

TALKING ABOUT THE WEATHER: CLIMATE AND THE VICTORIAN NOVEL

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DECLARATION

This thesis is my own work, and has not appeared in whole or in part elsewhere.

ABSTRACT

This thesis explores the striking and previously unremarked intersection between the proliferation of weather in the Victorian novel, and various contentious and influential theories about climate in the period.

At the beginning of the Victorian era, meteorology was viewed as an open field, emblematic of optimism for scientific progress. By the mid-1860s, it had become a site of controversy, ridicule, superstition and fakery. Climatic theories in medicine and evolution also faced challenges, yet remained in circulation throughout the period. Novels of the period show climate and weather on a quotidian level, but also frequently allude to the many debates and discourses which surrounded weather and climate in the Victorian age. This thesis shows weather in the Victorian novel variously engaging with, challenging and contributing to debates about climatic theories and meteorology.

My Introduction argues for an ongoing and interdisciplinary set of discussions about weather, climate and meteorology in the Victorian period, and outlines their legacies from earlier, influential climatic theories. Chapter 1 explores the discourses surrounding changed and polluted climates in the industrial city of the 1830s and 40s, and their representation in Gaskell's *Mary Barton*. Chapter 2 focuses on Charlotte Brontë's engagement with climatic theories relating to both body and place, and their representation in her correspondence and fiction. Chapter 3 connects the flood in George Eliot's *The Mill on the Floss* with early nineteenth-century diluvialist geology and with Eliot's early ambivalent response to Darwinian theory. Chapter 4 reads Hardy's weather-forecaster in *The Mayor of Casterbridge* in the context of Victorian suspicions and reservations toward meteorology. Chapter 5 explores some of the well-known literary depictions of fog in the *fin de siècle* narrative in relation to contemporary non-literary writing about fog and urban pollution. This thesis argues that by reading weather and climate in the Victorian novel closely and contextually, it becomes possible to identify novelists taking part in a number of important contemporary discussions about region, science, medicine, industry and chance.

ABBREVIATIONS

OED *Oxford English Dictionary.*

DNB *Oxford Dictionary of National Biography.* Oxford University Press,
2008. <<http://www.oxforddnb.com>>

NB. The reference style used in the footnotes and Bibliography in this thesis is that set out in the *Graduate Handbook* for the Department of English and Related Literature, University of York, pp.40-58.

INTRODUCTION

This thesis is about the striking intersection between the proliferation of weather in the Victorian novel, and contemporary debates about climatic theories in industry, economics, health, national identity and evolution, as well as in the emergent field of meteorology. One of the most noticeable features of Victorian novels is their weather: fog, snow, wind and rain appear in the narrative in order to obscure, chill, batter or drench individuals, and even so as to alter the course of the plot. Many other texts of the period, meanwhile, debate the extent to which climate itself might affect the individual or group; whether climate had determined the course of evolution; whether climate might change or be changed; and indeed whether the weather might be predicted or understood. Novelists and their characters, as well as doctors, scientists, social theorists, economists and of course meteorologists all talk about the weather: literary critics, in general, do not. In this thesis, I bring together social and political commentary, medical writing, geological treatises and meteorological texts, and reintegrate them with the weather described in the Victorian narrative.

The thesis argues, then, that weather in the Victorian novel is frequently more than either a phatic or scenic detail: when narratives or characters ‘talk about the weather’, they are also engaging in conversations of many kinds which they may or may not intend. ‘Conversations’ about the weather in literary, scientific and social writing of the period frequently intersect, sharpening or sharing terms with one another as they do so. ‘Talking about the weather’ is, of course, a quotidian undertaking, often valuable

precisely for its meaninglessness and non-contentious nature, but this thesis aims to show that it was also frequently a highly significant activity during the Victorian period.

Weather takes place within the broader context of climate; climate is, in theory at least, a constant, made up of the average behaviour of the weather within a region or nation. 'Climate remains, but the weather changes', as an article in the *Cornhill Magazine*, which I discuss in more detail below, stated in 1860.¹ The difference between the two appears to have been broadly understood by writers of the period: Hardy's observation in *Tess of the D'Urbervilles* (1891) that Tess's baby, having lived only a week, thought 'the week's weather climate' demonstrates the difference between the terms, and the idea that climate can only be discerned through a far longer observation and knowledge of weather tendencies in any given place.² Sergeant Troy neatly defines the difference in *Far from the Madding Crowd* (1874), when he observes that 'wet weather is the narrative, and fine days are the episodes, of our country's history'.³ Troy's pessimistic analogy is a useful one, and not only because it defines the difference between climate (the 'wet weather') and weather ('the episodes'). Many novels have what might be described as 'narrative' climates, within which 'episodes' of weather occur. One might attribute a 'climate' to almost any novel of the period: the stormy skies of *The Return of the Native* (1878), the sunshine of *Adam Bede* (1859), the fog and rain which characterize, respectively, two of the most important locations in *Bleak House* (1853), the persistent dirty, city rain of *Little Dorrit* (1857) and, perhaps most well-known of all, the snow of *A Christmas Carol* (1843). This thesis is attentive to both climate and weather in the Victorian narrative, reading 'episodic' weather

¹ David T. Ansted and Robert Drummon, 'On the Weather' in *Cornhill Magazine*, vol. III (July-December 1860), 565-79, (p.578).

² Thomas Hardy, *Tess of the D'Urbervilles*, ed. by Tom Dolin, introd. and notes by Margaret R. Higonnet (London: Penguin, 1998), p.96. All further references are to this edition.

³ Thomas Hardy, *Far from the Madding Crowd* (London: Macmillan, 1957 rpt. 1967), p.289. All further references are to this edition.

alongside and in relation to ‘narrative’ climates and to the broader question of climate itself.

In the Victorian novel, ‘climate’ is frequently used as though it were synonymous with ‘place’. References to trying climates, pestilent climates, native climates and hazardous climates are part of the characterization in the period of other countries, and especially colonial countries, by their climates and the deleterious influence of those climates not only on health but on racial characteristics.⁴ The question of colonialism and climate is not central to my argument in this thesis, though in Chapters 1 and 2 I explore instances of the powerful metaphors to which ideas about the perilous tropical or Indian climate, in particular, gave rise.⁵ This thesis largely focuses on Victorian writing about the effects and importance of climate in Britain; though the relationship between colonialism and climate is one which could be developed in future work.

The four main areas which this thesis explores are: climate as subject to change and pollution in the Victorian period; climate and its effects on both the individual and social body; climate and evolutionary theory; and Victorian attempts at the prediction of weather. Frequently, these themes intersect with one another: this intersection, rather than making my argument more difficult, confirms the intrinsically interdisciplinary nature of conversations about climate and weather. Weather itself is both nebulous and pervasive: as such, it emerges in several very different or unexpected contemporary

⁴ Douglas Lorimer’s *Colour, Class and the Victorians: English Attitudes to the Negro in the Mid-Nineteenth Century* (Leicester: Leicester University Press, 1978), David Bindman’s *Ape to Apollo: Aesthetics and the Idea of Race in the Eighteenth Century* (London: Reaktion Books Ltd, 2002) and Roxann Wheeler’s *The Complexion of Race: Categories of Difference in Eighteenth-Century British Culture* (Philadelphia: University of Pennsylvania Press, 2000) all show how climate was thought to act in determining racial characteristics, and therefore as strongly deterministic in Africa, ‘the tropics’ and India.

⁵ Alan Bewell’s *Romanticism and Colonial Disease* (Baltimore and London: The John Hopkins University Press, 1999) explores the symbolic significance of ‘tropical climates’ in Romantic and early Victorian literature, as well as the discourses of the disease climate in colonial countries, and I draw on his work in Chapters 1 and 2.

discussions.⁶ The idea that climate could profoundly affect an individual's constitution and morals heightened anxieties about the impact of industrial growth on city climates in the 1840s, for example. Understanding that changes in the weather would have a drastic effect on the harvests in a rural economy, on the development of diseases and infections, or on the chances of survival in a harsh winter, meant that prediction of the weather was an urgent concern for Victorian society, though early attempts at meteorological forecasts frequently disappointed hopes of accurate prediction, as I shall show.

This thesis is primarily about the ways in which novels 'talk about the weather', and in so doing, whether consciously or not, engage in conversations about climate and its influence or predictability. However, this takes place within the context of the kinds of 'talking about the weather' which characters also frequently employ as an apparently meaningless part of polite discourse: a 'conversational resource' or 'well-bred topic'.⁷ This is not the kind of anxious speculation about weather in which we shall see the less 'well-bred' characters in *Mary Barton* (1848) and *The Mayor of Casterbridge* (1886) engage, but an activity for the wealthy and leisured classes, taking place in the parlour or the library. Samuel Johnson's famous comment that 'when two Englishmen meet, their first talk is of the weather' is borne out repeatedly in Victorian fiction.⁸ By depicting characters engaging in this kind of conversation, novelists seem to locate weather-talk as extraneous; an empty way to pass time and fill gaps in conversation. Yet these conversations, and the reasons given for their occurrence, also implicitly

⁶ 'Nebulous' itself, with its Latin root 'nebulosus', meaning 'misty' or 'cloudy' seems an appropriate term to apply to the weather, attesting as it does to the intrinsic difficulty in establishing boundaries for the weather or the areas in which it might be found.

⁷ George Eliot, 'Mr Gilfil's Love-Story' in *Scenes of a Clerical Life*, ed. with introd. and notes by David Lodge (London: Penguin, 1973 rpt. 1985), p. 181, and *Middlemarch: A Study of Provincial Life*, ed. with introd. and notes by Rosemary Ashton (London: Penguin, 1994), p. 266. All further references are to these editions.

⁸ Samuel Johnson, 'Discourses on the Weather' in *The Idler*, 11, (24th June 1758), rpt. in W.J. Bate, John M. Bullitt and L.F. Powell eds, *The Idler' and 'The Adventurer'*. *The Yale Edition of the Works of Samuel Johnson*, 16 vols. (New Haven and London: Yale University Press, 1963), II, 36-39, (p.36).

suggest that talking about the weather might open up several other concerns. When Gwendolen Fairfax demanded, ‘pray don’t talk to me about the weather, Mr Worthing. Whenever people talk to me about the weather, I always feel quite certain that they mean something else’, she was right to identify the weather as a way to let in all kinds of other ‘meanings’.⁹

1. Talking about the weather

Characters in Victorian novels talk about the weather, worry about the weather, are made ill by the weather, pray for fine weather, curse bad weather. They compare their moods to the weather, and the weather to their moods. Weather also affects characters in numerous ways: like the legacies, illnesses, deaths, false accusations and romances which occur in Victorian fiction, the weather is an agent of the ‘chance and change’ which determine the structure and plot of the novel.¹⁰ In this section, I pause on this ‘talking’ and on some of the ideas it allows to emerge in the narrative.

Talking about the weather can be evasive, deceptive and dissembling. In *Vanity Fair* (1847-48), Dobbin turns the conversation, ‘like a consummate man of the world’, to ‘topics of general interest’ such as ‘the weather – that blessing to society’, because he does not wish to discuss George Osborne’s whereabouts. Lady Southdown talks ‘with

⁹ Oscar Wilde, *The Importance of Being Earnest* in *Complete Works of Oscar Wilde*, ed. with introd. and notes by Vivyan Holland (St. Helen’s: Collins, 2001), p. 329.

¹⁰ I adopt Gillian Beer’s terms from *Darwin’s Plots* here. Beer identifies ‘change and chance’ as a Darwinian influence in Hardy’s novels. She argues that for both Darwin and Hardy, chance and change were ‘not intermittent conditions’ but ‘the permanent medium of experience and thus of language’. *Darwin’s Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction* (Cambridge: Cambridge University Press, 1983 rpt. 2000), p.229. I acknowledge this point in relation to Darwin and Hardy, and return to it in Chapter 4, but my argument here also encompasses the possibility of ‘intermittent’ chance and change, particularly through the weather. Weather is after all the most ‘intermittent’ condition of all, yet at the same time can effect long-term and permanent change, as the persistent references to ‘weather-beaten’ and ‘weather-worn’ landscapes, people and buildings in Victorian novels suggest.

much discretion about the weather' to Miss Crawley to avoid saying 'a word about the state of her soul'.¹¹ In *The Newcomes* (1855), Pendennis accuses his wife Laura of 'pretend[ing] to talk about the weather' whenever he enters the room to disguise the fact that she has been flirting with another man.¹² This capacity of 'talking about the weather' to hide a multitude of other issues or concerns points to a wider tendency for narrative weather to mean more than might superficially appear to be the case.

While talking about the weather may be polite, or even deceptive, it is also frequently dull. In George Eliot's 'Amos Barton' (1858), Mr Bridmain, a man of 'laboured cordiality', remarks that '[t]he weather is very severe': the narrative builds on this inoffensive observation to give the first detailed characterization of Bridmain:

Mr Bridmain studied conversation as an art. To ladies he spoke of the weather, and was accustomed to consider it under three points of view: as a question of climate in general, comparing England with other countries in this respect; as a personal question, inquiring how it affected his lady interlocutor in particular; and as a question of probabilities, discussing whether there would be a change or a continuance of the present atmospheric conditions. To gentlemen he talked politics, and he read two daily papers expressly to qualify himself for this function. Mr Barton thought him a man of considerable political information, but not of lively parts.¹³

The idea that talking about the weather is not 'lively', and might be the unimaginative resort of one who cannot hold a discourse on more interesting or original lines, is a pervasive one. However, that very dullness is itself interesting. The ostensible reason for Bridmain's decision to speak of the weather 'to ladies' is that it is an accessible topic, and its immediate effects are easy to understand and discuss: we shall see this accessibility put to various uses throughout the period. The weather is not 'political': yet the opposition between weather and the 'politics' about which Bridmain talks with 'gentlemen' cannot be so definitively established. This distinction is one which has

¹¹ William Makepeace Thackeray, *Vanity Fair: a Novel without a Hero*, ed. with introd. and notes by John Sutherland (Oxford and New York: Oxford University Press, 1998), p.134 and p.418.

¹² William Makepeace Thackeray, *The Newcomes: Memoirs of a Most Respectable Family*, ed. with introd. and notes by Andrew Sanders (Oxford: Oxford University Press, 1995), p.673.

¹³ George Eliot, 'Amos Barton' in *Scenes of Clerical Life*, p.70.

become more complicated in our own period, where ‘talking about the weather’ can easily or inadvertently become conversation about global climate change, and the intensely debated questions about its causes, effects, and even its scientific plausibility. At certain moments in the Victorian era, too, the weather was a political issue. Anxieties about the polluted climates of Manchester in the 1840s, and London in the 1880s and 90s were closely related to concerns about the moral environments in the cities, and what could be done to change or improve these environments, as well as about industry itself.¹⁴ It was also in the very ‘daily papers’ to which Bridmain refers that a long-running debate about whether weather could be predicted, or even understood, took place during the early 1860s. The weather, it seems, appears with a noticeable frequency in ‘politics’, and indeed *vice versa*.

Bridmain’s ‘three points’ are also suggestive in relation to ideas about climate and nationality, the individual, and meteorology. The ‘question of climate’, and its uses in distinguishing England from ‘other countries’ indicates the function of climate in the Victorian period as an important tool used to designate place, as I discussed above. Bridmain’s polite inquiries about the effects of the weather on the ‘lady interlocutor in particular’ reflect several theories and discourses about the effects of climate on the female body and constitution ‘in particular’, which I argue in Chapter 2 were especially relevant to the Brontës. Finally, the ‘question of probabilities’ opens up questions about Victorian meteorology: ‘change’ or ‘continuance’ of ‘atmospheric conditions’, and the extent to which it might be possible to calculate their probability, were all highly charged questions in the period, as Chapter 4 will show. The dullness implied in talking about the weather is indeed deceptive.

Though talking about the weather seems to provide an easy way *not* to talk about other, more controversial questions, the weather itself is shown to be extremely

¹⁴ By ‘environment’ here, I mean the set of determining influences which includes the atmospheric, the climatic and the socio-economic, a distinction I discuss and develop in Chapter 1.

important in the Victorian novel. Weather surrounds thwarts or defeats characters in almost every Victorian novel. The frequency with which characters become ill as result of exposure to weather is one of the most prominent demonstrations of the assumption that weather is central to life. As this thesis will show, the idea that climate and weather had an important role in the cause and cure of disease was an important one in the period. However, the individual characters who are taken ill after exposure to rain or cold are also more widely representative of the contemporary sense of the significant and determining effects of the weather.

Characters as different as Oliver Twist, Marian Halcombe and Fred Vincy appear to be, or believe themselves to be, made ill by bad weather.¹⁵ The prevalence of characters who, after exposure to rain, fall ill with a fever is profoundly indebted to eighteenth-century medical treatises on the human constitution, as I shall show in Chapter 2. Not only does the weather cause illness, but it also depresses or even maddens several individuals. *Oliver Twist*'s Monks attributes his 'fits' to thunderstorms; Daniel Robson in Gaskell's *Sylvia's Lovers* (1863), *Villette*'s (1853) Lucy Snowe, as well as her author, are all 'acted upon' by weather as a 'dreary depression of spirits' which 'affected the sensitive or ailing in material ways.'¹⁶ With the exception of Marian Halcombe, it is indeed the 'sensitive or ailing' individuals who seem most vulnerable to these effects: however, even with this distinction in mind, the

¹⁵ 'The wet and cold had brought on fever and ague' for Oliver in Charles Dickens, *Oliver Twist*, ed. by Kathleen Tillotson, introd. and notes by Stephen Gill (Oxford and New York: Oxford University Press, 1998), p.247. In *Middlemarch*, Fred catches typhoid fever from 'unsanitary Houndsley streets' which is believed to be exacerbated by a 'nasty damp ride', p.260. Marian Halcombe curses 'the rain, the rain – the cruel rain that chilled me last night'; Count Fosco explains to Frederick Fairlie that 'Miss Halcombe unhappily exposed herself to be wetted through with a heavy rain. The cold that followed was of an aggravated kind; and it has now brought with it the worst consequence – fever'. Wilkie Collins, *The Woman in White*, ed. with introd. and notes by Matthew Sweet (London: Penguin, 1999 rpt. 2003), p.335 and pp.350-51.

¹⁶ The phrase is from Elizabeth Gaskell, *Sylvia's Lovers*, ed. with introd. and notes by Andrew Sanders (Oxford and New York: Oxford University Press, 1998), p.45. *Oliver Twist*, p.298 and Charlotte Brontë, *Villette*, ed. with introd. and notes by Helen Cooper (London: Penguin, 2004), pp.120-21. All further references are to these editions.

idea that the weather is something to be guarded against and which may wreak physical disaster pervades the Victorian narrative.

In settings where the significance of weather is frequently reiterated, characters often attempt to predict it. Characters in rural environments especially, and particularly in Eliot's and Hardy's novels, often possess 'weather wisdom': that is, attentiveness to the signs and tokens of weather change in the natural world.¹⁷ Gabriel Oak, Silas Marner and Gaskell's Daniel Robson are all associated with 'weather wisdom', and with what Eliot refers to in a metaphor in *Daniel Deronda* (1876) as the 'dim [...] sense of approaching weather-change'.¹⁸ Like the moods and changes of Mirah's emotions, to which the 'dim sense' applies in *Deronda*, the weather is difficult to predict or understand, and its changes are perceived only faintly, through an individual's affective response to atmosphere combined with innate recognition of common 'weather signs'.

However, attempts to predict the weather with any certainty in Victorian fiction tend to be associated with *hubris* of a kind which this thesis will argue becomes especially pronounced in debates about forecasting, particularly during what Katharine Anderson has termed 'the mid-Victorian crisis' in meteorology.¹⁹ In two novels as chronologically distant as *Martin Chuzzlewit* (1843-44) and *Middlemarch* (1871), predicting the weather is associated with a loss of credibility, and with vain speculation. Mr Jobling states briefly at the end of a chapter in *Chuzzlewit* that 'It will be a stormy night!', but the narrative comment in the following chapter is illuminating:

The Doctor's prognostication in reference to the weather was speedily verified. Although the weather was not a patient of his, and no third party had required him to give an opinion on the

¹⁷ See Katharine Anderson, *Predicting the Weather: Victorians and the Science of Meteorology* (Chicago and London: University of Chicago Press, 2005), pp.176-185 on weather wisdom as associated with 'those who spent their lives in closest contact with the elements, the sailor or shepherd' and their observations of 'the appearance of the clouds, behaviour of insects and animals, the transparency of the air', p.185.

¹⁸ George Eliot, *Daniel Deronda*, ed. with introd. and notes by Graham Handley (Oxford and New York: Oxford University Press, 1984 rpt. 1998), p.558.

¹⁹ See Katharine Anderson, 'The Weather Prophets: Science and Reputation in Victorian Meteorology' in *History of Science* 37, no.2, (1999), 179-216.

case, the quick fulfilment of his prophecy may be taken as an instance of his professional tact; for, unless the threatening aspect of the night had been perfectly plain and unmistakable, Mr. Jobling would never have compromised his reputation by delivering any sentiments on the subject. He used this principle in Medicine with too much success to be unmindful of it in his commonest transactions.²⁰

Talking about the weather is one of the ‘commonest transactions’ of conversation, yet strangely, it also appears to be fraught with concerns about professional reputation. Jobling, a man to whom reputation is of primary importance, would apparently find himself severely compromised by a speculative or unfounded ‘prognostication’. Dickens’ whimsical analogy between weather prediction and the medical profession is significant: it points to a similar need for ‘tact’ and care in predicting weather and in curing illness, as well perhaps as alluding to the close contemporary connections between weather and illness. The weather is positioned not as an illness but a patient: the weather is ‘the case’, but it is, as this thesis will show, a ‘case’ which proved more difficult to diagnose or understand than almost any disease.

‘Prognostication’, ‘prophecy’ and ‘reputation’ are all important elements of the Victorian lexicon of weather-forecasting, as Chapter 4 of this thesis will demonstrate. When Admiral Robert FitzRoy, an important figure in this thesis both for his scriptural literalism which I discuss in Chapter 3, and his meteorological work on which Chapter 4 will focus, set out to professionalize the science of meteorology, recasting the language of prediction was a significant aspect of his work. Fitzroy repeatedly attempted to detach the subject from any taint of the supernatural, superstition, or pretence to divine knowledge. FitzRoy stated of his own forecasts: ‘Prophesies and predictions they are not. The term forecast is strictly applicable to such an opinion as is the result of scientific calculation and combination’.²¹ Yet the words ‘prognostication’ and ‘prophecy’, with their implications of the uncanny or even the blasphemous, continue to

²⁰ Charles Dickens, *Martin Chuzzlewit*, ed. with introd. and notes by Margaret Cardwell (Oxford: Oxford University Press, 1982 rpt. 1998), p. 551. All further references are to this edition.

²¹ *The Times*, 12th April 1862, p.12, repeated in speeches and papers throughout the period and in FitzRoy’s *The Weather Book: A Manual of Practical Meteorology* 2nd edition (London: Longman, Green, Roberts and Green, 1863), p.171.

appear whenever the question of predicting the weather arises. In *Middlemarch*, nearly thirty years after *Martin Chuzzlewit* associated weather-prediction with prophecy, and drew comparisons between the reputation of the doctor and the forecaster, Eliot described Lydgate's moment of professional crisis in similar terms. Lydgate, having attended Fred Vincy because Mr Wrench had been unavailable, diagnosed typhoid fever to the chagrin of the latter, and as a result, faces an onslaught on his own professional credibility:

[Mr Wrench] threw out biting remarks on Lydgate's tricks, worthy only of a quack, to get himself a factitious reputation with credulous people. That cant about cures was never got up by sound practitioners.

This was a point on which Lydgate smarted as much as Wrench could desire. To be puffed by ignorance was not only humiliating, but perilous, and not more enviable than the reputation of the weather-prophet.²²

There is a remarkable closeness between the register in which Wrench's 'biting remarks' are made and the language of weather prophecy. 'Tricks', quackery, 'factitious reputation', credulity and 'cant' all seem to attribute Lydgate with the dubious 'reputation of the weather-prophet', so that the comparison is made not only in Lydgate's injured consciousness, but by the narrative itself. To be a weather-prophet is dangerous, even 'perilous', and not to be undertaken by 'sound practitioners'. Predicting the weather is a strangely hazardous business, despite taking place within an environment where the weather matters enormously, and where climates are something to be 'survived', to which one may be 'suited' or not.

Victorian novels embody more than a sense of the weather's importance, however: they also frequently engage with specific climatic theories and discourses. Though many associations between climate and the individual were almost universally accepted - most notably, the relationship between climate, disease and cure - others

²² *Middlemarch*, p.262.

were subject to challenge and debate in the Victorian period, as this thesis will show. 'Talking about the weather' does not take place in a cultural vacuum, but is the result of a long history of close connections between individual, place and climate.

2. Meteorology and climate in context

The individual chapters of this thesis focus on particular moments where climatic theories and meteorology become especially highly charged, and on their representation in novels of the period. In this section I outline some of the scientific legacies behind these moments. I also highlight the cultural dissemination of developments and controversies in meteorology and the moments at which novelists may have been aware of the status of this science, as they 'talked about the weather'.

From the beginning of the Victorian period until the 1860s, meteorology appeared as an invitingly open field. In 1862, *The Times* used a forceful metaphor when it expressed optimism for Robert FitzRoy's attempts at 'wresting even such a secret as this from nature': that is, the 'secret' of the coming weather.²³ Nature must, it seemed, yield to prolonged efforts to prise its secrets by painstakingly, forcibly, 'wresting' them. Katharine Anderson employs another suggestive metaphor for early hopes of meteorological advance when she states that the weather seemed to the Victorians 'a puzzle that would be solved'.²⁴ In this section, I discuss this 'solving' and 'wresting' in meteorology and their growth out of a broader interest in climatic theories of all kinds.

²³ *The Times*, 11th April 1862, p.11.

²⁴ *Predicting the Weather*, p.8.

I also highlight moments at which the language of meteorology seems to demonstrate the kind of ‘two-way traffic’²⁵ between literary and scientific writing about prediction.²⁶

An analogy made by John Stuart Mill in *A System of Logic* (1843) serves to demonstrate both early hopes and potential problems in meteorological advance. Though Mill is not a figure closely associated with climate, weather and meteorology, his analogy here is intriguing, and opens up questions about meteorology which become important in my discussion of forecasting in Chapter 4. Firstly, and most obviously, the passage below reflects a tendency in non-literary Victorian writing to use the weather in metaphor, and in so doing to point to ideas and themes associated with the weather. Secondly, Mill reveals much about early Victorian optimism surrounding the progress of meteorology. At this point, the secrets of nature seem at least partially susceptible to ‘wresting’, and the ‘puzzle’ of the weather to be, theoretically, solvable. This passage opens a section which is devoted to explaining ‘That there is, or may be, a science of human nature’:

Any facts are fitted, in themselves, to be a subject of science, which follow one another according to constant laws; although these laws may not have been discovered, nor ever be discoverable by our existing resources. Take, for instance, the most familiar class of meteorological phenomena, those of rain and sunshine. Scientific inquiry has not yet succeeded in ascertaining the order of antecedents and consequence among these phenomena, so as to be able, at least in our regions of the earth, to predict them with certainty, or even with any high degree of probability. Yet no one doubts that the phenomena depend on laws, and that these must be derivative laws resulting from known ultimate laws, those of heat, electricity, vaporisation, and elastic fluids. Nor can it be doubted that if we were acquainted with all the antecedent circumstances, we could, even from these more general laws, predict (saving difficulties of calculation) the state of the weather at any future time. Meteorology, therefore, not only has in itself every natural requisite for being, but actually is, a science; though, from the difficulty of observing the facts on which the phenomena depend, (a difficulty inherent in the peculiar nature of the phenomena,) the science is extremely imperfect; and were it perfect, might probably be of little avail in practice, since the data requisite for applying its principles to particular instances would rarely be procurable.²⁷

²⁵ The phrase is Gillian Beer’s, *Darwin’s Plots*, p.4.

²⁶ A more comprehensive history of weather-forecasting and prophecy can be found in Katharine Anderson’s *Predicting the Weather*.

²⁷ John Stuart Mill, *A System of Logic Ratiocinative and Inductive* (London: Longmans, Green and Co., 1884), p.275.

Mill's very reason for employing this comparison seems to be that 'rain and sunshine' are 'familiar': the weather is as accessible a tool for explication as it is for the kinds of conversation I discussed above. The focus of Mill's analogy, however, is the possibility of understanding these human weather episodes, the 'rain and sunshine' of human behaviour. The seemingly unfathomable and unpredictable operations of human nature are as like the weather as their study is like meteorology. Mill's assumption is that almost everything is subject to 'constant laws', and that these laws, once found and understood, will enable 'science' to predict and understand even the most apparently complex phenomena.

There is a strange tension, however, between Mill's statement that meteorology 'has in itself every requisite for being' and 'actually is, a science', and his subsequent retreat into the idea that this science is not only 'extremely imperfect', but even 'of little avail in practice'. References to the difficulty of 'procuring' the 'data requisite' meanwhile, seem conversely to highlight the subjectivity inherent in obtaining information about weather. The movement towards reservation and caveat within the short space of this passage inadvertently mirrors the trajectory of meteorology through the Victorian period. As I show in Chapter 4, the certainty that meteorology was an open science, with all the optimism for discovery and increased store of human knowledge which this implies, was displaced through the period. The phenomenon of weather were, as Mill states, entirely familiar, yet this familiarity frustratingly refused to yield understanding, and increasingly disappointed hopes that the weather might actually be predicted with any accuracy.

The drive to understand and predict weather arises from a social environment in which individuals believe weather and climate to be important. This in itself seems obvious: however, behind such beliefs were a set of ideas and theories which underpin

the arguments this thesis makes. The idea that place and climate were of primary importance in determining health has been termed ‘environmentalism’, and prevailed well into the nineteenth century.²⁸ During the Victorian period, ‘environmentalism’ seems to shape the recurrent idea, both in the literary text and in the actual treatment of invalids, that if place and climate determined disease and cure, one might move around to find the ideal climate, or modify the climate which appeared to have caused disease.²⁹

Thomas Dormandy’s observation that ‘escape from illness by moving to another place – almost any other place – is as ancient as hope itself’ emphasizes the ‘hope’ inherent in climatic theories, but it does not take into account that moving to ‘almost any other place’ was not simply the product of blind ‘hope’.³⁰ Rather, it was affirmed by much of the medical advice given in the period. Charlotte Brontë’s writing about the possibility of finding a curative climate for Anne Brontë, during her decline from tuberculosis, clearly inherits from this idea, as Chapter 2 of this thesis will show. However, migratory searches for the ideal climate are also reflected in the phenomenon of Victorian emigration, which Chapter 1 discusses in more detail, and in particular relation to industrial growth and urban climates. Emigration was largely undertaken in response to social and economic pressures in this country: however, the idea that one might find a better life in another climate is also bolstered by ‘environmentalism’ which stresses the influence of climate for good and ill. David Bindman suggests that climatic theories of human development implicitly hold out ‘the dream of an as yet undiscovered place’, whose climate would enable the development of a supremely civilized, attractive and intelligent race.³¹ This ‘dream’ is relevant in a broader sense during the Victorian

²⁸ James C. Riley, *The Eighteenth-Century Campaign to Avoid Disease* (New York: St Martin’s Press, 1987), p.11.

²⁹ See Riley pp.11-13.

³⁰ Thomas Dormandy, *The White Death: A History of Tuberculosis* (London and New York: Hambledon and London, 2001), p. 85.

³¹ *Ape to Apollo*, p.70.

period, as individuals move around the country and even the globe in search of a climate where they might find prosperity, or health.

An important influence for the notion of healthy, unhealthy and even ‘perfect’ climates was Hippocrates’ ‘Treatise on Air, Water and Places’. The theories which developed from the Treatise, like those in Buchan’s influential *Domestic Medicine* (1772), persisted well into the Victorian period, as I shall show. In Chapter 2, I focus in detail on Buchan’s text and its influence on Charlotte Brontë’s writing of the weather. However, Hippocrates also demonstrates a broader sense of the significance of weather and climate in medical endeavour. The Treatise begins by stating that ‘whoever would study medicine aright’ must learn about the seasons, winds and waters in any given place.³² Hippocrates insists that through studying these phenomena, the medical practitioner will learn which epidemics to expect in which location, and thus anticipate potential problems in any given place. ‘If it should be thought that this is more the business of meteorology, then learn that astronomy plays a very important part in medicine, since the changes of the seasons produce changes in disease’, Hippocrates observes, in a statement which points clearly to the interconnections between meteorology and medicine.³³ The Treatise moves seamlessly from medicine to racial characteristics, noting that ‘luxuriance’ and ‘cultivation’ for example, are found in climates which have violent extremes but where a temperate climate prevails overall. Within the influential Hippocratic framework, then, discussion of medicine, race and meteorology within one text is not only unproblematic, but positively necessary.

Hippocrates’ writings were an important and largely unchallenged influence on Victorian constructions of the body and its relationship to climate. Another voice which affirmed the importance both of climate and meteorology was Lamarck, whose theories

³² ‘Treatise on Air, Water and Places’ in *Hippocratic Writings*, ed. G.E.R Lloyd, trans. J. Chadwick. (London: Penguin, 1983), p.148.

³³ ‘Treatise on Air, Water and Places’, p.149. The use of ‘astronomy’ relates to early connections between astronomy and meteorology: indeed, the term ‘meteorology’ referred originally to meteors, which were thought to influence the weather.

were, by contrast, broadly dismissed over the course of the period. However, Lamarck remained a presence in the Victorian period: in particular, one which Darwin needed to dispel in *The Origin of Species* (1859).³⁴ In Chapter 3, I argue that Darwin's emphasis on the determining importance of competition and struggle in evolution, rather than of climate, was a crucial element of the argument in *The Origin*: it was also a significant distinction between Darwin's work and Lamarck's. What is particularly important here is that Lamarck's theory was predicated on climatic influence, and thus led him to attempt, repeatedly, to know and understand the weather. At every level, Lamarckian theory involves climate and physical environment. The account of evolution in *Philosophie Zoologique* (1809) depends on the idea of 'spontaneous generation', speeded up by heat: 'the material soul of all living things'.³⁵ The defining element of this theory, 'besoin' or 'need', also hinges on the prime importance of climate. In any given climate, a species would, Lamarck argued, move from an 'imparfait' state towards the 'plus parfait' as a result of environment ('influence de milieu'). George Eliot's observation in *The Mill on the Floss* that the theory 'that animals get thicker wool, is perhaps a little over-strained' both alludes to and disparages this idea, demonstrating that Lamarck's theories of evolution, if no longer considered credible by 1860, still remained a significant element of what were perceived to be the tenets of contemporary evolutionary theory.³⁶

Lamarck stressed the need for the individual to know and understand the weather, and attempted to develop and professionalize meteorology as a science. In

³⁴ See Adrian Desmond and James Moore, *Darwin* (London: Penguin, 1992), p.485 on Darwin and the problem of distinguishing his own evolutionary theory from Lamarck's.

³⁵ Jean-Baptiste Lamarck, excerpts from *Philosophie Zoologique* in *Pages Choisies*, ed. by Lucien Brunelle (Paris: Editions Sociales, 1957), p.56. See also L.J. Jordanova, *Lamarck* (Oxford and New York: Oxford University Press, 1984), p.56.

³⁶ George Eliot, *George Eliot, The Mill on the Floss*, ed. with introd. and notes by Gordon S. Haight (Oxford and New York: Oxford University Press, 1996 rpt. 1998), p.331. All further references are to this edition. Sally Shuttleworth notes that this analogy shows Eliot questioning 'all theories of evolution which either imply some form of progress or a discernible plan in nature'. *George Eliot and Nineteenth-Century Science: The Make-Believe of a Beginning* (Cambridge: Cambridge University Press, 1984), p.60.

1799, he instigated the *Annales Météorologiques*, and continued to produce these publications until 1810. Lamarck began by explaining, as did many putative forecasters, how useful it would be to predict the weather:

Annoncer, plus d'un année en avance, des probabilités sur le tems [sic] qu'il fera [...] c'est assurément offrir au public un avantage extrêmement précieux, et jusqu'ici vainement désiré; c'est en un mot lui présenter le moyen de déterminer, avec profit, le moment favorable pour un multitude de entreprises ou d'opérations importantes dans lesquelles le tems ou l'état d'atmosphère n'est point du tout indifférent.

Il n'est personne qui, voulant faire un voyage, commencer une moisson, donner un fête, expédier une navire, *etc, etc.* ne puisse avancer ou retarder de dix ou douze jours les entreprises dans lesquelles il lui importe d'avoir un tems favorable.³⁷

'Entreprises', 'opérations', and particularly the references to seafaring and the harvest,

anticipate the reasons given by Victorian forecasters for the need to know the weather.

Lamarck goes on to argue that, as random as its operations may appear, the weather

must submit to the kinds of 'laws' to which Mill was to refer in *System of Logic*.

Through painstaking, long-term observations, and compilation of their results, one

might at least predict the probability of the coming weather.

However, when Lamarck wrote the final *Annuaire* in 1810 he acknowledged that this level of prediction had not been achieved. The science was, he suggested, still its infancy, full of possibilities which he now doubted could be realized in his own lifetime: 'un champ presque neuf, fertile en découvertes'.³⁸ He recorded his hope that:

³⁷ 'To announce, more than a year in advance, the probabilities of the coming weather [...] is certainly to offer the public an extremely valuable advantage, and one which has been desired in vain up to now. In a word, it is to give them the means of profitably determining the most favourable time for a multitude of undertakings for which the state of the weather, or atmosphere, is by no means insignificant. There is no one who, wishing to set out on a voyage, begin the harvest, organise an outdoor event, or launch a ship, would not delay or bring forward his enterprise by ten or twelve days, if he knew that the weather then would be more favourable.' Jean-Baptiste Lamarck, *Annuaire Météorologique Pour l'An VIII De la République Française* p.5. *Oeuvres et Rayonnement de Jean-Baptiste Lamarck*, ed. by Pietro Corsi. edited 7th November 2007. Oxford University. 1st January 2008.

<www.lamarck.cnrs.fr/ouvrages/docpdf/Annales_meteorologiques_de_lamarck_pdf> This translation and those which follow are mine.

³⁸ 'An open field, full of possible discoveries'. *Annuaire Météorologique*, 1810, p.1. My translation.

Un jour probablement la météorologie sera plus en honneur et attirera beaucoup plus d'attention; la grandeur et la beauté des objets qu'embrasse cette science, l'intérêt qu'elle peut inspirer, et son utilité direct ne permettent nullement d'en douter.³⁹

This statement seems an early prolepsis of the problems meteorology was to encounter: a science which was not 'honoured', and did not attract sufficient public attention or regard, despite what Lamarck saw as its inherent 'grandeur and beauty', not to mention its obvious usefulness. Responses to meteorology throughout the Victorian period are marked by a tension between, on the one hand, the conviction that it would be of immeasurable value to be able to anticipate the weather, and that this must in theory be possible in a universe where everything depended on 'laws', and yet, on the other, an increasing realization that this might not be attainable in the near future. Lamarck was and is remembered for his flawed accounts of evolution rather than his meteorological work: the *Annales Météorologiques* represent a brief and forgotten moment in the history of forecasting. This moment, however, rehearses the difficulties meteorology was to encounter in 'solving' and 'wresting' the complexities of the weather, as well as demonstrating the tendency for theories which placed an emphasis on climatic theories to give rise to attempts at understanding and predicting the weather.

However, where meteorology focussed on classification rather than prediction, the science seemed to gain more respect and credibility. Luke Howard's work, and Goethe's interest in it, demonstrates a striking interchange between literature and meteorology in the pre-Victorian period. Inspired by the Linnaean system of classification, Howard's most famous work was published in the *Philosophical Magazine* in 1803, and entitled, 'On the modification of clouds, and on the principles of their production, suspension and destruction'. This work defined the three different

³⁹ 'Probably one day, meteorology will be more highly regarded and will attract more attention; the grandeur and the beauty which surround this science, the interest which it is capable of inspiring, and its direct usefulness, admit no doubt of this' *Annuaire Météorologique*, p.6.

groups of clouds: *stratus*, *cumulus* and *cirrus*, and then established sub-categories and modifications relating to these groups.⁴⁰ Howard's classification so impressed Goethe that he wrote to the meteorologist requesting a biography, and in 1817 composed a poem, 'Howard's Ehrengedächtnis' ('In Honour of Howard'), to applaud Howard's work:

[...] Howard gives us with his clearer mind
The gain of lessons new to all mankind
That which no hand can reach, no hand can clasp,
He first has gain'd, first held with mental grasp.
Defin'd the doubtful, fixed the limit-line,
And named it fitly – Be the honour thine!
As clouds ascend, are folded, scatter, fall,
Let the world think of thee who taught it all.⁴¹

The terms in which Goethe praised Howard demonstrate not only his own personal admiration for the meteorologist, but also the extent of optimism associated with classificatory meteorology as opposed to forecasting, in the period. The weather is unreachable, ungraspable, and that Howard should have been able to hold it 'with mental grasp' is laudable because it constitutes a move toward understanding *all* that is 'doubtful': it seems particularly significant in this context that Goethe does not actually refer directly to weather, or to clouds, but deals almost entirely in abstractions ('the doubtful', 'that which' etc.). Fixing a 'limit-line' is both a linguistic and a theoretical triumph: the clouds retain their intrigue and their mystery – ascending, folding, scattering in what seems a random pattern whose beauty is not marred by the 'limit-line' or the naming. Goethe's correspondence and poem reflect an early nineteenth-century enthusiasm for the benefits of definition, classification and even 'limiting'. They also represent a unique example of direct literary engagement with meteorology.

⁴⁰ Jim Burton, 'Luke Howard' (1772–1864)', *DNB*.

⁴¹ Goethe, 'Howard's Ehrengedächtnis', in Douglas Scott ed., *Luke Howard (1772-1864): His Correspondence with Goethe and his Continental Journey of 1816* (York: William Sessions Ltd, 1976), p. 112.

How, then, did Victorian novelists encounter and respond to developments in meteorology? The periodical press was, as I shall show, one way in which meteorology entered cultural circulation: an obvious site for possible encounters between meteorology and novelists, however, is the Great Exhibition of 1851. The Great Exhibition displayed weather maps from the Royal Society and synoptic rain charts, any of which might have been seen by the writers such as Charlotte Brontë who attended the Exhibition. One exhibit which must have attracted some fascinated attention was George Merryweather's 'Tempest Prognosticator', which he described as:

[A] circular pyramidal apparatus of three feet in diameter, and 3'6" in height – composed of French polished mahogany, glass, silver, brass, &c. – to illustrate my discovery of the means of anticipating storms, to be designated the "Tempest Prognosticator", which I am desirous of promulgating for the first time on that occasion for the benefit of all nations.⁴²

This sizeable piece of apparatus, as well as being composed of a variety of polished and expensive materials, was full of leeches. A circle of bottles, each containing a leech, connected to a bell at the centre of the Prognosticator. Drawing on the 'weather wisdom' which held that leeches became agitated when the atmosphere changed, the Prognosticator was designed so that, when the leeches crawled to the top of their respective bottles, they would climb over a lever triggering the bell, thus alerting the listener to an oncoming storm.⁴³ Merryweather's language, and indeed the name of the instrument itself, point to a strange relationship between different kinds of forecasting. On the one hand, he propounds the economic benefits of the Prognosticator ('the benefits of all nations') in formal terms ('desirous of promulgating'); at the same time, he uses the terms from which FitzRoy was to attempt to dissociate forecasting. Not

⁴² George Merryweather, letter to Royal Commissioners in 1850, reprinted in *An Essay Explanatory of the Tempest Prognosticator in the Building of the Great Exhibition for the Works and Industry of all Nations* (London: John Churchill, 1851), p.5.

