceptualisations of blood in medical publications and the anti-CDA campaign's representation of medical professionals, demonstrated the progressive Gothicisation of both.

The chapters that bookend this thesis (1 and 5) took a different approach to the research questions by more clearly foregrounding current critical approaches to contagion narratives and arguing for an expansion of the categories and conventions through which contagion narratives are typically read. In particular, Chapter 1 has explored Priscilla Wald's concept of the "outbreak

narrative,” a highly formulaic global pandemic narrative, which gained popularity in the late 1980s and especially in the 1990s. Wald has argued that the outbreak narratives are one of the archetypal myths of Western culture and that contagion narratives written well before the 1980s share the same features as the “outbreak narratives” of medical thrillers and science fiction horror. However, I argued that the outbreak narrative is a historically specific sub-genre of contagion narratives, whose conventions were shaped both by neoliberalist fears about Global South invasions and by the medical concept of (re)emerging infectious diseases (EIDs), itself an effort to gain public recognition and funding for infectious diseases in the wake of the attention given to the HIV/AIDS epidemic by the late 1980s. Chapter 5 has used the interpretive lens of Priscilla Wald’s outbreak narrative in order to argue that outbreak or contagion narratives are a recurring feature of ecoGothic fiction. Through an analysis of Cormac McCarthy’s *The Road* and Margaret Atwood’s *MaddAddam Trilogy*, I have argued that contagion narratives help mediate ethical questions about individual responsibility for climate crisis and the possibility of pre-empting action against environmental destruction. This chapter contended that the unique challenges of making climate crisis representable while accounting for the precariousness of climate futures has meant that outbreak narratives (as well as acquired immunity tropes) serve as a means to interrogate as well as portray individual survival in the climate crisis future as a series of (neoliberally) individualist choices.

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