⁴³ Katharine Anderson describes the Prognosticator in detail, and shows how its combination of weather wisdom and technology reflects changes in meteorological methods in the period. *Predicting the Weather*, p.172.

only is the instrument actually called a ‘prognosticator’, but Merryweather also refers to his leeches as ‘prophetic’, whilst the very term ‘Tempest’, rather than the more prosaic ‘storm’, seems to locate the Prognosticator as a piece of apparatus with almost mystical associations.

Thackeray, Dickens and Charlotte Brontë all attended the Exhibition: Brontë’s letters are particularly suggestive in this context. Brontë described the Exhibition as ‘a mixture of a Genii Palace and a mighty Bazaar’, whose ‘grandeur’ consisted in ‘the unique assemblage of all things – Whatever human industry has created – you find there’.⁴⁴ Among this ‘assemblage’, it certainly seems possible that the Tempest Prognosticator might well have been among the ‘ware of all kinds’ Brontë and other writers encountered.⁴⁵ If this were the case, this strange and sizeable piece of polished apparatus would have represented a signal that Victorian society was attempting, in various and sometimes strange ways, to predict the weather.

Even without visiting the Crystal Palace, it must have been clear that efforts at forecasting were being both made and mocked in the period. The most consistent references to weather, climate and prediction in the Victorian periodical press are *Punch*’s derisory articles about attempts at forecasting.⁴⁶ Articles in the paper play with the prominent associations and images of meteorology: the ‘clerk of the weather’, the ‘weather-glass’, ‘weather wisdom’ and the barometer. They make facetious proposals for ways to read the weather, literalizing tropes such as ‘the clerk of the weather’ by

⁴⁴ Letter to Ellen Nussey, 2nd June 1851, and to Patrick Brontë, 7th June 1851, in Margaret Smith ed., *The Letters of Charlotte Brontë with a Selection of Letters by Family and Friends*, 3 vols. (Oxford: Clarendon Press, 2000), II, 628-30.

⁴⁵ Letter to Patrick Brontë, 31st May 1851. *Letters* II, 625.

⁴⁶ Richard Noakes has noted that *Punch*’s response to science in the nineteenth century, particularly ‘[w]hen science was the subject of extensive debate elsewhere, when it was on public show, and when it appeared to be bogus, heroic, dangerous or ingenious’ was to associate it ‘however incongruously, with the domestic, political, and social’, to ‘bring out the wonderful, comic and worrying implications of scientific endeavour.’ Richard Noakes’ notes on *Punch* in *Science in the Nineteenth-Century Periodical* compiled by SciPer Project team, Geoffrey Cantor, Gowan Dawson, Sally Shuttleworth, Jonathan Topham and Richard Noakes. 31st December 2007. <http://www.sciper.org/browse/PU_desc.html>.

imagining a lower-class office worker undertaking this dull job,⁴⁷ or mocking the idea that weather could be detected from ‘signs’ by suggesting that one might foretell the weather by looking at his wife’s face.⁴⁸ *Punch*’s notes and commentary about the weather and forecasting are frequently snobbish, dissociating the ‘clerks’ it disparages from its own upper middle-class readership, or mocking the supposed ‘weather wisdom’ of the provincial man, and his claims to forecast the weather.⁴⁹ The dominant ideas underlying *Punch*’s approach to weather and its prediction are that forecasting is largely the preoccupation of the foolish, and that the weather remains as random and unpredictable as ever. *Punch*’s response to this particular scientific question suggests that much of society doubted that the weather could be predicted – but that they talked about it with no less frequency for that.

An article in an early edition of *Cornhill Magazine* in 1860 acknowledges the tedium of talking about the weather, but unlike *Punch*, suggests that this belies a set of far more interesting questions. Like *Punch*, *Cornhill* had a large readership, though its target audience was of a less elevated social status. In keeping with the magazine’s stated aims to cater for a family readership including women and children,⁵⁰ the article tackles its chosen theme by referring to several of the ways in which weather might affect the reader, seeking to engage, educate and instruct at the same time. The article begins by apologising for its ‘trite and commonplace’ subject, but argues that ‘there is ample reason in the history of the years 1859-60’ to discuss the weather.⁵¹ That the weather is ‘trite and commonplace’ is a given: the idea that it is not only quotidian, but worn-out and emptied of meaning seems an even sharper condemnation than Mr Barton’s view of Bridmain as ‘not of lively parts’. This would seem to set up a problem

⁴⁷ Anon., ‘The Real Clerk of the Weather’ in *Punch*, 19 (1850), 21.

⁴⁸ Anon., ‘Signs of the Weather’ in *Punch*, 50 (1866), 5.

⁴⁹ Esau Wapshot, ‘A Prophet in His Own Country’ in *Punch*, 50 (1866), 75.

⁵⁰ See Gordon N. Ray ed., *The Letters and Private Papers of William Makepeace Thackeray*, 4 vols. (London: Oxford University Press, 1846), IV, 161.

⁵¹ Ansted and Drmmond, ‘On the Weather’, p.565 The ‘unfavourable and exceptional’ weather of the winter of 1859-60 (p.570) might also suggest a more immediate climatic context for the rain and flood in *The Mill on the Floss*, the latter half of which was composed in that winter.

for the progression of the article: how might it be possible to talk about something 'trite and commonplace, and indeed, why would one wish to do so at all?

The answer appears to be that no matter how thin the subject of the weather may have worn through its daily use in conversation, the question of predicting and understanding it remained one of marked interest. The article goes on to ask what it means to be weather wise: can 'we [...] become weather-prophets without any instruments at all?'⁵² The answer given is that this is indeed possible, but that the enterprise should be allied with a firm grasp of what weather is, and how it works. Repeatedly, the writer(s) emphasize the idea that weather and climate are not the same, and the terms must be used carefully.⁵³ If an individual understands both the constancy of climate, and the changing nature of the weather, he or she may, through careful observation and attentiveness, become 'weather wise'.

A profound sense of the connections between climate, weather and individual, here as with Hippocrates and Lamarck, lies behind the drive to understand and predict the weather. However, this article explores those connections in particularly interesting terms:

Who is there who has not felt the influence of climate and weather clearing up or obscuring his intellectual faculties? We attribute this, perhaps correctly, to an indirect action through the state of our health; but who can say how much of it may not be due to some direct action hitherto unknown, proceeding from the great source of motion and force in our system? It would not be wise – nor, indeed is it safe – to carry speculation further in such a matter.⁵⁴

This brief moment of speculation is intriguing. The writer(s) assume that the idea that 'intellectual faculties' are affected by 'the influence of climate and weather' will be shared by all readers, yet also ponder whether this might be due to something more than just 'the state of our health'. The notion of a 'direct action, hitherto unknown', which

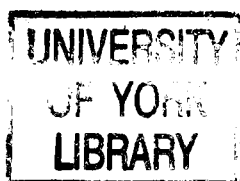
⁵² 'On the Weather', p.578.

⁵³ 'On the Weather', p.578.

⁵⁴ 'On the Weather', p.579.

connects mind, body, weather, and the universe seems to suggest that ‘the God of Nature’ (which the article concludes by invoking as the cause behind all weather laws, changes and fluctuations) might send physical, tangible messages through the weather. Teasingly, this half-formulated notion of the weather as not only the representation of, but a direct line of communication from, ‘the great source of motion and force’ is dropped almost immediately. That such ‘speculation’ is not ‘wise’ appears a logical conclusion, but that it might not be ‘safe’ is a stranger proposition. It is unclear whether this would entail a loss of credibility, or whether it would be actually blasphemous to speculate along these lines. The answer may well be a combination of both: this particular question is difficult to resolve, but whatever the intention behind these words, speculation about what weather was, and what it might do, was clearly something to be undertaken with some caution by the mid-Victorian period.

The theories of health and evolution which persisted with varying levels of credibility in the Victorian period, the moment of meteorological display at the Great Exhibition, and the constant refrain of mockery in *Punch* throughout the century, demonstrate that when novelists talked about the weather, they did so within a society which could hardly refrain from doing the same. Both *Punch* and *Cornhill* allude to the English habit of ‘talk about’ or ‘daily discussion’ of the weather, the former lightly derisive but ultimately affectionate towards the habit, the latter seeking to shape such conversations by informing their participants. The aim of this thesis is to show how the vast, varying, interdisciplinary nexus of Victorian conversations about weather are continually invoked, developed and challenged in novels of the period.



3. Critical perspectives

The critical approach I take in this thesis grows out of much of the recent work which has focused on the dynamic interplay between specific contemporary scientific theories, and the Victorian novel. The work of Gillian Beer and Sally Shuttleworth in particular informs my critical methodology. Both Beer and Shuttleworth have shown how scientific writing and ideas powerfully influenced the Victorian narrative, and have helped construct a vision of the Victorian period as one of intense and continual engagement between different kinds of writing and narrative. This thesis works from similar critical assumptions about the ways in which ideas and theories permeate narrative, either through a novelist's particular acquaintance with a text, or through a broader cultural absorption of discourse, both of which methods of infiltration are highly relevant in thinking about climate and the Victorian novel.

Beer's discussion in *Darwin's Plots* of the 'imaginative consequences' of Darwinian theory, and the ways in which it was both 'assimilated and resisted'⁵⁵ in nineteenth-century fiction underpins my arguments in Chapter 3 about the significance of the immediately post-Darwinian climate in *The Mill on the Floss* (1860). Perhaps because *Mill's* publication is so close to that of *The Origin of Species*, Beer does not focus on this novel, but rather on the more specifically evolutionary narratives of the later *Middlemarch* and *Daniel Deronda*. In Chapter 3, I explore a slightly more speculative line of enquiry concerning Eliot's early reading of *The Origin* and its relationship to the diluvial plot of *Mill*, asking whether it might be possible to extend the connections Beer has identified to a text where the Darwinian narrative seems to be questioned and even opposed.

⁵⁵ *Darwin's Plots*, p.2.

Darwin's Plots also informs my arguments about the ways in which climatic theories merged with, informed, or were sharpened by representations of climate and weather in the Victorian novel. Beer's identification of the 'two-way traffic' of narrative patterns and language between scientists and non-scientists, and the 'common language' between scientists and other writers is an important basis for this thesis. Beer argues that scientific narratives 'could be read very much as literary texts' in the period.⁵⁶ This is perhaps even more pronouncedly true of social commentators who were concerned with the urban climate such as Engels and Leon Faucher, as well as the meteorologist and social campaigner F.A.R. Russell, whom I discuss in Chapters 1 and 5 respectively. If talking about the weather is easily done and instantly accessible, it also provides a useful cross-cultural method to engage readers with the problems these texts outlined.

The relationship between various kinds of writing about climate and weather, however, is different from that between 'literary' and 'scientific' writing. Shuttleworth warns of the problems of 'reduc[ing] science to literature by insisting that science is a kind of writing':⁵⁷ science and literature may share a readership, but they do not always do so deliberately or willingly, and will have 'different goals' in their desired response from that readership.⁵⁸ However, writing about climate is broader and more nebulous than scientific writing. The medical treatises on which I focus in Chapter 2, for example, were specifically designed for a 'domestic' readership. Debates on meteorology and forecasting took place in the public forum of *The Times*, and contributions to these debates were also made by non-professional members of the public. The nature of the 'two-way traffic' which Beer identifies in both literary and

⁵⁶ *Darwin's Plots*, pp. 4-5.

⁵⁷ Sally Shuttleworth, 'Introduction' to *Nature Transfigured: Science and Literature 1700-1900* ed. by John Christie and Sally Shuttleworth (Manchester and New York: Manchester University Press; Canada: St Martin's Press, 1989), p.3.

⁵⁸ Laura Otis 'Introduction' to *Literature and Science in the Nineteenth Century: An Anthology* ed. by Laura Otis (Oxford and New York: Oxford University Press, 2000), pp.xviii-xix.

scientific narratives is very different in relation to writing about climate, where the same words, registers and themes seem to appear when weather becomes part of narrative. This, I argue, is part of what makes literature's engagement with climatic and meteorological arguments particularly distinctive.

The thesis also builds on Sally Shuttleworth's arguments and critical approach in *George Eliot and Nineteenth-Century Science*. Shuttleworth identifies 'the close interdependence of social and scientific theory' in Eliot's novels, arguing that the novelist participated in 'an active dialogue' with scientific theories, and especially with organic theory.⁵⁹ However, Shuttleworth's summary of the less direct interconnections between science and the novel also provides an important framework for this thesis. As Shuttleworth observes, 'science permeated not only social and psychological theory, but also the language, structure and fictional methodology of the Victorian novel'.⁶⁰ This thesis treats 'climate' almost as Shuttleworth positions 'science' in the sentence above. Climate permeates social and psychological theory, as well as medical and economic theories and indeed several branches of science itself: it also infiltrates the 'language and structure' of the novel, as I aim to show.

One obvious critical context for this thesis might appear to be the 'ecocritical' approach which has emerged in the past ten years. Cheryl Glotfelty has defined ecocriticism as 'the study of the relationship between literature and the physical environment', which asks questions such as:

How is nature represented in this sonnet? What role does physical setting play in the plot of this novel? [...] In addition to race, class and gender, should *place* become a new critical category?⁶¹

⁵⁹ *George Eliot and Nineteenth-Century Science*, pp. ix-x.

⁶⁰ *George Eliot and Nineteenth-Century Science*, p.206.

⁶¹ Cheryl Glotfelty's 'Introduction' in *The Ecocriticism Reader: Landmarks in Literary Ecology* ed. by Glotfelty and Harold Fromm (Athens and London: University of Georgia Press, 1996), pp.xviii-xix.

‘Place’ is, in some parts of this thesis, an important category in thinking about the novels I discuss, and as I suggested above, it is frequently both associated with and expressed by climate. However, I use ‘place’ largely in specific relation to climate, whilst questions about ‘nature’ are too broad for the particular emphasis I give to weather and climate. Ecocriticism tends to treat ‘weather’ as though it were a subdivision within the broader subject heading of ‘nature’. However, whilst weather and climate are, clearly, part of nature, they have a set of connotations and associations in the Victorian period which are not always or necessarily related to the idea of ‘nature’.

A crucial argument of this thesis is that weather and ‘society’ are not separate spheres. Glotfelty notes that traditional literary theory, ‘in general, examines the relationship between writers, texts and the world’, whilst ecocriticism seeks to redress the idea that ‘the world’ is constituted only by ‘society – the social sphere.’⁶² Glotfelty sees this as a problem, which may be balanced by critical exploration of the relationship between the literary text and ‘environment’ in its ecological sense. My own approach, however, takes the opportunity to read climate and weather both as they are invoked by ‘writers and texts’, and also as they are involved in both the ‘social’ and the environmental ‘sphere’.

In choosing to read and explore ‘nature’ in the literary text, ecocriticism often seems consciously to reject the societal or political. Jonathan Bate’s *Romantic Ecology* sets out to discard ‘the crude old model of left and right’ in reading Wordsworth’s poetry, and to ‘trust’ instead ‘the intuition that locates Wordsworth firmly in nature’, rejecting ‘the counter-intuitive readings that have been so influential in the academy over the past thirty years.’⁶³ This thesis sets out to reintegrate readings of, specifically, weather in the novel with the kinds of historical context Bate rejects, arguing that

⁶² Glotfelty, p.xix.

⁶³ Jonathan Bate, *Romantic Ecology: Wordsworth and the Environmental Tradition* (London and New York: Routledge, 1991), p.3 and p.10.

weather is at its most revealing when read in terms of the discourses surrounding it. Bate has imagined a school of 'New Geographism', which would place a heavy emphasis on the climatic conditions prevailing at the moment of literary production. He argues, for example, that the series of poor summers preceding Keats' composition of 'Ode to Autumn' suggest a specific climatic context for the poem's description of sunshine and productive harvest.⁶⁴ This thesis, however, reads weather and climate from an interdisciplinary perspective which is both 'geographist' and historicist. In Chapter 5 in particular, I am less interested in the individual affective responses to the fogs of *fin de siècle* London than in the socio-meteorological writing which was produced in response to them, and the intersections between this writing and depiction of fog in narrative fiction.

It would be possible to take almost any Victorian novel and to show that weather is important in its narrative. In this thesis, I have argued for several powerful moments in the period where the novel seems variously to adopt, interrogate or sharpen climatic theories and meteorological debate. Though I focus in most detail on Gaskell, the Brontës, Eliot, Hardy, Gissing, Wilde and Stevenson, I also place their work within the broader context of the conversations about weather which were taking place in Victorian fiction. Whilst Dickens' novels, in particular, emerge throughout the thesis, their depiction of weather is so wide-ranging as to be difficult to limit to just one historical context. I have not, therefore, included a chapter which focuses solely on Dickens' climates and weather, but rather refer to his texts in a number of different chapters, and especially in my discussion of London fog in Chapter 5. As this introduction has tried to show, Victorian society was engaged in a continual and often vexed conversation about the weather, in which novelists were also actively engaged. This thesis is about some of the most striking instances of their participation.

⁶⁴ Jonathan Bate, 'Living with the Weather', *Studies in Romanticism*, 35, no. 3 (Fall 1996), 431-37, (pp.432-34).

CHAPTER 1

‘THE OLD SMOKE-JACK’: INDUSTRIAL CLIMATES AND *MARY BARTON*.

1. Introduction

Manchester in the 1830s and 40s emerges both in social commentary and in the novel as a dark and unpleasant place, perpetually swathed in clouds of smoke. The rapid growth of industry had visible and disturbing effects on the climate of the city. In this chapter, I explore the ways in which social commentators and novelists of the period responded to changes in the city's climate, and argue that the industrialized ecology of the city gave rise to new ways of talking and writing about climate. The chapter takes Manchester as its primary focus, since this was the most frequently discussed industrial city in the period, and because much of the non-literary commentary I use here focuses specifically on that city. Dickens' and Gaskell's respective 'Coke-town' and 'Milton-Northern', in the 1850s, clearly draw heavily on contemporary debate and anxiety over Manchester in particular, and sharpen its identity as the most well-known industrial city of the Victorian period.

Observers of the industrial city, from medical writers like James Kay-Shuttleworth to novelists like Gaskell and Dickens, described the polluted climate of Manchester, and discussed ways in which it might be mitigated, improved, or simply escaped. The second section of this chapter shows the interconnections between several kinds of writing about Manchester from the 1830s to the early 1850s, and constructs a picture of the city, its climate and the language which surrounded it through the period. In the third section, I focus on Leon Faucher's *Manchester in 1844* and show how this text in particular adopts the themes, concerns and language from several earlier texts to describe the city's climate(s) in medical, moral, and economic terms. During this period, I argue, the concept of what we have come to term an 'economic climate' began to emerge, but in a sense which relied more heavily on conceptions of climate itself than

the way in which we might use the term today.¹ Faucher frequently employs climate and the actions of weather to explain the workings of an industrial economy, presenting images of the worker's constitution and morality in terms of his response to atmospheric conditions, and developing this resonant figure to portray the economy itself as a 'man' who was, like the factory worker, vulnerable to weather; but in this metaphor, 'weather' represents changes and variations in the economic cycle.

Finally I argue that in Gaskell's *Mary Barton* (1848), the anxieties, metaphors and themes associated with industrial climate in social commentary are productively combined with the quotidian reality of weather itself. In this novel, weather powerfully affects the individual, while climate takes on a more tacit function in defining the place and region in which events take place. Weather in *Mary Barton* is, variously, an economic reality, symbolically significant, and a determinant of events. I argue that this weather functions as a powerful and effective tool which Gaskell uses to convey her own sense of the nature and problems of the 'economic climate'. Though Gaskell certainly did not read Engels' work, which was not translated into English until 1887,² it is possible that she may have encountered Faucher's text, which was translated and published in Manchester whilst she was living in the city.³ In any case, the figure of the enervated and susceptible individual worker was certainly one in circulation as Gaskell wrote *Mary Barton*, and her response to and treatment of it are closely connected to the novel's depiction of weather and climate.

¹ The *OED*'s definition of the figurative uses of climate to designate 'the mental, moral etc. attitude of a body of people in respect of some aspect of life, policy etc' shows an increased tendency through the nineteenth century to refer to 'spiritual climates' or 'climates of opinion' but does not show any uses of 'economic climate' during the period.

² Kate Flint ed., *The Victorian Novelist: Social Problems and Social Change* (London, New York and Sydney: Croom Helm, 1987), p.26.

³ The text was translated by 'a member of the Manchester Athenæum', and it certainly seems possible that Gaskell would have been aware of its publication and of the ways in which the Athenæum had tried to gloss some of Faucher's more critical judgments of the city. Leon Faucher, *Manchester in 1844: Its Present Condition and Future Prospects*, trans. with introd. by a member of the Manchester Athenæum (London: Frank Cass and Co. Ltd, 1969). All further references are to this edition.

A central issue in this chapter is the mobility of the terms 'climate', 'environment' and 'atmosphere', and their frequently dynamic intersection. 'Environment' in this period tends to imply the multiplicity of factors and influences which surround – 'environ' – any individual. When Engels argued that the 'whole position and environment' of the worker 'involves the strongest temptation to immorality', the 'environment' to which he referred implied the entirety of the worker's situation and determining conditions: his work, his status, his finances and his residence.⁴ Environment can, and does, include both atmosphere and climate, but the word also refers to a broader set of material influences. By contrast, 'atmosphere' usually refers more specifically to the conditions of the air: in *The Condition of the Working Class* (1844), for example, atmospheres are 'corrupted', 'confined', 'poisoned', 'pestilent', 'abnormal', 'vitiating' and 'foul'. 'Atmosphere' frequently becomes synonymous with 'climate', which also refers to atmospheric conditions, in social commentary of the period, as I shall show. As the terms intersect, so too do the discourses and ideas associated with them, so that descriptions of atmospheric or environmental conditions frequently become inflected with climatic theories of human development and health.

The distinction between 'weather' and 'climate' which I outlined in the Introduction to this thesis is also important here. In the writing I discuss here, episodes of weather are sharply distinguished from the climates and atmospheres in which an individual exists. One of the problems which Faucher and others identify in relation to the industrial city is the idea that certain kinds of polluted or unhealthy climates might make the individual more susceptible to changing weather. Where a worker has acclimatized to the over-heated, indoor atmospheres in factories, in particular, he or she

⁴ Friedrich Engels, *The Condition of the Working Class in England*, ed. with introd. by David McLellan (Oxford and New York: Oxford University Press, 1999), p.200. All further references are to this edition.

is often shown to have become increasingly vulnerable to the inevitable changes in the weather which occur outside.

Engels' description of the factory 'atmosphere' exemplifies the interplay between terms common to the period. Engels' argument, which is indebted to Kay-Shuttleworth's comments on the 'enervation' which takes place in the factory environment, is familiar from many contemporary accounts: the work place is too warm, and it is unventilated, leading to a decline in workers' constitutions.⁵ Engels observed that 'the very least that [the workers] suffer is ill-health, arrested development, and general constitutional weaknesses', since 'no one can claim that work in the excessive heat and steamy damp of the factory contributes to good health':

The atmosphere of the factories is, as a rule, at once damp and warm, unusually warmer than is necessary, and when the ventilation is not *very* good, impure, heavy, deficient in oxygen, filled with dust and the smell of engine oil [...]. The operatives are lightly clad by reason of the warmth, and would readily take cold in case of irregularity of the temperature; a draught is distasteful to them, the general enervation which gradually takes possession of all the physical functions diminishes the animal warmth: this must be replaced from without, and nothing is more agreeable to the operative than to have all the doors and windows closed, and to stay in warm factory-air. Then comes the sudden change of temperature on going out into the cold and wet or frosty atmosphere, without the means of protection from the rain, or of changing wet clothing for dry, a circumstance which perpetually produces colds.⁶

Linguistically, the passage sets up an echo between the 'atmosphere of the factories' and 'wet or frosty atmospheres' outside. The 'lightly clad' operatives inside the factory are echoed in the description of those who go out into the cold 'without the means of protection from the rain', and the idea that they would 'readily take cold' were the

⁵ Kay-Shuttleworth stated in 1832 that operatives were confined in 'enervating, heated atmospheres', and became thin and sallow as a result. *The Moral and Physical Condition of the Working Classes Employed in the Cotton Manufactories in Manchester* (London: Frank Cass and Co. Ltd, 1970), p.24. Angus Bethune Meach's series of articles in the *Morning Chronicle*, while stressing the improvements made in ventilation by 1849, conceded that factory workers tended to be similarly thin and sallow, and 'more or less in a negative sanitary condition'. *Manchester and the Textile Districts in 1849*, reports published in the *Morning Chronicle*, October and November 1849, ed. by C. Aspin (Helmsore Local History Society, 1972), p.18.

⁶ Engels, p. 164.

temperature to vary is reflected in the reference to the ‘circumstance which readily produces colds’. The causes of this ‘taking cold’ echo those described in William Buchan’s image in *Domestic Medicine* (1772) of the ‘living barometer’, which I discuss in more detail in Chapter 2. Buchan argued that individuals who did not expose themselves to various different kinds of weather, but remained protected indoors, would eventually become highly susceptible to atmospheric change.⁷ The writers on whom this chapter focuses may not have been directly acquainted with Buchan’s text: however, the figure of the ‘living barometer’ was clearly a resonant one, which appears to be invoked in writing about industrial climates and atmospheres, and their effects on the body.

Writers of all kinds frequently describe the ways in which the changed environment in Manchester, both climatic and atmospheric, affected both individual bodies and the social organism. Catherine Gallagher has shown how the individual and the social body are conflated in a ‘time-honored homology’ in the works of Thomas Malthus and Henry Mayhew.⁸ This kind of association is particularly noticeable in depictions of industrial Manchester, with the factories ‘belching’ and ‘vomiting’ smoke over a diseased landscape and its equally diseased bodies. Several critics have emphasized the ways in which the Victorians viewed women’s bodies, in particular, as open to influence by external conditions. Jill Matus has identified the dynamic, ‘unstable’ construction of the female body, while Susan Zlotnick discusses this in specific relation to the ‘contested, unstable cultural figure’ of the ‘mill girl’ in the first half of the century, and the arguments made by commentators that the factory

⁷ William Buchan, *Domestic Medicine: or, a treatise on the prevention and cure of diseases by regimen and simple medicines* ed. by Randolph Trumbach (New York and London: Garland Publishing Inc., 1985), p.91.

⁸ Catherine Gallagher, ‘The Body Versus the Social Body in the Works of Thomas Malthus and Henry Mayhew’ in *The Making of the Modern Body: Sexuality and Society in the Nineteenth Century*, ed. by Catherine Gallagher and Thomas Laqueur (Berkeley, Los Angeles and London: University of California Press, 1987), pp.83-106, (p.85).

atmosphere affected both her morality and her physical form.⁹ Zlotnick's arguments build on the theme identified by social and economic historians of the anxiety produced in society by the emergent figure of the working woman.¹⁰ In this chapter, however, I focus specifically on the ways in which atmospheres which are *like* climates became crucial not just to constructions of this working woman, but also to the male worker, both in literal terms and as a recurrent metaphorical figure. Indeed, as I show in the third section of this chapter, when the worker is recruited in metaphors representative of industry itself, that worker is increasingly figured as male.

Although this chapter invokes the relationship between the 'tropical' climates of the factories and the perceived licentiousness of the factory women, then, I argue that this well-documented association was part of a wider contemporary discussion about the effects of various kinds of climate on both the body and the social body. I therefore contextualize the arguments made by Zlotnick and Matus within the broader tendency I discern in the period, to talk and worry about the 'economic climate' and of anxiety about climate itself as it was shaped by industry.

2. Belching, vomiting and exhaling: Manchester climates 1832-1855

Workers in industrial Manchester could no longer experience unpolluted or healthy climates, and were subject instead to the miasmas 'exhaled' by masses of dirt and filth,

⁹ Jill Matus, *Unstable Bodies: Victorian Representations of Sexuality and Maternity* (Manchester: Manchester University Press, 1995), p.66 and Susan Zlotnick, *Women, Writing and the Industrial Revolution* (Baltimore and London: The John Hopkins University Press, 1998), p.20.

¹⁰ See for example Deborah Valenze, *The First Industrial Woman* (New York and Oxford: Oxford University Press, 1995) and Frank Mort, *Dangerous Sexualities: Medico-moral Politics in England since 1830* (London and New York: Routledge and Kegan Paul, 1987 rpt. 2000).

and to the artificially created ‘tropical climates’ of the factories.¹¹ Unable to ‘breathe the pure atmosphere of the country,’ the workers inhaled instead the unhealthy, dusty air of the city.¹² What the city breathed out, its inhabitants breathed in, in a disturbingly close respiratory association. Skies were not blue, but black with factory smoke, and flowers would not grow in the polluted climate of the city.¹³ Rain became so acidic that it could no longer be drunk or used for washing.¹⁴ In *Mary Barton*, Gaskell employs a familiar theme in Victorian fiction of identifying the difference between urban and rural landscapes when she observes that rain, which should ‘waken up the flowers’ has no such result in Manchester, ‘where, alas! there are no flowers’, so that ‘the rain had only a disheartening and gloomy effect’.¹⁵ She also seems to allude to the contemporary and local context of what Dickens called in *Hard Times* (1854) the ‘bricking out’ of nature: Manchester seems like an environment where the normal laws of climate do not operate.¹⁶

Smoke is, of course, not a climatic phenomenon but rather the polluting product of industry. However, in its visible effects, the smoke of Manchester was closely associated with both weather and climate in the city: the wind blew smoke across the city, and rain and snow mingled with soot on their descent.¹⁷ Visions of the Manchester industrial climate abound in observation, literature and polemic of the period, and several genres employ the same tropes and images to depict city smoke. In 1832, Sir James Kay-Shuttleworth described Manchester as ‘surrounded on every side by some of

¹¹ Engels uses ‘exhale’, p. 198, as does Faucher, p.16, in descriptions of miasma and dirt.

¹² Faucher, *Manchester in 1844* p.16.

¹³ See Stephen Mosley, *The Chimney of the World: A History of Smoke Pollution in Victorian and Edwardian Manchester* (Cambridge: The White Horse Press, 2001), p.41 on the failure of flowers to grow in Manchester’s smoky environment. Jenny Uglow also mentions Elizabeth Gaskell’s attempts to work out which flowers in her own garden could survive the local smoke. *Elizabeth Gaskell: A Habit of Stories* (London and Boston: Faber and Faber, 1993), p.84.

¹⁴ Meach, p.9.

¹⁵ Elizabeth Gaskell, *Mary Barton*, ed. with introd. and notes by Edgar Wright (Oxford and New York: Oxford University Press, 1987 rpt. 1998), pp.111-12. All further references are to this edition.

¹⁶ Charles Dickens, *Hard Times for These Times*, ed. with introd. and notes by Kate Flint (London: Penguin, 1995), p.65.

¹⁷ See Meach, p.10.

the largest factories of the town, whose chimneys vomit forth dense clouds of smoke which hang heavily over this insalubrious region'.¹⁸ Leon Faucher wrote of 'the fogs which exhale from this marshy district, and the clouds of smoke vomited forth from the numberless chimneys.'¹⁹ Factory smoke was figured in violently emetic bodily terms, in novels and social commentary alike. In Frances Trollope's *Michael Armstrong* (1840), chimneys are described as 'belching eternal clouds of smoke': Charlotte Brontë wrote to W.S. Williams of the 'soot-vomiting mills' of the North, and in *The Professor* of a mill 'vomiting soot' from its 'long chimney'.²⁰ Yet what is 'vomited' from these chimneys is not only soot, but 'clouds', so that the *cumulus*, *stratus* and *cirrus* observed and defined by Luke Howard were exchanged for the clouds of black smoke and soot produced by industry. The persistent image in both novels and non-fictional writing of the period, then, is of a seemingly volitional and malign ejection of smoke and soot from the chimneys, which then 'hangs' in 'dense clouds' over the breathing, poisonous, 'insalubrious' city.²¹

Yet the smoking chimney also became a powerful metonymic symbol for a thriving industry. After the Preston lock-out in 1853, Dickens commented in a letter on the 'cold absence of smoke' in the town.²² An article in *Household Words* also repeatedly mentioned the smokeless atmosphere of the town, and its 'locked-up and smokeless' factories:

¹⁸ *Moral and Physical Condition*, pp.34-35. 'Salubrious' is to describe a healthy climate or atmosphere by Charlotte Brontë, Charles Dickens, and Thomas Hardy. I discuss the 'insalubrious' atmosphere at Ferndean in *Jane Eyre* in the next chapter of this thesis. See also *Villette*, p. 201, and *Hard Times*, p.127.

¹⁹ *Manchester in 1844*, p. 16.

²⁰ Frances Trollope, *The Life and Adventures of Michael Armstrong The Factory Boy* (London: Frank Cass and Co. Ltd, 1968), p.144. Charlotte Brontë, letter to W.S. Williams June 1849 in Margaret Smith ed., *Letters*, II, 721. *The Professor*, composed in 1845-46, published posthumously in 1857, ed. by Margaret Smith and Herbert Rosengarten (Oxford: Clarendon Press, 1987), p.17.

²¹ Mosley notes that the particular local climate at Manchester, with its humidity and prevailing wind directions, intensified the smoke problem since the smoke tended to linger once produced. *The Chimney of the World*, p.35.

²² Letter to John Forster, 29th January 1854. *The Letters of Charles Dickens*, 12 vols, ed. by Madeline House and Graham Storey (Oxford: Oxford University Press, 1965-2002), VII, 324.

We pass out of the station, astonished to perceive that the atmosphere here, instead of being thick and smoky, is as clear here as the air upon Hampstead Heath. An intelligent Prestonian explains that now, there are fifty tall chimneys stone cold and smokeless, and that ought to make a difference.²³

The writer, clearly expecting to find the industrial North smoky and unwholesome, expresses his surprise through the analogy with Hampstead Heath, as though to stress the dissonance between the impoverished working-class town in which he found himself, and the 'clear' air of the semi-rural South. Smoke constituted an insolvable paradox: in its absence, the air might be 'clear', but it was also 'cold' in a broader and more significant way. Where there was no smoke from the factories, the financial hardship engendered by lack of work meant that there could be no smoke in the domestic hearth, and 'cold' became a penetrating reality.

These conflicting ideas about smoke and industry emerge in both *North and South* (1855) and *Hard Times*. In Gaskell's novel, Mr Thornton, who has listened to Mrs Hale complain of the 'smoky atmosphere' at 'Milton' (i.e., Manchester), warns Margaret ominously of the coming strike with the words, 'You will see Milton without smoke in a few days, I imagine, Miss Hale.'²⁴ Yet though *North and South* acknowledges that industry depends on the steady 'vomiting' from factory chimneys, it also portrays the human cost of smoke in the death of Mrs Hale, a death which is closely connected with the smoky atmosphere of the town. Dickens' Mr Bounderby, speaking of the smoke in Coketown, appropriates it as '*our* smoke', which is 'meat and drink to us. It's the healthiest thing in the world, and particularly for the lungs.'²⁵ Not only does Bounderby emphasize the necessity of factory smoke, he also equates it with the 'healthiness' of the 'meat and drink' which inhabitants of Coketown are able to purchase when the factories are open. Dickens, with far less ambiguity than Gaskell,

²³ Unsigned article [James Lowe], 'Locked Out' in *Household Words*, VIII (10th December 1853), (345-48) rpt. in Flint ed., *The Victorian Novelist*, p.52.

²⁴ Elizabeth Gaskell, *North and South*, ed. by Martin Dodsworth (London: Penguin, 1970), p.164.

²⁵ *Hard Times*, p.125. My italics.

makes it clear that Bounderby is speaking from a position of self-promotion and ruthlessness. The description of the smoke at Coketown is less violent but more sinister than the belching and vomiting in many other texts: ‘monstrous serpents of smoke’ ‘trail’ around the city with apparently malign intent.²⁶

Though the sight and smell of smoke clearly affronted many commentators, several contemporary texts suggest that it was most intensely experienced in the poorest areas of Manchester. Engels noted that the smoke from the factories blew directly across the areas where ‘the workers alone’ could ‘breathe this polluted atmosphere’, whilst the wealthy inhabited ‘breezy heights’ from which they could inhale ‘healthy country air’.²⁷ The idea Engels sets out, that the bourgeoisie might have deliberately established such a topographical class-divide in the city, was clearly part of his mission to awaken the proletariat to the helplessness of their state at the mercy of the uncaring middle class. However, he was not alone in identifying this particular aspect of Manchester’s urban organization.

In 1843, the Reverend John Molesworth prepared a ‘smoke map’ for the Manchester Select Committee. The map showed that while affluent business men tended to live in, or have houses built in, areas of the town which were kept relatively smoke-free by either wind direction or distance from factories, the poorer inhabitants were housed directly in the path of the smoke-clouds.²⁸ Leon Faucher, too, noted in 1844 that ‘the merchants and manufacturers have detached villas, situated in the midst of gardens and parks in the country’,²⁹ and Angus Bethune Meach, writing in 1849, observed that ‘[t]he far outskirts of the city, again, form a sort of universally-stretching West-end. Thither fly all who can afford to live out of the smoke.’³⁰ The ‘West-end’, like ‘Hampstead Heath’ in the article on the Preston lock-out, suggests that pleasant or

²⁶ *Hard Times*, p.71.

²⁷ *The Condition of the Working Class*, p.98.

²⁸ *The Chimney of the World*, p.31.

²⁹ *Manchester in 1844*, p.26.

³⁰ *Manchester and the Textile Districts in 1849*, p.2.

healthy atmospheres were automatically identified with the South of England. The ‘flight’ of those who could afford to live on these outskirts also implies a panic associated with the smoky atmosphere of the city. This then, was a climate which could be circumvented through wealth: a ‘salubrious atmosphere’ could be purchased for a price, whilst the ‘insalubrious’ areas of the city continued to cause concern and even fear, at some distance.

One way in which the city approached the two problems of a smoky environment and the impossibility of access to unpolluted nature by the workers was the introduction of parks to Manchester. Faucher had asked: ‘If the people of Manchester wish to go out upon a fine Sunday, where must they go? There are no public promenades, no avenues, no public gardens; and even no public common.’³¹ The result of this absence of outdoor civic amenities, as Faucher perceived it, was that the ‘people of Manchester’ would drink to excess and engage in immoral activities: if there were parks to go to, perhaps they could be kept from ‘the streets’ and ‘the beer-houses’.³² After several years of campaigning, parks were established in Manchester in 1848: four years too late for Faucher to see them.³³

An ‘unsigned notice’ discussing *Mary Barton* in the *Manchester Guardian* illuminates the ways in which many of the Manchester population saw the parks in hopeful terms, and imagined that they might significantly improve both atmosphere and environment in the city. The writer criticizes Gaskell’s failure to mention the city’s parks in the novel (though in fact of course *Mary Barton* is set several years before 1848).³⁴ The article demonstrates a slightly odd expectation that a writer describing

³¹ *Manchester in 1844*, p.55

³² *Manchester in 1844*, p.27. See also Asa Briggs, *Victorian Cities* (London: Oldhams, 1963), p.132. Briggs briefly notes the contemporary hope that the parks might constitute a significant improvement to the overall environment of the city.

³³ See *Victorian Cities* p.135.

³⁴ John Barton’s trip to London to present the petition suggests the year 1839.

fictional events in the city *ought* to represent its improvement, and cannot be allowed to create a narrative world which is in any way partial or negative:

Nothing is said of the parks which have been purchased, and laid out exclusively for their [the workers'] enjoyment, where thousands of happy and intelligent faces may be seen on Saturday afternoons and on holidays, delighting themselves in innocent games or athletic exercises, invigorating alike to the body and mind.³⁵

The writer uses the parks to counter a number of contemporary ideas about Manchester: the reference to 'happy and intelligent faces', in particular, seems designed to contradict the idea that the Manchester population was 'enervated' or in a state of degenerative decline. The parks have been 'purchased' rather than 'created' or 'established', suggesting that the climates of Manchester could be improved or escaped through strictly financial tactics, while 'laid out' implies a physical blanketing of the landscape with parks. The article's depiction of the parks, then, is of a straightforward fiscal solution, and thence a forcible over-laying of the contemporary problems in the city, re-mapping and re-ordering it for the 'enjoyment' and the improvement, of those who lived there.

This article encapsulates a mood of expectation that the parks might offer real improvements in the city. Meach also cited the parks and their 'gymnastic apparatus' as part of Manchester's general amelioration in the years just preceding 1849, and Faucher's editor and translator listed 'the project for providing Public parks' among the 'great number of extensive improvements' taking place in Manchester.³⁶ This project was also, I argue, part of an attempt to change and regulate the city's environment which had a specifically moral aim. Faucher's references to 'loitering' in the streets,

³⁵ 'Unsigned notice' in the *Manchester Guardian* (28th February 1849), p.12, rpt. in *Elizabeth Gaskell: The Critical Heritage* ed. by Angus Easson (London and New York: Routledge, 1991), pp. 123-130, (p.125).

³⁶ Meach, *Manchester and the Textile Districts*, p.25 and Translator's Preface to *Manchester in 1844*, p. xii.

was to leave the country. Critics such as Raymond Williams have often read such conclusions as an avoidance of the very real social problems the novels have set out.³⁹ My argument that emigration was also a matter of exchanging one climate for another does not suggest that these conclusions were necessarily any less evasive than Williams suggests, but frames them within the context of contemporary ideas both about climate in Britain, and about the countries to which the characters migrate.

The estimated figures for emigration to the USA and to British-controlled North America in the year 1840 suggest that over 70,000 Britons left for these countries.⁴⁰ One of the more attractive propositions which countries such as America and Canada offered to the emigrant was the ‘lure of an idyllic existence’ within a version of the ‘mythical’ agrarian past which seemed to have vanished from industrial Britain.⁴¹

These countries seemed to hold out the possibility of a life lived according to the seasons, out of doors and in accordance with the natural cycle of nature, rather than the spasmodic movements of the ‘economic climate’. However, these seasons themselves were also specifically portrayed as fundamentally healthy and wholesome. In a report on ‘Emigration from the United Kingdom’ in 1826, the comments of M. Bouchette, the Surveyor General of Lower Canada, were cited to support this idea:

Though severe, the climate of Canada is far from being either unhealthy or disagreeable. The weather is generally clear and bracing; and the labour of artisans, at their out-of-door employments, is rarely suspended for many days in succession.⁴²

³⁹ See Williams, *The English Novel from Dickens to Lawrence* (London: Chatto and Windus, 1970), p.89 and *Culture and Society 1780-1950* (Harmondsworth and New York: Penguin, 1963), where Williams describes the end of *Mary Barton* as a ‘devastating conclusion’, p.91.

⁴⁰ Figures from Eric Richards, *Britannia’s Children: Emigration from England, Scotland, Wales and Ireland since 1600* (London and New York: Hambledon Press Ltd, 2004), pp.120-21.

⁴¹ Charlotte Erickson, *Leaving England: Essays on British Emigration in the Nineteenth Century* (Ithaca and London: Cornell University Press, 1994), p.34 and p.43.

⁴² Bouchette’s comments were cited in an article ‘Report from and Minutes of Evidence Taken Before, the Select Committee of the House of Commons, on Emigration from the United Kingdom’ in the *Edinburgh Review* 45, (1826), pp.49-74. Oliver MacDonagh ed., *Emigration in the Victorian Age: Debates on the Issue from Nineteenth-Century Critical Journals* (Hants. and Germany: Gregg International Press, 1973), pp.58-59.

Bouchette's report anticipates a range of reasons for the urban labourer to escape from cities such as Manchester in the 1840s. As I have shown, commentators and novelists alike perceived the climate in Manchester as both 'unhealthy' and 'disagreeable': Bouchette's reference to the 'clear' Canadian weather seems to provide a direct alternative to the smoke of the industrial city. The final sentence of the passage sets out a vision of work fundamentally opposite to the kind of labour experienced by the Manchester factory worker. Employment in Canada takes place 'out-of-doors', but perhaps even more importantly, it is constant: 'rarely suspended for many days in succession'. The unpredictable suspension of labour was, as the next sections will show, a perennial concern for the workers in Manchester, and a contingency which was difficult either to predict or surmount.

Industrial Manchester was viewed and described as a polluted landscape, where efforts at amelioration of atmosphere or environment seemed, especially in the 1840s, largely unsuccessful. Though writers in Manchester itself – Meach, Gaskell's reviewer, and Faucher's translator – defended various aspects of its environment, the sense that the industrial city was almost beyond hope persisted into the 1850s in Gaskell's and Dickens' narratives among others. In the next section, I focus on the work of one commentator in particular: Leon Faucher's *Manchester in 1844*, which develops the idea of the city's polluted climate in distinctive and polemical ways.

3. Faucher's Manchester: figuring the economic climate

Faucher, a French visitor to the city in 1843, documented his observations in a text specifically designed to outline what he saw as the city's 'Present Conditions and Future

Prospects'. The text begins by approaching Manchester from a historical perspective, describing it as an 'unknown, inaccessible region' in early British history, which through its 'abundant facilities for manufacturing labour', 'incomparable race of men' and 'features of the soil and climate', gave birth, 'Minerva-like' to industry on a huge scale.⁴³

Faucher repeatedly figures both industry and its growth in terms of climate, and specifically with *temperate* climate. He argues that the potentially disastrous effects of strikes can be surmounted in England since here:

Industry soon recovers from the convulsions which from time to time afflict her. That which would be for other nations a revolution, is to her only a shock. The sap of civilization in the temperate zone, has the same activity as the sap of vegetation in the tropics, and rapidly develops itself whatever the obstacles may be.⁴⁴

This analogy is a striking one, which draws on ideas about climatic influence on race to associate Britain's success in industry with its own temperate climate.⁴⁵ The 'sap of civilization in the temperate zone' is contrasted not with an equivalent sap in 'the tropics', but with 'the sap of vegetation': Britain spawns 'civilization', the tropics produce only 'vegetation'. However, one of the chief concerns articulated in *Manchester in 1844* is that climates in Britain - whether economic, metaphorical, or the artificially created climates inside the factories - might echo or become similar to those in tropical zones. The 'temperate' nature of any zone, then, and the differentiation between this temperance and 'the tropics', must be carefully guarded. Though Faucher describes England generally and Manchester in particular as perfectly suited to the development of successful industry, he continually warns that an over-protective trading

⁴³ *Manchester in 1844*, pp.2-4.

⁴⁴ *Manchester in 1844*, p.151.

⁴⁵ This idea pre-figures the arguments of Thomas Henry Buckle, who stated in 1857 that 'the inhabitants of temperate climates' were 'remarkable' for their 'steady and unflinching industry', as opposed to the 'fitful and capricious' national character to which very northerly latitudes give rise, or the indolence engendered by a very warm climate. *History of Civilization*, 2 vols. (London: John W. Parker and Son, 1857), I, 39-40.

environment is dangerous, and will engender an insular economy which is vulnerable to changes in economic ‘weather’. As the translator’s Preface itself observes, the ‘attainment of entire FREEDOM OF TRADE’ would prevent periodical unpredictable crises which ‘like the hurricanes of tropical climes, convert the most smiling prosperity into sudden desolation’.⁴⁶ Where the economy, and its stability, appears to be most at risk, it is figured in terms of specifically tropical climate and weather.

Faucher drew on the work of Peter Gaskell and Kay-Shuttleworth, doctors who were primarily interested in the moral and physical effects of industry. He broadens his focus from both of their texts, sharpening the sense of moral repulsion they had articulated as well as dealing specifically with what economy *is* and how it operates on every level from the personal to the societal. Faucher’s description of the factory worker, like Engels’, draws on Kay-Shuttleworth’s description of the ‘enervating’ nature of such work:

Man, when he directs his energies to the culture of soil, being exposed to the weather, sometimes falls a victim in the struggle against the elements which in other cases harden and strengthen him. Industry within doors defends him from sudden and violent maladies, but it enervates and undermines his constitution. Although a more perfect system of ventilation has been introduced, yet the human frame will never accommodate itself to such confined exertion as fourteen or fifteen hours per day; and if the occupation become hereditary, the race will infallibly degenerate.⁴⁷

As part of a repeated theme emphasizing the preferable nature of rural to indoor occupations, Faucher stresses this enervation by contrast with the man involved in ‘the culture of the soil’. Exposure to weather ‘hardens and strengthens’ these rural workers, though some inevitably succumb in the constant ‘struggle’. The differentiation between ‘sudden and violent maladies’ and a slowly ‘undermined’ constitution is significant: like the weather, illness can visit the individual without warning, and that individual may or

⁴⁶ Preface to *Manchester in 1844*, p.xiii.

⁴⁷ *Manchester in 1844*, p.116.

may not 'fall a victim' in this struggle. However, over-protection from periodic illness is as problematic in the long-term as protection from the weather. The factory walls represent an unreliable *cordon sanitaire*, 'defending' the worker from some illnesses, from the weather, and, when the factory is functioning, from poverty: at the same time, however, this leaves him weakened, with his 'frame' unable to adapt, and his race subject to degeneration.

The factory protects the worker from weather: it also behaves like a climate itself. This becomes highly significant in depictions of the sexuality of the factory workers, and of women in the factories in particular. Concerns about women in work, and especially working in factories, were an underlying and constant refrain throughout the period, expressed both in social commentary and in the novel.⁴⁸ The working woman was frequently represented as a different race entirely, a representation which was sharpened by ideas about the ways in which she was acted upon by new, quasi-climatic, influences. Susan Meyer has argued that 'white women [...] occupied an ambiguous position on the racial scales of nineteenth-century science', and has commented on the overlap between the position of women, and of all 'dark-skinned races' in the nineteenth century.⁴⁹ Where women were presented as like members of 'dark-skinned races', what Deirdre David has termed 'the myth of races made excitable by tropical climate' was also frequently applied to them, developed and exploited by commentators seeking to explicate and even dramatize the effects of industry on both the human and the social body.⁵⁰

⁴⁸ Engels bemoans the 'complete ignorance' of 'all the factory girls' of 'the most elementary accomplishments of the housewife', p.168. In *Sybil*, Mr St Lys comments that, where women are out at work, 'what we call a domestic life is impossible to be realized' (p.144), while Mary Higgins in *North and South* is 'fit for' nothing, and cannot run a house because her mother and sisters have worked in factories and been unable to teach her the tenets of housewifery (p.103). On working women and the anxiety they produced in society see Valenze, Mort and Zlotnick.

⁴⁹ Susan Meyer, *Imperialism at Home: Race and Victorian Women's Fiction* (New York: Ithaca; London: Cornell University Press, 1996), pp.16-19.

⁵⁰ Deirdre David, *Rule Britannia: Women, Empire and Victorian Writing* (Ithaca and London: Cornell University Press, 1995), p.103.

While Kay-Shuttleworth had focused on the ‘enervating’ effects of the factories on both men and women, Peter Gaskell’s analysis established the factories as what we might now term ‘microclimates’, and was particularly concerned with their effects on the women who worked in them:

The stimulus of a heated atmosphere, the contact of opposite sexes, the example of license upon the human passions – all have conspired to produce a very early development of sexual appetencies. Indeed, in this respect, the female population engaged in mill labour, approximates very closely to that found in tropical climates; puberty, or at least sexual propensities, being attained almost coeval with girlhood.⁵¹

Gaskell gives three reasons for the ‘development of sexual appetencies’: heat, proximity of the opposite sex and exposure to ‘license’. This, then, is actually an environment composed of all surrounding factors, of which the ‘heated atmosphere’ is only one. However, in going on to compare the ‘female population’ to ‘that found in tropical climates’, Gaskell narrows the broader question of environment into the specific model of climate, to account for apparent early puberty and ‘sexual propensities’. As environment becomes ‘climate’, ‘heated’ is translated into ‘tropical’, and in this translation, takes on a range of new meanings and implications.

A ‘tropical’ climate implied in the Victorian period not simply warmth, but diseases of different and more dangerous kinds than could be found elsewhere. Alan Bewell has argued that the concept of ‘the tropics’ shifted in the Romantic period from a ‘climatic term’ to a ‘social, biological and medical construction’, central to which was ‘the notion that the tropics were fundamentally sick and needed to be cured if they were ever to become fully habitable by human beings.’⁵² References to ‘tropical climates’ by Peter Gaskell, as well as by Faucher and Engels, suggest that these men did indeed read

⁵¹ Peter Gaskell, *Artisans and Machinery: The Moral and Physical Condition on the Manufacturing Population* (London, 1836), cited in Zlotnick, pp.153-54.

⁵² *Romanticism and Colonial Disease*, p.18.

the factories both as sick themselves, and as environments which caused disease. The ‘sickness’ they identified there was not cholera, malaria or dysentery, however, but sexual ‘license’.

Faucher’s description of the factories, like Peter Gaskell’s, conflates the broader environment of the factories with the tropics:

In congregating so many men, women and children, together without any other object than Labour, there is full scope for the birth and growth of passions which eventually refuse to submit to constraint, and which end in unbridled license. The union of sexes, and the high temperature of the manufactories, act upon the organisation like the tropical sun; and puberty is developed before age and education have matured the moral sentiments. The factory girls are strangers to modesty. Their language is gross, and often obscene; and when they do not marry early, they form illicit connexions, which degrade them still more than premature marriage.⁵³

Like Peter Gaskell, Faucher shifts questions relating to the social and the atmospheric into the language of climate. However, Faucher’s concern is not only medical but moral: what Peter Gaskell had described as the ‘development of appetencies’ is here expressed in more emotive terms as ‘the birth and growth of passions’. Faucher imposes a narrative onto this ‘birth and growth’, the ‘constraint’ they eventually defy and the explosion into ‘unbridled license’ in which they end. This miniature narrative of check, restraint and release makes a story of the situation Faucher describes, and removes it from the realms of the physical into a more alarmist, cataclysmic account. The ‘early puberty’ to which Faucher refers would appear to be specifically female puberty, since the next sentence refers to the ‘factory girls’, their immodesty and their degradation. Puberty here is a kind of moral index: to achieve it too soon is not only a risk because it enables young girls to become pregnant at an early age, but is also a

⁵³ *Manchester in 1844*, pp.45-46.

symptom in itself of their debased and 'tropicalized' state.⁵⁴ Faucher uses the image of the 'tropical' factory as part of a wider argument about the societal implications of working women, positioning them as a separate breed or race, rather than simply as prematurely pubescent. However, when Faucher focuses on the movements of the economy, the figure whose exposure to climate he describes is more often male than female.

Faucher invokes climate as a metaphor for the operations and the problems of a mechanized, large-scale industrial environment, contrasting the rhythm and cyclicity of seasonal change with the unpredictable fluctuations of the urban economy. His discussion of the movements of 'the industrial world' stresses the importance of 'constancy and regularity of labour' by referring to 'the irregularity of the seasons' in the life of the agricultural labourer.

There are years of plenty, and years of famine; every summer has not in equal degree the genial warmth of the sun, or the same amount of fertilising rain: and thus, in the agricultural districts labour is subjected to continual changes; each day does not yield its bread.⁵⁵

Thus, the rural worker learns 'prudence and economy', saving and hoarding according to his - and it would seem to be 'his' rather than 'her' - judgment. Though the passage begins with 'years' and seasons to embody the variable nature of agricultural economy, Faucher then invokes the day-to-day contingency of weather itself, and applies this to the daily 'yield' of bread. However, like the enervated factory worker whose 'constitution' becomes 'undermined' through lack of exposure to the weather, the factory worker is unable to prepare for 'bad seasons', and must 'depend upon the

⁵⁴ Janis McLaren Caldwell notes the perceived desirability articulated in eighteenth-century medical treatises of delaying the menarche in young girls for as long as possible, through regular exposure to fresh air and exercise. *Literature and Medicine in Nineteenth-Century Britain: From Mary Shelley to George Eliot* (Cambridge: Cambridge University Press, 2004), p.21.

⁵⁵ *Manchester in 1844*, p. 134.

factories always being open' to him.⁵⁶ The factory becomes a larger symbol of over-protection from the elements and the weather: the physical reality of working there weakens the constitution, and renders the body weak and susceptible, but the very fact of being employed in a factory insulates the worker in unhealthy ways from the inevitable and necessary movements in the economic cycle.

This model also applies on a larger scale to industry itself. Faucher explains that because Manchester manufacturers do not have to contend with foreign competition, and therefore produce goods only for trade within their own country, there are few regular disturbances to the 'economic climate':

This state of things is not always favourable to a vigorous development of industry, for, when it is sheltered from the action of external influences, it is like a man who is never exposed to the inclemency of the weather – he remains feeble, and vegetates in a state of mediocrity.⁵⁷

The male body seems better able than the female to carry the symbolic import of Faucher's argument: industry is a beleaguered everyman, rather than a debased female factory worker. The feeble and vegetative state of this man is a useful method of explaining what Faucher sees as the primary problems of an over-protective industry where competition is the 'weather' to which the economy must become hardened and resilient. However, the term 'vegetates' also recalls Faucher's earlier distinction between the 'civilization' which grows from a temperate climate, and the 'vegetation' found in a tropical one. If factory atmospheres had become 'tropical' and acted on female workers accordingly, this passage seems to articulate an anxiety that the temperate economic climate, too, might start behaving in dangerously 'tropical' ways.

⁵⁶ *Manchester in 1844*, p.136.

⁵⁷ *Manchester in 1844*, p.138.

Climate and weather are almost always presented as abstractions in Faucher's text. Drawing on contemporary climatic theories of human development and sexuality, as well as medical ideas about the necessity of exposure to the weather, Faucher presents his arguments about the economy, the individual and the city through metaphors which would have been readily accessible to his readers. These climatic metaphors are also strengthened, I argue, by the contemporary sense that the Manchester climate had gone awry, making contrasts with agricultural workers in the fresh air all the starker. Climate in the city was an issue of urgent concern: Faucher builds on all aspects of this concern in his polemic, from the argument that Manchester's economy grew out of its climatic peculiarities, to the notion that the general atmosphere in the city was leading inexorably to decline and degeneration. In the next section, I show how anxieties about the economic climate and its effects, as well as the construction of the city as smoke-covered and polluted, are represented and challenged in Gaskell's *Mary Barton* through very different uses of a climatic method of explication.

4. *Mary Barton*: the lottery of weather

Elizabeth Gaskell saw the Manchester workers 'as if doomed to struggle through their lives in strange alternations between work and want; tossed to and fro by circumstances', living a 'lottery-like' existence and 'convulse[d]', periodically by 'agony'. (Preface, pp.xxxv-vi). Like Engels, who presented the 'proletarian' submerged in 'floods of varying chances', entirely passive and powerless to control his own circumstances, Gaskell's vision of the worker is of an individual almost entirely at the

mercy of economic fluctuations he barely understands and certainly cannot influence.⁵⁸ In this section, I argue that Gaskell frequently employs the weather to represent this situation. Like Faucher, Gaskell figures the industrial environment in climatic terms, but in *Mary Barton*, this climate is most strongly felt in terms of the ‘episodes’ of weather from which it is composed.

The climate of *Mary Barton* is almost unmitigatedly harsh, and the weather within it often ‘bitter’ (p.64 and p.69) or ‘stormy’ (p.363). Weather is fine only in the opening chapter, which I discuss below; in memory (when Job Legh recalls that ‘it were fine weather’ as he brought the infant Margaret home from London, p.120); or in theory (when the narrative observes that the girls’ shawls are worn more loosely ‘at midday or in fine weather’, but adapted ‘in colder weather’, (p.2)). Winds are, with few exceptions, from the east: they are ‘keen’ (p.8, p.48 and p.220), ‘bleak’ (p.48), ‘terrible’ (p.55), ‘powerful’ (p.57), ‘mighty’ (p.59), or ‘bitter’ (p.65). They batter and chill the Manchester poor, and also drive and heighten the flames from Carson’s burning factory (pp. 55-59). *Mary Barton*’s episodes of weather, then, form a narrative of oppressive cold and powerful wind.

The novel makes surprisingly few references to factory smoke, however. Only as Mary leaves Manchester does she look back, from the rear-facing seat on the train, at ‘the factory-chimneys, and the cloud of smoke which hovers over Manchester’, and then she does so in a spirit of memory and nostalgia for ‘the objects of her childhood’ (p.33). The smoke in Manchester is an essential part of the city’s characterization, and yet it is seen only from a distance in the novel, as though to suggest that to live in Manchester is to become immune to its unaesthetic and unhealthy smoky atmosphere. In Liverpool, Charley observes that he could not ‘abide a home in the middle of smoke’: yet as Mary watches the smoke from the steam-boats in Charley’s own city, she ‘wonder[s] at [his]

⁵⁸ *The Condition of the Working Class*, p.127.

intolerance of the smoke of Manchester' (p.341). All cities, it appears, have their own climates, which are familiar and tolerable to those who inhabit them, and yet could not be 'abided' by those from other cities. I argued in my Introduction that climate was frequently used to figure 'place' in the Victorian period: the characterization of Manchester through its smoky climate in *Mary Barton* is accepted and yet generally unspoken. When Jem asks Mary to emigrate to Canada, he asks, '[w]ould it grieve thee sore to quit the old smoke-jack?' (p.425), figuring Manchester as a foreigner might even before leaving it to assist in the process of 'selling' Mary the idea of Canada's healthy climate in opposition to Manchester's smoke.

For those who live in the Manchester of *Mary Barton*, however, life is composed of the episodes of weather which occur there, rather than defined by its climate as this might be perceived from a distance or by an outsider. Indeed, the only use of the term 'climate' is by the young sailor recounting his voyage and his search for a mermaid during an evening at Job Legh's home: '[i]t stands to reason th'sea hereabouts is too cold for mermaids; for women here don't go about naked on account o' climate' (p.175). The comical assumption that the only reason women in Britain might not 'go about naked' is because the climate is too cold is clearly the main import of this comment, but the remark also points to a sense that climate is something which one notices only by contrast with other places and latitudes. What matters, and what affects survival from day to day, is the weather: just as the worker cannot always grasp the wider circumstances which determine his 'agony' or 'varying chances', but only remain sharply conscious of their immediate results and effects, so climate is both less relevant, and less comprehensible, than the quotidian reality of weather.

Gaskell set out, in *Mary Barton*, 'to give some utterance' to the 'agony' suffered by the 'dumb people' she encountered in the streets of Manchester (Preface, pp.xxxv-vi). In finding a voice to give this 'utterance', she required what J.W. Childers has

called an 'interpretive trope' which could 'provide the fullest possible depiction of this alien, unfathomable world'.⁵⁹ Childers argues that 'suffering' provided the terms with which Gaskell could achieve this depiction in *Mary Barton*, since suffering 'reaches across class boundaries' and can therefore be understood by readers of all kinds. However, I argue that the weather in *Mary Barton* fulfils a similar function to 'suffering' as such a narrative strategy. Gaskell shows that the workers are subject to changes in all kinds of 'weather' not through metaphor but by describing in detail a harsh winter and its bitter cold, when the weather powerfully affects both individuals and the economy. Any reader who had experienced a cold winter was only required to make a small leap of imagination and empathy to understand exactly how this would affect poorly-clothed and malnourished workers, and from there, how the winter might also affect the economy. *Mary Barton* lingers on and details the weather to which the workers are vulnerable to illustrate the workings of 'Political Economy' and the economic climate in human and comprehensible terms.

The opening of the novel depicts the Manchester workers enjoying a day's holiday in the pastoral setting of Green Heys Field. Here, the workers enjoy nature in an unpolluted, rural setting:

It was an early May evening – the April of the poets; for heavy showers had fallen all the morning, and the round, soft, white clouds which were blown by a west wind over the blue sky, were sometimes varied by one blacker and more threatening.

(p.2)

This is a noticeable contrast to the visions of Manchester climates set out by Peter Gaskell, Kay-Shuttleworth, Faucher and Engels, and echoed in other novels of the period. The allusion to Chaucer positions weather in *Mary Barton* as part of a literary tradition which stretches back beyond the industrial setting of the novel. John Lucas

⁵⁹ Joseph W. Childers, *Novel Possibilities: Fiction and the Formation of Early Victorian Culture* (Philadelphia: University of Pennsylvania Press, 1995), p.167.

argues that Gaskell's novel emphasizes the organic continuity of the workers' consciousness, which is composed of 'habits of life, of speech, of amusement' which they have brought to the growing city from the surrounding countryside.⁶⁰ Here, this kind of continuity is also evident in the depiction of weather and the rich poetic history of that weather, and thence to the shared experience of both workers and 'the poets' – an association which might seem not only surprising, but even controversial. At the same time, however, a disjunction also appears, since this is 'a May evening' which is only *like* 'the April of the poets'. The 'soft, white clouds' constitute a deliberate emphasis on the absence of smoke and black clouds at Green Heys Field: but the wind occasionally blows one 'blacker and more threatening' across the sky. The threat of the dark clouds establishes the proximity of the industrial city, and emphasizes the ever-present possibility of changes in the weather and all that they imply.

Changes in the weather are even more important than they might initially appear. When John Barton enters the narrative, so too does a profound pessimism about the industrial economy, which is developed in the famous 'Dives and Lazarus' speech and repeatedly articulated through references to the weather. Barton compares the Manchester women to 'Buckinghamshire people' such as his wife and her sister Esther, recalling the theme in social commentary of the pale, enervated state of the Manchester factory workers: 'You'll not see among the Manchester wenches such fresh rosy cheeks' (p.6). However, Barton's observation that 'beauty is a sad snare' leads to his rumination on Esther's downfall and its derivation from her work in the factory. 'The worst of factory work for girls', he argues, is that they 'can earn so much money when work is plenty, that they can maintain themselves anyhow.' Like Faucher's factory workers, the 'girls' are improvident, and unprotected from sudden change of any kind. A tone of 'gloomy prophecy'⁶¹ looks ahead to times when the work is not 'plenty', and

⁶⁰ *The Literature of Change*, p.38.

⁶¹ Childers, p. 161.

the factory girls, like the workers Faucher describes, become vulnerable to the vicissitudes of the economic climate.

The difference between Faucher's argument and Barton's is that, where Faucher ultimately presents these changes in metaphorical terms, with weather symbolizing the external forces of trade to which industry is susceptible, Barton describes the possibility of unemployment and poverty themselves in specifically meteorological terms:

If I am out of work for weeks in the bad times, and winter comes, with black frost, and keen east wind, and there is no coal for the grate, and no clothes for the bed, and the thin bones are seen through the ragged clothes, does the rich man share his plenty with me, as he ought to do, if his religion wasn't a humbug?

(p.8)

Gaskell herself was aware that the winter was a significant problem in times of economic stress. She remarked in a letter to John Pierpoint during a period of hardship in Manchester that 'if it were winter, the lower classes would find it almost unbearable.'⁶² Winter in *Mary Barton* is used several times to accentuate the sufferings of the poor; when Esther tries to enlist Jem's sympathy for her descent into prostitution, she pleads: 'it was winter, cold, bleak winter; and my child was ill, so ill, and I was starving' (p.188). Barton's speech employs this idea in polemical terms. Having begun by stating directly the possibility of being 'out of work', Barton then intensifies and sharpens his description, clause by clause, presenting a picture of winter poverty to impress upon Wilson the dire consequences of the 'bad times'.

'The bad times' suggest a fatalistic acceptance on Barton's part that such times are inevitable within the cycle of economy, just as winter is inevitable in the seasonal cycle. The times 'when the work is plenty' are as temporary as the fine weather on this May evening. The two examples of winter weather (black frost and east wind), each

⁶² Letter to John Pierpoint, 12th June 1841. J.A.V. Chapple ed., *Elizabeth Gaskell: A Portrait in Letters* (Manchester: Manchester University Press, 1980), pp.29-30.

given its own clause, pile misery upon misery by separating and specifying precisely what winter means in physical terms. The repetition of 'no' in the references to Barton's imagined lack of coal and bed-clothes responds symmetrically to the two kinds of winter weather just outlined, and continues the process of intensification. However, though the speech ostensibly refers to Barton himself ('If *I* am out of work', 'share his plenty *with me*'), it also makes suffering universal, by placing the impersonal 'the' in relation to 'thin bones' and 'ragged clothes'. By employing the weather to strengthen his depictions of the physical and individual effects of unemployment in apparently personal tones, then, Barton broadens his argument to apply to the Manchester labouring community as a whole.

Seasonal change may be anticipated, but the intensity and duration of weather within those seasons is entirely unpredictable. When winter does arrive, desperate attempts at prophecy appear in response to the cold, and to the economic effects which follow:

It was towards the end of February, in that year, and a bitter black frost had lasted for many weeks. The keen east wind had long since swept the streets clean, though in a gusty day the dust would rise like pounded ice, and make people's faces quite smart with the cold force with which it blew against them. Houses, sky, people, and everything looked as if a gigantic brush had washed them all over with a dark shade of Indian ink. There was some reason for this grimy appearance on human beings, whatever there might be for the dun looks of the landscape; for soft water had become an article not even to be purchased; and the poor washerwomen might be seen vainly trying to procure a little by breaking the thick grey ice that coated the ditches and ponds in the neighbourhood. People prophesied a long continuance to this already lengthened frost; said the spring would be very late; no spring fashions required; no summer clothing purchased for such a short uncertain summer. Indeed, there was no end to the evil prophesied during the continuance of that bleak east wind.

(p.48)

Both the 'black frost' and the 'keen east wind' John Barton had predicted are realized here, seeming to confirm the accuracy of his wider predictions. Each action and effect of the winter is felt as both continual, and immediate: the dust 'would rise', and 'make

people's faces quite smart'. This dust itself takes on the attributes of the cold, feeling 'like pounded ice' as it hits people's faces in tandem with the east wind. The weather becomes an entirely unpredictable, unaccountable force: though there 'was some reason' for the 'grimy appearance' of the people, the dark appearance of the landscape itself is without reason or logic ('whatever there might be for the looks of the landscape').

Faced with this unfathomable set of circumstances, then, people turn to 'prophecy'. The sentence beginning '[p]eople prophesied' moves from an almost technical register ('a long continuance', 'already lengthened') into more abrupt syntax: 'the spring would be very late; no spring fashions required; no clothing purchased'. A chorus of commentary and grim prophecy sounds, with one gloomy prediction immediately following the next. We hear these predictions as though through Mary's ears, each one designed to engender more despair and worry particularly to the seamstress, with their references to reduced demand for clothing and fashion. The weather is everyone's conversational and intellectual property: this is why it provides such a useful illustration for the worsening of economic circumstances. Yet it is also no-one's profession, and appears as incomprehensible as 'Political Economy' to those who struggle to survive within its unpredictable changes.

In *The Mayor of Casterbridge* (1886), Hardy depicts the incomprehensible nature of weather and the impossibility of 'prophesying' or 'prognosticating' it which leads Henchard and others to consult the 'forecaster or weather-prophet', Fall, as I show in Chapter 4. In *Mary Barton*, by contrast, the community consults and speculates together, demonstrating the human bonds and kinship which are central to the novel, but also suggesting the limitations of these bonds. No individual is assumed to have authority or special knowledge of any kind, as each leads a 'lottery-like' existence, where the future can scarcely be guessed (Preface, p.xxxvi). Hardy's farmers try to

'feel' the coming changes of the weather: Gaskell's industrial workers talk. The intense and anguished talk about the weather contrasts sharply with the conversation of the mill-owners. These men, waiting to consult with the workers, are compelled by etiquette to talk first of the weather, and cannot discuss business until they have 'done their duty by all the showers and sunshine which had occurred during the past week' (p.212). To the mill-owners, talking about the weather is an entirely phatic activity, in keeping with their trivial approach to the meeting itself. The 'showers and sunshine' make little difference to their own interests, and so their conversation does not include prophecy or speculation, but a summary overview of weather which has already occurred.

For the workers, however, talking about the weather is so highly charged an activity that the terms in which it is undertaken come to be used in other situations in which the future is frighteningly uncertain. After John Barton's unsuccessful trip to present the charter in London, hopelessness and uncertainty about the future are presented in the same terms as the weather, and the workers of Manchester talk of the situation as they talked of the long winter:

Despair settled like a heavy cloud; and now and then, through the dead calm of sufferings, came pipings of stormy winds, foretelling the end of these dark prognostics. In times of sorrowful or fierce endurance, we are often soothed by the mere repetition of proverbs which tell the experience of our forefathers; but now, 'it's a long lane that has no turning', 'the weariest day draws to an end' etc., seemed false and vain sayings, so long and so weary was the pressure of the terrible times.

(p.130)

If weather induces misery and hardship, misery and hardship are also like the weather. Despair is 'a heavy cloud', yet the 'stormy winds' might augur the end of the expectation of suffering in the future. The action of these winds is extremely difficult to determine: the 'pipings' seem to prefigure the wind itself, which in turn only 'foretells' the possibility of 'the end' of the 'prognostics'. The meaning of the sentence, like hope

itself, is infinitely deferred. 'Prognostics' here might refer either to the predictions made by the people, or to the actual indications of disaster; both senses were in use in the mid-nineteenth century.⁶³ In either case, the use of 'stormy winds' which might more usually be expected to presage chaos or disturbance seems dissonant as an omen of the end of despair, and the linguistic complexity of the sentence underlines the chaotic and meaningless nature of the workers' attempts to predict the future.

As John Barton began his 'Dives and Lazarus' speech referring to himself alone and then broadened his argument by making suffering universal, Gaskell moves from the 'despair' of the novel's characters to a general comment on how 'we' might be reassured in such times, by the experience of 'our' forefathers. The similarities between hardship and bad weather allow Gaskell to universalize the situation of the workers by invoking an assumed shared experience between reader and characters: that is, the communality of proverbs repeated by 'our' forefathers. Once this kinship is established, the text returns to the workers' own sense that such 'sayings' 'seemed false and vain'. The possibility of a happier future is as difficult to divine as a change in the weather, but the increasingly desperate situation means that attempts to do so are almost offensively fruitless.

The weather becomes less prominent as the narrative's central interest moves to the murder of Harry Carson, Jem's false arrest, Esther's reappearance and Mary's change of heart. Finally however, through Jem and Mary's emigration, the novel broadens its concern with quotidian weather both literal and metaphorical into climate itself. *Mary Barton* apparently concludes that the climate which is constituted by economic and meteorological 'episodes' is one which can be escaped only in terms recalling the discourses of emigration I outlined in the first section of this chapter. The description of Jem and Mary's life in Canada begins as from an almost visionary

⁶³ See *OED*.

perspective: 'I see a long, low wooden house, with room enough and to spare' (p.463). From Manchester in 1848, Gaskell's vision is stretched to Canada in terms which seem to derive more from imagination than observation: the setting is conjured, rather than described, in the vivid historic. Here, '[t]he glory of an Indian summer is over all': not only is the weather manifestly more pleasant, but it is markedly constant. This constancy is affirmed in the description of Mary awaiting Jem's return from work:

At the door of the house, looking towards the town, stands Mary, watching the return of her husband from his daily work; and while she watches, she listens, smiling,

"Clap hands, daddy comes,
With his pocket full of plums
And a cake for Johnnie."

(p.463)

The opening of this final section initially makes it unclear whether Mary's waiting at the door is being presented as daily and continual, or whether this is a specific moment, as does the present tense, and the reference to Jem's 'daily work'. This 'daily work' also recalls the promotional language surrounding emigration which I discussed above: in Canada, work is as constant as the weather. Mary song to her son emphasizes assumptions both of constancy ('daddy comes') and of plenty ('pocket full of plums'), which Jem then validates by arriving with fruit and cake. The novel concludes with Jem's information that Margaret, Will and Job Legh all intend to emigrate to Canada: in Job's case 'to try and pick up a few specimens of Canadian insects' (p.464). This final reference to Job's endeavours in natural history reads as a confirmation of the absolute difference between the Canadian climate and the 'smoke-jack' left behind.

This chapter has shown how the Manchester climate changed in response to industrial growth, and how this change was depicted in writing of all kinds in the 1830s and 40s. The polluted atmosphere of the city became an important part of its regional distinction. From descriptions of Manchester as perpetually over-hung by black clouds

‘vomited’ from factories, to Mary Barton’s sense of familiarity with these clouds because they represent home and childhood, Manchester’s atmospheric and climatic peculiarities helped distinguish it as a unique city with its own microclimate. Faucher developed this idea by extending the distinction into distant history, and extended it in his opposition between tropical and temperate climates, and his argument that Manchester’s unique climatic atmosphere could be tolerated and even welcomed, as long as it maintained and withstood its temperate, variable fluctuations. Gaskell, like Faucher, used the weather as a method to convey a vision of economy: yet in *Mary Barton*, the problem set out is not that an individual might become immune to local climate, but that he or she will always feel the effects of the weather within it keenly and painfully. In *Mary Barton*, the individual in the midst of an incomprehensible climate and the weather which that climate imposes evokes the wider problem of the worker’s ‘lottery-like’ situation. In this ‘economic climate’, nothing can be ‘prognosticated’ with certainty, and periodic phases of ‘agony’ must, it seems, be either endured or exchanged for a climate which is more constant in every sense.

CHAPTER 2

'STRANGELY TRYING': READING THE BRONTË CLIMATE.

1. Introduction

During the same years in which the polluted atmospheres in industrial cities caused anxieties among novelists and commentators and led to the frequent recruitment of the idea of the individual at the mercy of changing weather, the Brontës at Haworth existed in complex relation both to industrialized climates, and to the ‘natural’, unpolluted but harsh climate of the Yorkshire moors. They also engaged closely with a number of discourses about the effects of the weather on the body, including Buchan’s theory of the ‘living barometer’, as I shall show. Both the industrial environment and the Yorkshire climate itself affected the lives and novels of the Brontës in ways which have not yet been fully explored, and which also relate to broader discourses of climate, place, region and health during the period. The dramatic Brontë climates which have been remembered by readers, and recently largely ignored by critics, have, I suggest, served to obscure this. In this chapter, I begin by discussing this problem, and then detail the discourses of climate and its effects which lie behind the memorable weather descriptions in all of the Brontë novels, particularly those in *Villette* (1853), *Wuthering Heights* (1847) and *Jane Eyre* (1847).

Where climate and weather appear in the Brontës’ novels, I argue, they are frequently inflected with a range of meanings and inheritances. This chapter explores the discourses invoked, and the connections between them, by reading climate first, as an ongoing pre-occupation throughout the lives of the Brontës. I then focus on Charlotte Brontë’s correspondence, which provides an insight into middle-class, and female, discussions of weather, air, and health both physical and mental. This correspondence represents an area of anxiety and self-examination which expresses many of the discourses outlined in relation to Haworth during the period. I explore Brontë’s inscription of such

anxieties in *Villette*, before turning to the narrative and thematic significance of climate in *Wuthering Heights* and *Jane Eyre* in particular.

As in *Mary Barton*, weather in the Brontë narrative is both frequently unpredictable and a part of daily life. However, climate is also a term which the Brontë correspondence and novels (particularly *Jane Eyre*) consistently invokes to identify and define place. Charlotte Brontë, as I shall show, was conscious both of the climate in which she herself, or her characters, were placed at any given moment, and of the contrast between these climates and those which existed elsewhere on the globe. For Brontë, climate was both a ‘narrative’, to use Sergeant Troy’s terms once again, and a setting.

The passage which follows is at the same time one of the most well-known introductions to a Victorian novel, and one of the most famous instances of weather in the Victorian narrative. I include it because it has often seemed to invite a reading of Brontë weather which this chapter will argue only partially accounts for the complexity of the narrative climate:

There was no possibility of taking a walk that day. We had been wandering, indeed, in the leafless shrubbery an hour in the morning; but since dinner [...] the cold winter wind had brought with it clouds so sombre, and a rain so penetrating, that further out-door exercise was now out of the question.¹

Jane Eyre’s cancelled walk, and the way in which it frames her interiority both physical and emotional in the novel’s first chapter, is central to her representation as an isolated, lonely child, continually threatened by the elements. The ‘nipped fingers and toes’ she describes as the inevitable result of these walks impress upon the reader the harsh physical effects of the climate in which Jane finds herself - not only here, but throughout the narrative. The

¹ Charlotte Brontë, *Jane Eyre*, ed. with introd. and notes by Michael Mason (London and New York: Penguin, 1996), p.13. All further references are to this edition.

winter afternoon Jane observes from her window seat, with its 'pale bank of mist and cloud', its 'wet lawn and storm-beat shrub' and its 'ceaseless rain' (p.14) begin the contrast maintained throughout the narrative between warmth and cold, fire and ice, need and comfort.

This is the kind of weather which critics and readers alike have noticed, and to which they have responded. 1960s and 70s criticism of the novel identified a conflict between fire and 'Eyre', between the heat of the exotic, 'Angrian' climates of Brontë juvenilia and the cold or stormy climates of Charlotte Brontë's novels,² but since the move away from this kind of structuralist approach, the wider significance of Brontë climates has been explored in detail only by Alan Bewell, in his analysis of imperialism and anti-imperialism in *Jane Eyre*.³ This chapter seeks to fill the space between early, structuralist explorations of climate in the novels, and Bewell's specific focus on 'colonial disease' by showing that climate and climatic ideas about health, imperialism and place are all inscribed in the Brontës' novels.

The cold and forbidding weather in the early chapters of the *Jane Eyre*, along with *Wuthering Heights*' 'whirl of wind and suffocating snow',⁴ have in many ways served to obscure some of these discourses through their dramatic impact and sheer prominence, and have come to be read as representative of a 'Brontë climate'. Not only has 'the iconography properly associated with *Wuthering Heights*'⁵ encroached on readings of other Brontë climates, but it has also become conflated with climate as it was involved in the

² David Lodge, 'Fire and Eyre: Charlotte Brontë's War of Earthly Elements' in Lodge, *The Language of Fiction: Essays in Criticism and Verbal Analysis of the Novel* (London: Routledge and Kegan Paul, 1966 rpt. 1984), pp.114-43, and Nina Auerbach, 'Charlotte Brontë: the Two Countries', *University of Toronto Quarterly*, XL, II, (1973), 328-42.

³ *Romanticism and Colonial Disease*, pp.277-95.

⁴ Emily Brontë, *Wuthering Heights*, ed. with introd. and notes by Pauline Nestor (London and New York: Penguin, 1995, rpt 2003), p.14. All further references are to this edition.

⁵ Patsy Stoneman, 'The Brontë Myth' in *The Cambridge Companion to the Brontës*, ed. by Heather Glen (Cambridge: Cambridge University Press, 2002), p.223.

lives of the Brontës themselves. Emily Brontë's much-vaunted emotional attachment to the moors and their natural scenery seems to have led the way for a reading of *Wuthering Heights* which views the novel's storms and winds as a direct and uncomplicated representation of the weather at Haworth – both in nature, and in significance.⁶ As I shall show, however, the weather in *Wuthering Heights* is more complex, and more evocative of contemporary medical discourse, than has generally been acknowledged. Climate at Haworth itself was also implicated and recruited in several discussions of health and place during the period. Gaskell's *Life of Charlotte Brontë* (1857), for example, presents Haworth as remote, bleak and windswept, but also as an industrialized township suffering many of the same environmental problems as Manchester in the 1840s.⁷ This chapter investigates the interplay between these two faces of mid nineteenth-century Haworth, and the ways in which climate was implicated in both, particularly in terms of the diseases prevalent there.

Virginia Woolf commented in 1904 that:

The *Life*, by Mrs Gaskell, gives you the impression that Haworth and the Brontës are somehow mixed. Haworth expresses the Brontës; the Brontës express Haworth; they fit like a snail to its shell.⁸

Woolf presents this as a received idea which is open to debate, and sardonically queries it, speculating that perhaps the Brontës' literary output would not have been much different

⁶ See for example Romer Wilson's comment that although on the day she visited Haworth the weather was 'hot', this is 'an accident', since Haworth is equally likely to suffer snow in September or May: 'there is no end to winter here'. *All Alone: The Life and Private History of Emily Jane Brontë* (London: Chatto and Windus, 1928), pp.6-7.

⁷ Gaskell refers to the Report by the Board of Health on Haworth in 1850, and notes that the town was subject to typhus. Elizabeth Gaskell, *The Life of Charlotte Brontë*, ed. with introd. and notes by Alan Shelston (London: Penguin, 1975), p.340. All further references are to this edition.

⁸ Virginia Woolf, 'Haworth, November 1904' in Andrew McNeillie ed., *The Essays of Virginia Woolf* 6 vols. (New York: Harcourt, Brace, Jovanich, 1986), I, 5-9, rpt. in McNeess ed., *The Brontë Sisters: Critical Assessments*, 4 vols. (Sussex: Helm Information, 1990), I, 618-21 (p.618).

had the parsonage been uprooted to a London slum, though she is nonetheless curious to visit the by then famous Haworth. The impression that Haworth and the Brontës are ‘somehow mixed’ is, I argue, not only powerful but also justified to an extent. However, the precise nature of this local context embodied by Haworth needs to be considered in more detail. In ‘expressing Haworth’, the Brontës also expressed several local and contemporary ideas about climate, health and the individual. If we look in more detail at the various ways in which climate was visibly associated with health in the town during its inhabitation by the Brontës, the connection becomes far more fruitful.

Certainly Haworth parsonage was, and is, an ideal location from which to observe the ever-changing weather of the Yorkshire moors. The parsonage, at the top of the hill in Haworth, is located, as Patsy Stoneman notes, in a position ‘pivotal between nature and culture’.⁹ Juliet Barker has described the Haworth climate as almost continually windy, and its landscape as ‘in thrall to the sky, which is rarely cloudless and constantly changing’.¹⁰ To be ‘in thrall’ to the sky suggests a certain helplessness against the elements, but this very vulnerability is explored and questioned in several Brontë narratives.

This chapter posits climate and weather as an important part of Charlotte Brontë’s negotiation between what Sally Shuttleworth has described as the ‘physiological, mental, and emotional economies of womanhood’, all of which were, in the mid-Victorian period ‘regarded as interdependent’: an interdependence which Brontë also repeatedly affirms.¹¹ In this context I also intend to build on the ideas raised by Shuttleworth’s relatively brief

⁹ ‘The Brontë Myth’, p.220.

¹⁰ Juliet Barker, *The Brontës* (London: Weidenfield and Nicholson, 1994), p.94.

¹¹ ‘Medical Discourse and Popular Advertising in the Mid-Victorian Era’ in Mary Jacobus, Evelyn Fox Keller and Sally Shuttleworth eds, *Body/Politics: Women and the Discourses of Science* (New York and London: Routledge, 1990), pp.47-68, (p.47). See also Introduction to *Embodied Selves: An Anthology of Psychological Texts 1830-1890*, ed. by Jenny Bourne Taylor and Sally Shuttleworth (Oxford: Clarendon Press, 1998) on ‘materialist science[s] of the self which rejected the dualistic divide between mind and body,’ p.xiv.

reference in *Charlotte Brontë and Victorian Psychology* to an early letter sent from Charlotte Brontë to Elizabeth Gaskell, in which Brontë refers to the ‘strangely trying’ effects of the equinox on both her physical and mental health.¹² Shuttleworth notes that Brontë is here ‘[d]rawing on contemporary theories of the impact of the winds and seasons on the nervous forces of the body’, and reads the letter as evincing ‘a tremendous sense of powerlessness’, and ‘an image of self as mere plaything in the hands of larger, uncontrollable forces’.¹³ Although Shuttleworth makes this point as part of a broader argument about Brontë’s exploration of contemporary connections between body and mind, the question of climate itself in relation to these connections is a fertile one. Brontë’s sense of the effects of climate and weather on her own health and on that of others is a perennial theme, both in her letters and her fiction.

This chapter also draws on and questions some of the arguments in Janis McLaren Caldwell’s *Literature and Medicine in Nineteenth-Century Britain*. Caldwell provides a recent perspective on the Brontës and physical health, arguing that the Brontës and other writers of the pre-Darwinian novel, employed an approach to the body and health which negotiated between ‘personal experience and scientific knowledge of the natural world’, which she terms ‘Romantic materialism’.¹⁴ Where Caldwell is interested in the kinds of interplay and productive exchange between these two ways of ‘reading’ the body and its disturbances, however, in this chapter I am particularly interested in the ways in which climate is involved in such readings. Caldwell argues that Charlotte and Emily Brontë embodied opposing visions of health and of medical intervention. Though she suggests that both were ‘confirmed Romantic materialists’, Caldwell argues that Charlotte Brontë

¹² Letter to Gaskell, 6th November 1851, in Margaret Smith ed., *Letters*, II, 710.

¹³ *Charlotte Brontë and Victorian Psychology* (Cambridge and New York: Cambridge University Press, 1996), p.32.

¹⁴ *Literature and Medicine*, p. 1.

exhibited 'less faith in natural health' than Emily,¹⁵ who had 'fully absorbed a strain of early nineteenth-century medical teaching about childhood', and was 'devoted' to 'a Romantic materialist location of value in a prolonged, physically robust childhood.'¹⁶

However, Caldwell's argument that Charlotte Brontë retained a faith in 'doctors and their interventions' which found expression in her fiction through a series of friendly and trustworthy doctors is not entirely borne out in Brontë's correspondence. Whilst it is broadly true that *Wuthering Heights* offers a vision of natural, robust health, where Charlotte Brontë's heroines are far more likely to be threatened by environment and the elements, Charlotte Brontë's response to medical intervention was in fact less wholeheartedly positive than Caldwell suggests.¹⁷ Caldwell's arguments about Charlotte Brontë are most relevant with reference to *Villette*, whose heroine is among the least healthy of all Brontë characters, and who does indeed hold at least one doctor in high esteem. I therefore explore *Villette*'s representations of climatic influence on mind and body in relation to Brontë's correspondence. In *Jane Eyre*, by contrast, the medical, geographical and psychological importance of climate combine to offer a richer demonstration of Charlotte Brontë's engagement with contemporary thinking about climate.

Readings of the Brontë body and medical discourse have often depended on a somewhat conflicted account of nineteenth-century Haworth. In particular, Haworth's industrial poverty, poor hygiene and sanitation, and the diseases which this engendered in those who lived in the town, need to be detached from the similarly persistent emphasis on the unhealthy nature of the parsonage itself. Whilst it suited Elizabeth Gaskell to allow the two to elide in the *Life*, in fact the discourses surrounding 'consumption' (tuberculosis) and

¹⁵ *Literature and Medicine*, p.98.

¹⁶ Caldwell refers to Rousseau's doctrine of maternal breastfeeding and the necessity of exposure to elements, espoused and developed by William Buchan in his *Domestic Medicine* treatise. *Literature and Medicine*, p.69.

¹⁷ Sally Shuttleworth observes that Charlotte Brontë's 'own responses to medical practice were highly ambivalent' *Charlotte Brontë and Victorian Psychology*, p.31.

hereditary 'taint' and those surrounding contagious, industry-related diseases like cholera and typhus were very different, and had contrasting relationships to climate.

Cholera and typhus were 'new' illnesses, particularly frightening and alarming in their growth and spread, and were often used by novelists to alert the reader to the problems of nascent industrialization.¹⁸ In contrast, tuberculosis was viewed as a 'disease of the individual', which did not reflect moral decline but rather appeared as a tragedy which frequently struck the 'best' and most ethereal of characters.¹⁹ Alan Bewell discusses the 'aestheticizing' of tuberculosis, and makes the important distinction that the disease was characterized in the Romantic and early Victorian period as born out of 'place, habit and disposition', rather than of contagion.²⁰ This way of figuring the illness is important in reading the construction, by Charlotte Brontë and others, of Brontë deaths, and indeed of deaths in Brontë narratives. Diseases which are caught from polluted environments, or which might be passed from one individual to another, persistently rank lower on a perceived moral hierarchy than those to which one might, through heredity or constitutional frailty, be prone.

The idea of catching, rather than succumbing to, diseases also relates to the question of contagion. Allan Conrad Christensen argues that after 1832, 'miasmatic thinking' tended to displace the idea that diseases were caught and spread by individual contact, and that this thinking was at its peak in the late 1840s, remaining in the ascendant until germ theory finally triumphed later in the century.²¹ Elaine Freedgood's argument that contagious diseases were associated with fears about industrialization, whilst miasma theory

¹⁸ See Katherine Byrne, 'Consuming the Family Economy: Tuberculosis and Capitalism in Charles Dickens' *Dombey and Son*', *Nineteenth-Century Contexts*, 29, No. 1 (March 2007), 1-16, (p.1).

¹⁹ Byrne, 'Consuming the Family Economy', p. 3.

²⁰ *Romanticism and Colonial Disease*, p.185. Thomas Dormandy also discusses the 'Romantic' nature of the disease in *The White Death: A History of Tuberculosis* (London and New York: Hambledon and London, 2001) pp.83-88.

²¹ Allan Conrad Christensen, *Nineteenth-Century Narratives of Contagion: 'Our Feverish Contact'* (London and New York: Routledge, 2005).

constructed disease as something which could be addressed and even avoided through improved housing conditions and ventilation, is also useful here to underline the very different ways in which epidemic and non-contagious diseases were perceived in this period.²² The construction of consumption as an ‘ethereal’ disease, and the role attributed to climate in its aetiology and cure, are significant, because they also serve to differentiate it from the kinds of ‘industrial’ and possibly contagious diseases suffered by other residents of Haworth. In the town, diseased atmospheres caused frightening, ‘dirty’ disease; in the parsonage, a family of women were susceptible to cold winds and storms. This is a distinction which would have been important to make in the 1840s, but which Gaskell’s *Life* and the weight of Brontë mythology has allowed to become obscured.

Discourses of climate, health and place are also connected to those of imperialism, and imperial climates. Alan Bewell’s *Romanticism and Colonial Disease* is the most extended study of the connections between health, place and Empire, and the ways in which weather functions ‘geopolitically’ to further these connections, both in Romantic poetry and in *Jane Eyre* itself. The ‘geopolitical’ argument here is that a place is defined by its diseases, and must be protected against the encroachment of other, less acceptable diseases from other countries.²³ Bewell identifies in *Jane Eyre* a geopolitical approach to weather and disease which is connected to a discourse on the deleterious effects of tropical climates on the British constitution, and which thus articulates a fundamentally ‘anti-Imperialist’ agenda in the novel.²⁴ This chapter sets out to read the associations between climate and

²² Elaine Freedgood, *Victorian Writing About Risk: Imagining a Safe England in a Dangerous World* (Cambridge: Cambridge University Press, 2000), p.42. Freedgood refers to the cholera epidemic of 1831-32 as representative of a ‘stunning return’ of epidemic disease which led to such associations. See also Anthony S. Wohl’s comment in *Endangered Lives: Public Health in Victorian Britain* (London: Methuen and Co. Ltd, 1984) on the opposition met by contagionist theories of cholera between 1845-56, since such theories ‘implied the need to establish internal quarantine, and quarantine meant loss of trade’, p.121.

²³ *Romanticism and Colonial Disease*, p.19.

²⁴ ‘Tropical Invalids’ in *Romanticism and Colonial Disease*, pp.277-295. Bewell argues that the ‘central tactic’ of *Jane Eyre* is ‘to employ medical geography for anti-imperialist purposes’, p.287.

imperialism for which Bewell has argued as part of Brontë's broader tendency both to view life and to figure it in climatic terms. I therefore reintegrate postcolonial readings of the novel such as Bewell's, as well as Deirdre David's reading of *Jane Eyre*'s 'racism'²⁵ and Susan Meyer's more ambiguous conclusion on the presence of imperialism in the text,²⁶ with the kind of emphasis on health, mind and body made by Shuttleworth and Caldwell, through a sustained focus on climate and weather in all these areas.

2. 'Living barometers' at Haworth parsonage

In this section, I turn in more detail to Charlotte Brontë in particular, since her engagement with climatic theories is the most fully documented and broadest of all the Brontës. Questions about the nature of this engagement are closely related to the question of what it meant to live at Haworth parsonage in the 1840s and 50s. As the daughter of a parson who was closely interested in health, regimen and self-regulation, Brontë was exposed to the 'domestic medicine' texts on Patrick Brontë's shelves, and the Hippocratically-influenced ideas of the importance of climate to health which were contained within them. As the daughter of a parson *at Haworth*, Brontë was also well placed to witness first-hand the effects of environment, as well as climate, on the body, in relation to the periodic outbreaks of typhus and cholera in the town.²⁷

²⁵ *Rule Britannia*, p. 109.

²⁶ *Imperialism at Home*, p.93.

²⁷ Typhus was a perennial problem in Haworth, whilst cholera killed the curate Willie Weightman during an outbreak in 1842. Barker, pp.402-03.

Patrick Brontë's profession dictated that he should have some knowledge of medicine and cure, and take an interest in the bodies as well as the souls of his parishioners.²⁸ Shuttleworth argues that the Reverend Brontë was almost obsessed with self-regulation, with medical science and with 'the inter-relations between the body and mind' to a degree 'far beyond the bounds of professional duty'.²⁹ Whether Patrick Brontë's concern was excessive or not, however, it is clear that his ongoing interest in medicine, disease and cure, particularly as they related to his own family, formed an important part of the upbringing of all the Brontë children.

Both Caldwell and Shuttleworth note the significance of William Buchan's *Domestic Medicine* to nineteenth-century thinking about disease, and specifically to the Brontës' reading of the body and its disturbances.³⁰ Buchan's text, published in 1772, had been reprinted ten times by 1800, and was still widely read in the mid-Victorian period.³¹ In Chapter 1, I showed how elements of Buchan's arguments pervaded thinking about industrial Manchester: in the Brontë household, however, the text itself sat on the shelves. With Thomas Graham's *Modern Domestic Medicine* (1826), it was assessed by Patrick Brontë as among the best of its kind available, and copies of both were kept for reference in the parsonage.³² Not only was the text itself physically available to the Brontës, its influence permeated much medical writing of the period. Caldwell observes that Thomas Graham 'cribbed heavily' from Buchan in his own *Domestic Medicine*,³³ and Shuttleworth identifies Buchan as a possible source for the approaches to female health and its regulation

²⁸ *Literature and Medicine*, p.76.

²⁹ *Charlotte Brontë and Victorian Psychology*, p.27.

³⁰ *Literature and Medicine* p. 70, *Charlotte Brontë and Victorian Psychology*, p.79. For Caldwell, Buchan's theories of child-rearing and health are central to Emily Brontë's vision of childhood in *Wuthering Heights*.

³¹ Shuttleworth, 'Medical Discourse', p.55.

³² Caldwell, p. 70. Patrick Brontë noted this opinion on the flyleaf of Graham's text, and recorded his intention to keep both treatises.

³³ *Literature and Medicine*, p.74.

demonstrated in contemporary advertising in the *Leeds Mercury* and *Leeds Intelligencer*.³⁴ Patrick Brontë noted occasions on which his family had used products advertised in these papers, while Charlotte and Branwell, in their early writings, parodied the ‘specific advertising copy’ used in them.³⁵ Buchan’s text then, underlies much of the medical thinking about climate to which the Brontës were exposed, and its emphasis on climate as central to the maintenance of good health seems to extend through both medical and literary writing well into the nineteenth century.

What is interesting about Buchan’s text in this context is his persistent emphasis on the relationship between weather, climate and the bodily economy. Buchan outlines the effects of different types of weather on the constitution, emphasizing always the importance of free-flow and balance in the body, and the dangers of either obstruction or excess of any element. Heat is described as dispelling the ‘watery parts of the blood’, and thus inducing biliousness and fever; cold ‘obstructs and congeals’, leading to coughs; moisture ‘destroys the elasticity of solids’ and causes ‘ague’.³⁶ As I have shown, changes in the atmosphere were perceived as one of the chief threats to constitution: Buchan’s writing about ‘Perspiration’ both exemplifies and strengthens such perceptions. ‘Perspiration’, like menstruation, bleeding, phlegm and bile, is a part of the bodily economy, and must, according to Buchan, remain in balance if the constitution is to remain intact. If the body is, as Shuttleworth argues, read as ‘helpless materiality, at the mercy of external physical forces’,³⁷ climate and weather constitute one of the most important, and most frequently encountered, of these forces:

³⁴ ‘Medical Discourse’, p.50.

³⁵ *Charlotte Brontë and Victorian Psychology*, p.80.

³⁶ *Domestic Medicine*, p.92.

³⁷ ‘Medical Discourse’, p.45.

One of the most common causes of obstructed perspiration, or catching cold, in this country, is the changeableness of the weather, or state of the atmosphere. There is no place where such changes happen more frequently than in Great Britain. With us the degrees of hot and cold are not only very different in the different seasons of the year, but often change almost from one extreme to the other in a few days, and sometimes even in the course of one day. That such changes must affect the state of perspiration is obvious to everyone.

The best method of fortifying the body against the changes in the weather is to be abroad every day. Those who keep most indoors are the most liable to catch cold. Such persons generally render themselves so delicate as to feel even the slightest changes in the atmosphere, and by their pains, coughs and oppressions of the breath, they become a kind of living barometers.³⁸

Buchan uses ‘the state of the weather’ and ‘the state of the atmosphere’ interchangeably, as does Charlotte Brontë in her letters. ‘Great Britain’ here poses particular and specific challenges to health through ‘the changeableness of the weather’: this is important to note in relation to the perceived dangers of an *unchanging* tropical climate which we see articulated in *Jane Eyre*. Though the novel seems to oppose the stultifying air and windless atmosphere of the West Indies to fresher, European climates, the contrast is complicated by the simultaneous contemporary fears of ‘changeability’ in British weather. The body’s openness to these external forces and to atmosphere is a given: the way to counter this is to take control of the level and frequency of exposure. Charlotte Brontë’s letters, as I shall show, are remarkable for the frequency with which they attempt to wrest such control, as they refer to the possible benefits of ‘a change of air’ yet at the same time demonstrate a constant anxiety about the weather which might be encountered en route to a healthier climate. Her anxieties surrounding consumption, in particular, are often framed in terms reminiscent of Buchan’s presentation of the disease as both derived from and curable by climate.

Haworth parsonage was, however, not only exposed to the vicissitudes and changeability of a Northern climate, but to the contemporary problems of industrial

³⁸ *Domestic Medicine*, p.75.

poverty. All the Brontës were able to see at first hand the ways in which industrial environments could cause disease and suffering, whenever they looked down to the town below rather than up to the moors above. As Sally Shuttleworth observes, ‘Although the Brontë sisters might have had their minds on thoughts coming from ‘above’, their eyes and noses must inevitably have been assailed in the Haworth streets by unavoidable evidence of the realm ‘below’.’³⁹ Charlotte Brontë in particular was well placed to observe this evidence, being the only Brontë child left alive in 1850, the year of Benjamin Herschel Babbage’s Report on the conditions in the town.⁴⁰

In this year, ‘low fever’ was rife in Haworth, but also encroached into the parsonage itself, with ‘every body but old Tabby’ ill during April.⁴¹ When Babbage arrived, he found that mortality rates in Haworth ‘rivalled the worst districts in London’,⁴² and that lack of sewerage and clean water, as well as the proximity of the churchyard, all contributed to the prevalence of typhus and fever in the town. Although Babbage, and Patrick Brontë himself endeavoured to resolve the mortality and health problems in Haworth through improved sanitation and sewerage, Gaskell’s *Life* has helped to associate the industrial diseases in the streets below with the illnesses suffered in the parsonage and by the Brontës themselves. Gaskell refers to the ‘sickly season’ of April 1850 and to the Babbage report, but rather than describe the measures undertaken as a result, she focuses on the effects of the ‘season’ on those living at the parsonage, and thus begins an elision between an industrial, unhealthy, typhoid Haworth, and a tubercular, isolated Brontë household.⁴³ Her specific reference to the ‘sickly season’ reflects Gaskell’s tendency to present Charlotte Brontë as ‘in thrall’ to weather and climate, and to underline her helplessness in the face of the

³⁹ *Charlotte Brontë and Victorian Psychology*, p.22.

⁴⁰ Barker, *The Brontës*, p.635.

⁴¹ Letter to EN, 29th April 1850. *Letters*, II, 395.

⁴² Barker, p.95.

⁴³ *Life*, p.407. In *Mary Barton*, Gaskell had stated with even less ambiguity that typhoid fevers are ‘brought on by miserable living, filthy neighbourhood, and great depression of mind and body’, p.68.

elements, but is supported to some degree by the efforts by sanitarians in the mid-Victorian period to find a connection between seasonal patterns and the incidence of typhoid fevers – though a convincing link was never established.⁴⁴ Whatever research and statistics proved, however, the sense that typhoid fever arrived on the breath of the wind was clearly widely held, as *Jane Eyre* itself demonstrates.

Though Haworth suffered its share of the problems caused by industrial environments, then, it has not been remembered or depicted in the same terms as Manchester or London in the same period, and these problems have been somewhat complicated by association with the illnesses suffered by the Brontës themselves. In fact, only months after the Babbage report which he himself had requested, Patrick Brontë was apparently sufficiently convinced either that Haworth had been greatly improved, or that the parsonage itself was not affected by the problems outlined, to write to Ellen Nussey of the ‘free exhilarating air of Haworth’. Charlotte Brontë had been ill in London, and having urged Nussey to ‘call in the ablest Medical advice’, Patrick stated that the ‘Malaria of London’ had been causative in the illness, clearly positioning London as an unhealthy, urban environment in stark contrast to a healthy Haworth.⁴⁵

Haworth has been represented by its climate, from Gaskell’s *Life* to the present, and the twin vision of a tubercular parsonage and a fever-ridden town has conflated to present a picture of an almost uniquely unhealthy location. However, since in the Victorian period contagious and non-contagious diseases, and ‘new’ ‘industrial’ illnesses and those like ‘consumption’ held entirely different associations and resonance, it is important to differentiate between the kinds of ill-health experienced at Haworth and to consider the

⁴⁴ See Anne Hardy, *The Epidemic Streets: Infectious Disease and the Rise of Preventive Medicine 1856-1900* (Oxford: Clarendon Press, 1993), p.186

⁴⁵ Patrick Brontë to EN, 12th July 1850. *Letters*, II, 423. By ‘Malaria’, Patrick Brontë means ‘bad air’, rather than the disease itself.

many ways in which the Brontës would have seen climate and atmosphere as affecting bodily health. The local contexts at Haworth in the 1840s and 1850s provided every reason to think, and talk, about the weather, but the ways in which Charlotte Brontë engaged in this thinking and talking in her correspondence are particularly striking.

3. Guarding against the weather: Charlotte Brontë's letters and *Villette*

It might be expected that, in letters to friends over a number of years, any correspondent would comment on and enquire about weather, give information about his or her own health and offer advice, sympathy and interest towards a friend's health. Charlotte Brontë's letters, however, are exceptionally full of these characteristics. In almost every letter she wrote, Brontë noted the weather, usually to comment on its cold, wet or stormy nature, and very often to detail the effects it was wreaking on herself, her father, or her sisters. In contrast, for example, the more physically robust George Eliot rarely mentions either weather or health in her correspondence. Only when illness becomes an immediate issue does Eliot invoke climate, hoping in 1854 that 'Southern air' will help a friend's 'bodily discomfort', briefly mentioning health and weather in a stilted letter to her brother Isaac Rearsen Evans in 1856, and stating an intention to go away and escape bad weather during her step-son 'Thornie's' illness in 1869.⁴⁶ Perhaps the figure most closely analogous to Brontë in this respect is Keats – and Keats' connections with consumption, the death of siblings and fears for his own health also, of course, find echoes in Brontë's own life. The

⁴⁶ Letters to John Chapman, 9th December 1854, Isaac Rearsen Evans, 22nd May 1856 and Eugène Bodichon, 2nd July 1869, in Gordon Haight ed., *The George Eliot Letters*, 3 Vols. (New Haven and London: Yale University Press, 1978), II, 131, 153, and 458-59.

culture of self-regulation and the question of how this regulation might be achieved in a changeable climate, was especially relevant in consumptive cases, and seems to have led to as close a concern with the weather in Keats' correspondence as in Brontë's.

Keats also frequently echoes the ideas about disease put forward in Buchan's treatise, suggesting that his own medical training had taken place along lines influenced by this approach.⁴⁷ In 1819, the poet wrote to Fanny Keats of his fear that the weather might affect his throat, and noted that, on the specific advice of his doctor, he had 'had a wa[r]m great Coat made' and 'ordered some thick shoes':⁴⁸ Buchan's observation that 'wet feet often occasion diseases' seems to be echoed here.⁴⁹ Like Brontë, Keats' anxieties over his own health made him intensely worried about that of his circle of correspondents, and of Fanny Keats in particular. In February 1820, having described a recent cold caught 'from imprudently leaving off' his coat, Keats adjures his sister to wear her own coat lest the same fate befall her;⁵⁰ and in March of the same year, framed by his increasing resolution not to spend another winter in England, he instructs Fanny Brawne to take the threat of climate seriously, and not to catch cold through carelessness.⁵¹

There is, then, a kind of 'talking about the weather' in letters which goes beyond the conversational, and which intensifies when health becomes a serious concern. Charlotte Brontë's letters chart an increasing concern with changes in the weather in connection with health both mental and physical, as well as with the specific climate at Haworth, and the dangers which both climate and weather might pose to the recipients of her letters. It was impossible accurately to predict the weather, and of course the weather could not be

⁴⁷ Bewell comments on Keats' 'medical topography' and its debt to his medical training, p.162.

⁴⁸ 20th December, 1819. Robert Gittings ed., *The Letters of John Keats* (Oxford: Oxford University Press, 1970), p.342.

⁴⁹ *Domestic Medicine*, p.18.

⁵⁰ 6th February 1820, *Letters of John Keats*, p.354.

⁵¹ March 1820, *Letters of John Keats*, p.369.

changed or avoided: the only way to retain some control against a force which appeared entirely random was to monitor its changes and effects closely and intensely.

Brontë's letters, and particularly those dating from Emily Brontë's illness onwards, demonstrate what Sally Shuttleworth has described as a 'picture of women anxiously monitoring the slightest aspect of their bodily functions, constantly under threat of medical intervention in the most overtly physical forms' which appears in women's private writings of mid-Victorian era.⁵² Brontë's correspondence provided a space for the circulation of fretting and fears about the body, its fluctuating states of health, its frailty and, constantly emerging alongside this, its openness to influence by climate and weather.

It is in her letters to Ellen Nussey that Brontë's anxieties about both health and weather most frequently emerge. A constant refrain in the letters to Nussey (including a letter from Anne Brontë in 1848)⁵³ is of Nussey's own apparent susceptibility to the East wind, and to damp weather generally.⁵⁴ One letter, written in April 1850, seems to encapsulate Brontë's anxiety about her friend's health, as well as demonstrating both her absorption of, and reservations towards, the recommendations derived from Buchan to be 'abroad every day':

I certainly do think you are too venturesome in risking exposure to all weathers – there are sudden changes from hot to cold and vice versa – there are fogs, cold penetrating winds during which all people of constitutions not robust are better in the house than out of doors; regular exercise is an excellent thing, but in very cold or damp & stormy weather, you cannot with prudence enjoy it. I do not wish you to coddle yourself, but trust you will be careful... maladies are sooner caught than cured.⁵⁵

⁵² 'Medical Discourse', p.48.

⁵³ AB to EN, 26th January 1848. *Letters*, II, 19.

⁵⁴ See letters to EN April 1850, pp. 384, 385; 11th May 1850, p.396; November 1851, p. 719, and December 1851, p.726, and to Amelia Ringrose to discuss Ellen's health and susceptibility 28th April 1850, p.390. *Letters*, II.

⁵⁵ To EN, 3rd April 1850, *Letters*, II, 374.

Brontë's acknowledgement of the benefits of 'regular exercise', and her caveat that she is not advising 'coddling', both point to a line of influence from Buchan, but her anxiety over 'sudden change' in the weather suggests a pessimistic interpretation of the *Domestic Medicine*: changes in the atmosphere are here viewed as so dangerous that it is better to avoid them all together than to be too 'venturesome'. Caldwell's differentiation between Emily and Charlotte Brontë's respective interpretations of 'Romantic materialism' initially appears to be validated here: *Wuthering Heights*, and Emily's own refusal during her last illness to 'coddle' herself suggest the kind of robust approach to the elements Caldwell describes, whilst Charlotte's caution and anxiety – doubtless heightened after the recent deaths of her sisters – does indeed point to a less confident approach to the elements. However, though Brontë was clearly nervous of excessively 'venturesome' exposure to the elements, this was not accompanied by any great liking or respect for the medical profession.

Indeed, there is a general sense throughout Brontë's letters of irritation with doctors and their advice, which is superficially indicative of little more than her intermittent misanthropy and irascibility. In 1848, after the death of Branwell Brontë, for example, she observed in a letter to Ellen Nussey that the doctors over-estimated both the amount of time Branwell had left to live, and the time it would take her to recover from a more minor ongoing complaint herself.⁵⁶ However, Brontë's response to the medical profession was also intimately bound up with her sense that physicians and surgeons were apt to miss the fluid interconnections between mind, body and soul, and therefore to treat body alone, through crude and interventionist methods. Buchan, and to a lesser extent, Graham had depicted mind and body as part of a continuum, and one which was profoundly affected by

⁵⁶ 9th October 1848. *Letters*, II, p.125.

changes in the weather: the doctors Brontë disparaged in her correspondence seemed to her to ignore or discount this.⁵⁷

Writing of a visit to London and a meeting with Sir James Kay-Shuttleworth and his family, Brontë commented on Sir James' habit of 'looking at her with a physician's eye', but stated that: 'not the most skilful physician can get [at] more than the outside of these things – the heart knows its own bitterness – and the frame its own poverty – and the mind its own struggles'.⁵⁸ The treatment of 'the outside of things' alone seems to have become a perpetual irritation for Brontë, who wrote a few days later: 'I abhor and distrust their [i.e., Nussey's doctors'] strong medicines': 'he is not dealing with a horse or an elephant'.⁵⁹ To Gaskell in 1851, Brontë expressed the wish that the doctors would 'not exhaust you any more with blisters and medicine', and gleefully applauded Nussey's mother for proving the doctors' 'croakings' wrong in an unexpected recovery.⁶⁰ 'Strong medicines', then, seem to reduce the sufferer to an animal status, missing the complexities of mind and heart which are distinctively human.

The effects of the weather are a prominent example of the ways in which Brontë connects mind and body in her correspondence. To Margaret Wooler, Brontë wrote of the effects of 'long storms' on her 'nervous system', and hence her whole body and state of well-being.⁶¹ This letter is different from more general observations – often made in letters to Nussey – that poor weather was simply depressing or unpleasant: Brontë clearly felt that the weather had the power to alter her whole constitution, and to affect all three of the 'bodily economies' - physiological, mental and emotional - outlined by Shuttleworth.

⁵⁷ Both Buchan and Graham discuss depression, melancholia, and hypochondria as well as physical illness, and recommend similar cures for both mental and physical illness.

⁵⁸ 12th April 1850, *Letters*, II, p.384.

⁵⁹ To Ellen Nussey, 15th April 1850, *Letters*, II, p.385.

⁶⁰ To EN, January 1851, p.561; to EN 25th November 1851, p.723. *Letters*, II.

⁶¹ To MW, 17th February 1852. Clement Shorter ed., *The Brontës' Lives and Letters*, 2 Vols. (London: Hodder and Stoughton, 1908), II, 250.

During her depression in the winter of 1851-2, Brontë wrote of the ways in which ‘approaching disturbances in the atmosphere’ invariably caused her both ‘bodily weakness’ and ‘deep, heavy, mental sadness’, whilst the equinox, in particular, ‘strangely trie[d]’ her:

[...] a month or six weeks about the equinox (autumnal or vernal) is a period of the year which, I have noticed, strangely tries me. Sometimes the strain falls on the mental, sometimes on the physical part of me; I am ill with neuralgic headache, or I am ground to the dust with deep dejection of spirits (not, however, such dejection but I can keep it to myself).⁶²

Shuttleworth, as I noted above, refers to the ‘powerlessness’ evinced in this letter:⁶³ the language employed by Brontë does indeed seem to reflect a complete surrender to the weather and its changes. The description of this influence as merely ‘strangely tr[ying]’ is undermined by the language of weight, oppression, and almost complete annihilation, as the ‘strain falls’ so heavily as to render Brontë ‘ground to the dust’, all of which seems more than merely ‘trying’. This influence ‘falls’ with equal weight on ‘the mental’ and ‘the physical’. If Brontë experienced her entire constitution as so severely affected by atmospheric disturbance, then, it seems unsurprising that she also felt that topical remedies which treated the sufferer as ‘a horse or an elephant’ failed to recognize the complexity and inter-connectedness of the female mind and body.

Yet Brontë is also quick to affirm that the ‘dejection’ is not such that she is unable to ‘keep it to [her]self’. This is, of course, contradicted to some extent by its detailed description in a letter to Gaskell, but it seems important to note that Brontë was apparently aware that attributing one’s illness to the weather might seem like a ‘silly fancy’, as Gaskell herself was to designate it in *Wives and Daughters* (1866), or make one sound like what

⁶² Letter to Gaskell, 6th November 1851, *Letters*, II, 710.

⁶³ *Victorian Psychology*, p.32.

Dickens was to describe in *Bleak House* as one of those ‘petulant people who make the weather and the winds [...] the stalking-horses of the splenetic and gloomy humours’.⁶⁴ In an earlier letter detailing her ‘bodily weakness’ and ‘deep, heavy mental sadness’ during stormy weather, Brontë cuts short her own complaints by stating ‘[t]his is a stupid, disgraceful, unmeaning state of things’.⁶⁵ The ‘powerlessness’ inherent in Brontë’s bodily and mental influence by the weather is real enough. However, Brontë also plays down this powerlessness, aware that it might seem tendentious or questionable to less susceptible individuals.

Intrusive ‘cures’ seemed an inadequate approach to the ‘bitterness’, ‘poverty’ and ‘struggle’ of the whole body, but Brontë explored alternatives both in homeopathy and in the perennial notion of a curative ‘change of air’. Though she reported Emily Brontë as dismissing homeopathy as ‘quackery’, Charlotte noted that ‘were I in [Emily’s] place it appears to me that I should be glad to give it a trial, confident that it can scarcely do harm and might do good’.⁶⁶ Homeopathy, unlike the kind of medical advice to which Brontë referred disparagingly, does assume connections between body and mind, and seems to have been one of the ‘different systems and medicines’ Brontë explored in the search for a cure during Anne Brontë’s illness.⁶⁷ However, the defining characteristic of Brontë’s letters whilst Anne was dying of consumption is her increasing anxiety over the weather. It was, as always, to Ellen Nussey that Brontë most often wrote to express this anxiety, but she was also keen to solicit the advice of Dr John Forbes, a specialist in tuberculosis who

⁶⁴ Elizabeth Gaskell, *Wives and Daughters*, ed. with introd. and notes by Pam Norris (London: Penguin, 1996), p.489. Charles Dickens, *Bleak House*, ed. by Norman Page, introd. J. Hillis Miller (London: Penguin, 1971 rpt 1985), pp.130-31. Samuel Johnson, in his argument that Englishmen should desist from talking about, speculating on, or identifying themselves with, the weather, had called the attribution of ill-health or depression to weather ‘the cowardice of idleness, and the idolatry of folly’. *Idler*, in Bate, Bullit and Powell eds, p.39.

⁶⁵ To EN, 19th January 1850, *Letters*, II, p.387.

⁶⁶ To W.S. Williams, 1848, *Letters*, II, 142 and 147.

⁶⁷ Letter to WSW, 16th April 1849, *Letters*, II, 201. Brontë also wrote to Dr Epps, a noted homeopath, for advice on Emily’s condition in December 1849, pp.150-151.

had published *Observations on the Climate of Penzance, and the District of the Land's End in Cornwall* (1821).⁶⁸ During Anne's illness, Brontë became increasingly preoccupied with the weather, in ways which might initially have derived from Dr. Forbes' 'opinion on the regimen prescribed',⁶⁹ but which developed into a noticeably increased documentation of every change in the weather and its possible effects on the invalid.

Consumption, as well as being a frequently 'aestheticized' disease, was also particularly closely associated with climate and its potential effects. Buchan gave nine possible causes for consumption, of which three are specifically climatic: confined or unwholesome air; transition to a cold climate; and exposure to cold through wet feet or similar. He recommended removal to 'a situation in the country, where the air is pure, dry and free', and suggested that 'if a voyage were undertaken *in due time*, it would *seldom* fail to perform a cure.'⁷⁰ Anne Brontë, writing to Ellen Nussey of her desire for a 'change of air' after diagnosis, closely echoes Buchan's words in her statement 'the doctors say that a change of air or removal to a better climate would *hardly ever fail* in consumptive cases, if the remedy were taken *in time*'.⁷¹ Since her own doctor had recently stated that a move at this stage was not advisable, the 'doctors' to whom Anne refers in the plural seem likely have been Buchan, and also Graham, who was similarly emphatic about the need for a change of air in consumptive cases.⁷² Charlotte Brontë, by contrast, expressed misgivings

⁶⁸ See n.2., letter to WSW 9th December 1848, p.151, and letter to George Smith, 22nd January 1849, pp.170-71, *Letters*, II. Forbes was a physician also interested in geology: his writing on Penzance and Cornwall was the result of his work in Cornwall where he had been appointed to head a medical practice specifically as a 'physician with an interest in geology'. R.A.L. Agnew, 'Sir John Forbes, 1787-1861', *DNB*. Brontë met Forbes twice during her visit to London to see the Great Exhibition in 1851, and commented that she was 'sincerely glad to see' him. Letter to EN, 2nd June 1851, p.627.

⁶⁹ To GS, see above, p.171.

⁷⁰ *Domestic Medicine*, pp.218-219, my italics. The other causes given for the disease are 'want of exercise', 'violent passions', 'great evacuations', 'debauchery', 'infection' and 'sitting', at least two of which it can be assumed were not attributed to Anne Brontë.

⁷¹ AB to EN, 5th April 1849, *Letters*, II, 195. My italics.

⁷² Graham's *Modern Domestic Medicine* (London: Simpkins and Marshall, 1826), which generally tends far more towards topical cures, and the uses of tincture and balsam for most ailment, nonetheless also attributes a significant role to climate in the cure of 'consumptive invalids': like Buchan, he also avers the importance of

about the dangers posed by the putative journey, and stated that if a move were made ‘it should certainly not be in the month of May which is proverbially trying to the weak’.⁷³ The weather represents a dangerous combination of the random and the determining, to which the only possible response seems to be close monitoring and attempts to mitigate or defend against its effects.

Brontë wrote to Nussey that ‘Anne really did seem to be a little better during some mild days last week but to-day she looks very pale and languid again’ on the 22nd January 1849,⁷⁴ and re-iterated and developed the point only a week later: ‘During the mild weather Anne really seemed something better; I began to flatter myself she was gathering strength. But the change to frost has told upon her’. Dr. Forbes had written advising against ‘change of residence, for the present’, but Brontë expressed the hope that ‘Could [Anne] only get over the Spring I hope Summer may do much for her, and then early removal to a warmer locality for the winter might a[t] least prolong her life.’⁷⁵ In February, Brontë feared a ‘sudden change to cold’, and displayed increasing apprehension about the coming Spring, ‘trembling’ at the thought of ‘any change to cold wind or frost’, and wishing already on the 4th February that ‘March were well over’.⁷⁶ In March itself, Brontë noted that Anne had ‘felt unfavourably’ the recent ‘changes in temperature’, and re-stated in the same words her wish that ‘March was well over’.⁷⁷ Though climate was, as I have suggested, closely implicated in contemporary thinking about consumption, Charlotte Brontë’s preoccupation appears exceptionally intense, expressing a constant sense of external forces and their power materially to affect the body.

a change of air ‘in time’: ‘All consumptive invalids require a mild atmosphere, and *the sooner this is resorted to the greater will be the probability of success.*’ p.77.

⁷³ To EN, 29th March 1849, *Letters*, II, 194.

⁷⁴ *Letters*, II, 171.

⁷⁵ To EN, 29th January 1849, *Letters*, II, 171-72.

⁷⁶ Letter to WSW 4th February 1849, and EN 16th February, *Letters*, II, 177 and 183.

⁷⁷ To EN, 16th March 1849, *Letters*, II, 191.

Climate, place and health are inseparably bound together throughout Brontë's correspondence. Not only is she unable to enquire after a correspondent's health without lamenting the weather to which he or she has recently been exposed, or advising a change of air and scene, she also figures Haworth itself through its climate. To W. S. Williams in 1849, Brontë described 'the pretty South-of-England villages, so different from our northern congregations of smoke-dark houses clustered round their soot-vomiting mills', seemingly eliding Haworth with the industrial setting more generally associated with Manchester in the period.⁷⁸ To George Smith, however, she invoked Haworth's climate in a far more Romantic, fatalistic and semi-metaphorical register, stating that 'Hope is indeed not a plant to flourish very luxuriantly in this northern climate.'⁷⁹ Brontë was not only fearful about changes in the British weather, and their possible effects on health, but also anxious about the effects of climates elsewhere. She wrote to Ellen Nussey that a mutual friend must not go to the West Indies 'unless her health is greatly altered for the better – she can scarcely be expected to bear the climate',⁸⁰ while her fears for James Taylor during his visit to India centred around her concern about what the climate there would do to a 'European constitution'.⁸¹ Alan Bewell has discussed the early nineteenth-century texts which delineate the effects of such climates on the European visitor:⁸² if Brontë was not directly acquainted with such texts, their influence would seem to have pervaded a contemporary construction of the dangers of foreign climates which she readily adopted.

Villette encapsulates Brontë's anxieties about the weather, her sense that place was defined by climate, and that certain individuals might be perpetually affected by changes in the weather. I discuss it here as a kind of apotheosis of the ways in which Brontë wrote

⁷⁸ To WSW, June 1849, *Letters*, II, 721

⁷⁹ 22nd September, 1851, *Letters*, II, 690.

⁸⁰ To EN 24th May 1848, *Letters*, II, 69.

⁸¹ To James Taylor, 15th November 1851, *Letters*, II, 717.

⁸² Bewell mentions Johnson's *The Influence of Tropical Climates on European Constitutions* (1813) and Henry Marshall's *Notes on Medical Topography* (1821), pp.283-85.

about climate and weather in her correspondence. *Villette*'s exploration of the line between sanity and madness, and the potential held by external material forces to push Lucy further toward psychical disturbance has been identified by Shuttleworth, among others: however, the novel recruits weather both as part of its interrogation of mental balance and disruption, and also in more prosaic ways as something which the unhealthy individual must constantly fear and guard against, to protect body as well as mind.⁸³

Twice in *Villette*, descriptions of weather phenomena serve to connect a false narrative of events with the subsequent prose which deflates and undermines this narrative. 'I will permit the reader to picture me, for the next eight years, as a bark slumbering through halcyon weather', Lucy states, before puncturing this vision with a description of 'cold, of danger, of contention': 'I know there was a storm, and that not of one hour nor one day' (*Villette*, p.39). On her voyage to Labassecour, Lucy creates a poetic vision of the continent of Europe as seen from the ship, overlaid with sunshine beneath a sky 'grand with imperial promise', before alerting the reader to the counterfeit nature of this reverie by stating that she saw no such seascape, but remained stricken by sickness in her cabin. (pp.62-63). Illusory visions of a positive or pleasant situation are accompanied by dream-like absorption in the weather. 'Good' weather, by contrast, is as illusory as the idea of an easy, unproblematic response to it, which can, it transpires, happen only in reverie and imagination.

Throughout the narrative, Lucy's fear of the weather and her susceptibility to its changes are located specifically as part of her 'morbid', sensitive character. During a period of 'catalepsy' at the Pensionnat, Lucy recalls, 'I well remember whatever could

⁸³ Sally Shuttleworth has shown that Lucy Snowe's vulnerability to atmospheric disturbance is part of her broader characterization as acted upon by external elements, whilst the 'responsiveness of her physical frame to the storms and tempests outside' underpins her sexual fantasies and nightmares'. *Victorian Psychology*, pp.212-13.

excite – certain accidents of the weather, for instance, were almost dreaded by me, because they woke the being I was always lulling, and stirred up a sort of craving cry I could not satisfy’ (pp.120-21). Lucy’s sense of connectivity with the weather is such that she is compelled to respond to it even in ‘dread’: ‘roughly roused and obliged to live’, she leans out of the dormitory window to watch and feel a tempest with ‘delight’. Here, ‘accidents of the weather’ seem to be aligned with the ‘Passion’ and ‘Feeling’ which the novel, and Lucy herself, constantly contrasts with ‘Reason’: weather is ‘accidental’, unpredictable, exciting and spontaneously alive, providing a kind of periodic release from the ‘dead trance’ in which Lucy attempts to hold ‘the quick of [her] nature’ (p.120).

However, this does not entirely account for Lucy Snowe’s particular relationship to the weather. Lucy spends a large amount of time listening to and fearing the wind, but this is not only through fear that it might rouse her to involuntary action and mental excitement. ‘Epidemic diseases, I believed, were often heralded by a gasping, sobbing, tormented, east wind’ (p.43), she states, embodying a strange tension between a sense of the wind as itself tormented, and as the harbinger of sickness. The reference to ‘epidemic diseases’ seems to situate Lucy’s belief within the language of medicine and, specifically, infection, yet the apparent pain attributed to the wind itself also presents this belief as perhaps merely the strange fancy of a nervous individual.

During the summer vacation, Lucy’s depression turns to physical illness, exacerbated when ‘the Indian summer closed and the equinoctial storms began’ (p.176). Like Charlotte Brontë herself, Lucy finds her body and mind ‘strangely tried’ by equinoctial weather, and accepts the connection as a logical one. Though the effects of the weather may be more sharply felt by the weak or depressed, this is also specifically located as a connection which all ‘unhealthy’ people experience:

It was a day of winter east wind, and I had for some time now entered into that dreary fellowship with the winds and their changes, so little known, so incomprehensible to the healthy. The north and east owned a terrific influence, making pain all the more poignant, all sorrow sadder.

(p.300)

The 'unhealthy' must, perforce, engage in a depressingly close relationship with the weather. Knowing that wind and weather will affect them, these individuals are able to negotiate these effects only by trying, as far as possible, to anticipate 'the winds and their changes'. This 'dreary fellowship', then, is very different from Lucy's earlier fear that the weather might allow a part of her repressed self to surface and be 'obliged to live'. There is a medical, bodily relationship with the weather in *Villette* which has often gone unremarked, and which seems closely related to Brontë's own letters to Ellen Nussey, with their constantly reiterated anxieties about the coming weather and its effects.

Brontë's own sense of the effects of the equinox on both body and soul suggests that she accepted the weather, for all its strangeness and unpredictability, as a powerful determinant of mental and physical health. This is complicated in *Villette* through the emphasis on the weather as at the same time evoking memory, misery, psychic disturbance and 'sorrow': to this list, I argue that 'disease' should be added, in order fully to represent Brontë's vision of the weather's potential to affect every part of the bodily and mental economy. In *Jane Eyre*, however, as well as *Wuthering Heights* and, to a lesser extent, *The Tenant of Wildfell Hall*, the ways in which an individual might *allow* weather to have an effect, or might negotiate, challenge or surmount such effects, are more closely questioned.

As Gilbert and Gubar have noted, Brontë's female heroines from *The Professor* to *Villette* demonstrate 'a progressive deterioration in spirit' which culminates in the morbid,

vulnerable Lucy Snowe.⁸⁴ However, whereas Gilbert and Gubar suggest that this deterioration constitutes Brontë's representation of the ways 'women internalize the destructive structures of patriarchy', I argue that it can also be read as a process of increasing openness to the weather which mirrors Brontë's own growing sense of the individual's vulnerability to weather and to climate. Whilst this progression could be traced chronologically through *Jane Eyre*, *Shirley* and *Villette*, this chapter argues that *Jane Eyre*'s approach to climate and the weather is also fundamentally connected with place and region, and I therefore read *Jane Eyre* in context with *Wuthering Heights* in particular, as well as *Wildfell Hall*, to argue that all three Brontës articulate a strong sense of individual and female resilience at this stage which in *Jane Eyre* is allied to a wider vision of climate and its importance.

4. Constitutional strength in the Brontë narrative

Caldwell's reading of *Wuthering Heights* contrasts the healthy Catherine and Heathcliff who run freely on the moors, with cosseted Linton, sickly and huddled by fires. Caldwell's focus is on the child, and on the importance of childhood, in the novel. In this context, she identifies Lockwood as having reached 'premature adulthood', unable to behave as 'a man of sensibility', or to engage with the residents of *Wuthering Heights*, and observes that his physical weakness corresponds to his lack of 'natural experience'.⁸⁵ In fact, as I shall show, Lockwood's invalidism throughout the novel not only marks his difference from the

⁸⁴ Sandra Gilbert and Susan Gubar, *The Madwoman in the Attic: The Woman Writer and the Nineteenth-Century Literary Imagination* (New Haven: Yale University Press, 1979), p.400.

⁸⁵ *Literature and Medicine*, pp.88-89.

healthy, hardy children in the narrative, but also attests to Emily Brontë's own readings of climate, weather and the body.

The work of defining the term 'wuthering' is, significantly, given to Lockwood:

Wuthering Heights is the name of Mr Heathcliff's dwelling, 'wuthering' being a significant provincial adjective, descriptive of the atmospheric tumult to which its station is exposed in stormy weather. Pure, bracing ventilation they must have up there, at all times...

(p.4)

Climatic definitions of place are underlined in the idea that local weather has its own lexicon of 'provincial adjectives'. Lockwood's attempt to re-site the 'provincial adjective' within his own Southern, 'refined' language and experience employs a meteorological register ('atmospheric tumult') as well as a medical one ('bracing ventilation'). U. C. Knoepflmacher locates Lockwood's 'linguistic self-consciousness' as part of the character's arrested development and assumed 'bookishness', commenting specifically on Lockwood's need 'to furnish a pedantic definition' for the word 'wuthering'.⁸⁶ Yet this is not only an exercise in linguistic knowledge: Lockwood's careful description attests to the inevitable combination of different vocabularies of the weather, and thereby to the weather's own multiplicity of possible effects.

On his first, disastrous, visit to Wuthering Heights, Lockwood greets Heathcliff jovially, but drastically underestimates the significance of the weather:

'You see, sir, I am come according to promise!' I exclaimed, assuming the cheerful - 'and I fear I shall be weather-bound for half an hour, if you can afford me shelter during that space.'
'Half an hour?' he said, shaking the white flakes from his clothes; 'I wonder you should select the thick of a snow-storm to ramble about in. Do you know that you run the risk of being lost in

⁸⁶ U. C. Knoepflmacher, *Wuthering Heights: A Study* (Athens: Ohio University Press, 1994), p.18.

marshes? People familiar with these moors often miss their road on such evening, and, I can tell you, there is no chance of a change at present.'

(p.12)

Though Lockwood understands the concept, and the problems, of being 'weather-bound', both his 'cheer' and his partial understanding are immediately quashed by Heathcliff's response. The inadequacy of Lockwood's linguistic definitions is clearly demonstrated: it is not enough to theorize and to give etymology, one must also understand the real, 'provincial' significance of the weather and its application to daily life in a particular place and region.

From here on, the ways in which characters respond to weather becomes an index of their strength and character. Lockwood becomes ill, and curses 'these bleak winds, and bitter, northern skies, and impassable roads, and dilatory country surgeons!' (p.91). It is during the storm in which Heathcliff wanders on the moors, however, that the 'iconographic' Brontë weather imagery becomes most closely connected with health and resilience. A 'rattling' and 'violent' storm sweeps the Heights, and Cathy becomes 'thoroughly drenched for her obstinacy in refusing to take shelter, and standing bonnetless and shawl-less to catch as much water as she could with her hair and clothes' (p.85). This proves 'the commencement of her delirium' (p.88), which she survives only to fall ill again with 'what was denominated a brain fever' (p.134). Edgar tells Catherine that if he could take her 'a mile or two up those hills', where 'the air blows so sweetly', she would be cured. Nelly and Edgar decide upon a 'change of scene' for Catherine, but Catherine has already decided that her death is inevitable, and that it is Heathcliff who will 'kill' her. During her illness, she fasts, as Heathcliff will do to hasten his own death, and repeatedly demands that Nelly open the window to her sick-room (p.122 and p.126). When Nelly refuses, stating that 'I won't give you your death of cold', Catherine responds by arguing

‘You won’t give me a chance of life, you mean’ (p.126). This seems a more conflicting response to the domestic medicine tracts than Caldwell allows: Catherine demands the fresh air and ventilation recommended by Buchan and Graham, yet this is concurrent with an obvious death-wish expressed in her rejection of food and repeated intention to die. As Dr Kenneth observes, ‘A stout, hearty lass like Catherine does not fall ill for a trifle’ (p.129). Both Catherine and, later, Heathcliff use the ways in which climate was thought both to cure and cause disease to their own ends, employing and inverting medical theories at the same time.

It is the weak in *Wuthering Heights* who are most powerless against weather and atmosphere. Nelly recommends the Heights to Linton Heathcliff for its healthy situation, and ‘fresher and dryer’ air: but, interestingly, she states that it will be ‘healthier *for you*’ (p.205, my italics), suggesting that it is the frail and the infirm – Dickens’ ‘petulant people’ - who must worry about the climates in which they find themselves. Edgar Linton catches cold in the ‘chill and damp’ of an evening walk (p.228), and remains ill for the rest of the winter. Heathcliff himself, however, like Catherine, chooses to become ill, and to die, having cursed his ‘hard constitution, and temperate mode of living’ (p.325) which condemn him to a long and miserable life. The two actions Heathcliff undertakes to fulfil his death wish are to spurn food, and to leave the house in what Nelly calls ‘a moist season’, before she warns that Heathcliff will ‘catch a bad cold, or a fever’ (p.326). Finally, he dies ‘laid on his back’ in bed, with the window open, and the room drenched in rain from a deliberately opened window.

If Emily Brontë affirms the status of the ‘healthy child of nature’, then, she does so in a way which is not entirely committed to the themes of Buchan’s *Domestic Medicine*. *Wuthering Heights* implies that the dangers of climate are variable according to the individual upon whom they act. Catherine’s will to die negates the supposedly healthy

influence of a change of place, and Heathcliff's self-destruction means that he *allows* the season to help him towards the grave. The open window out of which Nelly finds Heathcliff leaning during his decline prefigures the window through which the rain will lash his bed and dead body, but also counters Buchan's instructions to keep free movement of air and to ventilate sleeping quarters. 'The room was filled with the damp, mild air of the cloudy evening' (p.327): Nelly wishes to close the window, but Heathcliff turns from the ledge and appears with 'ghastly paleness', looking like 'a goblin' and forbids her to do so.

It is also interesting that many of Emily Brontë's weak, susceptible characters are male. Throughout the narrative, Nelly Dean functions as the voice of common-sense self-regulation, chiding Catherine and Heathcliff for exposing themselves to rain and cold, offering the most reliable cures and palliatives in the novel. Beyond the extremes of self-determined illness and death, or innate resilience, Brontë seems to locate the best chance of health and survival with the innate sense of Nelly Dean, rather than with the likes of Mr Kenneth, the doctor.

The Tenant of Wildfell Hall, too, presents a vision of female resilience to climate: their use of the equinox, in particular, exemplifies the younger Brontës' optimism that women might remain strong and healthy despite the weather. Both Emily and Anne Brontë refer to the spring equinox, which falls around the twentieth of March, in ways which contrast sharply with Charlotte Brontë's later fear of equinoctial change. In *Wuthering Heights*, the equinox is Cathy's birthday: a 'beautiful spring day'. In *The Tenant of Wildfell Hall*, Helen Graham invariably makes one of her infrequent journal entries on the twentieth of March, noting on this day that her husband Arthur has left again for a season's drunken carousing in London: even when he has actually left a few days, weeks or even

months earlier, it is still most often the twentieth of March when she notes this.⁸⁷ Helen, however, symbolically over-rules the seasonal cycle of misery imposed on her by her husband when, at the end of the novel, she shows Gilbert Markham a rose which has survived the winter as representative of her own hardiness, and metaphorically instigates a springtime of her own (p. 482).

This rose is also important in connection with the imagery used throughout *The Tenant of Wildfell Hall* relating to plants, flowers and their relationship to climate. The construction of character, and particularly female character, as a plant in soil or climate unfit to nourish her, recurs throughout Victorian fiction.⁸⁸ In *Wuthering Heights*, Heathcliff declares that Edgar ‘might as well plant an oak in a flower-pot, and expect it to thrive, as imagine he can restore her [Catherine] to vigour in the soil of his shallow cares!’ (p.152). In *The Tenant*, Mrs Markham warns Helen Graham of the dangers of her methods of child-rearing through the same imagery:

‘and if you were to rear an oak sapling in a hothouse, tending it carefully night and day, and shielding it from every breath of wind, you could not expect it to become a hardy tree, like that which has grown up on the mountain-side, exposed to all the action of the elements, and not even sheltered from the shock of the tempest.’

(p.33)

Mrs Markham’s warning alludes to the power of environment in the formation of character, and also seems to invoke once again Buchan’s doctrine of exposure to the elements and to changing weather. Helen later bemoans the ‘sunless shade of solitude’ and ‘unwholesome

⁸⁷ Anne Brontë, *The Tenant of Wildfell Hall*, ed. with introd. and notes by Stevie Davies (London: Penguin, 1996), p. 265 and 369. All further references are to this edition.

⁸⁸ See M.H. Abrams, *The Mirror and the Lamp: Romantic Theory and the Critical Tradition* (London, Oxford and New York: Oxford University Press, 1953, rpt 1971) pp.171-77 on the image of the plant as Romantic metaphor for organic growth of both poetry and individual. I discuss this image further in Chapters 3 and 5.

soil' of her marriage (p.243), as well as describing her son's mind as a fertile soil where 'if weeds grow fast [...] so too do better plants' (p.369). Helen's use of this organicist register throughout the novel makes her speech to Gilbert Markham all the more powerful:

'This rose is not so fragrant as a summer flower, but it has stood through hardships none of *them* could bear: the cold rain of winter has sufficed to nourish it, and its faint sun to warm it; the bleak winds have not blanched it, or broken its stem, and the keen frost has not blighted it. Look, Gilbert, it is still fresh and blooming as a flower can be, with the cold snow even now on its petals. – Will you have it?'

(p.482)

For both Emily and Anne Brontë, then, climate is a powerful influence, but in *Tenant*, rain, wind and frost are ultimately less powerful than human, and especially Christian, will, whilst in *Wuthering Heights*, climate is something which must be understood and respected, but to which a fundamentally strong and 'hardy' individual is unlikely to be subordinated.

It is in *Jane Eyre*, however, that climate is given the fullest and most sustained attention. In this novel, the discourses surrounding climate which I have outlined in this chapter interconnect with and inform one another, particularly in relation to race and to health. *Jane Eyre* herself has frequently been read as undertaking various kinds of 'mission' through the narrative which are connected to Imperialism, health, or both. Deirdre David argues that Jane represents the contemporary ideal of a 'woman of empire' on a civilizing mission, the aim of which is ultimately to subdue Rochester by means analogous to those used by missionaries in colonial countries.⁸⁹ Susan Meyer reads Jane as undertaking a project to clean and 'sanitize' each environment in which she finds herself against the encroaching 'blackness' embodied by Bertha Rochester.⁹⁰ Alan Bewell has

⁸⁹ *Rule Britannia*, p.77.

⁹⁰ *Imperialism at Home*, p.82.

developed this point in specific relation to the diseased atmospheres Jane encounters, and the ways in which they echo discourses of colonial disease and ‘medical geography’. Jane’s ‘mission’, however, is framed throughout in terms of climates both British and colonial, and their relationship to health and disease.

Climate in *Jane Eyre* is a powerful mechanism to distinguish between the location of the narrative in ‘the healthy heart of England’ (p.402) and other, unhealthy parts of the globe. As David argues, ‘*Jane Eyre* is about the way Thornfield is not the West Indies, and is not India’.⁹¹ In ‘not’ being either of those places, however, Thornfield – as well as Gateshead, Lowood, Moor House and Ferndean – has its own particular relationship to the effects of weather and atmosphere. That is, although climatic theories both of race and of health are implicated in the narrative’s figuring of India and the West Indies, climate is also bound up with mental and well as physical health, with cause and cure of disease in regional and local settings. If we approach the text from a different direction – that is, to read climate as of central significance in the novel, rather than as a set of images the novel employs intermittently to express imperialist/anti-imperialist/racist sentiments – it is possible to identify connections between all of these areas.

I noted at the beginning of this chapter the ways in which the weather frames Jane’s representation at the opening of the narrative. From Gateshead, weather and climate follow Jane to Lowood, where they are not only unpleasant but also dangerous, in this ‘cradle of fog and fog-bred pestilence’ (p.89). Bewell’s arguments about diseased climates ‘in need of cure’ leads him to observe that the description of Lowood is ‘shaped as much by the language of medical geography as by aesthetics’, and that as a ‘diseased space’, the school echoes descriptions of ‘sick’ colonial spaces.⁹² As well as echoing colonial discourse,

⁹¹ *Rule Britannia*, p.91.

⁹² *Romanticism and Colonial Disease*, pp.27-28.

however, Lowood and the diseases encountered there also refer back to the contagionist/anticontagionist discourses identified by Freedgood in relation to the industrial cities of the 1830s and 40s, and their representation at Haworth itself.

Helen Burns's death from consumption is, as Sally Shuttleworth has observed, 'more dignified' than the contraction of typhus, which is simultaneously killing so many other pupils.⁹³ Typhus is personified: 'breathed' in by the fog (p.89) and remaining at the school until it has 'fulfilled its mission of devastation' (p.89). However, the relationship between this disease and contagion is uncertain: typhus is the result of '[t]he unhealthy nature of the site; the quantity and quality of the children's food; the brackish, fetid water used in its preparation; the children's wretched clothing and accommodations' (p.89). It does not discriminate in its victims, but can be caught simply from 'stopping out' 'when the dew is falling' (p.93). The point is less that typhus at Lowood is 'undignified' because contagious, and rather that susceptibility to dirty atmospheres reflects a body more earthly than that of the consumptive. For Helen Burns, a disease which is in filthy air, in dirt and in food, is inappropriate. However, consumption is also clearly located as a disease not transmissible between individuals. After Helen's death in bed with Jane, the girls are found in the morning, Jane 'asleep, and Helen [...] – dead' (p.96): they are carried, respectively, to bed and grave, with no sense that the less ethereal, rebellious Jane might have caught any disease from the sick child whose bed she shared.

Although typhus was one of the 'new' illness which caused alarm in the mid-Victorian period, giving rise to visions like that of the 'fever houses' in Dickens' *Bleak House*, where pestilence and contagion threaten to encroach into other areas, it was also primarily a disease of 'local environmental problems'.⁹⁴ Brontë conflates 'fog-bred

⁹³ *Charlotte Brontë and Victorian Psychology*, p.160.

⁹⁴ *Bleak House*, p.364; Anne Hardy, *The Epidemic Streets*, p.191.

pestilence' with the more prosaic causes of the disease identified by the 'inquiry' at the school (food, water, clothing, cramped conditions), but contains them all within the 'cradle' of Lowood. Climate defines places, but it also contains them. Jane next imagines Thornfield 'a neat, orderly spot', and, importantly, free from another kind of dangerous climate:

Millcote was a large manufacturing town on the banks of the A___; a busy place enough, doubtless: so much the better, it would be a complete change at least. Not that my fancy was much captivated by the idea of long chimneys and clouds of smoke – 'but,' I argued, 'Thornfield will, probably, be a good way from the town.

(p.103)

Industrial climates are indeed the least of those which may threaten health and constitution in the novel, and busy 'manufacturing towns' do not impinge on Jane's narrative. Though factory smoke and the industrial climate are easily dismissed in *Jane Eyre*, however, climates of all kinds emerge in relation to places which must be negotiated or avoided.

Throughout the novel, climate is invoked as a way of identifying place, and particularly the difference between English and non-English places. The intolerable cold at Lowood is 'Canadian'; a warm summer at Thornfield feels 'as if a band of Italian days had come from the South' to the cliffs of 'Albion' (p.278); and a large unusual moth who appears drawn North by the warm weather is 'West Indian' (p.280). Jane imagines a life with Rochester, in its immorality, as taking place in France, 'in a Southern clime', but rejects both the climate and the passion of this putative future for the life of 'a village schoolmistress, free and honest, in a breezy mountain nook in the healthy heart of England' (p.402). *Jane Eyre* makes a repeated association with England as Northerly, as healthy, and as 'temperate': this is most pronounced in contrast with foreign climates and their effects.

Bewell has suggested that *Jane Eyre* is a novel preoccupied with discourses on the 'tropical invalid'.⁹⁵ In the 'ruined' figure of Richard Mason, the death in India of St John Rivers, and in Rochester's flight from the unhealthy West Indies on the tail of a 'European' wind, Bewell detects a persistent theme of fear of tropical climates and the loss of independence which they frequently entail, whilst Jane herself, in her cleanliness and her affiliation with the wind itself, constitutes the 'embodiment of an ecological myth' of health.⁹⁶ Bewell also makes a connection between the dangers which a tropical climate might pose to health, and the health of the working-class poor in industrial towns, reading *Jane Eyre*'s mission for cleanliness and good health as analogous to the reformist aims of the public health movement in the period. However, as I noted above, the narrative seems to detach itself from the urban environment early on: the problems caused by 'long chimneys and clouds of smoke' do indeed appear to be 'a good way' from *Jane Eyre* and all she encounters. The novel's engagement with questions of health and environment seems to be related to the individual rather than to society: as Shuttleworth observes, the novel 'can be read as a quintessential expression of Victorian individualism. Whilst George Eliot's heroines ask where can social duty lie, Charlotte Brontë's only ask how individual desires and ambitions can be achieved.'⁹⁷ *Jane Eyre*'s interest in individual progress and success seems far more prominent than any questions it might raise about the condition of the urban poor, whilst fears about the perils of a tropical climate seem generally bound up with fears of what *any* climate might do to Jane herself.

At Moor House, it is clear at an early stage that St John Rivers is keen to develop a healthy constitution by being, in William Buchan's phrase, 'abroad every day'. 'No weather seemed to hinder him in [his] pastoral excursions' (p.392): in response to the

⁹⁵ *Romanticism and Colonial Disease*, p.285.

⁹⁶ *Romanticism and Colonial Disease*, p.288.

⁹⁷ *Victorian Psychology*, p.182.

suggestion he might stay indoors, St John asks 'if I let a gust of wind or a sprinkling of rain turn me aside from these easy tasks, what preparation would such sloth be for the future I propose to myself?' (p.393). In 'preparation' for the perils of the Indian climate, then, St John is clearly attempting to develop the healthy, resilient form which will enable him to withstand the extreme heat. He also stresses Jane's own physical stamina in terms of her ability to survive climatic variations, in order to prove her suitability to accompany him on his mission. St John's response to entreaties from Diana and Mary Rivers that Jane should stay at home in poor weather is telling:

'Jane is not such a weakling as you would make her,' he would say: 'she can bear a mountain blast, or a shower, or a few flakes of snow, as well as any of us. Her constitution is both sound and elastic; - better calculated to endure variations of climate than many more robust.'

(p.442)

St John's language here is interestingly ambiguous. It is unclear whether he is implying that Diana and Mary 'would make' Jane a weakling with their words and conception of her - that is, 'make her *out* to be a weakling' - or whether, more literally, they might actually weaken her constitution by encouraging her to stay at home in the warmth, a Linton 'coddled' by the fire. In either case, his emphasis on her 'sound and elastic' constitution clearly reflects his estimation of her as a woman who could withstand the Indian climate in all necessary ways.

A favourite term of both Charlotte Brontë and William Buchan, 'elasticity' held a number of related meanings in the period. Throughout the nineteenth century, 'elasticity' was frequently used figuratively to refer to 'energy, vigour, buoyancy of mind or character;

capacity for resisting or overcoming depression'.⁹⁸ Jane Eyre's 'elastic' constitution, then implies not only her capacity to return to a state of equilibrium after experiencing extremes of heat or cold, but also to a more profound and personal kind of resilience and cheerfulness. The very concept of elasticity implies and attests to the connections between mind and body which both Brontë and Buchan saw as open to climatic disturbance and change.

However, the novel clearly positions the Indian climate as more dangerous than St John supposes. Jane argues that hers is 'not the existence to be protracted under an Indian sun', and that to go to India would be to 'go to premature death' (p.450), while Diana fears that Jane would be 'grilled alive in Calcutta' (p.462). Though this 'grilling' also alludes to the practice of 'suttee' in India,⁹⁹ the violence of Diana's language suggests an actively aggressive side to climate which is echoed in Rochester's later assertion that to bring Bertha to the 'insalubrious' Ferndean would have amounted to 'indirect assassination', since 'those damp walls would soon have eased [him] of [his] charge' (pp.338-39). Although Jane Eyre is presented as a heroine with health and elasticity enough to survive the 'cradle' of typhus and the vagaries of British weather, then, the novel still reflects ideas about the dangers of climate which were later fully developed in Brontë's correspondence and in *Villette*.

Strangely, however, having declined St John's offer to travel to India, Jane finds herself in a situation almost as unhealthy as was Lowood. The conclusion of the novel in the 'insalubrious' atmosphere at Ferndean has caused something of a problem for critics. Bewell argues that 'it would be difficult to see Jane's final settlement in the fog-ridden

⁹⁸ See *OED*. Brontë refers to her own failure to recover 'elasticity' after a visit to the sea in a letter to W.S. Williams, June 1852, whilst in *Shirley*, a significant element in Shirley's 'enviable' good health is that her 'elasticity remained unbent' after storms. *Shirley*, ed. by Herbert Rosengarten and Margaret Smith, introd. and notes by Janet Gezari (Oxford and New York: Oxford University Press, 1998 rpt. 2007), p.345.

⁹⁹ See David on the Victorian horror of this practice as representative of lack of civilization in the colonies, and Brontë's references to suttee throughout *Jane Eyre* pp.77-80.

woods of Ferndean as more than the expression of a hope that England might be made more healthy for its people'.¹⁰⁰ Meyer, having detailed Jane's mission to 'clean down' unhealthy atmospheres throughout the novel reads Ferndean as a location which Jane will find impossible to sanitize, and argues that its 'insalubrious' damp and fog disrupt 'the utopian elements of the ending, indicating that the world is still not fully purified of oppression.'¹⁰¹ Brontë's decision to leave Jane and Rochester in this particular environment is indeed puzzling, but may be both more ambiguous and less ominous than Bewell and Meyer suggest.

Ferndean is Rochester's inheritance from his father, which he has never been able to let because of its 'ineligible and insalubrious' situation, too dangerous, as I noted above, even for Bertha to inhabit. However, Jane and Rochester not only settle at Ferndean, but find in it a regenerative power unrivalled by any other location in the novel: Rochester recovers his sight, and Jane gives birth to healthy children. Readings of Ferndean as an irredeemably unhealthy place, impossible to clean and restore, or as casting a gloomy shadow over the novel's conclusion, do not take into account that Jane concludes the novel after ten apparently healthy years of marriage and inhabitation of the house. The final chapter, with its famous opening line, 'Reader, I married him' (p.498) seems in fact to take place in a different Ferndean: instead of mentioning damp and decay, Jane refers to 'the landscape before us; [...] the weather around us', and 'tree, town, river, cloud and sunbeam' (p.500), all of which help Rochester to regain his sight. Also significant is the description of the couple's return from their wedding: 'I went into the kitchen of the manor-house, where Mary was cooking the dinner, and John cleaning the knives' (p.498). The imperialistic project of 'cleaning down' identified by Meyer, and the work of

¹⁰⁰ *Romanticism and Colonial Disease*, p.294. Sally Shuttleworth also suggests that the conclusion 'ill accords with Jane's attempts to claim happiness for all', *Victorian Psychology*, p.181.

¹⁰¹ *Imperialism at Home*, p.93.

domestication, has shifted to the staff Jane now merits as a rich man's wife. The scene is redolent of warmth and comfort, and constantly reaffirms Jane's new status: she is at ease in the kitchen, watching Mary baste roasting chickens, and John engaged in a 'polishing process', but also comfortable with her role in pressing a five pound note into the hand of the servile John, who politely pulls his forelock to the new mistress.

However, though this conclusion seems to suggest that individuals can survive 'insalubrious' climates, the narrative is also framed, finally, by the news of St John's death in India. His final letter announces his own anticipation of imminent death, and we assume that the climate of India has triumphed over all St John's best efforts in preparation, as his 'master' announces daily 'more distinctly' that death is imminent. For Bewell, this is confirmation of the narrative's mapping of the theme of 'tropical invalidism', and it does indeed seem to warn of the dangers of climates abroad. However, St John's submission to his cause, contrasted with Jane's health and success, also affirms and validates the kind of 'individualism' which pervades the novel. St John's death might be less a final, ominous warning about imperialism or climate, and rather a contrast between his submission of self and life to Christ, and Jane's continued mission to forge a new and healthy life at Ferndean. Thus, St John's death need not cast a shadow over Jane's own health and future: rather, it removes the last suggestion of self-sacrifice, leaving Jane free to pursue individual happiness in a climate now made healthy.

Wuthering Heights, *The Tenant of Wildfell Hall* and *Jane Eyre* demonstrate the differing ways in which all three Brontës read climate, and interpreted climatic theories during a brief and productive moment of contiguous literary output. Though *Wuthering Heights* has cast something of a shadow over readings of Brontë climates and climate at Haworth, its frequently optimistic associations with weather combine with a strong sense of the role of individual will and determination which suggest a more idiosyncratic reading of

the domestic medicine texts on Emily Brontë's part than Caldwell suggests. All three Brontës take the effects of climate on constitution as a given, but interpret this with a level of optimism which increasingly fades from Charlotte Brontë's later visions of weather and climate. As her correspondence begins to demonstrate an ever bleaker response to the weather and a heightened sense of the difficulty of mediating or surviving its effects, Charlotte Brontë writes enviously of Shirley's 'elasticity', but later with more conviction of Lucy Snowe's weakness and susceptibility. *Jane Eyre*, however, represents a moment at which Brontë inscribes the novel's climate and weather with several powerful contemporary discourses, in such a way that they both form an important part of the definition of place and region, and also threaten to affect bodily health. However, the novel ultimately affirms that the individual might be stronger than the elements which surround her: a particularly radical move, I suggest, in the context of Brontë's local environment, which continually suggested the opposite.

CHAPTER 3

‘THE DESOLATION WROUGHT BY THAT FLOOD’: DILUVIAL THEORIES AND
THE MILL ON THE FLOSS.

1. Introduction

From the moment George Eliot began writing and researching *The Mill on the Floss*, she intended the novel to end with a flood. She noted in her commonplace book that she and G.H. Lewes ‘went into town today and looked in the Annual Register for cases of inundation’,¹ and documented in letters and notes her interest in cataclysmic floods and her intention to include one as realistic and probable as possible in the novel she was composing, transferring the action of the novel to Lincolnshire during composition on the grounds that such a flood was more likely there. Despite Eliot’s research, critics and reviewers from the novel’s publication onwards have struggled to reconcile the flooding of St Ogg’s with the realist register of the rest of the novel. This may be partly because Eliot’s assiduous research and attempts at writing a meteorologically and geographically plausible ‘inundation’ sit uneasily with the apparent echoes of diluvialist geological debates of the 1830s, which this chapter argues are evoked in the flooding of St Ogg’s. Critical resistance to reading the flood *as a flood* has meant that a range of meanings and significances have been missed. In this chapter, I explore the connections between Eliot’s grounding of the flood in real weather events of the past; diluvial theories in geology; and the flood’s position as part of the broader climate which the novel describes.

Few critics have read the flood in the terms Eliot intended, and none have discussed its resonance with early nineteenth-century geological theories. In this chapter, I suggest that Eliot’s initial reading of Darwin’s *Origin of Species* seems to have led her to a sense

¹ See Gordon S. Haight ‘The Mill on the Floss’ in Haight ed., *A Century of George Eliot Criticism* (London: Methuen, 1965 rpt. as a University Paperback, 1966), p.339, and Jenny Uglow, *George Eliot* (St. Ives: Virago Press Ltd., 1987 rpt. 1994, 1996), p.124, on Eliot’s early conception of the novel and the role the flood was to play.

that all accounts of geological change and ‘Development’ were subject to change, re-interpretation and re-evaluation – diluvial theories as much as any other. I show how geologists initially proposed the Noachian flood as a primary determinant of geological change, until, in the 1830s, the discipline began to move away from the idea that diluvialism offered a credible account of the earth’s structure and past changes. In the third section of the chapter, I explore Robert FitzRoy’s insistence on a biblical flood in his writing about the *Beagle* journey. I contrast this with Darwin’s own rejection of diluvial theory, and argue that this rejection also forms part of Darwin’s wider argument that climate tended not to function as a check to population or an influence on the development of species. Finally, my reading of *The Mill on the Floss* reintegrates the novel’s repeated references to floods and flooding with its broader depiction of the weather. I contrast *Mill*’s climate with that of *Adam Bede* (1859), and argue that *Mill*’s flood and narrative climate exist in a difficult relationship to one another, which may well be one reason why contemporary reviewers and critics from all periods have frequently found the flooding of St Ogg’s profoundly problematic.

A contemporary review of *Mill* suggested that its author:

does not know how to bring her story to a natural end. When once the point is past to which the whole has been tending, and in which all her strength and intensity has been put forth, she does not care much what happens to her people. She marries them, or she drowns them, it does not matter much which.²

This review places drowning on the same level as marriage: final and irrefutable, but at the same time too easy and obvious a conclusion. The reading of the flood as an unsatisfactory *deus ex machina* reached its apotheosis in F.R. Leavis’ comment that the ‘flooded river has

² Anonymous review, *The Guardian*, (25th April 1860), rpt. in Stuart Hutchinson ed., *George Eliot: Critical Assessments*, 4 Vols. (East Sussex: Helm Information Ltd, 1996), I, 123-29, (p.125). Hereafter *CA*.

no symbolic or metaphorical value. It is only the dreamed-of perfect accident that gives us the opportunity for the dreamed-of heroic act'.³ But even where critics approach the flood more open-mindedly than Leavis, it has often presented difficulties in reading *Mill*. Ironically, given Eliot's research, the only critic to focus on the meteorological context of the flood concludes that 'the meteorology is wrong'.⁴ The flooding of St Ogg's, despite Eliot's apparent efforts to the contrary, does tend to strike readers and critics alike as a problem, both as a failure of realism, and as an inadequate conclusion to the complex life of Maggie Tulliver.

One way of negotiating the questions the flood presents has been to focus instead on its symbolic meanings. Gillian Beer deals with the question of realism by observing succinctly that, 'floods may happen', and then by detailing the relationship between the flood, narrative realism, and symbolism:

The flooding river is part of the natural conditions which have produced the particular economic order at St Ogg's. The flood thus has meanings which pull in opposing directions: outside the social and yet within the economic order, there is always the possibility of the uncontrollable natural event which comes willy-nilly and must take its course. At the same time, the analogy with sexual passion is strong, and particularly with female passion.⁵

Beer's focus, then, is on the sexual and female passion which constitutes one of the flood's many meanings. However, the description of the flood as something both 'outside' and 'within' different 'orders' in St Ogg's is also a fruitful way of considering it as a climatic event. The flood is a part of weather, and of the defining climate of St Ogg's, but it is also

³ F.R. Leavis, 'Revaluations (XV): George Eliot (I)' in *Scrutiny* XIII, (Autumn-Winter 1945), 172-87, rpt. in *CA*, II, 146-61, (p.159).

⁴ John Sutherland, *Can Jane Eyre Be Happy?* (Oxford and New York: Oxford University Press, 1997), p.132.

⁵ Gillian Beer, *George Eliot in Key Women Writers* series, ed. by Sue Roe (Bloomington; Indiana University Press, 1986), p. 100.

outside most of the community's experience of that climate, though both community and individuals frequently refer to and remember floods of the distant past. Not only has the flooding river helped to construct the particular 'economic order' of the town, it has also, as I shall show, affected the geology and physical structure of the town: the Round Pool, in particular, is described as having been formed by floods of the past.⁶ The narrative makes it very clear that St Ogg's has been formed, changed and influenced by floods. It is surprising then, that these floods have received little or no critical attention. In this chapter, I argue that the importance of the diluvial narrative in *Mill* goes significantly beyond the symbolic.

Feminist, Freudian and Marxist readings of the novel have variously positioned the flood as an explosion of passion, a disintegration of language, ontology, sexuality or economic tension.⁷ Penny Boumelha argues that the flood is so 'flagrantly fantasized and contrived' that it must be seen as a self-conscious escape from the realist mode, submerging 'the world of history (and of mimetic realism) along with St. Ogg's, bringing with it the victory of symbol, legend, fantasy.'⁸ However, given Eliot's attempts to research the flood, and to find a location for the narrative in which this flood might be read as passingly plausible, the idea that it also constitutes a deliberate rejection of realism is difficult. Boumelha finds the flood apposite not only because it 'flagrantly' discards realist constraints, but also because it is a fitting ending to the life of a particularly complex and intriguing heroine:

⁶ George Eliot, *The Mill on the Floss*, ed. with introd. and notes by Gordon S. Haight (Oxford and New York: Oxford University Press, 1996 rpt 1998), p. 50. All further references are to this edition.

⁷ See, for example, Elizabeth Weed, 'The Mill on the Floss or the liquidation of Maggie Tulliver', *Genre*, XI (Fall 1978), 427-44, rpt. in *CA* III, 131-46, (p.135), and David Smith, "In their death they were not divided"; The Form of Illicit Passion in *The Mill on the Floss*'; from 'Incest Patterns in Two Victorian Novels' in *Literature and Psychology*, XV (1965), 135-62 rpt. in *CA*, III, 114-30, (p.126).

⁸ Penny Boumelha, 'Realism and the Ends of Feminism' in Susan Sheridan ed., *Grafts: Feminist Cultural Criticism* (London: Verso, 1988), pp.77-92, (p.88).

It is important [...] that Maggie does not, for example, gently expire from one of those quasi-symbolic brain-fevers so apt in this period to strike down heroines with brain enough to become enfevered. Instead, she is at once vindicated and annihilated by the flood.⁹

Mill is, indeed, striking in the period for its healthy and robust heroine. Yet though Maggie is less susceptible to pestilential wind, miasmatic air, or wet feet than any Brontë heroine, she is just as surely killed by climate. One question my chapter raises is whether this might be particularly significant in the context of Darwin's repeated assertions that climate tends not to reduce species or have a direct impact on evolution.

The flood in *Mill* has, I suggest, a complicated relationship with Eliot's reading of Darwin's *The Origin of Species* during the novel's composition. *The Origin of Species* was published on the 24th November 1859: Eliot began reading it immediately, writing to Charles Bray on the 25th that the work made 'an epoch', but to Barbara Bodichon on the 5th December that 'the Development theory' produced 'a feeble impression compared with the mystery that lies under the processes'.¹⁰ At this point, the first volume of *Mill* was finished; during the rest of December, Eliot was completing Book III, which details Mr Tulliver's loss of the mill, and financial decline. It was not until the 22nd March 1860 that Eliot turned out the last eleven pages, with furious speed.¹¹

Whilst the theme of 'struggle' and competition in the novel – which certainly intensifies in those parts of the narrative composed after Eliot read *The Origin* - seems to point to a line of influence from Darwin's text to *Mill*, Eliot's initial response to Darwin's

⁹ 'Realism and the Ends of Feminism', p.86.

¹⁰ Gordon S. Haight ed., *The George Eliot Letters*, 9 vols. (New Haven: Yale University Press, 1982), IV, 214 and 217.

¹¹ Rosemary Ashton, *George Eliot: A Life* (Allen Lane, London: Penguin Press, 1996), pp.228-232. Frederick Karl observes that the manuscript of *The Mill* contains very few 'heavy revisions', suggesting that Eliot did not revisit her work after her reading of Darwin or alter it significantly in the light of her reading of *The Origin*. *George Eliot: A Biography* (London: Flamingo, 1996), p.331.

theories suggests more fruitful possibilities in reading the novel. Shuttleworth has noted that this response was fairly typical of contemporary reaction: Eliot viewed *The Origin* as a masterly and well-argued continuation of the essentially Lamarckian ‘Doctrine of Development’.¹² In *Darwin’s Plots*, Gillian Beer notes that Eliot was initially ‘misled by her very familiarity with contemporary debate’ in her reading of *The Origin*: having read Lamarck, Chambers, Lyell and Spencer, she saw Darwin at first as merely summarizing their ideas, and ‘did not perceive the novelty’ of what he had written or ‘immediately grasp its implications’.¹³ If *The Origin* seemed like only the most recent development in a continuing progression of evolutionary theory, geological arguments about the Noachian deluge, and changing responses to such arguments, were also an important part of this long narrative, and one which *Mill* seems consciously to invoke.

Critical discussions of *Mill*’s relationship to evolutionary theory have tended to focus on struggle and competition in Eliot’s narrative. Barbara Hardy, Sally Shuttleworth and Gordon Haight have all noted that Eliot was preoccupied by the idea that ‘survival of the fittest’ did not always mean survival of the ‘best’.¹⁴ Hardy states that:

Even though *The Mill on the Floss* is a very Darwinian novel, its debt to Darwin is to be found in its hard and pessimistic look at struggle and survival, rather than its optimistic treatment of personal evolutions.¹⁵

The competition between Tulliver and Wakem, the theme of Maggie’s maladaptation to her environment and the analogies with a natural world ‘red in tooth and claw’ all provide strong evidence for this claim for pessimism in *The Mill on the Floss*. However, the

¹² *George Eliot and Nineteenth-Century Science*, p.16

¹³ *Darwin’s Plots*, p.146.

¹⁴ Haight notes in ‘The Mill on the Floss’, that ‘[Eliot’s] keen intelligence questioned the optimistic assumption that the course of evolution was always towards the best’, p. 348.

¹⁵ Barbara Hardy, *Particularities: Readings in George Eliot* (London: Peter Owen, 1982), p. 69.

designation of the term ‘very Darwinian’ to the novel seems questionable other than in this regard.

Sally Shuttleworth identifies pessimism in the novel not only in the tragic outcome of its competitive environment, but in the narrative’s aversion to unifying schemas of any kind. Eliot, Shuttleworth observes, appears to challenge any elements of Darwinism which ‘might possibly be linked with a theory of progress or directed adaptation’, and to focus rather on the bleakest implications of evolutionary theory.¹⁶ This focus, however, is not only articulated through Eliot’s frequent analogies with the animal world, but through her extraction of the principle of ‘survival of the fittest’ into social and economic life, so that, for example, the young of St. Ogg’s assume that losses incurred by any coming flood will ‘be felt only by the poorer sort’ (p.512). Shuttleworth also warns that whilst it is ‘tempting’ to discuss *Mill* in terms of natural history and evolutionary biology, and to account for its differences from *Adam Bede* in this way, ‘to do so would be to ignore the [...] complex attitude to time and fictional construction’ in *Mill*. She argues that there are two timelines in *Mill*: one is that of continuity, organic change, and gradualism, and the second, which disrupts this, is displayed in the catastrophism of the novel’s conclusion.¹⁷ I accept both Shuttleworth’s warning of the potentially reductive nature of a reading which contextualizes *Mill* too closely with *The Origin*, and the idea of the two concurrent timelines in the novel. In this chapter, however, I argue that both the climate of the novel, and the flood at its conclusion, are frequently related to these timelines, in a marked contrast to Eliot’s depiction of climate in *Adam Bede*.

I set out to first to explore what it meant, in 1859 and 1860, to write about a flood. Diluvialism was by this point – as Darwin himself observed – ‘almost banished’ from

¹⁶ *George Eliot and Nineteenth-Century Science*, p.57.

¹⁷ *George Eliot and Nineteenth-Century Science*, p.54.

modern geology;¹⁸ however, the Noachian flood had formed a central part of thinking about the formation and population of the earth in geology up until at least 1820. The flood remained an area for debate and discussion through the 1830s: this debate is alluded to directly in *Mill*. As I shall show, the novel invokes both geological theories during the period, and Noah's flood itself.

2. Arguing about the flood: diluvialism and early nineteenth-century geology

During what has been termed the 'heroic age' of geology, between 1790 and 1820, it was generally believed that a flood or floods had determined the shape and nature of the earth.¹⁹ Ideas about how the flood(s) might have taken place, and whether, as Cuvier argued, there had rather been a series of smaller floods, each taking effect in turn, varied and were debated amongst geologists. However, the central idea that the Mosaic account was a roughly accurate description which geological study could illuminate and explain by detailing the physical results of flooding, was widely accepted. Historians of science have recently questioned a previously widespread notion that Lyell's *Principles of Geology* (1830) marked a definitive end to the flood's predominance in geological science.²⁰ During

¹⁸ Charles Darwin, *The Origin of Species*, ed. with introd. and notes by Gillian Beer (Oxford: Oxford University Press, 1988), p.245.

¹⁹ See Gertrude Himmelfarb, *Darwin and the Darwinian Revolution* (New York: Norton and Co., 1968), p.83.

²⁰ Charles Coulston Gillispie embodies the approach which views 1830 as a decisive moment in the move away from the flood in geology in *Genesis and Geology: A Study in the Relations of Scientific Thought, Natural Theology, and Social Opinion in Great Britain 1790-1850* (New York: Harper and Row, 1959), p.91. Martin S.J. Rudwick, 'The Shape and Meaning of Earth History' in Lindberg and Numbers eds, *God and Nature: Historical Essays on the Encounter Between Christianity and Science* (Berkeley, Los Angeles and London: University of California Press, 1986), pp. 296-321 (p.313), and James R. Moore, 'Geologists and Interpreters of Genesis in the Nineteenth Century', in the same anthology, pp. 322-350 (p.325) debate this identification of 1830 as definitive and pivotal, arguing for more gradual changes in scientific opinion.

the late 1830s, as I shall show, diluvialists were engaged in a process of re-evaluating their theses, contradicting opposing views to keep the question of the geological deluge central to the discipline, or, in the case of Robert FitzRoy, making a determined return to scripture in order to reaffirm the thesis of a universal flood. During this time, Eliot's own changing perspectives on religion were slowly leading her away from scriptural geology: in 1839, she found the Reverend Harcourt's *Doctrine of the Deluge* – a text which tried to reclaim the flood from Lyell's mission to eliminate it from geological enquiry - 'allusive and elliptical'.²¹ If Eliot had never in adult life been persuaded of the validity of diluvial theories, she was nonetheless aware that they were in circulation, and of their relevance to the continually developing discipline of geology.

The career of William Buckland, his writings about the deluge and his ultimate recantation of diluvialism, in many ways map the trajectories both of geology itself and of diluvialism in particular. I also focus on Buckland here since he is mentioned by name in *Mill*, suggesting that Eliot was aware of at least some of his work. An energetic and idiosyncratic lecturer at Oxford in the 1820s, Buckland argued successfully that geology was a subject fit for University study, and that its chief benefit was its ability to reinforce the teachings of the Bible by explaining and thereby proving the Mosaic account of creation through contemporary geological findings;²² and indeed, *vice versa*. Early in his career, Buckland argued that a 'geological deluge' had taken place which was, essentially, Noah's flood. However, since the biblical account was flawed, incomplete and in need of re-interpretation, geological study and explication were needed to show exactly how the flood

²¹ Haight ed., *Letters*, I, 34.

²² Rudwick shows how Buckland's changing theories in geology reflected the 'highly specific circumstances' of moments in his career: for example, at Oxford, it was important to defend geology from claims that it might provoke religious scepticism, but later in his career, Buckland was quick to see that diluvialism had fallen from favour, and did not hesitate to change his own theories in response. 'Shape and Meaning', p.313.

occurred and to assess the nature and extent of its impact. By identifying the need for such explication, Buckland marked out a space for his own career.

Buckland managed to reconcile two main pre-existing theories: Vulcanism, which argued for a changing earth as acted upon by a series of volcanic eruptions, and Neptunism, which placed the Noachian flood at the centre of its interpretations.²³ His diluvialism did not refute the Vulcanist thesis of an earth which had gradually changed as the result of a long series of volcanic eruptions: at the same time, he maintained the central importance of a universal flood. Buckland argued that a universal geological deluge had been caused by a volcanic eruption which set in motion a huge tidal wave and consequently destroyed or displaced human and animal life across the globe. In 1823, he published *Reliquiae Diluvianae*, an account of fossil bones found in a cave in Yorkshire the year before, which Buckland argued belonged to creatures which had perished before the flood itself, but had been covered in mud in the surging waters and therefore hidden from view until recent excavations. The book sold rapidly, and Buckland achieved broad recognition.²⁴

The later stages of Buckland's career, however, reflect a move away from the idea of the flood as a central cause and agent in geological change. In 1836, he composed the sixth Bridgewater Treatise, *Geology and Mineralogy Considered with Reference to Natural Theology*. The Bridgewater Treatises were commissioned in a bequest in 1825 by the Earl of Bridgewater, to uphold the 'Power, Wisdom and Goodness of God, as manifested in the Creation': despite his stated 'reference to natural theology', however, Buckland questioned some of the specific details of the Mosaic account. Buckland's approach to diluvialism changed significantly in this Treatise. He now argued that a series of volcanoes and

²³ Gillispie, p.103.

²⁴ Neville Haile, 'William Buckland, 1784-1856', *DNB*.

catastrophes had occurred after the Noachian flood, and had changed the face of the earth far more recently than he had suggested in previous works.

Contemporary tensions between ‘natural theology’ and ‘geology and mineralogy’ are apparent in Buckland’s treatise. Buckland treads a difficult path between affirming the development of geology as a science which was now capable of re-interpreting the Mosaic account, and yet retaining the fundamental premise of the flood of the Old Testament. The treatise queries the idea of the flood as the *sole* agent of change, and also suggests a narrative of creation where some species, and some types of rock formation and sediment, were created significantly later than the Mosaic account had claimed. Explaining how the materials of the created earth were changed by volcanic eruptions which produced new rock formations, Buckland illustrates the power of catastrophic activity to those whom he assumes have become complacent about it:

In the state of tranquil equilibrium which the planet has attained in the region we inhabit, we are apt to forget the foundation of the solid earth, as an emblem of duration and stability. Very different are the feelings of those whose lot is cast near the foci of volcanic eruptions; to them the earth affords no stable resting place, but during the paroxysms of volcanic activity, reels to and fro, and vibrates beneath their feet; over-throwing cities, yawning with dreadful chasms, converting seaside into dry lands, and dry lands into seas.²⁵

Buckland identifies the British Isles as having reached a stage of development superior to other parts of the planet which had not yet ‘attained’ the ‘state of tranquil equilibrium’ enjoyed by the British. Despite this privileged position, however, Buckland’s point is that his readers should realize that such a state can be neither universal nor permanent. By extension, if volcanic eruptions could wreak such effects elsewhere on the globe *now*, there was no reason to place a limit on the effects which they might have wrought in the past.

²⁵ William Buckland, *Geology and Mineralogy Considered With Reference to Natural Theology*, sixth Bridgewater Treatise (London: Hatchard and Son, 1837), p. 47.

Even as the sixth Treatise was published, the theme of a universal deluge was already becoming out-dated and even risible, as were the Bridgewater Treatises themselves, which seemed, by the late 1830s, 'positively passé'.²⁶ Whilst notions of 'revolution' in science should be approached with caution, it is certainly true that by the 1830s, several leading figures had publicly retracted their affiliations to diluvialism. When Sedgewick resigned from his presidency of the Geological Society in 1832, he used his closing speech to express the wish that he and others had been more reserved in their unquestioning certainty about the universal deluge.²⁷ The discipline at this stage became increasingly polarized into 'scriptural' (essentially catastrophist and diluvialist) and 'scientific' (gradualist and uniformitarian) geology. Although the abandonment of diluvialism by Sedgewick and other members of the Geological Society 'may be taken as the first step in a general rout',²⁸ away from thinking about the deluge in professional and respected geologists, however, protesters and reactionaries remained.

In a *Letter to Professor Buckland Concerning the Origin of the World* (1838), the geologist William Cockburn argued that Buckland's argument was incompatible with geological knowledge. The inconsistencies which had led Buckland to his conclusions could, Cockburn suggested, be explained through the Mosaic account of creation and particularly through reference to the Noachian flood. 'We read [in the Mosaic account] of no convulsion, no storms, nor variations', argued Cockburn.²⁹ The *Letter* dismissed the possibility that volcanoes had acted as a primary cause and force, reinstating the flood as the most important determinant of the structure of the earth, and of species distribution.

²⁶ See Adrian Desmond and James Moore, *Darwin* (London: Penguin, 1990), p.213. Desmond and Moore note that London society, by the time of Darwin's return from the *Beagle*, termed the treatises 'bilgewater', p.219.

²⁷ Gillispie, *Genesis and Geology* p.142.

²⁸ Gertrude Himmelfarb, *Darwin and the Darwinian Revolution* (New York: Norton and Co., 1968), p.234.

²⁹ William Cockburn, *A Letter to Professor Buckland Concerning the Origin of the World* (London: Hatchard and Son, 1838), p. 15.

Though the immense geological upheaval caused by the deluge initiated volcanic eruptions, Cockburn argued, these eruptions acted only on those creatures too large or too slow to flee upwards, and away from the water:

The heavy inhabitants of the marshy and low ground, the dinotherium, the ichthyosaurus, &c., &c., are unable to get away; they are overwhelmed & drowned, or poisoned by the lime and other materials, which had already fallen into the water.³⁰

Cockburn's vague '&c., &c.', though perhaps pointing to a degree of uncertainty over which species might have been in existence, and fleeing, also implies that the numbers and types were simply too many to count or to name: the wholesale, watery destruction caused by the flood defies both language and syntax. The apparent narrative appeal of the flood notwithstanding, however, it no longer constituted a credible account of geological change. Robert M. Young notes that Cockburn's *Letters* were 'met with polite but unencouraging replies' from the Geological Society:³¹ diluvialist arguments, it seems, could not be entirely silenced in the late 1830s, but the response from geological circles was unenthusiastic at best.

3. The flood, climate and evolution: narratives from the *Beagle*

Outside this specifically geological argument about the flood, yet making a vehement case for the diluvialist account, was Robert FitzRoy, captain of the *Beagle*, scriptural literalist,

³⁰ *Letter to Professor Buckland*, p.17.

³¹ Robert M. Young, *Darwin's Metaphor: Nature's Place in Victorian Culture* (Cambridge and New York: Cambridge University Press, 1985), p.7.

and, later, meteorologist. Whilst the debate between Buckland and Cockburn hinged on invoking geological ‘proof’ of their respective arguments, FitzRoy’s writing about the Noachian flood derived explicitly and unashamedly from his own religious perspective. FitzRoy’s argument was, to Darwin and Lyell, as risible as were the Bridgewater Treatises.³² I invoke it here as representative of the state of diluvial discussion by 1839, and also as particularly interesting in its context as an intended counter to Darwin’s own emergent geological arguments and theories.

FitzRoy’s narrative of the *Beagle* voyage was published with Darwin’s in 1839, and included a chapter entitled ‘A very few remarks with reference to the Deluge’.³³ This understated title belies the vigorous nature of the argument which follows. FitzRoy stated firmly that he viewed a lack of belief in the literal word of the Bible to be a ‘suffering’ to which ‘young men’ were particularly prone.³⁴ He regretted having been ‘led away by sceptical ideas’ on the *Beagle* voyage, and set out to try and dissuade ‘young men in the navy’ from following the same route:

....knowing extremely little of the Bible, one of my remarks to a friend, on crossing vast plains composed of rolled stones bedded in diluvial detritus some hundred feet in depth, was ‘this could never have been effected by a forty days’ flood,’ – an expression plainly indicative of the turn of mind, and ignorance of Scripture. I was quite willing to disbelieve what I thought to be the Mosaic account, upon the evidence of a hasty glance, though knowing next to nothing of the record I doubted: and I mention this particularly, because I have conversed with persons fond of geology, yet knowing no more of the Bible than I knew at that time.³⁵

³² Desmond and Moore, pp.284-85.

³³ *Narrative of the surveying voyages of HMS Adventure and Beagle*, vol. 2, ch. 28, rpt in Janet Browne and Michael Neve eds, *Voyage of the Beagle* (London: Penguin, 1989), pp.400-424.

³⁴ ‘A Few Remarks’, p.401.

³⁵ ‘A Few Remarks’, pp.402-03. The ‘friend’ in question was Darwin.

Briefly then, during his voyage with Darwin, FitzRoy had been swayed by gradualist arguments: after this, however, the positions of the two men were irreconcilably opposed. FitzRoy's method of addressing his temporary doubts about the flood was not to examine geological evidence more closely, but rather to remedy his 'ignorance of Scripture'. His 'turn of mind' is presented as a kind of religious crisis which only a return to the Bible can solve: the 'Remarks' constitute a recantation of what seems almost like a sin in having doubted the universal deluge. For the rest of the chapter, FitzRoy approaches the question by first referring back to the Bible, and only then considering how geological evidence might confirm and justify the scriptural word.

The respective careers of Darwin and FitzRoy after the *Beagle* journey seem significant in terms of the flood, and more generally in relation to the status of climatic accounts of evolution. FitzRoy rejected Darwinian evolutionary theory, and turned first to diluvialism, and then to meteorology. In what seems an echo of Lamarck's career in the early nineteenth century, FitzRoy's emphasis on climatic determinants in geological change led him to the study and prediction of weather itself. FitzRoy's reading of the structure of the earth and his meteorological endeavours, also like Lamarck's, damaged his reputation during his own lifetime, as I show in more detail in Chapter 4.

By contrast with FitzRoy, Darwin's account of the *Beagle* journey barely mentions the deluge, except to note that:

The perfect preservation of the Siberian mammals, perhaps presented, till within a few years, one of the most difficult problems which geology ever attempted to solve. On the one hand it was granted, that the carcasses had not been drifted from any great distance by any tumultuous deluge, and on the other it was assumed as certain, that when the animals lived, the climate must have been so totally different, that the presence of ice in the vicinity was as incredible, as would be the freezing of the Ganges. Mr Lyell in his *Principles of Geology* has thrown the greatest

light on this subject, by indicating the northerly course of the existing rivers with the probability that they formerly carried carcasses in the same direction.³⁶

For Darwin, Lyell's mission to rid geological science of the flood had clearly been successful: so illuminating was the 'light thrown', it was unnecessary even to address the question in depth. Not a 'tumultuous deluge' but 'the course of the existing rivers' could account for the position of the carcasses. By the time he wrote *The Origin*, Darwin could confidently state that modern geology had 'almost banished such views as the excavation of a great valley by a single diluvial wave'.³⁷ What seems to be of primary importance for Darwin, both in the *Journal* and in *The Origin*, however, is repeatedly to affirm the actions of natural selection over the actions of climate in determining either numbers of, or variations in, species. 'One is tempted to believe,' he observed in the *Journal*, 'in such simple relations, as variation of climate and food, or introduction of enemies, or the increased number of other species, as the cause of the succession of races'.³⁸ Such 'simple relations', however, are precisely what Darwin argued against. In his introduction to *The Origin*, he observed that '[n]aturalists continually refer to external conditions, such as climate, food etc. as the only possible causes of variation.'³⁹ Survival of 'favoured races' and the elimination of those unfit for survival, are of course the causes of variation which Darwin wanted to emphasize. Critics have related this particular element of Darwinism to the themes of competition and struggle in *Mill*, as I have mentioned above. However, such struggle is also directly opposed to the idea of the influence of climate: here this influence is one in a list of 'external conditions', but in other parts of *The Origin* climate is addressed

³⁶ Darwin's *Journal of Researches* in Browne and Neve eds, p.197.

³⁷ *Origin*, p.245

³⁸ January 1834, *Journal*, p.165.

³⁹ *Origin*, p.4.

alone and in more detail. The implications of this opposition might be wider than has previously been identified. Darwin's argument hinged on what natural selection was not, as well as what it was, leaving the influence of climate as a distinctly out-dated explanation for evolutionary change.

Darwin stated that:

It is notorious that each species is adapted to the climate of its own home: species from an arctic or even from a temperate region cannot endure a tropical climate, or conversely. [...] But the degree of adaptation of species to the climates under which they live is often overrated. We may infer this from our frequent inability to predict whether or not an imported plant will endure our climate, and from the number of plants and animals brought from warmer countries which here enjoy good health. We have reason to believe that species in a state of nature are limited in their ranges by competition of other organic beings quite as much as, or more than, by adaptation to particular climates.⁴⁰

It is interesting, in this context, that Maggie Tulliver is one of few Victorian heroines not to be likened by either narrative or any character to a plant in the right or wrong soil to flourish. The idea that certain climates nurtured certain vegetation and eliminated others had formed a central part of thinking about both natural history and natural theology, to the extent of being 'notorious', as Darwin noted. The trope of the (particularly female) character as a plant unable to thrive in certain conditions appears throughout fiction of the period. One question in relation to *Mill*, then, might be to ask why Maggie, though clearly positioned in the wrong environment for her own intellectual, social or sexual development, is never compared to such a plant. Without suggesting that Eliot's recent reading of *The Origin* led her immediately and consciously to avoid this particular literary and climatic image, I suggest that the absence of this common figure in *Mill* is noteworthy.

⁴⁰ *The Origin of Species*, p.115.

Darwin's other main argument about climate, which is significant in reading *Mill*, relates to its ability to function as a check to population. Though he acknowledged that 'climate plays an important role in determining the average numbers of a species,' Darwin's emphasis was firmly on the gradual changes in population which might be engendered by long-term climatic change.⁴¹ The possibility of 'direct' action by climate is couched in reservations and caveats: above all, climate functions within the structure of natural selection, so that 'even when climate, for instance, extreme cold, acts directly, it will be the least vigorous, or those which have got the least food through the advancing winter, which will suffer most.'⁴² This element of natural selection seems to inflect the final chapter of *Mill*, where residents of St Ogg's are convinced it will only be 'the poorer sort' who cannot afford to live out of the flood's path, who will suffer after a large flood (p.512). More broadly, however, *Mill* is a narrative in which climate takes 'direct action', affects the physical structure of the landscape and eliminates individuals, and does so via a catastrophic deluge – all of which seems distinctly un-Darwinian.

As *The Origin* was published, both Darwin and the wider geological community had rejected entirely the idea of floods as having determined the structure or nature of the earth. Even in 1839, attempts to bring the flood back to the discussion had seemed like the last, futile, efforts of a defeated minority. The final section of this chapter explores *Mill*'s invocation of diluvial theories which were generally held to be entirely without merit by 1859 and 1860, and the uneasy relationship between the diluvial theme and climate and weather in the novel.

⁴¹ *The Origin*, p.37.

⁴² *The Origin*, p.37.

3. 'It was the flood!': *The Mill on the Floss* and deluge

Eliot writes about climate in two prominent ways in *Mill*. For most of the novel, weather is presented as offering a pleasant contrast with the domestic interior, and as, variously, local, regional and 'English'. However, this is repeatedly countered by allusions to floods in the town and to the possibility of cataclysmic change. Eliot's methods of writing the weather in *Mill* are, I argue, noticeably different from those in *Adam Bede* in particular as well as from later novels in which her response to evolutionary theory was less qualified.⁴³

In *Adam Bede* (1859), Eliot represents weather and climate very differently. Much of this can be accounted for, of course, with reference to earlier novel's organicism, the essentially positive picture of bucolic life which it seeks to give, and indeed the fact that, unlike *Mill*, *Adam Bede* does not have a tragic conclusion.⁴⁴ However, beyond the continual sunshine in this novel, and the repeated allusions to 'perfect weather', climate in *Adam Bede* is also presented in ways markedly different from, and suggestive in contrast with, *Mill*.

Twice in *Adam Bede*, 'climate' is used to figure for an inevitable, ineluctable influence. Seth Bede muses that, 'the joy of being with Dinah *would* triumph: it was like the influence of climate, which no resistance can overcome.'⁴⁵ This may be slightly complicated by the novel's conclusion in which Adam, not Seth, marries Dinah. However,

⁴³ In *Middlemarch*, for example, 'talking about the weather' functions as the kind of polite and meaningless element of social intercourse I outlined in the Introduction to the thesis, or else in terms of metaphor: 'Mr Brook's conclusions were as difficult to predict as the weather' (p.8), and his conversation pursued 'as quietly as if he were only discussing the nature of last year's weather' (p.485). Reconciliation between Dorothea and Will takes place against a storm outside, keeping them indoors and mirroring their tempestuous emotions.

⁴⁴ Shuttleworth's identifies *Adam Bede*'s organicism and its contrast with *Mill*'s more complex approach to time and history, as I have noted above, and warns that to account for this by reference to the post-Darwinian context of *Mill*'s publication might be a reductive opposition (p.54). However, the marked difference between the climates of both novels seems notable in this context.

⁴⁵ George Eliot, *Adam Bede*, ed. with introd. by Valentine Cunningham (Oxford and New York: Oxford University Press, 1996, rpt 1998), p.111. All further references are to this edition.

rather than suggesting that 'the influence of climate' may be 'overcome', this seems to imply only that Seth's specific anticipation itself was misjudged. The narrative is clear on the point that 'climate' represents an irresistible force which acts slowly but surely to bring about change and development. Later, Arthur Donnithorne's pleasure in hearing Hetty's beauty praised is also described in this way: 'other men's opinion, you know, was like a native climate to Arthur's feelings: it was the air on which they thrived best, and grew strong' (p.274). What characterizes Arthur as weak and easily influenced is not that he is susceptible to a 'native climate', but that 'other men's opinion' constitutes this climate. The narrative's parenthetical 'you know' suggests that 'native climate' is used here as a figure with which the reader will be familiar, and takes for granted the idea that living things 'thrive' and 'grow strong' in their 'native climates'.

By contrast, one of the chief criticisms which the narrative makes of Hetty Sorrel is that because she has no affectionate memories of parents, pets, companions or children, and appears entirely unfettered by the normal bonds of human kinship, she also has no native climate. Thus, Hetty is compared to 'plants that hardly have any roots: you may tear them from their native nook of rock or wall, and just lay them over your ornamental flower-pot, and they blossom none the worse' (p.154). Hetty's flower-like beauty seems almost suspect because it has not developed from climate: whilst it might be dangerous to allow certain influences – such as 'other men's opinions' – to act like a climate, to be detached from climate altogether suggests a fundamental failing in the individual. Eliot's continual descriptions of Hetty as animal – kitten, pigeon, peacock – affirm the incomplete nature of her very humanity which this dissociation implies.

Climate in *Adam Bede* is assumed to be so important a determinant of life and development that it can be put to figurative use for anything which is inevitable, or which grows and changes naturally. Weather, however, is as unpredictable as ever. As Mrs

Poyser observes 'as for the weather, there's One above makes it, and we must put up wi't' (p.193). A Mr Craig attempts to forecast it, with his 'weather glass', but is proved wrong and concludes that the weather is a 'ticklish', 'chancy' thing (p.205). Weather may be 'ticklish', and sent to be 'put up' with, but it rarely causes difficulty for the residents of Hayslope:

The reaping of the wheat had begun in our north midland county of Loamshire, but the harvest was still likely to be retarded by the heavy rains, which were causing inundations and much damage throughout the country. From this last trouble the Broxton and Hayslope farmers, on their pleasant uplands and in their brook-watered valleys, had not suffered, and as I cannot pretend that they were such exceptional farmers as to love the general good better than their own, you will infer that they were not in very low spirits about the rapid rise in the price of bread, so long as there was hope of gathering in their own corn undamaged; and occasional days of sunshine and drying winds flattered this hope.

(p.292)

This is the same pre-Corn Law society we shall see depicted in *The Mayor of Casterbridge* in Chapter 4, where prices rise sharply in consequence of poor harvest weather. However, the effects of this on Eliot's fictional community are the opposite of those in *Casterbridge*: the Hayslope farmers are exempted from the poor weather in the region, and consequently able to raise their own prices in the face of scarcity of corn. These farmers may not be 'exceptional' in altruism, but the climate in which they exist is exceptional in the extreme. The sunlit spot of nature's generosity, and its contrast to the 'heavy rains' which beset the surrounding region, not only contrasts with Hardy's *Casterbridge* but equally markedly with questions of weather, region and the individual in *Mill*.

In *Mill*, the term 'climate' is used only once. When Philip suggests that Maggie might 'really like to be a tenth Muse', she demurs in unusually prosaic terms, commenting that '[i]f I carried a harp in this climate, you know, I must have a green baize cover for it'

(p.332). As in *Mary Barton*, where the sailor notes that mermaids would never inhabit British shores since the climate is too cold for women to go about naked, climate is a defining characteristic of place, which also tends to eliminate the possibility of myth or exoticism. Here, that climate is also explicitly located as a rainy one, where the harp of the muse would need to be covered in green baize. Climate, in *Mill*, represents the place inhabited: wet, unpoetic, uninspiring and unconsidered except by contrast with imaginary or ancient climates. Weather, on the other hand, is a reality of life which appears in strangely conflicting guises throughout the narrative.

As Sally Shuttleworth has observed, *Mill* begins with a disturbed 'temporal perspective'. The opening passage creates an 'immersion in temporality', with its series of present-tense descriptions of motion: this initial 'Proust-like submergence into the world of unconscious memory' is then opposed by the 'start of the linear, conscious narration of the story' inside the Mill itself.⁴⁶ Weather and season, however, serve to connect these two timelines and to suggest an uncomplicated continuity between past and present which the later parts of the narrative will undermine. Thus, the 'February sun' (p.7) experienced by the narrator yokes the present vision with the 'February afternoon many years ago' (p.9) which the narrative goes on to describe. Later, both the novel and Maggie herself become preoccupied by questions of the past and its relation to the present, which the recurrent theme of flooding both sharpens and complicates: initially, however, the dreams of the present are elided with the memories of the past within a vision of climate which is cyclical and unchanging.

The opening pages of the novel also introduce the recurrent idea of weather as something which happens outside, and from which it is pleasant to be sheltered:

⁴⁶ *George Eliot and Nineteenth-Century Science*, pp.52-54.

Even in this leafless time of departing February [Dorlcote Mill] is pleasant to look at – perhaps the chill damp season adds a charm to the trimly-kept, comfortable dwelling-house, as old as the elms and chestnuts that shelter it from the northern blast.

(p.7)

Where Jane Eyre's interior at Gateshead is only a temporary and unstable vantage point from which to observe the unpleasant conditions outside, in *Mill*, the pleasures of being indoors are heightened by contrast with an outside world which 'adds charm' to the house. Similarly, the 'trimly-kept' dwelling represents not the kind of self-conscious attempt to clean and 'keep house' which Alan Bewell and Susan Meyer identify in *Jane Eyre* as a response to a dangerous and unhealthy environment, but rather reflects the apparently impregnable stability of the property-owning classes: a stability which is to be undermined as surely as the idea that weather can be kept 'outside'.

The scene inside the mill, on that February afternoon 'many years ago', introduces the theme of death by drowning, as Mrs Tulliver frets that Maggie may 'tumble in some day' (p.12) as she wanders by the water. Again this anxiety is framed in terms of interior and exterior: Mrs Tulliver looks out of the window at the scene outside, and articulates her anxiety in relation to Maggie's clean pinafores, and the proximity of tea-time, situating her concerns firmly within the realms of domesticity. Indeed, it is Maggie and Tom's childhood home which is most frequently identified in the novel as the comfortable exterior which contrasts with weather outside. Tom, at the end of a miserable term at Mr Stelling's school, is glad 'to see the last yellow leaves fluttering before the cold wind' (p.151), since they mark the arrival of the Christmas vacation. On his return, Tom's 'happiness at seeing the bright light in the parlour at home, as the gig passed noiselessly over the snow-covered bridge: the happiness of passing from the cold air to the warmth and the kisses and the

smiles of that familiar hearth' (p.152) begins one of the most sentimental representations of weather in the novel.

Familiarity, custom, and memory here become entwined with hearth, home and Christmas, which leads into a detailed interlude in which a personified 'Old Christmas', apparently commanding the weather, 'arranges' a snowy landscape for contrast with the comfort of home:

... old Christmas smiled as he laid this cruel-seeming spell on the out-door world, for he meant to light up home with new brightness, to deepen all the richness of in-door colour, and give a keener edge of delight to the warm fragrance of food: he meant to prepare a sweet imprisonment that would strengthen the primitive fellowship of kindred, and make the sunshine of familiar human faces as welcome as the hidden day-star. His kindness fell but hardly on the homeless – fell but hardly on the homes where the hearth was not very warm, and where the food had little fragrance; where the human faces had no sunshine in them, but rather the leaden, blank-eyed gaze of unexpectant want. But the fine old season meant well...

(p.153)

The narrative's glancing references to 'the homeless' and 'homes where the hearth was not very warm' seem a somewhat token acknowledgement of the existence of poverty. The awkward combination of an almost hackneyed description of 'leaden, blank-eyed gaze of unexpectant want', and the simultaneous sense that the narrative is trying to convince its readers that 'the fine old system meant well' is profoundly strange. It is difficult to escape the conclusion that Eliot includes this passing reference as a gesture towards the social vision of Dickens' Christmas books in particular, as though aware that Christmas in the novel might often be linked to a disquisition on the poor, or indeed a narrative which offers a solution, even if only on an individual level, to their plight. Yet such social vision is not Eliot's perspective, here or elsewhere in *Mill*. Indeed, the main function of the blank-eyed poor in this passage seems to be in the contrast they provide with those whose food is fragrant and whose hearth is warm. 'Fine old Christmas' takes the theme of interior

comfort against exterior weather to extreme lengths, emphasizing the pleasures of the hearth not only against the weather outside, but against a wider sense of the hardships endured by others.

During Maggie's time at her cousin Lucy Deane's home, however, a superficially similar passage suggests a change in perspective. At this stage, Maggie has been accepted into society in St Ogg's, and can therefore enjoy an enforced period of 'sweet imprisonment' once more:

The next morning was very wet: the sort of morning on which male neighbours who have no imperative occupation at home are likely to pay their fair friends an illimitable visit. The rain, which has been endurable enough for the walk or ride one way, is sure to become so heavy, and at the same time so certain to clear up by and by that nothing but an open quarrel can abbreviate the visit: latent detestation will not do at all. And if people happen to be lovers, what can be so delightful, in England, as a rainy morning? English sunshine is dubious; bonnets are never quite secure; and if you sit down on the grass, it may lead to catarrhs. But the rain is to be depended on.

(p.409)

This is the first instance of the rain which is to become increasingly present in the narrative. Yet here, rain has no suggestions of apocalyptic flooding: if one were to look for thematic preparation for the concluding flood in the novel's depiction of rain alone, it would be hard to detect any prefiguring of the deluge. This is, specifically, English weather which is connected to English habit and custom, locating events within a local, familiar and therefore superficially reassuring context.

Predicting the weather is less a vexed question here than it is an opportunity to offer interpretations which suit an individual's intentions. There is no tension between the equal certainties that the rain will 'clear up' and 'become heavy': both serve to prolong the 'sweet imprisonment' which is clearly desired. Once again, Sergeant Troy's observation that 'wet

weather is the narrative' is borne out in perceptions of the English climate: 'the rain is to be depended upon'. All of this seems almost deliberately to undermine Eliot's later descriptions of the torrential rain which leads to the flooding of the town. Can rain, in the same narrative, be 'dependable', 'English' and even pleasant, and also catastrophic and apocalyptic? The dissonance between these two representations of climate might well be one reason reviewers and critics have often read the flood as an unlikely and unprepared conclusion.

Alongside a narrative of weather as associated with memory, with comfort and with the domestic interior, however, runs one of floods, which are also frequently connected with memory, but which inflect these memories with the catastrophic implications of diluvialism. The Round Pool, a favourite place for both Maggie and Tom, is connected with memory, story-telling, and, importantly, with a history of floods. Tom, responding to Bob Jakin's comment that the Floss is not presently 'high', responds with a rare moment of imagination and story-telling:

"Ay, but," said Tom, whose mind was prone to see an opposition between statements that were really quite accordant, "but there was a big flood once, when the Round Pool was made. *I* know there was, 'cause father says so. And the sheep and cows were all drowned, and the boats went all over the fields ever such a way."

"*I* don't care about a flood comin'," said Bob; "I don't mind the water, no more nor the land. I'd swim – *I* would."

"Ah, but if you got nothing to eat for ever so long?" said Tom, his imagination becoming quite active under the stimulation of that dread. "When I'm a man, I shall make a boat with a wooden house on the top of it, like Noah's ark, and keep plenty to eat in it – rabbits and things – all ready. And then if the flood came, you know, Bob, I shouldn't mind."

(p.50)

The passage pre-figures the novel's conclusion, where Bob's optimism is seen to be justified: he owns two boats, and survives the flood. Tom's association of all floods with the Noachian deluge points to the cultural currency of the Biblical story, and suggests that

Eliot was aware of the echoes between her own narrative and that in Genesis – and, consequently, of the uses to which the Noachian flood had been put in early geological accounts. The floods have formed the familiar physical landscape in which the Tullivers grow up, but they also constitute a part of family – and familiar – history. To Tom, ‘father says so’ is here enough to stand as absolute proof of the ‘big flood’ - and Mr Tulliver too has been handed down stories about of floods and their effects:

The Tullivers had lived on this spot for generations, and [Mr Tulliver] had sat listening on a low stool on winter evenings while his father talked of the old half-timbered mill that had been there before the last great floods which damaged it so that his grandfather pulled it down and built the new one.

(p.263)

The floods, and their effects, are inseparable both for Tulliver and his son from the stories of their youth. Not only do they invoke past catastrophe, however, but they do so within the recurrent domestic setting which contrasts with winter weather outside. The stories of the ‘last great floods’ are part of the familiar interior, heightening the comforts of that interior by invoking past climatic catastrophe.

The Tullivers, and St Ogg’s itself, associate the floods with the past, and the past with floods. The chapter ‘Mr and Mrs Glegg at Home’ details the way in which the legend of Ogg, who ferried the Virgin across the flooded Floss, over-hangs the town:

This legend, one sees, reflects from a far-off time the visitation of the floods, which, even when they left human life untouched, were widely fatal to the helpless cattle, and swept as sudden death over all smaller living things. But the town knew worse troubles even than the floods – troubles of the civil wars, when it was a continual fighting-place, where first Puritans thanked God for the blood of the Loyalists, and then Loyalists thanked God for the blood of the Puritans.

(p.117)

The floods of the 'far-off time' are described in similar terms to diluvialist descriptions of the Noachian flood: their 'visitation', the 'widely fatal' effects on cattle, and their ability to sweep 'as sudden death' all seem to recall the accounts of the Biblical flood I discussed above, and especially Cockburn's description of animals fleeing the rising water. 'War and the rumour of war (p.118) have died out, and 'The Catholics, bad harvests, and the mysterious fluctuations of trade, were the three evils mankind had to fear: even the floods had not been great of recent years' (p.118). In fact, the narrative then sets out no 'evil' connected with either the Catholics or bad harvests, and the only 'fluctuation of trade' which has an effect on events is Tulliver's mishandling of the Mill and its sale, which is far from 'mysterious'.

The endemic complacency at St Ogg's is described in terms which recall Buckland's writing about the ever-present possibility of catastrophe:

And the present time was like the level plain where men lose their belief in volcanoes and earthquakes, thinking to-morrow will be as yesterday, and the giant forces that used to shake the earth are forever laid to sleep.

(p.118)

This passage clearly foreshadows the novel's conclusion, but also alerts us to the error of those who believe in what Buckland had termed 'tranquil equilibrium' as a permanent state. For Buckland, catastrophe in other regions of the earth constituted proof of catastrophe in the past: for Eliot, past catastrophe implies the possibility of the same in the future. The 'dependable' wet climate, in which it is always possible – except for the 'blank-eyed poor' – to find a domestic interior in which to shelter from weather is undercut by the reminder of

‘giant forces’, and the more so by the closeness of this reminder to Buckland’s catastrophist arguments.

After Maggie and Tom leave childhood and ‘go forth together into their new life of sorrow’ (p. 191), catastrophic events are invoked with increasing frequency. The narrator refers to the villages along the Rhine that tell ‘how the river once rose, like an angry, destroying god’ (p.271), and Maggie at the Red Deeps looks at ‘those broken ends of branches’ and ponders on their status as ‘the records of past storms’ (p.299). But the clearest reference to diluvialism itself occurs when Stephen Guest suggests that Lucy take Buckland’s treatise to the St Ogg’s Book Club:

Did Lucy intend to be present at the meeting of the Book Club next week? was the next question. Then followed the recommendation to choose Southey’s “Life of Cowper,” unless she were inclined to be philosophical, and startle the ladies of St Ogg’s by voting for one of the Bridgewater Treatises. Of course Lucy wished to know what these alarmingly learned books were; and as it is always pleasant to improve the minds of ladies by talking to them at ease on subjects of which they know nothing, Stephen became quite brilliant in an account of Buckland’s Treatise, which he had just been reading. He was rewarded by seeing Maggie let her work fall, and gradually get so absorbed in his wonderful geological story that she sat looking at him, leaning forward with crossed arms, and with an entire absence of self-consciousness, as if he had been the snuffiest of old professors...

(pp.380-81)

The Treatise is rather controversial for St Ogg’s society: ‘startling’, ‘alarming’ but also – to Maggie - ‘wonderful’. That Eliot presents the Bridgewater series as highly controversial and ‘shocking’ is partly a method of reminding the reader that this a past society, where the ideas contained within the Treatises were still new and seemed ‘alarmingly learned’, and thereby establishing complicity with a reader who is assumed to know that Buckland’s Treatise would no longer be read in this way. However, it is also implicit that *all* new ideas, and theories, are unavoidably the products of their time, subject to rebuttal and to a fall from fashion.

The 'wonderful geological story' is, oddly, Stephen's ('his'), rather than Buckland's. Superficially, this reflects Maggie's own reading of the situation, and the degree to which Guest has impressed her. The mobility of the 'story', and the near-irrelevance of its original author, also suggest that once theories and ideas pass into general consciousness they break free from their original author to exist in their own right, yet as only one among so many myths, legends and stories.⁴⁷ Also telling is Stephen's conclusion of the 'story', and the way this undermines Maggie's unselfconscious absorption: "I will bring you the book, shall I, Miss Tulliver?" said Stephen when he found the stream of his recollections had run shallow. "There are many illustrations in it that you will like to see." (p.381). The Treatise becomes a picture book, suitable for 'ladies', and while 'stories' may absorb, seduce or even convince, Stephen's sudden loss of 'recollection' also reminds us that they are always subject to interpretation and mediation by their current narrators, who might even simply forget their conclusions.

Mill employs two narratives of weather and climate throughout: the first of these is local, domestic vision of the weather which though unpredictable tends not to necessitate prophecy or prognostication in the first place. The second narrative of floods, catastrophe, and geological change runs alongside and even intersects with the domestic responses to weather but does not explicitly challenge them until the conclusion. Stephen Guest's highly individual and even cynical recounting of Buckland's treatise meanwhile locates the text as a story one might read in preference to Southey's 'Life of Cowper', if 'inclined to be philosophical'. In the flooding of St Ogg's in the novel's penultimate chapter, these two narratives, and questions about diluvialism, catastrophism, and survival finally, fully, converge.

⁴⁷ Jenny Uglow observes that Maggie 'sees stories everywhere': this also underlines her propensity to engage with the narrative Stephen offers. *George Eliot*, p.129.

For the last time, Maggie finds herself confined by the weather, but this time because she is unable to leave 'her lonely room', where she is engaged in 'battling with the old shadowy armies' of memory and misery:

[T]here had been a sudden change in the weather: the heat and drought had given way to cold, variable winds, and heavy falls of rain at intervals; and [Maggie] had been forbidden to risk the contemplated journey until the weather should become more settled. In the counties higher up the Floss, the rains had been continuous, and the completion of the harvest had been arrested. And now, for the last two days, the rains on the lower course of the river had been incessant, so that the old men had shaken their heads and talked of sixty years ago, when the same sort of weather, happening about the equinox, brought on the great floods, which swept the bridge away, and reduced the town to great misery. But the younger generation, who had seen several small floods, thought lightly of these sombre recollections and forebodings; and Bob Jakin, naturally prone to take a hopeful view of his own luck, laughed at his mother when she regretted their having taken a house by the river-side, observing that but for that they would have had no boats, which were the most lucky of possessions in case of a flood that obliged them to go to a distance for food.

But the careless and the fearful were alike sleeping in their beds now. There was hope that the rain would abate by the morrow; threatenings of a worse kind from sudden thaws after falls of snow, had often passed off in the experience of the younger ones; and at the very worst, the banks would be sure to break lower down the river when the tide came in with violence, and so the waters would be carried off, without causing more than temporary inconvenience, and losses that would be felt only by the poorer sort, whom charity would relieve.

(pp.511-12)

'Sudden change' to 'variable' weather recalls the fears inspired by medical writing about weather and its effects on constitution which I discussed in Chapters 1 and 2. However, just as Maggie does not fall ill from one of the 'quasi-symbolic brain-fevers' to which Boumelha describes Victorian heroines as so frequently succumbing, her death comes about not because she has stayed indoors and become a 'living barometer', but because staying indoors has become suddenly unsustainable as a practice when the flood water is rising outside. The reference to higher counties and their arrested harvest recalls the Hayslope farmers' exceptionality to the general rain, and their subsequently pronounced delight in increased profit. Here, however, the wider regional implications of bad weather seem irrelevant. The weather is not an economic or agricultural concern, and from being a

function of 'Englishness' or even of the more immediate region, its significance has become concentrated solely on the immediate area.

Lazy, conversational weather-prediction is replaced by the 'recollections and forebodings' of old men. Again, memory stretches back to floods, and is activated by the current possibility of a flood, but 'the younger generation' embody the complacency the narrative outlined earlier, laughing at the idea of 'great misery', and believing so strongly that 'to-morrow' will be as 'yesterday' that they cannot conceive of the relevance of a history which is even sixty years long. The 'hopes' of the residents of St Ogg's are presented one by one, each seeming to replace the last as it is disproved: perhaps the rain will stop; perhaps the river will not break its banks; probably if it does so, it will do so at a distance. Finally, when the rain has not abated, and when the banks seem sure to burst, the assumption that it will be 'the poorer sort, whom charity would relieve' seems to conflate this complacency with a *laissez-faire* approach. If the struggle and competition in the novel can be read in Darwinian terms, as Haight, Hardy and Shuttleworth have argued, the idea that, after great climatic disturbance, the weakest of the species will suffer most seems also to reflect such a pessimistic reading of *The Origin*.

The flood flows into Bob Jakin's house, destroying for good the idea that weather is something which happens only out of doors. Maggie is 'driven out upon the flood: - that awful visitation of God which her father used to talk of' (p.517): memories, stories, and the idea of the flood as divinely ordained converge, as she is swept along. As she rows toward the river, Maggie sees 'poor dumb beasts crowding piteously on a mound where they had taken refuge' (p.518). This reference seems to recall not Noah's flood itself, but Cockburn's explication of that flood: the Bible did not dwell on the animals left behind, but diluvialists, as I have shown, focused specifically on the question of which animals might have survived and which perished.

Maggie and Tom's deaths are finally framed in a conclusion which affirms both continuity ('nature repairs her ravages') and rupture ('but not all'). A regenerative atmosphere pervades St Ogg's, where the economy has recovered as 'the wharves and the warehouses on the Floss were busy again' (p.521), the harvest has been brought in, and 'every man and woman mentioned' in the novel is 'still living – except those whose end we know'. Though the town has survived and recovered, the landscape has changed, with 'uprooted trees', and 'scarred' hills bearing 'the marks of the past rending' (p.522). Continuity and regeneration are pointedly undercut through reference to the idea that a cataclysmic deluge has left its mark on the geological structure of the town and surrounding area.

In the 'desolation wrought' by the flooding of St Ogg's, Eliot clearly affirms the possibility of catastrophic change and its consequences. That she does so in specifically diluvial terms suggests a long view of geological debate and its susceptibility to challenge, ridicule and reinterpretation. Not only had Darwin, and the 'Development Theories' with which Eliot associated his work, explicitly challenged such catastrophism, but gradualist geological arguments had undermined the idea of the universal deluge for at least twenty years. *Mill* clearly does not align itself with the specific arguments of men like Cockburn and FitzRoy, and indeed actively implies that Buckland's *Treatise* was both outdated and subject to dubious interpretation – though it still had an undeniable narrative appeal. However, Eliot insists that, as Beer states, 'floods may happen', and allows their multiple implications and associations to appear when they do. I began this chapter by arguing that the flood was a central part of Eliot's initial conception of the novel, and one which had proved difficult for critics to reconcile with the idea of *Mill* as a realist text. By reading the flood as, specifically, a flood, and by exploring its associations with catastrophist geology,

we can see the multiple implications of a brief, intriguing and complex moment in Eliot's response to Darwin and to evolutionary theories of all kinds.

CHAPTER 4

‘CURIOUS REPUTE’: FORECASTING, PROPHECY AND *THE MAYOR OF
CASTERBRIDGE*.

1. Introduction

In *The Mayor of Casterbridge* (1886), a ‘man of curious repute as a forecaster or weather-prophet’ gives a weather forecast which has a considerable impact on the shape of the narrative, and on the future of the novel’s protagonist.¹ It is the voices of the community who speak here, attributing the man, Fall, with ‘curious repute’, seemingly unsure quite how to categorise him. Interestingly, the phrase allows ‘forecaster’ and ‘weather-prophet’ to stand alongside one another, leaving it unclear whether Fall is of uncertain definition, or whether the descriptions might even be interchangeable. As this chapter will show, however, both of these terms, as well as ‘weather-caster’, ‘prophet’ alone and ‘conjurer’ which are also used to describe Fall, carried contentious meanings and implications throughout the Victorian period. What is also striking is that to be a ‘forecaster or weather-prophet’ locates Fall as ‘a man of curious repute’: to foretell the weather is, in *Casterbridge*, a strange and ‘curious’ thing.

This chapter argues that Fall is a richly suggestive character in *Casterbridge*, unique in Hardy’s novels and indeed in Victorian fiction. My argument explores two cultural frameworks, both of which shape this ‘curious repute’. The first of these is the ‘conjurer’ figure which Hardy researched and noted before and during the composition of the novel: as a ‘curst conjurer’ (p.189) who can ‘cure the evil’ and ‘charm away warts’, Fall clearly harks back to these earlier conjurers, as I shall show. Secondly, I investigate the significance of Fall in relation to the changing reputation of forecasting in the mid Victorian period. I discuss in particular the controversial cultural phenomenon of Robert FitzRoy’s forecasts which were printed in *The Times* between 1861 and 1864. FitzRoy also

¹ Thomas Hardy, *The Mayor of Casterbridge*, ed. with introd. and notes by Keith Wilson (London: Penguin, 1997 rpt. 2003), p.184. All further references are to this edition

published a *Weather Book* in 1863, in which he expanded upon the principles of a meteorological approach which combines ‘weather wisdom’ with scientific methodology. The challenges FitzRoy encountered in establishing forecasting as a valid enterprise, and the level to which the science ultimately disappointed expectations of accuracy, left weather prediction as both a vexed and a controversial area. Few believed, after the 1860s, that the weather might be accurately predicted, as the discussions in *The Times* which this chapter details demonstrate. Reputation, credibility and status were all called into question in debates about weather prediction, in ways which I argue are echoed in Hardy’s depiction of Fall.

Hardy’s strange and liminal forecaster evokes and confirms the perception of meteorology as a dubious science of ill-repute, and sharpens a cultural construction of the forecaster as a figure around whom unease and uncertainty gathered. By identifying Fall as the site of competing discourses and arguments I also argue that his position in the narrative reveals a complex relationship between different chronologies in *Casterbridge*. In Fall’s weather forecast, and its wider relationship to the weather and economy in the town, Hardy creates a space to demonstrate the intense and often complicated relationships between weather, prediction, economics, chance and competition.

Critics and reviewers of *Casterbridge* have often identified this ‘man of curious repute’, Fall – or ‘Wide-oh’, as he is pejoratively termed by residents of Casterbridge – as part of Hardy’s sensitive, carefully-researched depiction of a by-gone community. A (somewhat mixed) contemporary review in the *Saturday Review* acknowledged and applauded the characterization of Fall as ‘proof of how thoroughly Mr. Hardy has studied the workings of the rustic mind’,² and indeed Hardy’s own personal writings and notebooks

² Anonymous review in the *Saturday Review*, LXI (29th May 1886), 757 rpt. in *Thomas Hardy: Critical Assessments*, ed. by Graham Clarke, 4 vols (Sussex: Helm Information Ltd., 1993) Vol I, 143-145, (p.144).

reveal an abiding interest in the figure of the ‘conjurer’ and his relation to the rustic, uncivilized history of the county. Twentieth-century critics like Simon Gatrell position Hardy as primarily a ‘local historian’ of Wessex, seeking in the novel to re-create a lost era: Fall appears, superficially, to be a part of this re-creation, as a link with obsolete practices and customs.³ However, an investigation of changing agricultural conditions in Dorset, suggests that rather than simply evoking the past and detaching it from the present in *Casterbridge*, Hardy’s fictional world inscribes contemporary questions about both weather and the agricultural economy in its depiction of the same issues in 1840s Wessex.

My argument that the figure of Fall is informed by the changing discourses of meteorology in the period challenges the point some critics have made that Hardy’s novels, and particularly *Casterbridge*, consciously ignored the issues of contemporary society and economy. Reading *Casterbridge*, and Hardy’s other ‘Novels of Character and Environment’, as evocations of a lost past has led critics like Joe Fisher and Roger Ebbatson to identify Hardy as undertaking a reactionary project which ignores contemporary issues by retreating to an apparently simpler historical moment. Ebbatson, writing about *Far From the Madding Crowd* (1874), notes that although Hardy ‘witnessed at first hand’ the upheaval caused by agricultural depression in Dorset, he nonetheless represented in Gabriel Oak an individual whose fortunes improve steadily through the narrative, and who remains seemingly immune to the upheavals brought about by ‘agricultural depression, land reform and rural exodus.’⁴ Fisher argues that Hardy ‘ignores significantly changed work patterns in Dorset/Wessex in his own lifetime’ by ‘setting the novels back forty or fifty years’, and dismisses such settings as ‘a very token gesture’.⁵ I

³ Simon Gatrell, ‘Wessex’ in Dale Kramer ed., *The Cambridge Companion to Thomas Hardy* (Cambridge: Cambridge University Press, 1999), pp.19-37, (p. 25).

⁴ Roger Ebbatson, *The Evolutionary Self: Hardy, Foster, Lawrence* (Brighton: Harvester Press, 1992), p.12.

⁵ Joe Fisher, *The Hidden Hardy* (Basingstoke: Macmillan, 1992), pp.5-6.

argue, however, that Hardy's position as a 'first hand' witness to changes in agricultural and economic work patterns is particularly relevant in *Casterbridge*. At a time when the agricultural economy was in a state of flux and change, and the weather, as I shall show, a particularly important part of perceptions of the reasons behind this, Hardy depicted an economy which both parallels and suggestively contrasts with such contemporary issues.

I begin by exploring the section of the narrative where Fall is described, in order to open up questions about the weather and its significance in the novel. The opposition which many critics have perceived between Henchard's superstition and Farfrae's rationalism has contributed to readings of Henchard's consultation with Fall as the last resort of a man unable adequately to compete in economic terms. William Greenslade argues that Henchard and Farfrae enact a 'contrast between old culture and Victorian modernity', with Henchard's 'improvisatory, volatile' approach defeated by 'the rational, modernizing Farfrae.'⁶ Reading Henchard and Farfrae in this oppositional way predicates a view of Fall as allied with rustic superstition alone. Merryn Williams, for example, argues that Henchard's failures come about 'because he has consulted a conjuror about the harvest, and relied on his forecast too implicitly', while Farfrae succeeds because he 'consults no weather-prophets, but calculates intelligently on the probabilities.'⁷ This chapter questions several of the assumptions which underpin this kind of construction of Fall, Henchard and Farfrae. By identifying Fall as part of a community intensely preoccupied by weather, I

⁶ Editor's Introduction to *Thomas Hardy's 'Facts' Notebook*, ed. by William Greenslade (Aldershot: Ashgate Publishing Company, 2004), pp. xxii-xxiv. Joe Fisher also argues that Fall embodies the 'volatile discourses' of magic and witchcraft in the novel. *The Hidden Hardy*, pp. 117-18.

⁷ Merryn Williams, *Thomas Hardy and Rural England* (London: Macmillan, 1972), p.150. Other critics who have read Fall as either a knowing charlatan or a part of the rural past include Frederick R. Karl, 'The Mayor of Casterbridge: A New Fiction Defined', *Modern Fiction Studies* vol. VI, no. 3 (Autumn 1960), 195-213, rpt. in *Critical Assessments IV*, pp.85-101, (p.90). Bert. G. Hornback, *The Metaphor of Chance: Vision and Technique in the Works of Thomas Hardy* (Athens: Ohio University Press, 1971). As the publication dates of all these texts indicate, an interest in, or mention of, Fall as a character was more prevalent in criticism of the 1960s and 1970s.

also argue that the competition between Henchard and Farfrae is, in many ways, a competition which hinges on adapting to, calculating on, or trying to predict the weather.

Questions about adaptation, competition and the weather relate to the important consideration of Hardy's Darwinism. All Hardy's novels, were of course, written after the publication of *The Origin of Species*, and the ideas with which Eliot was newly engaging and experimenting in *Mill* were, to Hardy, accepted facts. In contrast with Eliot's early reservations towards Darwinian theory, Hardy claimed that he had been 'among the earliest acclaimers of *The Origin of Species*.'⁸ One of Hardy's biographers, Michael Millgate, reads his subject's assimilation of Darwinian theory as the natural consequence of his pessimistic world view, suggesting that Hardy 'found little difficulty in accommodating himself to the prevailing pessimism of the post-Darwinian intellectual world into which he emerged in early manhood.'⁹ The undeniably tragic, fatalistic climates of Hardy's novels, seem to translate the Darwinian idea of man alone in an uncaring universe into dramatic and poetic terms. The winds from 'heaven' and the disturbances of the 'firmament' are part of a nature which is frequently not only 'red in tooth and claw', actively malign. In his novels, Hardy expressed and developed the idea that nature is heedless of the individual by figuring that nature, and especially the weather, as purposefully cruel and destructive.

In *Casterbridge*, the weather smites, blows and rattles in the firmament: yet at the same time, Hardy presents weather as a central issue in the town's economy, where 'the townsfolk understood every fluctuation in the rustic's condition, for it affected their receipts as much as the labourers' (p.61), and the income of the 'rustic' was in turn, 'ruled

⁸ Florence Hardy, *The Early Life of Thomas Hardy 1840-91* (London: Macmillan, 1928), p.198. Gillian Beer notes that 'Hardy acknowledged Darwin always as a major intellectual influence in his work and his way of seeing'. *Darwin's Plots*, p.222.

⁹ Michael Millgate, *Thomas Hardy: A Biography Revisited* (Oxford: Oxford University Press, 2004), p.89.

by' the weather (p.185). Roger Ebbatson discusses weather in the novel in relation to Hardy's Darwinism to observe that:

Darwinism enabled the artist to grasp that change in a group, class or society was not explicable solely by reference to a monocausal outside agency (for example the weather on the denizens of Casterbridge).¹⁰

Although it is undeniable that Darwinian evolutionary theory tends to reject the idea of the 'monocausal outside agency', the weather at Casterbridge does not seem to corroborate this theory. The novel explains, repeatedly, the interconnections between weather, farming, and the town's economy. By placing weather at the centre of the narrative, however, Hardy does not contradict the idea that change has multiple causes, but rather focuses on a different facet of Darwinian theory: adaptiveness.

For any species to survive either a changed climate, or a move to a different climate, it must have the 'flexibility of constitution' which will allow it newly to 'acclimatise'.¹¹ As I showed in the last chapter, Darwin was careful to state that 'adaptation to particular climate' was neither the only nor the most significant limitation on the ranges of species: 'competition of other organic beings' is defined in *The Origin* as at least an equal, and often a more important a determinant of survival.¹² In *Casterbridge*, these two aspects of natural selection combine, so that competition is frequently undertaken through responses to the weather. Rather than simply surviving the climate, both Henchard and Farfrae must respond to, adapt to, predict or even gamble upon that weather. Farfrae takes physical control of the local effects of 'poor winters' with his seed-drill (pp.46-47). He triumphs over Henchard in the organization of the 'celebration of a national event' (p.100) by

¹⁰ *The Evolutionary Self*, p.8.

¹¹ *Origin of Species*, p.116.

¹² *The Origin of Species*, p.115.

anticipating the probability of poor weather and adapting to it when it arrives. Finally, he changes his purchasing patterns in the face of the good weather which had made Henchard decide, disastrously, to sell all the corn which he had stock-piled (p.189). Ebbatson suggests that 'Hardy's 'good' characters adapt to their environment as beautifully as Darwin's admired woodpeckers or earthworms':¹³ if this statement seems questionable in terms of much of Hardy's later fiction, it is particularly difficult to reconcile with Henchard's failure of adaptiveness in *Casterbridge* as opposed to Farfrae's success. Repeatedly, Farfrae anticipates bad weather and gambles wisely on its possibility. The 'beautiful' adaptation Ebbatson describes is not the kind required in *Casterbridge*, where survival is less about assimilation to climate than it is about understanding that the weather will change, and that this cannot be predicted, only guarded against.

Perhaps because weather in the Hardy novels seems so much a part of their fatalistic world-view, few critics have dwelt on it. To attribute causality to weather might seem to fit better with readings of the 'tragic universe' in Hardy's novels, which tend to identify Henchard's *hamartia*, and describe the ways it brings about his downfall.¹⁴ Albert Pettigrew Elliot's *Fatalism in the Works of Thomas Hardy* (1966) describes Hardy's characters as existing alone in a fatalistic universe, where 'coincidence', 'Fate' and the gods continually pursue them and frequently use the weather as an instrument of their intent: Elliot devotes a chapter to 'Nature' as one of the methods Hardy uses to express and carry out his 'fatalism'.¹⁵ Recent critical discussion of causality, chance, and determinism relates these themes to the contemporary discourses which influenced their depiction in the novel, in doing so it has also moved away from discussing the weather. However, this

¹³ *The Evolutionary Self*, p.19.

¹⁴ See Hornback, p.97, and Karl, pp.90-96.

¹⁵ Albert Pettigrew Elliot, *Fatalism in the Works of Thomas Hardy* (New York: Russell & Russell, 1966), p.81.

chapter argues that in *Casterbridge* the weather is intimately bound up with all these themes and can be read productively in relation to the ideas associated with forecasting in the period.

Gillian Beer and Helen Small both discuss chance in Hardy's novels: particularly, in Small's case, in *The Return of the Native*.¹⁶ Beer observes that for both Hardy and Darwin, 'chance and change' are 'the permanent medium of experience and thus of language'.¹⁷ Chance events are what determine life and its appearance, negating one set of possibilities and opening up another. Small develops this idea in connection with questions about the individual and his/her importance within the social organism, discussing theories of chance in connection with the dice-game in *Native*.¹⁸ One way to read chance in *Casterbridge* would be to build on these arguments by discussing weather itself as a chance event. Certainly, the associations between weather and the random frequently suggest weather events as physically manifestations of chance. Weather does seem to appear and change by chance, and, in turn, it frequently determines or alters chances for individuals. However, in this chapter I focus more specifically on weather-forecasting itself as an activity with an awkward relationship to chance. Where an individual must adapt to the weather, he or she needs to understand and exploit its relationship to chance and this, as I shall show, is difficult to achieve.

¹⁶ Helen Small, 'Chances Are: Buckle, Hardy, and the Individual at Risk' in Helen Small and Trudi Tate eds, *Literature, Science, Psychoanalysis, 1830-1970* (Oxford and New York: Oxford University Press, 2003), pp.64-85).

¹⁷ *Darwin's Plots*, p.229.

¹⁸ 'Chances Are', pp.80-81.

2. Hardy's weather, forecasting and Mr Fall

When Hardy writes about the weather, far from summoning an easy set of images with which to figure fatalism and pessimism, he calls up a number of different teleologies, registers, and accounts of the place of the individual in the universe. Weather in the Hardy novel feels and sounds alive: its 'moods' are felt and heard, as well as seen. Winds 'strum' their 'articulations' in *The Return of the Native* (1878), where Egdon Heath is 'aroused to reciprocity' during 'winter darkness, tempests and mists' when '[t]he storm was its lover; and the wind was its friend'.¹⁹ The heath's animate nature, 'perfectly accordant with man's nature' (p.11), gives life and distinct personality to the weather there, which in turn continually interacts with and responds to the landscape. The wind 'seemed made for the scene, as the scene seemed made for the hour' (p.56): it is volitional, 'following', 'striving' and 'racing', and also creates the 'plaintive' aural sound which distinguished 'the linguistic peculiarity of the heath'. This thesis has argued throughout that the Victorian narrative frequently uses climate to define place: in *Native* this definition is not static but a dynamic and interactive process.

When weather appears in the Hardy narrative, terms like 'firmament', 'heavens', and 'weather-god' frequently surround it. During a storm in *Far From the Madding Crowd*, the light 'flaps' across the storm 'as if reflected from phosphorescent wings crossing the sky': '[m]anoeuvres of a most extraordinary kind' occur in 'firmamental hollows', and the lightening gleams 'in the heavens like a mailed army' (p.277). This

¹⁹ Thomas Hardy, *The Return of the Native*, ed. with introd. and notes by Penny Boumelha and notes by Tony Slade (London: Penguin, 1999), p.11. All further references are to this edition.

lightening, springing from 'east, west, north and south' becomes increasingly associated with the 'diabolical':

The forms of skeletons appeared in the air, shaped with blue fire for bones – dancing, leaping, striding, racing around, and mingling together in unparalleled confusion. With these were intertwined undulating snakes of lesser light. Simultaneously came from every part of the tumbling sky what may be called a shout; since, though no shout ever came near it, it was more in the nature of a shout than of anything else earthly. [...] [L]ove, life, everything human, seemed small and trifling in such close juxtaposition with an infuriated universe.

(p.280)

In this animated universe, each detail of the storm takes on life of a demonic kind. The shouting, racing, confusion of elements contribute to an 'infuriated universe' which seems quintessentially Hardyean: Oak and Bathsheba remain safe within it, but the idea that this universe may decide at any time to let loose such a 'dance of death', and fill the atmosphere with violent sounds and unearthly light is redolent of the kind of random malevolence and fatalism often associated with weather in Hardy's novels.

Weather is pervasive, powerful and physically evident. It also 'alter[s] all the chances', as Sergeant Troy observes in *Crowd* (p.289). Troy, a gambler and taker of risks, does not anticipate the rain which ruins the races, and loses money, foreshadowing Henchard's own losses in his sense that 'if it hadn't been for that wretched rain' (p.289) he would have made rather than lost the money. Existing in such a universe, characters are frequently depicted looking to the natural world for signs and portents of coming weather. In Gabriel Oak's anticipation of rain and storm in particular, the connections between individual and weather are drawn in some detail.

Walking home with a presentiment of rain after noticing the 'sinister aspect' of the sky (p.268), Oak sees a toad 'travelling across the path' and knows 'what this direct

message from the Great Mother' implies (p.271): a storm is approaching. Next, Oak sees a slug inside his home, which constitutes 'Nature's second way of hinting to him that he was to prepare for foul weather', followed by two spiders falling from the ceiling (p.272). Finally, he looks to the sheep for signs of coming weather and sees them 'grouped in such a way that their tails, without a single exception, were towards that half of the horizon from which the storm threatened':

This was enough to re-establish him in his original opinion. He knew now that he was right [...]. Every voice in Nature was unanimous in bespeaking change. But two distinct translations attached to these dumb expressions. Apparently there was to be a thunder-storm, and afterwards a cold continuous rain. The creeping things seemed to know all about the later rain, but little of the interpolated thunder-storm; whilst the sheep knew all about the thunder-storm and nothing of the later rain.

(p.272)

Katherine Anderson notes that Oak's list is 'typical of the data associated with weather wisdom': that is, the kind of experience and understanding of changes in atmosphere which were the realm of those, like shepherds and seamen, who lived and worked closely with the weather, and took note of 'indications from the sky, animal behaviour [and] the built environment'.²⁰ Such indications clearly form the basis of Oak's predictions. Even so, a forecast from 'creeping things' and from sheep, both of whom 'know all about' different parts of the coming weather, reads strangely: yet the narrative goes on to bear out the forecast precisely.

Whilst Fall's forecast, is, as I shall show, never explicitly shown either to be accurate or simply a fortuitous guess, Oak's is directly validated. A dry storm follows immediately, and then torrential rain. Contemporary readers would not, presumably, have

²⁰ *Predicting the Weather*, p.176.

expected a shepherd in 1874 to trust in the testimony of spiders and toads so implicitly. For this forecast to work, in a narrative sense, without positioning Oak as either ridiculously naïve or as calling on the supernatural for his predictions, *Crowd* must be read firmly in the context of a more innocent and distant past. Hardy's 1912 Preface to *Crowd* describes the society he depicted in the novel as entirely divorced from the present day, a 'dream-country' where 'legend, folk-lore, close inter-social relations, and eccentric individualities' still existed.²¹ *Casterbridge*, by contrast, depicts not a 'dream-country', but an economic environment determined by weather, where legend and folk-lore are presented in far more ambiguous terms.

Weather wisdom is not limited to shepherds in the earlier novels. Eustacia Vye calls on such accepted wisdom when she orders the boy, Johnny: 'if you hear a frog jump into the pond with a flounce, like a stone thrown in, be sure you run and tell me, because it's a sign of rain' (p.61). Eustacia is ill-at-ease on the heath - 'her Hades' (p.69) - and is no 'native' to its environment: her appropriation of local weather-lore despite this therefore suggests its contemporary ubiquity. Tess and Angel Clare hear a cock crow three times after their wedding, and as rain descends, Angel observes that 'the cock knew the weather was going to change' (p.218). However, prediction and tragic fatalism combine here, since the three crows also pre-figure Tess and Angel's respective 'betrayals' of one another which are explicated in the chapter which follows. In the bleakly deterministic world of *Tess*, the signs and auspices of coming weather combine with presentiments of doom.

In *Casterbridge*, the weather is 'firmamental' and fatalistic, heard and felt profoundly by the residents of the town.²² However, it is also something no reputable individual attempts to predict. Though all the farmers attempt to sense the coming weather,

²¹ Thomas Hardy, 'Author's Preface', p.vi in *Far From the Madding Crowd*.

²² 'Firmamental' is used in *Crowd*, in the quotation used above, and in *Native*, p.283.

none display Oak's confidence in their own interpretations of the atmosphere: the wet harvest weather is a surprise to everyone. Fall is strangely situated as an individual paid to give forecasts which no-one will admit fully to believing - as indicated by the fact that the locals call him 'Wide-oh' behind his back. At the same time, he causes unease in his visitors, and seems to be associated with the uncanny. Michael Henchard's visit to Fall, then, is a strange episode in the novel, fraught from the outset with anxiety, fear, and doubt.

The approach to Fall's house is on a 'crooked and miry path' (p.184), which prefigures an association between Fall and 'crookedness' and dishonesty. This run-down cottage, in a 'lonely hamlet' - 'so lonely, that what are called lonely villages were teeming in comparison' - locates the forecaster as a liminal figure, who inhabits the outermost fringes of respectable society. In his conversation with Fall, Henchard himself seeks to 'repress [...] his individuality'. Even before this conversation, however, the narrative temporarily ceases referring to him by name, terming him instead 'the tall traveller' and 'the visitor' (p.185). By becoming complicit in this repression, rather than suggesting reasons for it, the narrative implies that Henchard's desire to remain unidentifiable is the natural consequence of visiting a weather-prophet. Henchard's desire for social mobility, and his constant concern that Elizabeth-Jane should not do servants' work, or speak like a local, suggests that a class-based anxiety might inform his unease in this situation: indeed, Fall's use of 'leery' recalls Henchard's anger at Elizabeth-Jane for using the same term, and sounding 'like a clodhopper' (p.133). While this might constitute a part of Henchard's discomfiture, however, social awkwardness cannot fully account for the manifest strangeness which accompanies this consultation.

The eerie and uncomfortable atmosphere is especially pronounced in the initial conversation between the two men:

“I’ve long heard that you can – do things of a sort?” began the other, repressing his individuality as much as he could.

“Maybe so, Mr Henchard,” said the weather-caster.

“Ah – why do you call me that?” asked the visitor with a start.

“Because it’s your name. Feeling you’d come, I’ve waited for ‘ee; and thinking you might be leery from your walk I laid two supper-plates, look ye here.” He threw open the door and disclosed the supper-table, at which appeared a second chair, knife and fork, plate and mug, as he had declared.

(p.185)

Henchard’s ‘I’ve long heard’ suggests that Fall and his powers are part of the town’s collective unconscious. Passed on through stories, conversation and rumour, Fall’s ability to ‘do things’ is clearly well-known, yet at the same time Henchard is unable or unwilling to state when, or from whom, he ‘heard’ of this: Fall and his reputation are shrouded in secrecy. ‘[T]hings – of a sort’ is highly and suggestively ambiguous: it is difficult to discern whether weather forecasting is one of these ‘things’, or whether the ability to ‘do things’ implies that Fall might even have some kind of control over events, ‘doing’ things in the sense of actually causing them to happen.

Fall shatters Henchard’s attempts to repress his individuality, both by his use of the Mayor’s name, and his apparent emphasis of his own ‘individuality’. Capitalizing on Henchard’s own interpretation of the scene as not only uncomfortable but even alarming, Fall seems to revel in his own marginal and shady status, displaying the ‘two-supper plates’ with theatrical flourish (he ‘threw open the door’), and enjoying Henchard’s subsequent surprise. This eerily prepared table again strengthens the sense of the uncanny surrounding this visit: the chair, and the supper, ‘appear’ as though actually ‘cast’ by this strangely knowing individual. The table-trick deliberately broadens the possibilities of the ‘things’ Fall can do: foretelling the weather is, after all in a sense foretelling the future, and Fall fully exploits the supernatural elements in this association.

During the forecast itself, however, as Fall develops the sense that he has access to mystical, arcane knowledge, the narrative voice intervenes succinctly to suggest that this may not be so:

“I’ve worked it out already, and you can know at once.” (The fact was that five farmers had already been there on the same errand from different parts of the country.) “By the sun, moon, and stars, by the clouds, the winds, the trees and grass, the candle-flame and swallows, the smell of the herbs; likewise by the cats’ eyes, the ravens, the leeches, the spiders, and the dung-mixen, the last fortnight in August will be – rain and tempest”

(p.187)

It is now apparent why Fall knew Henchard’s name, and why there was a spare place set at the supper table: Fall is accustomed to interruptions by ‘farmers’ on this ‘errand’. The table might have been set for any one of them, on the logical assumption that one may very well arrive, and the more cynical assumption of apparent fore-knowledge of his arrival could only strengthen Fall’s reputation as having access to knowledge of the future. The word ‘errand’ also suddenly re-positions the weather forecast as a common part of the farmer’s working life. This also accounts for Fall’s use of Henchard’s name: clearly he is sufficiently involved in the local community to be aware of the names and appearances of its prominent members. The parenthetical insertion of the sentence mentioning these ‘five farmers’ seems deliberately obtrusive, and casts profound aspersions on Fall’s ability to ‘work out’ the weather or the future.

This forecast is a bizarre combination of details, some of which seem to allude to the kind of ‘weather wisdom’ displayed by Gabriel Oak, and some of which seem strangely random (‘the candle-flame’, ‘the grass’ and ‘the dung-mixen’, in particular). The long list of portents is as theatrical as the throwing open of the door and the appearance of the second supper-place: it reads as a conscious rhetorical flourish to lend emphasis to the final,

short words of the forecast: 'rain and tempest'. This prediction combines the prosaic 'rain' with the dramatic, theatrical and even biblical 'tempest' – and Fall goes on to state that "[t]will be more like living in Revelations this autumn than living in England'. As in so many Victorian novels, strange or exceptional weather is figured as fundamentally un-English: but here, the extreme weather is not located as foreign or 'tropical', but as apocalyptic.

It is impossible to determine whether Fall himself believes entirely in his forecast. Initially, the narrative seems to suggest that Fall has a kind of integrity, despite his lack of status in the neighbourhood: '[he] would have preferred more honesty in his clients, and less sham ridicule' (p.184). However, his seemingly deliberate exploitation of Henchard's unease, and the ambiguity inherent in his having 'worked it out already' casts some doubt on this, as does the strange list of signs and portents. Does Fall genuinely believe his own forecast, and enact his impatience with 'sham ridicule' by embarrassing his clients in revenge? Or has he simply calculated on the probabilities, as he did when laying the table? Questions about such calculation and its relationship to prediction reappear in Hardy's notes on conjurors and also in discussions about forecasting in the 1860s. What is predicted is almost always possible, and may or may not be probable, and equally may or may not be borne out. How one might tell the difference between a statement of probability and an accurate prediction, and whether, given its difficult relationship to probability and possibility, there is any merit in forecasting at all, becomes increasingly difficult to tell.

The residents of *Casterbridge*, and the local farming community, do not talk about or speculate on the weather, but consult a man in whom they profess out loud not to believe, though 'very few of them were unbelievers in their secret hearts' (p.184). Half-believing in a man with magical powers, yet unable to admit to a 'belief' in forecasts,

Henchard and his neighbours exhibit a strange response to the idea which was not, after all, uncommon in the historical setting of the novel, nor in other Hardy novels, that weather might be inferred from signs in the natural world. In the next sections, I explore first a local and then a national context for the representation of and responses to Fall the forecaster.

3. Researching the past: conjurors and obsolescence

As a ‘conjuror’, Fall is part of a history which stretched back to the 1840s and before. Like the reddleman in *Native*, Fall is:

one of a class rapidly becoming extinct in Wessex, filling at present in the rural world the place which, during the last century, the dodo occupied in the world of animals. He is a curious, interesting and nearly perished link between obsolete forms of life and those which generally prevail.

(*Native*, p.13)

Hardy’s language here recalls geological accounts of extinction to position the reddleman as an unfortunate casualty of relentless change and progress, ‘perishing’ where he is unable to evolve in contemporary Wessex. Like the reddleman, the Wessex conjurors in Hardy’s notes often represent a ‘curious, interesting and nearly perished link’ between the past and present. However, Fall is ‘curious’ in a very different way from the reddleman: not a ‘curiosity’, but a bizarre and unsettling character. Through his strange characterization and

his echoes of two different kinds of prediction, Fall complicates this ‘nearly perished link’ and suggests a more dynamic relationship between past, recent past, and present.

In March 1884, Hardy began researching issues of the *Dorset County Chronicle*²³ for material he could use in *The Mayor of Casterbridge*.²⁴ As well as the story of the wife-sale he was to use as the novel’s foundation, he also found accounts of ‘conjurers’ in Wessex in the early nineteenth century, which, along with stories passed down by friends and acquaintances, he noted in his personal writings and notebooks. However, Hardy’s interest in the conjuror also pre-dates the *DCC* research, as his personal notebooks show, and continues at least until 1886, where he describes the conjuror as part of the poet William Barnes’ childhood and its local context. In this section, I explore Hardy’s writing about conjurers and the Dorset past, arguing that his collection of this material was not just the product of an abiding interest in local history and its customs, but was also related more specifically to questions about prediction and the future.

Hardy’s research in the *DCC* and his general interest in the history of Dorchester and of Wessex is often read as though what he found in documents and stories from the past was entirely different and dissociated from the historical moment in which he was composing *Casterbridge*. William Greenslade, for example, positions Hardy in 1884 as a ‘Victorian of the so-called ‘age of equipoise’’, looking back to a ‘culture that was rough, primitive, unregulated in character and marked by the persistence of customary traditions and practices’.²⁵ This opposition between the two ‘worlds’ (pre- and post- Reform Act, new Poor Law, railways, and the abolition of the Corn Laws), however, is too simplistic in

²³ That is the *Dorset County Chronicle, Somerset Gazette, And General Advertiser For The South and South-West of England*, hereafter *DCC*.

²⁴ See Paul Turner, *The Life of Thomas Hardy: A Critical Biography* (Oxford, Blackwell, 1998 rpt. 2001), p.92.

²⁵ William Greenslade Introduction to ‘*Facts*’ *Notebook.*, pp.xxii-xxiv.

the context of the changing agricultural conditions which surrounded Hardy in the 1880s.²⁶ If Hardy was reading the *DCC* whilst also deliberating on these changes, his interest in the conjuror might well have been sharpened by the preoccupation with fatalism and prediction which emerged during the agricultural depression of the 1870s and 80s.

When Hardy wrote, in *Casterbridge*, that ‘the time was in the years before foreign competition had revolutionized the trade in grain’, and that consequently the farmers of the period look anxiously to the skies with an intensity ‘almost unrealizable in these equable days’ (p.183), he seemed strangely to ignore the context in which the novel was composed. This was the period which economic historians have called the ‘agricultural depression’ of the 1870s and 1880s. The Corn Laws, which are pivotal to the narrative of *Casterbridge*, had been repealed in 1846, and in 1870, barriers to competitive imports were removed. Farmers in Britain now faced intense competition from abroad: after a series of poor harvests in 1875-9, they were unable to raise corn prices to cover their losses and were under-cut by cheaper foreign imports.²⁷ Initially, both farmers and labourers saw the poor weather which had caused the poor harvests as the root of the problem, rather than, firstly, taking into account the larger issue of cheap foreign imports, and secondly, adapting to the situation by turning to other areas of the agrarian economy which were less susceptible to foreign competition, such as dairy farming.²⁸

²⁶ Hardy’s essay, ‘The Dorsetshire Labourer’ (1883) rpt. in Harold Orel ed., *Thomas Hardy’s Personal Writings* (London and Melbourne: Macmillan, 1967) pp.168-90 and the notes he wrote for H. Rider Haggard’s research in *Rural England: being an account of agricultural and social researches carried out in the years 1901 & 1902* (London: Longmans, Green & Co., 1906), pp.167-170, argue for his keen awareness of changing work and social patterns in the region.

²⁷ See Richard Perren, *Agriculture in Depression 1879-1940* (Cambridge University Press, 1995); P.J. Perry ed., *British Agriculture 1875-1914* (London: Methuen, 1973) and P. J. Perry, *British Farming in the Great Depression 1870-1914* (Newton Abbot: David & Charles, 1974) for general background on the agricultural depression.

²⁸ See Perry’s observations in his introduction to *British Farming* that ‘many assumed [the depression] was just a temporary state of affairs caused by bad seasons [...] a view which persisted in some quarters into the 1880s’ (p. xiii) and that ‘the adverse seasons of the later 1870s [...] misled almost everyone concerned with the fortunes of agriculture as to the reality of the new situation’ (p.xix). Dairy farming was a safer option because dairy products could not be imported before they lost freshness: Tess’s work in the dairy in *Tess’s*

Joe Fisher, drawing on Barbara Kerr's social history of the region in *Bound to the Soil*, refers to the 'fatalism which was part of the workfolk's response to 1880s agricultural depression.'²⁹ Kerr emphasizes the workers' desperation during the period, and their consultation of 'books of fate' to find some hope of improvement in the future. In an economic situation where many attributed the depression to poor weather, this 'fatalism' must also have involved a particularly keen sense of the importance of knowing or predicting the weather. The conjurers of Hardy's research, meanwhile, also belong to a world of fatalism, superstition, prophecy and prediction.

Though today a 'conjurer' is the practitioner of 'magic' for entertainment, the meaning of 'conjurer'/'conjuror' has changed over the years. The *OED* gives six definitions for the word: the first, and most common, appears to be the one Hardy employs in his notes and his novels: 'one who practices conjuration; one who conjures spirits and pretends to perform miracles by their aid; a magician, a wizard'. In this sense the word was used by Hobbes and Shakespeare among others, and its use seems to have become less marked in literature after 1836 – though Hardy seems to invoke it both in *Casterbridge* and in *Tess of the D'Urbervilles*.³⁰ By the 1870s, the second definition of 'conjuror' is more prominent: 'one who practices legerdemain, a juggler'. Somehow, then, through the century and as Hardy was writing *Casterbridge*, a conjuror had become not one who could, or even pretended to, raise spirits or predict the future, but rather a practitioner of trickery for entertainment. If late Victorian culture had largely moved away from a belief in the conjuration of spirits and miracles, and translated the term accordingly, the use of 'conjuror' in *Casterbridge* must have implied at the same time magic and trickery, the

1890s setting may allude to the changes in agricultural economy to which astute farmers responded in this way.

²⁹ *The Hidden Hardy*, pp.117-18. Barbara Kerr discusses the fatalism of the workers during the depression in *Bound to the Soil: A Social History of Dorset 1750-1918* (Wakefield: EP Publishing Ltd., 1975), p.243.

³⁰ *Tess*, p.133. Fall himself is referred to in this novel as having 'lost his powers', when Dairyman Crick ponders whether to consult a conjuror for a weather forecast.

miraculous and the performative. Fall is uneasily posed between the two definitions: on the one hand, a strange character, able to ‘do things – of a sort’, and on the other, consciously enacting an entertainer’s role.

The conjurors in Hardy’s notes cure illness – or purport to do so, and are believed to succeed. They usually appear in a neighbourhood regularly and periodically, by the year or the month but often in accordance with lunar cycles. Frequently they are either low in status, or shrouded in mystery and rumour; they foretell the future (again, apparently successfully) and often use astrology to aid in their predictions. Hardy notes the following from an article of 1829, entitled ‘Curing the King’s Evil’:

Procession of conveyances laden with persons afflicted with the King’s evil passed through Sturm Newton on way to Hazlebury [near] where resides a man named Buckland, who has attained a reputation for curing, in a miraculous manner, the King’s evil, at his yearly fair or feast. Exactly 24 hrs before the new moon in month of May every year, whether it happens by night or day, the afflicted assemble at the doctor’s residence, where they are supplied by him with the hind legs of a toad enclosed in small bag [...] The bag is worn suspended from the neck, & the lotion and salve applied in the usual manner until the cure is completed [...] the app^{ces} of many showed that they moved in a resp^{ble} sphere of life.³¹

Buckland is not explicitly termed a conjuror but clearly fits the definition. Interestingly, the ‘toad bag’ re-emerges in Fall’s response to Henchard’s demand to know, as proof of his ability to ‘do things’, whether he can ‘cure the evil’: ‘if they will wear the toad-bag’, Fall replies (p.185). What is also particularly interesting about these notes – both Hardy’s and those of the *DCC* - is their ambiguous attitude towards Buckland. Though Buckland is credited with having ‘attained a reputation’ and is even termed a ‘doctor’, the *DCC* clearly felt it noteworthy that many of the patients appeared ‘respectable’, and Hardy in turn reproduced this. The significance of ‘respectable’ people visiting Buckland suggests that

³¹ *DCC*, (28 May 1829), item 110a in Greenslade ed., ‘Facts’, p.165.

this is not entirely to be expected, and is echoed in Henchard's own discomfiture at the discrepancy between his social standing and his willingness to visit Fall.

In his 'Personal Notebooks' Hardy recorded folklore and tales passed on by family and acquaintances: one such is the story of 'The Planet-Ruler', noted in 1872 and apparently having occurred around 1813:

He used to come his rounds like a pedlar, passing through M____y about every month. [...] His method of telling your fortune was to do it religiously, his first greeting being "The Lord hath sent us a fine morning: the Lord hath thought it proper to send us rain." At the end, "The Lord will bless you," & c. People used to tell him the day and hour they were born; & the next time he came he would bring the ruling of the planets – a half-sheet of butter paper written over.

[...]

The above planet-ruler or astrologer was said to have astrological diagrams in his room at Beaminster.

Another man of the sort was called a conjuror; he lived in Blackmoor Vale. He would cause your enemy to rise in a glass of water. He did not himself know your enemy's name, but the bewitched person did, of course, recognizing the form as the one he had expected.³²

The planet-ruler and the conjuror clearly belong to the same *genus* ('of that sort') though the planet-ruler predicts rather than 'conjures' the future. The planet-ruler validates his work and attempts to dissociate it from any taint of blasphemy not only by invoking 'the Lord' but specifically by connecting 'the Lord' with the weather, as the ultimate proof of a benevolent, interventionist deity. The conjuror, on the other hand, is more occult in his operations, dealing with 'bewitched' people and raising visions: 'doing things' in the sense of making them happen. Seeing images, or the future, in 'glasses' also recalls Henchard's gloomy and paranoid speculation that '[Farfrae] must have some glass that he sees next year in' (p.182). This glass is a key element of the conjuror's powers:

³² *The Personal Notebooks of Thomas Hardy*, ed. with introd. and notes by Richard H. Taylor (London and Basingstoke: Macmillan Press Ltd, 1978), p.47.

Conjurer Minterne when consulted by Pult P ____ (a strapping handsome woman), told her that her husband would die on a certain day, and showed her the funeral in a glass of water. She said she could see the legs of the bearers moving along. She made her mourning. She used to impress all this on her inoffensive husband, and assure him that he would go to hell if he made the conjuror a liar. He didn't, but died on the day foretold. Oddly enough, she never married again.³³

Though the situation described is somewhat farcical, figuring 'Pult P ____' as a comically 'strapping' woman, and ironically reflecting on her failure to remarry, it is intriguing that, according to this account, the conjuror was proved right: the husband died 'on the day foretold'. The prophecy is fulfilled, yet at the same time that fulfilment cannot be easily attributed either to an accurate prediction, or simply to chance. This idea reappears in Fall's weather forecast, and the subsequent change in weather roughly along the lines he had given. The weather does indeed change at the time Fall predicted: 'no sooner had the sickles begun to play than the atmosphere suddenly felt as if cress would grow in it without other nourishment' (p.190). Hardy's writing on conjurors and their powers rehearses the ambiguous position he takes in *Casterbridge*, in which he never entirely discredits the cures and prophecies described, yet almost always allows the idea that the events which followed might have done so by chance to stand.

Hardy also refers to the conjuror figure in his elegiac essay on the poet William Barnes, published, like *Casterbridge* in 1886. Hardy's admiration of Barnes stemmed from the latter poet's close connections with nature and with the past. Barnes, Hardy had earlier stated, understood and expressed the 'peasant's' 'absolute dependence on the moods of the air, earth, and sky', and as a result his poetry served as a link to the remote past and its

³³ Thomas Hardy, *The Life and Work of Thomas Hardy*, ed. by Michael Millgate, (London: Macmillan, 1984), p.175.

‘now obsolete customs and beliefs’.³⁴ The essay outlines of some of those ‘customs and beliefs’, and discusses another conjuror in this context:

There used to come to a little bridge, close to [Barnes’] father’s door, till quite recently, a conjuror or “white wizard”, who cured afflicted persons by means of the toad-bag – a small piece of linen having a limb from a living toad sewn up inside, to be worn round the sufferer’s neck and next to his skin, the twitching movements of which limbs gave, it was said, “a turn” to the blood of the wearer, and effected a radical change in his constitution.³⁵

This reference to the conjuror figure is chronologically the closest to the publication of *Casterbridge*. Its implications, therefore, are particularly worthy of note: again, the ‘toad bag’ is mentioned, and again the possibility of the conjuror’s power is alluded to without commitment. Most importantly perhaps, the man who ‘came his rounds’ was a benevolent character: specifically, a ‘white’ wizard. Why then, in *Casterbridge*, is a conjuror a figure to be feared, and whose forecasts no-one will profess aloud to believe?

Hardy rarely records these conjurors for their forecasting of the coming weather then, but rather for their predictions of death, for their apparent powers to wreak vengeance on enemies, or to cure illness. The character of Fall clearly draws on the predominant features of these conjurors, but also implies more than simply a link to the ‘customs and beliefs’ of the past. Fall is not an itinerant whose prophecies, forecasts and cures are actively and openly sought, but a character who inhabits the furthest fringes of society, and whom ‘respectable’ individuals avoid. The answer to this disjunction may lie in the fact that Fall is not only a ‘curst conjuror’ but, variously, a ‘forecaster’, a ‘prophet’, a ‘weather-prophet’ and a ‘weather-caster’ suggesting a broader set of meteorological influences which might also account for his markedly liminal status and his ‘curious repute’.

³⁴ ‘An Unsigned Review of *Poems of Rural Life in the Dorset Dialect*, by William Barnes’ (1879) in Orel ed., *Personal Writings*, p.98.

³⁵ ‘The Rev. William Barnes, B.D.’ (1886) in *Personal Writings* p.103.

4. FitzRoy and the language of forecasting

Forecasting the weather, particularly during the 1860s was a highly problematic and contentious undertaking in which ‘repute’ was difficult to maintain. This section focuses on two connected issues in meteorology: the reputation of the forecaster, and the problem of finding a language for the weather and particularly, for forecasts of the weather, which was not subjective, speculative or visionary. These two issues both sharpen the question of what it meant, in 1886, for Hardy to create a forecaster, and demonstrate kind of associations which had become inseparable from such a figure.

Anyone who identifies a new science, or a new scientific argument, must find an appropriate language in which to do so. Gillian Beer has shown that in finding a language to explain natural selection in *The Origin*, Darwin faced two problems ‘intrinsic to all discourse’: ‘language is anthropomorphic,’ and ‘language always includes agency’.³⁶ It was difficult, therefore, to describe a universe without man at its centre, or to refer to ‘selection’ without implying a ‘selector’. As Darwin struggled to find a language to express natural selection without such associations, so Robert FitzRoy struggled to create a language which could give ‘probable’ events in the future without sounding ‘prophetic’.

FitzRoy repeatedly declared that his forecasts were not ‘prophesies or predictions’, and argued that ‘[t]he term forecast is strictly applicable to such an opinion as is the result of scientific calculation and combination.’³⁷ The difficulty was that the definition of ‘forecast’ overlapped with the definitions of ‘prophesies and predictions’, as well as with ‘prognostication’, another word frequently used to describe speculative musings on the

³⁶ *Darwin's Plots*, pp. 47-48.

³⁷ See Introduction to this thesis, p.10.

coming weather in the period. All these terms were frequently used as though interchangeable throughout the Victorian period, leaving no clear and defined space for a 'forecast' which is not 'prophetic'. To 'prophesy' is to 'speak or write as by divine inspiration', but, simultaneously, to 'foretell or to predict future events', to 'prefigure or portend'. If to 'forecast' overlaps with the idea of 'foretelling' and 'predicting', then, it also invokes the kind of claim to divine inspiration which is embodied in the word 'prophesy'. Though to 'prognosticate' might seem to imply a medical and more professional set of implications, it also, and particularly in the nineteenth century, carries associations with conjecture, prophecy and even the supernatural. The *OED*'s second definition for 'prognosticate' is in fact 'to foretell, predict, prophesy or forecast'. Even the more neutral-sounding 'prediction' is linked to the sense of unfounded speculation: 'a prophesy or forecast', or 'a portent or omen'. 'Forecast' then is included in the very definitions of the words FitzRoy sought to avoid. The language which surrounded conjurors also complicates the meaning of the word: conjurors 'cast' the waters to predict the futures of the 'folks' who visit them.³⁸ Fall is a 'forecaster', but also a 'weather-caster', which even implies that he 'casts' the weather himself. 'Casting' itself embodies all the problematic linguistic associations from which FitzRoy sought to free the science, and indicates the difficulty of finding a language for meteorology which would sound scientific and credible.

The extent to which Hardy was aware of, or influenced by, debates in meteorology of the period is uncertain. As a young man living in London between 1862 and 1867, keen

³⁸ Interestingly, the first edition of *Tess* simply has Dairyman Crick stating 'I don't believe in him [a local conjuror]. But I shall have to go to him if he's alive', (p.33) while in the 1912 revised text, Crick emphasises this point: 'I DON'T believe in 'em; though 'a do cast folks' waters very true.' Thomas Hardy, *Tess of The D'Urbervilles*, ed. by Juliet Grindle and Simon Gatrell, introd. by Simon Gatrell, notes by Nancy Barriuneau (Oxford and New York: Oxford University Press, 1998), p.137. In 1912, then, Hardy presents the conjuror and his reputation in even more complicated terms than he had in 1891. His motivation for this is difficult to understand, and would require more space than is available here. However, it is worth noting that over time, Hardy appears to move neither closer to or further from the idea of the conjurors' 'curious repute'.

to absorb the cultural atmosphere of the capital, it is likely that he would have read *The Times*, and been aware of the constant exchange of letters, ideas, and arguments about meteorology which this section will discuss.³⁹ The fierce debate around meteorology certainly provides an important context for much of the language surrounding Fall, and must surely have inflected contemporary responses to a character who purports to be able to predict the weather. While the conjurers of a bygone Wessex, then, formed a conscious part of Hardy's characterization of this figure, the discussions about forecasting in the intervening period may well have lent that characterization added depth. At the very least, the portrayal of Fall in *Casterbridge* is a constituent part of a general cultural climate from the mid-Victorian period onwards, in which forecaster figures are viewed with suspicion and accorded 'curious repute'.

After his 1839 'Remarks on the Deluge', Robert FitzRoy's career moved towards meteorology. In 1851, his work on the *Beagle* earned him membership of the Royal Society, and when, two years later, a meteorological department in the Board of Trade was established after a maritime conference in Brussels, the Society recommended that FitzRoy head the department as a 'meteorological statist'. The Board's interest in strengthening its meteorological capabilities derived from the obvious benefits to sailors, and thereby to 'trade' and industry, of sharing information when it was known that a storm was approaching. Increasingly, however, FitzRoy was not satisfied simply to issue warnings to sailors of storms that were already approaching, and attempted to provide warnings of what the weather would be two or three days in advance. From 1861 until 1864, he provided daily weather forecasts, printed in *The Times*. The forecasts initially seemed to position *The Times* at the centre of contemporary culture, a leading source of information and

³⁹ See Millgate, pp.72-82 for a detailed discussion of Hardy's time in London and the journals and periodicals he read there in preparation for a career in journalism.

knowledge. Yet when the forecasts seemed to be wrong more often than not, they became instead a source of embarrassment to the paper, and were eventually dropped.⁴⁰ As I shall show, the phenomenon of weather prediction, the contemporary response to it, and the language in which it was presented are all highly suggestive of ideas about chance, prediction and the seeming *hubris* of those who would claim to know, or understand, the weather.

FitzRoy's forecasts took the form of tables of 'Reports' of the weather conditions at ports in Britain and Europe over the last twenty four hours, giving barometer readings, temperatures and appearance of the skies in curt initialized form: 'b'. for blue skies, for example (see Appendix 1). These Reports were then followed by comments under the heading 'Probable', in which the expected conditions for the next two days across the British Isles and northern France were summarized. These summaries are similar to the register familiar from the Shipping Forecasts today, and far removed from the lists of signs and portents given by Gabriel Oak or Fall himself: 'N.N.W. to W.S.W.; strong, with snow'.⁴¹

However, these dry and formulaic Reports and forecasts of the 'Probable' coming weather conditions are only a small part of a rich conversation between FitzRoy, *The Times*, and its correspondents on the subject of weather prediction. FitzRoy's forecasts were frequently positioned in the newspaper following or immediately above editorial descriptions of recent gales or wind: the weather, and what it had been doing, clearly held abiding interest which the forecasts fed and enhanced. Preceding the forecast outlined above, an article on 'Gales' details both the impact and the nature of high winds at Great

⁴⁰ Biographical information from Anderson, *Predicting the Weather*, pp.105-6, 84-85; H.E.L. Mellersh, *Fitzroy of the Beagle* (USA: Mason & Lapscomb, 1968), pp.125-40; Peter Nicholls, *Evolution's Captain: The Story of the Kidnapping That Led to Charles Darwin's Voyage Aboard the Beagle* (New York: HarperCollins, 2003), pp. 170-75.

⁴¹ *The Times*, 22nd January 1863, p.12.

Yarmouth in recent days, combining the observation that ‘the barometer fell to 28.9’ with more subjective and dramatic language referring to the ‘terrific violence’ with which the wind blew. A storm at Preston is discussed in terms of a flood caused in the Ribble, and the damage caused to vessels moored at local quays: again, the article repeatedly refers to the ‘violent and destructive’ nature of the weather. It seems impossible to find a language for talking about the weather which does not implicitly allow the possibility of intentionality or personify that weather, and these articles did not attempt to do so. ‘Bitter’ cold, ‘violent’ storms, even ‘strong’ winds, all imply a subjective and even anthropomorphic approach to weather. To describe weather as ‘destructive’, meanwhile, is also both anthropocentric and suggestive of agency, to use Beer’s terms. Placed next to such descriptions, FitzRoy’s tables, with their lists of numbers and curt abbreviations, seem like an attempt to counter the subjectivity inherent in talking about the weather.

The proliferation of correspondence on the subject also brought different languages and themes to the discussion. After any forecasts which proved inaccurate, one George F. Burder would write to the paper, detailing with precision the discrepancies between what had been predicted, and what had occurred. In return, FitzRoy would respond with an explanation of the unforeseen factors which had made the forecast unreliable, stressing the complicated and changeable nature of the atmosphere and wind direction. Ostensibly, Burder drew attention to such discrepancies to ‘help the public judgement on the value of these “forecasts”’, but the repeated correspondence makes it clear that he nursed a professional resentment.⁴² Burder and his brother, William Corbett Burder, were both unpaid observers who submitted meteorological statistics for the quarterly returns of the Registrar-General, whose existence Burder claimed FitzRoy had ‘habitually ignored’: ‘although its establishment marks an era in British meteorology which will be remembered

⁴² *The Times*, 21st January 1863, p.12.

long after the present system of “forecasts” has been condemned as visionary.’⁴³ His scathing encasement of ‘forecasts’ in inverted commas clearly indicates Burder’s distaste for the trend in meteorology away from observation and collation of statistics, but the idea that they were ‘visionary’, and would be ‘condemned’ as such, speaks of a contemporary unease around ‘vision’, prediction and forecasting.

Both FitzRoy himself, and *The Times*, in its support of him, attempted to differentiate his methods and his forecasts from the problematic taint of the ‘visionary’. An editorial piece in 1864 defends the paper’s decision to print the forecasts, and the progression of meteorological science:

Admiral FITZROY is doing his best to reduce our forecasts of the weather to a rational system, founded on wide and exact observation, and, considering that the science is yet in its infancy, he appears to be fairly successful. We believe it to be wiser to use his warnings and take his principles into account rather than to reject them altogether.⁴⁴

Against the background of letters like Burder’s, *The Times* clearly needed to defend its decision to publish FitzRoy’s forecasts, and to re-affirm their ‘rational’, scientific basis. Using the ‘warnings’ and taking ‘his principles into account’ positions *The Times* as cautious rather than rash in its inclusion of the forecasts: this is the ‘wiser’ course of action, and by implication it would be ‘unwise’ to ignore the warnings if there is a possibility, however slim, that they may be correct.

The article continues by making a direct and seemingly politic comparison between FitzRoy and ‘bolder prophets’: men in Portugal and Gibraltar who had apparently ‘lately been so successful as to have caused prayers to be put up in churches against the tempests

⁴³ *The Times*, 24th January 1863, p.9.

⁴⁴ *The Times*, 5th January 1864, p.8.

advertised to come off' in December 1863. 'It is needless to say', the writer states, 'that Admiral FITZROY has as much to say to these magicians as Mr FARADAY has to say to Mr HOME. This is an affair of science, not of spirit-rapping'. Not only is a 'magician', like a visionary, clearly designated as a character with nothing to contribute to meteorology, then, the context for 'these magicians' locates it as a derogatory term in itself. By 'Mr Home', the article refers to the medium Daniel Home, whose sittings were attended by Sir Edward Bulwer Lytton and the Browings, among others, but whose reputation was extremely low at this point:⁴⁵ Faraday not only provides a straightforward contrast to Home through his scientific credentials, but also because in 1853 he had investigated the current fashion for and belief in 'spirit-rapping' and 'table-turning', and concluded that neither was proof of supernatural activity. The analogy suggests, then, that *The Times* not only placed FitzRoy's methods and predictions in direct opposition to the supernatural, but even hoped that he might prove such 'magicians' wrong, and banish them from the field altogether.

The article contrasts FitzRoy with these 'prophets' through a striking set of images:

While [Fitzroy] is creeping on, as it were, as it were, on his knees, and using all the resources of observation, science and the electrical telegraph to make modest guesses as to the weather of the next two days, bolder prophets, beyond the reach of our PROSPERO'S rod, are raising storms and hurricanes.

FitzRoy 'on his knees': an almost comical picture emerges of the Admiral painstakingly crawling along, grasping at each instrument and method in order to make only the most 'modest' of guesses', contrasting forcefully with the image of the 'bold prophets', upright, brash and arrogant, waving their arms to 'raise storms'. This passage initially appears to suggest that the prophets actually cause the weather: 'raising storms and hurricanes'. Later

⁴⁵ Robert Browning satirized Home as a charlatan in 'Mr Sludge the Medium' (1856).

in the article, this transpires to be a metaphorical allusion to the chaos and disruption caused by these prophets, since the writer observes that ‘the weather turned out more than usually fine’. However, there is a degree of conflation between causing, and predicting the weather here, which is furthered by the strange reference to ‘Prospero’s rod’.

Having established such a construction of the ‘creeping’ FitzRoy and his careful observations, the writer cannot be designating him ‘our Prospero’. ‘Our Prospero’s rod’ must presumably, then, refer to the particular climatic conditions in England: Portugal and Gibraltar are ‘beyond’ its ‘reach’ in the sense that they belong to a different climatic zone. This too is intriguing: while on the one hand, the article seeks to present weather forecasting as a noble if embryonic science, it still makes use of a literary image of the weather as raised by the striking of a magician’s rod. Weather and its prediction seem to stand in uneasy relation to folklore, magic, and science: even in an article stressing rationalism in meteorology, the Prospero analogy emerges almost unbidden as an automatic, unthinking way to figure the weather and its changes.

After a period of prolonged and unpredicted wet weather in 1862 cast some doubts on the merits of the forecasts however, *The Times* had responded in language which satirically recasts FitzRoy’s forecasts as ‘prophesies’:

The public has not failed to notice, with interest, and, as we much fear, with some wicked amusement, that we now undertake every morning to prophesy the weather for the two days next to come. While disclaiming all credit for the occasional successes, we must, however, demand to be held free of any responsibility for the too common failures which attend these prognostications.⁴⁶

⁴⁶ *The Times*, 11th April 1862, p.9.

Perhaps because at this moment the paper sought to dissociate itself from ‘too common failures’, the article apparently dismisses FitzRoy’s insistence on the term ‘forecast’ rather than ‘prophesy’. The article’s description of the forecasts as ‘prophesies’ and ‘prognostications’ locates and even derides them as the wild predictions of one who believes he has access to arcane or even supernatural knowledge. The article tacitly sides with those who may notice the ‘prophesies’ ‘with some wicked amusement’, ostensibly pitying FitzRoy and sympathizing with him for his errors, but continuing in a subtly mocking tone.

The week had been relentlessly wet, despite repeated forecasts of fine weather:

“Jam satis terris” has been the only ode that has occurred to schoolmasters or schoolboys, umbrellas are at a premium, and JUPITER PLUVIUS has had the whole sky to himself. Yet during this time we have been daily promising fresh breezes and fine Weather day after day, and our weather prophet has only once permitted himself to foretell that on one day – Sunday last – it would be rainy in Ireland. In the face of all this, we are afraid we cannot stand up with good conscience for the actual value of the prophetic powers with which we have recently been endowed.

This paragraph employs several ways of talking and thinking about the weather. The reference to ‘*Jam satis terris*’ not only draws on a shared cultural experience of ‘reading the weather’ in poetry (‘schoolmasters and schoolboys’), but also alludes to the ‘appall’d town’ described in the Horatian ode, and in particular, the idea of weather as ‘sent down’ by a vengeful deity. ‘Jupiter Pluvius’ similarly reinforces the notion of weather as heaven-sent – and by pagan, rather than Christian heavens. *The Times* enjoys ‘wicked amusement’ along with its readers by constructing a consciously hyperbolic vision of the weather and its vengefulness, a kind of cynical invocation of the image Hardy later employs in a more ambiguous sense, of ‘the god of the weather’. Placed in between these two references to

pagan gods and weather is the brief comment: ‘umbrellas are at a premium’, as if to deflate this imagery through allusion to the actual contemporary and mundane significance of wet weather for Londoners.

The article then observes that if FitzRoy ‘had trusted to the doctrine of probability, instead of to his telegraphic reports, chance would probably have used him better, and could not have used him worse’. ‘Probability’ was precisely what FitzRoy attempted to determine: yet *The Times* suggests this would be more easily gauged by averages, or even experience, than by unreliable technological methods. ‘Chance’ here is an apparently active agency, which ‘uses’ the individual: but it might equally ‘use’ one for better as for worse. Whatever ‘telegraphic reports’ might be, then, the forecaster is still, like the weather itself, subject to the whims of chance.

The debate in *The Times* shows that to be a weather forecaster in the 1860s was an intensely problematic undertaking. Anyone who forecast the weather was open to accusations of being ‘visionary’, a prophet, or a prognosticator. FitzRoy attempted in vain to create a language of meteorology which was free from such taints, yet his sponsors as well as his detractors characterized his forecasts as prophecies at least as often as he affirmed that they were not. Society acknowledged that to be able to forecast the weather would be of immense benefit to society and to the economy. As *The Times* observed: ‘[i]t is not necessary to impress upon a people whose earliest salutation in the morning and whose common topic of talk throughout the day is derived from the Weather and its operation upon all their avocations, how useful it would be to get a few hours’ notice of its probable vicissitudes’.⁴⁷ Farmers, sailors and even umbrella vendors, could all benefit from knowing the weather in advance: in *Casterbridge*, as I shall show, this desire to get ‘notice’ of the weather is heightened to a considerable degree. However, the article goes on to observe,

⁴⁷ 12th April, 1862.

‘the desire is so general that it is everywhere the parent of a hundred superstitions’. In Hardy’s novel, the need to know the weather is so urgent that farmers pay a man shrouded in ‘a hundred superstitions’. The truly adaptive individual in such an environment, meanwhile, trusts instead to ‘the doctrine of probability’.

5. *The Mayor of Casterbridge: weather and economics*

At Weydon Priors, after Henchard has sold his wife and child in a drunken auction, he steps outside into ‘the peacefulness of inferior nature’:

The sun had recently set, and the west heaven was hung with rosy cloud, which seemed permanent, yet slowly changed. To watch it was like looking at some grand feat of stagery from a darkened auditorium. In presence of this scene after the other there was a natural instinct to abjure man as the blot on an otherwise kindly universe; till it was remembered that all terrestrial conditions were intermittent, and that mankind might some night be innocently sleeping when these quiet objects were raging loud.

(p.14)

This is superficially reminiscent of descriptions of the weather at Egdon Heath as an integral part of landscape. The image of the ‘auditorium’, combined with the hanging ‘rosy cloud’, underlines the small and insignificant status of ‘man’ in this immensity, presenting a vision of unity between land and sky reaching towards one another to form a distinct location. Here, however, the landscape only appears to be in harmony with the weather. Rather than existing in symbiotic relation to one another, the landscape is the ‘auditorium’ for the ‘feat of stagery’ which the weather performs. The ‘scene’ will be determined by the weather as protagonist, and though at present it is the setting sun and rosy cloud who enact

their 'feat of stagery', the 'natural instinct' to see the landscape as indicative of a 'kindly universe' is immediately undercut. 'Terrestrial conditions' – the sun, clouds and 'heavens' already mentioned – are not only 'intermittent', with the possibility that they might 'rag[e] loud' at any moment, they are also 'objects'. This term seems strange, in relation to the conditions of the air. In making the weather an 'object', the narrative stresses the brutal physicality of the effects of its 'raging', changeable nature. The universe is 'unkindly' precisely because weather will always occur within it, enacting a drama in which man becomes less a 'blot' than a victim.

The weather at Casterbridge, in contrast to that in many novels of the Victorian town and city, and particularly those discussed in chapter 1, is markedly no different in the town from the countryside. Though when Elizabeth-Jane first sees the town from the summit of a nearby hill, she observes that '[i]t is all huddled together; and it is shut in by a square wall of trees' (p.27), Casterbridge's apparent distinction from the surrounding country proves to be illusory. The narrative illuminates Elizabeth-Jane's observations by stating that '[c]ountry and town met at a mathematical line': however, the 'mathematical line' between the two takes on a symbolic significance in the sense that mathematics and logic are needed to negotiate the relationship between town and country. Farfrae's economic successes are frequently presented as mathematical: he relies on smooth ciphering, and machines, and mensuration' (p.104), where Henchard is a 'rule 'o thumb sort of man' (p.48) who measures by 'chalk strokes', or by 'stretching his arms' (p.104). The 'mathematical line', then, is not a division but rather a relationship to be negotiated and conquered through mathematics itself. Casterbridge, though apparently 'untouched by the faintest sprinkle of modernism' (p.27) is intimately connected with the countryside and with weather in economic terms.

The apparently pastoral landscape at Casterbridge engendered in the description of Elizabeth-Jane's first morning in the town underlines this connection:

When Elizabeth-Jane opened the hinged casement next morning the mellow air brought in the feel of imminent autumn almost as distinctly as if she had been in the remotest hamlet. Casterbridge was the complement of the rural life around: not its urban opposite. Bees and butterflies in the corn-fields at the top of the town, who desired to get to the meads at the bottom, took no circuitous course, but flew straight down High Street without any apparent consciousness that they were traversing strange latitudes. And in autumn, airy spheres of thistledown floated into the same street, lodged upon the shop-fronts, blew into drains; and innumerable tawny and yellow leaves skimmed along the pavement, and stole through people's doorways into their passages with a hesitating scratch on the floor, like the skirts of timid visitors.

(pp.56-57)

This description of the close connections between rural and urban life is deceptively pleasant. Bees, butterflies, thistledown and leaves suggest a penetration of the town by the country surrounding it which is largely innocent, yet the constant affirmation throughout the novel of the degree to which the town-dweller feels the pain of the 'rustic's' struggle suggests that such proximity brings its own problems. The narrative then moves from Elizabeth-Jane's survey of the whole town to the voices she hears from Henchard and Farfrae below. Farfrae, waiting for his coach, decides to walk to the 'top 'o town' with Henchard, carrying the bag containing his seed-drill and walking the same route as those bees and the butterflies which also fly 'straight down High Street'. The path taken by Henchard and Farfrae here, from one end of town to the other suggests the town's permeability not only by the more innocent visitors from the countryside, but also by the kinds of technological advance heralded by Farfrae's appearance in the narrative.

Casterbridge's vulnerability to weather requires individual adaptiveness. At a meeting of tradesmen, Henchard is interrupted with the cry from 'the lower end of the table': 'how about the bad bread?' (p.35). Against the ill-feeling in the town towards the

recent 'bad bread' which has resulted from a bad crop of wheat Henchard sold to the bakers, he becomes defensive and ill-tempered, taking refuge in the assertion that 'You must bear in mind that the weather just at the harvest of that corn was worse than we have known it for years' (p.36). Like the farmers of the late 1870s, Henchard attributes the problem to bad weather. However, if the weather determines the quality of the corn, the adaptive individual must find a way to counter this, rather than resigning himself to its inevitable effects. Farfrae's 'inventions' provide exactly this possibility. The conversation between the two men after Farfrae's demonstration of the seed-drill illustrates the ways technology and nature are combined in Farfrae's success:

"There, now do you taste that."

"It's complete! – quite restored, or – well – nearly."

"Quite good enough to make good seconds out of it," said the Scotchman. "To fetch it back entirely is impossible; Nature won't stand so much as that, but here you go a great way towards it."

(pp.46-47)

Farfrae is not simply a modernizing innovator who defeats the effects of poor weather with technology: rather, his 'invention' respects and works with 'Nature', never attempting to achieve what 'Nature won't stand'. In the context of Farfrae's repeated ability to negotiate the changing weather, this apparently minor distinction becomes important.

Weather changes dramatically and with consequence Henchard plans an outdoor event at his own expense:

The sky, which had been remarkably clear down to within a day or two, was overcast, and the weather threatening, the wind having an unmistakable hint of water in it. Henchard wished he had not been quite so sure about the continuance of a fair season. But it was too late to modify or postpone, and the proceedings went on. At twelve o'clock the rain began to fall, small and steady, commencing and increasing so insensibly that it was difficult to state exactly when dry

weather ended or wet weather established itself. In an hour the slight moisture resolved itself into a monotonous smiting of earth by heaven, in torrents to which no end could be prognosticated.
(p.102)

The language of this passage suggests the kind of conflicting meteorological vocabulary outlined in the previous section. Initially, the weather is described detachedly: 'it was difficult to state'. However, the incremental increase in the rain leads to a dramatic change in register. The rain becomes active and almost self-determining, 'establishing' and 'resolving itself'. Suddenly, from the impassive observations on the overcast sky and the level of moisture in the air, the narrative changes to an apocalyptic and fatalist tone, as the rain 'smites' the earth. The weather has taken on the role of active agent in the uncaring universe. Earth and heaven are in battle with one another, and heaven's agent is weather, hurled down violently and with intent. That 'no end could be prognosticated' again recalls meteorological discourse, and its appropriation as common conversational property, since we assume that it is the 'number of people' who 'had heroically gathered in the field' who reach this conclusion (p.102).⁴⁸ However, the significance of this weather is not that it represents a climatic fatalism, but that it is never safe to assume 'the continuance of a fair season'; rather, one must allow for the logical possibility of rain, using what *The Times* called 'the doctrine of probability' and establishing an alternative plan for this contingency.

Farfrae's celebrations not only suggest that he has anticipated rain, remembering, as Sergeant Troy observed, that 'wet weather is the narrative and fine days are the episodes' (*Crowd*, p.277), but also that he has adapted to it:

The notes of a stringed band came from the enclosure that Farfrae had erected – the pavilion as he called it – and when the Mayor reached it he perceived that a giant tent had been ingeniously constructed without poles or ropes. The densest point of the avenue of sycamores had been

⁴⁸ The phrase also recalls Gaskell's 'no end to the evil prophesied' in *Mary Barton*, p. 48.

selected, where the boughs made a closely interlaced vault overhead; to these boughs the canvas had been hung, and a barrel roof was the result. The end towards the wind was enclosed, the other end was open.

(p.176)

Once again, Farfrae has responded to and improved on a situation caused by the weather, mindful not only of what 'Nature' will 'stand' but also of what it can offer. In his 'ingenious' construction of a tent-like structure, Farfrae takes account of the position of the trees, seeing where they have, apparently fortuitously, arranged themselves for maximum utilization by man, and avoids the need even for 'poles or ropes'. He also takes into account the direction of the wind which played 'Aeolian improvisations' (p.102) on Henchard's tent-cords, and achieves a draught-proof construction 'like the nave of a cathedral' (p.103). If the weather is pagan, smiting earth from heaven, Farfrae's cathedral-like structure seems to relocate it within a Christian framework. What is important about Farfrae's success against Henchard's failure here is not only that, as the lawyer tactlessly comments, Henchard 'didn't think of it, you see; and he did' (p.106), but that far from subduing the weather through obtrusively modern and technological apparatus, Farfrae both exploits and respects nature and the weather. By contrast, Henchard's plans included 'greasy poles', 'hurdles', a stage and a clothed table, all advertised in modern, commercial fashion on 'long posters of a pink colour' (p.101), each detail seeming like an intrusion into nature. Farfrae combines his ingenuity with financial acumen, in the notion of charging 'admission at the rate of so much a head' (p.102). Nature and the weather then, are not allied to an innocent, ageless timeframe which is pitted against commerce, technology and modernity. Rather, the weather is a perennial concern: the ways in which the individual might adapt to and predict that weather determine economic and financial survival.

When the harvest is imminent, interest in the weather suddenly sharpens. From weather as a threat to celebration, or even the inadequate excuse of a ‘rule o’ thumb sort o’ man’, the ‘terrestrial conditions’ become a matter of intense and individual concern:

The farmer’s income was ruled by the wheat-crop within his own horizon, and the wheat-crop by the weather. Thus in person he became a sort of flesh-barometer, with feelers always directed to the sky and wind around him. The local atmosphere was everything to him; the atmospheres of other countries a matter of indifference. The people, too, who were not farmers, the rural multitude, saw in the god of the weather a more important personage than they do now. Indeed the feeling of the peasantry in this matter was so intense as to be almost unrealizable in these equable days. Their impulse was well-nigh to prostrate themselves in lamentation before untimely rains and tempests, which came as the Alastor of those households whose crime it was to be poor.

(pp.184-85)

The farmer is ‘ruled’ not only by the wheat-crop, but by ‘the god of the weather’. This god is a strange figure, both in Hardy’s novel and in Victorian discourses of the weather. The concept of a being who controlled the weather can be an ironic trope, as when *The Times* makes mocking allusions to ‘Jupiter Pluvius’, or when *Punch* refers to ‘the clerk of the weather’, and berates him for his poor organisation of climatic conditions.⁴⁹ The ‘god of the weather’ at Casterbridge is not a trope but actually a deity, however, suggesting that weather might be divinely ordained, and that its movements are unfathomable. In *Jude the Obscure*, Hardy uses the ‘weather-god’ again, describing a fine day as ‘intercalated’ among cloudy ones to illustrate the ‘caprice of the weather-god’.⁵⁰ Here the more technical ‘intercalated’ undermines the notion of a capricious weather-god, yet the prose surrounding that god in *Casterbridge* emphasises rather the terror he inspires in the ‘prostrated’ peasantry.

⁴⁹ ‘Meteorological Appointment’ in *Punch*, 47 (1864), 263. See also my Introduction, p.23.

⁵⁰ Thomas Hardy, *Jude the Obscure* ed. with introd. and notes by C.H Sissons (London: Penguin, 1985), p.140.

The fatalism brought about by agricultural depression suggests that this situation would have resonated strongly amongst the farmers of the 1880s. The 'rural multitude' of *Casterbridge* must have seemed profoundly rustic, 'almost unrealizable' and even risible in their 'prostrations' to a public who were apparently, as Hardy put it in his 1895 preface, 'indifferen[t]' to 'harvest weather'.⁵¹ If readers might have been more inclined by 1895 to read a 'god of the weather' as the superstitious belief of a pre-Corn Law peasantry, however, it is important to note that the passage was written in physical proximity to a society where, if farmers and peasants did not 'prostrate themselves in lamentation', neither were they by any means 'indifferent' to the harvest weather.

Narrative depictions of weather throughout Hardy's novel fluctuate between the meteorological, the affective and the fatalistic. The harvest weather is heavily dramatized, and suddenly takes on the position of an over-arching, uncaring Fate against which humans become the tiny and powerless 'blots on the universe' which the novel suggested early on. The opening sentence proclaims the absolutism and inescapability of the causal link between crop and weather, through its directness and its repetitions. The farmer as 'flesh-barometer' recalls Buchan's image of the 'living barometer', but rather than connoting physical susceptibility, the expression evokes the farmer's desperate attempts to sense the coming weather with his 'feelers'. These 'feelers' produce a strange effect in the narrative, even seeming to reduce the farmer to an animalistic status like the 'creeping things' of *Far from the Madding Crowd* who sensed and portended the coming weather. Yet the farmer finds it impossible to perceive signs through his 'feelers', and instead frequently turns to the weather-prophet, unable to rely either on the doctrine of probability or on his own 'weather wisdom'.

⁵¹ Hardy's Preface to 1895/1912 edition, Appendix II in *Casterbridge*, p. 379.

As the passage expands on this theme, the tone becomes increasingly pagan and dramatic. The 'god of weather' suddenly becomes associated with 'unrealizable' fear and dread. The reference to Alastor associates this god with a volitional cruelty and destruction, since Alastor was not only a violent god, but acted specifically to wreak vengeance and bring nemesis to households. The final comment on 'those households whose crime it was to be poor', however, undercuts the hyperbole of the prostrations and lamentations with a pragmatic economic reality, and even some passing social comment on the increased vulnerability of 'the poor' to any changes in the weather. In thinking about the operations of a weather god, who might be appeased with sacrifices and 'lamentations', the 'rural multitude' read weather as absolutely dependent upon incomprehensible chances and contingencies. Neither the farmers' 'feelers', nor their attempts to become 'flesh-barometers', appear to give any definite signs of the coming weather, which is too incomprehensible to be determined through rustic 'weather wisdom'. The farmers and peasants seem to have lost touch with the close affiliation which had enabled Gabriel Oak to read the 'messages' and signs which enabled him to predict the coming storm. It is this simultaneous dissociation from nature, along with an absolute dependence on the weather, which enables Fall to make his strange living in *Casterbridge*.

However, relying on a weather-prophet is a problem in *Casterbridge* partly because it represents an individual's abrogation from his personal responsibility to calculate chances and probabilities. The weather is something upon which Henchard and Farfrae, in particular, gamble. Having decided 'I don't altogether believe in forecasts' (p.186), and losing faith in Fall's prediction, Henchard acts on the town's belief that 'excellent harvest was almost a certainty', and sells his grain (p.187). The narrative interjects to comment that 'Henchard had backed bad weather, and apparently lost', and that 'he was reminded of what he had well known before, that a man might gamble upon the square green fields as

readily as upon those of a card room'. Consulting a conjuror represents a desire to eliminate chance from this green 'card table', on which everything is gambled. Hardy makes it clear, through Farfrae's 'reckoning', and his sense that the farmers were 'calculating with just a trifle too much certainty on an abundant yield', that such elimination is impossible: like the weather, chance cannot be removed, only anticipated. Economic survival in Casterbridge is contingent upon first remembering that the weather is always subject to change and chance, and secondly, upon calculating that such chances will probably be negative. This is a meteorological slant on Susan's sense that 'anything [was] possible at the hands of Time and Chance, except perhaps, fair-play' (p.4) and Elizabeth-Jane's lessons in youth that 'happiness was but the occasional episode in a general drama of pain' (p.322). Conjurors and forecasts cannot eliminate chance, because their own forecasts are based on probability of a more uncertain kind.

In this chapter, I have argued that Fall's 'curious repute' was historically determined in two main ways, and that his uncertain position in Casterbridge society reflects the similarly contentious status of meteorology in the mid to late Victorian period. Through this uncertainty, Fall also encapsulates the various chronologies of the novel, and shows Hardy maintaining a view of the weather both as economically significant, and as representing an almost insolvably difficult relationship for the individual to negotiate, since weather is fundamentally chancy. Henchard concludes that 'you can never be sure of weather till 'tis past' (p.189): this observation at the same time echoes mid-Victorian suspicions about the merits of weather forecasts, and embodies the novel's insistence on the need to adapt to, rather than try to predict, the weather. Where the 'dream-land' of *Crowd* is lost, and individuals seem to have lost their close physical relationship to the coming weather, forecasting cannot be contracted out to prophets. *Casterbridge* mourns this lost

affiliation between individual and weather, but offers no alternative other than the equally difficult 'doctrine of probabilities'.

CHAPTER 5

‘THE LONDON PARTICULAR’ AFTER DICKENS: FOG AND NARRATIVE AT
THE *FIN DE SIÈCLE*.

1. Introduction

Michael Henchard, backed by contemporary assumptions about weather forecasting, concluded that ‘you can never be sure of the weather ‘till ‘tis past’. As Hardy wrote *Casterbridge* against a Dorset background, however, those living in London could anticipate the weather with rather more certainty. The weather anticipated was the fog Dickens had termed in *Bleak House* ‘the London particular’.

In the first chapter of this thesis, I discussed representations of polluted climates in novels and social commentary of the 1840s. In this chapter I develop some of the themes identified in Chapter 1, and show how questions about the urban climate find new expression and gain new significance in writing about London fog in the 1880s and 90s. Though one of the most famous instances of literary fog in the Victorian period occurs earlier in the century, in Dickens’ *Bleak House*, and Dickens explores urban pollution and fog in several other novels (noticeably, *Martin Chuzzlewit* (1843-44), *Dombey and Son* (1848) and *Little Dorrit* (1857)), this chapter will examine the particularly notable fogs of the 1880s and 1890s and their treatment in literary and meteorological writing. Dickens’ rehearsal of many of the themes and ideas discussed in this chapter provides a constant background for my arguments, and much of the writing about fog in the 1880s and 90s seems to draw on his literary depictions of fog. Whilst taking into account earlier writing and concerns about fog in this chapter, I argue for a specific and significant moment in the history of the fog and its literary representation in the 1880s and 1890s, when it emerged as both a meteorological and a political issue.

Whereas the texts I discussed in Chapter 1 tended to focus on smoke and the industrial climate, novelists and commentators at the *fin de siècle* were preoccupied

with urban fog. The 'London particular' however was not a purely meteorological phenomenon, but the result of pollution, exacerbated and to some extent caused by smoke from factories. London fog, then, embodied a strange combination of polluted, artificially created climate, and 'natural' weather. Yet this weather was so predictable as to appear to constitute the climate of the city: just as Manchester came to be figured by its smoky atmosphere, so the London fogs of the late Victorian period have formed a powerful and enduring definition of the city.

Appropriately enough, fog finds its metamorphic, insidious way into much literary and non-literary writing of the *fin de siècle*. This chapter will examine the ways in which realist, sensationalist and Gothic narratives variously responded to the fog both as a meteorological phenomenon and as it was presented by meteorologists and social reformers. Though I acknowledge the non-discrete nature of these categories of narrative, as well as the difficulty in drawing a line between 'literary' and 'non-literary' writing, this chapter explores the fog's mediation between, and changes within, the novel and social polemic, and realist and non-realist narratives. By discussing the arguments of the meteorologist and social reformer F.A.R. ('Rollo') Russell, and the conservationist H.D. Rawnsley on fog and smoke pollution, as well as *The Nether World* (1889), *The Strange Case of Dr Jekyll and Mr Hyde* (1886) and *The Picture of Dorian Gray* (1891), I show the fog's mobility between narrative forms, and the reciprocity of influence between these forms.

On the one hand, then, fog was experienced and debated as a problem, deleterious to health and environment: on the other, it was a fertile narrative opportunity which writers in the 1880s and 90s readily exploited and developed. I argue that both these responses intersect with and inform one another. Thus, meteorological concerns become inscribed in literary texts, and meteorological texts borrow literary and novelistic tropes to dramatize their own polemic. Whilst not all occurrences of fog in

the narrative are related to meteorological and social reformist discourse, by reclaiming the meteorological aspect of the fog it becomes possible to identify and explore in close and productive detail some of its metaphorical uses in the *fin de siècle* narrative.

Though Rawnsley discusses smoke in Lancashire rather than London, his article ‘Sunlight or Smoke’ so powerfully exemplifies the interchange between literary and non-literary articulations of pollution that I include it here to show how various registers converge in late Victorian descriptions of smoke and fog. I also argue that concerns about pollution and the possible ‘death of the sun’ articulated in literary form by Dickens and Tennyson, and in the debate of the 1870s over solar energy and the future of the sun, anticipate, and are revisited in, later debates about fog.¹ I then discuss fog in three late-Victorian urban narratives of different genres: *The Nether World*, *Jekyll and Hyde* and *Dorian Gray*. In all three narratives, the artistic possibilities of the fog are exploited, and critics have often identified this as a purely symbolic representation of the nascent anxieties associated with late Victorian urban life.² In this chapter however, I examine the different kinds of resonance associated with the fog in the narrative from the 1880s, and argue that contemporary associations of the fog with crime, degeneration and pollution also inflect its depiction in the literary narrative. Finally, I consider the implications of the persistence of both fog itself and writing about fog for the science of meteorology.

Perhaps because of its overwhelming presence in Victorian fiction, particularly from the 1880s onwards, fog has merited slightly more attention in literary criticism than has other climatic phenomena. Critics have almost invariably read fog as metaphorical, and with good reason. It would be difficult to argue against a reading of

¹ See Gillian Beer, ‘“The Death of the Sun”: Victorian Solar Physics and Solar Myth’ in J.B. Bullen ed., *The Sun is God: Painting, Literature and Mythology in the Nineteenth Century* (Oxford: Clarendon Press, 1989), pp.159-181.

² Raymond Williams, in *The Country and the City* (London: Chatto and Windus, 1973), seems to inaugurate this trend, speaking of the ‘labyrinthine obscurity’ of London in the late-nineteenth century, and the resulting loss of meaning and identity there (p.217 and p.227). The theme is continued and developed by most of the critics I discuss below, who have developed and abstracted the theme of the labyrinthine city and assumed the role of the fog as a symbol of this.

Dickens' fog in *Bleak House* as representative of legal obfuscation and obtuseness, for example. Indeed, Dickens does most of the work for us, when he describes the Lord High Chancellor 'with a foggy glory round his head'.³ Raymond Williams makes several comments on fog in Dickens' narratives, arguing that the fog in *Dombey and Son* 'keeps us from seeing each other clearly, and from seeing the relation between ourselves and our actions, ourselves and others'.⁴ Williams' argument hinges on the theme of alienation of individuals in the city, and is predicated on a view of the fog as metaphorical. However, I argue that reading the fog as a convenient metaphor whose resonance derives from what fog *looked* like in the city cannot fully account for the representations of fog in the *fin de siècle* narrative. The texts on which this chapter focuses were composed in a cultural context where the fog was not only a frequent urban reality, but also the subject of debate, enquiry and even reform.

Once critic who has discussed fog in the narrative is Elaine Showalter, who argues that brown fog contributes to a homoerotic subtext in *Jekyll and Hyde*. This argument is compelling, but like Williams, Showalter reads the fog as symbolic, locating it within a list of images of anality, rather than as an urban reality in the period.⁵ In this chapter, I make a claim for the fog as related to the 'queerness' of that text, through its perceived contemporary potential to dissolve boundaries and binaries.⁶ In this chapter more than any other, then, I come closest to what Jonathan Bate has called 'New Geographism', since I am concerned with the meteorological conditions which surrounded and influenced narrative.⁷ I make a distinction, however, between considering the fact that Stevenson, Gissing, Wilde and Conan Doyle all wrote in an

³ *Bleak House*, p.12.

⁴ *The English Novel from Dickens to Lawrence*, p.34.

⁵ Elaine Showalter, 'Dr. Jekyll's Closet' in *Sexual Anarchy: Gender and Culture in the Fin de Siècle*, (London: Bloomsbury, 1991) p.113.

⁶ On 'queerness' in the text, see Donald E. Thorne, *Queer Theories* (Basingstoke and New York: Palgrave Macmillan, 2003) in the *Transitions* series, ed. by Julian Wolfreys, pp.136-147.

⁷ 'Living with the Weather', p.436.

epoch of prevalent urban fog, and analysing the social, economic and meteorological discourses surrounding this fog.

Stephen Mosley's *The Chimney of the World* discusses smoke pollution and its impact on life and environment in Manchester at the turn of the twentieth century. Partly as a consequence of the factory smoke, Manchester later experienced fogs of equal severity to those in London, during the same time period, peaking in the 1880s. Although the focus of this chapter is London rather than Manchester, Mosley's discussion of smoke pollution is still useful in outlining some of the debates which surrounded pollution and its effects on climate at the turn of the century.

Mosley also details the ambivalence surrounding smoke pollution in Manchester, outlining two contemporary discourses about smoke, one of which presents smoke as a visible sign of economic prosperity and health, whilst the other characterizes it as unhealthy, dangerous and indicative of wasteful practices in both the factory and the home.⁸ We have seen the first of these arguments articulated in the literary narrative by Mr Bounderby in *Hard Times* and by Mr Thornton in *North and South*, whilst writing about the Preston lock-out also showed the penetrating economic 'cold' in which the smokeless chimneys resulted. This chapter will focus largely on the characterization of smoke and consequently the fog, as invidious and as a social evil, in the reformist writing of F.A.R. Russell. This reading appears in the ascendant by the 1880s and 1890s, and brings to bear the most influence on literature of the period.

Bill Luckin has made a case for the 1880s and 1890s as an important cultural moment in the history of fog. Luckin approaches the fogs as part of environmental history, and links them with contemporary socio-medical perspectives.⁹ His study outlines the history of London fog, its causes and effects, and the discourses which came to surround it. Luckin's focus is specifically on the social Darwinist,

⁸ *The Chimney of the World*, pp.69-113.

⁹ Bill Luckin, "'The Heart and Home of Horror': The Great London Fogs of the Late Nineteenth Century", *Social History*, 28, No.1 (January 2003), 31-48.

epidemiological and economic theories which contributed to what he terms a 'catastrophist' view of both fog and the inner city, conflating the two as alien, unknowable and immoral. This view is seen to reinvigorate the idealization of the rural, proposing the 'real or imagined pastoralization of the greatest capital in the world.'¹⁰ However, though this argument about fog can be traced in writing of the late nineteenth century, it does not fully account for all the uses of fog in realist, Gothic and supernatural writing of the period. Luckin states that 'like Dickens before them, novelists and poets from every level of the literary hierarchy appropriated fog as a potent symbol of rediscovered metropolitan poverty and environmental deprivation'.¹¹ However, the model of fog as symbolizing only poverty and deprivation is inadequate here. The novels on which this chapter focuses do depict parts of London as deprived and impoverished: however, fog does not provide a demarcation between the deprived and advantaged areas of the city, and is not associated only with poverty. Indeed, the boundaries between socio-geographical regions in London are increasingly blurred by the pervasive fog.¹² Dorian, Jekyll and Hyde all traverse the boundaries between areas of the city, *flâneurs* whose meanderings transgress such metropolitan divisions and who are followed by fog throughout.¹³

2. Smoke, fog and the city

Although the late nineteenth century witnessed a peak in the problem of smoke pollution, the connection between smoke and fog in cities was not a Victorian

¹⁰ 'Heart and Home', p.33.

¹¹ 'Heart and Home', p.44.

¹² See Linda Dryden on social demarcations in the city's topography. *The Modern Gothic and Literary Doubles: Stevenson, Wilde and Wells* (Basingstoke and New York: Palgrave Macmillan, 2003), p.67.

¹³ On the figure of the *flâneur* in the Gothicized city see Dryden, pp.57-61.

discovery. Peter Ackroyd gives the history of London fog and smoke, outlining the problem from Tacitus' writing about Caesar's invasion, through John Evelyn's *Fumifugium* (1661) and on through the nineteenth century.¹⁴ As smoke pollution increased through the Victorian period, the city fogs became discoloured by its residue, changing from white to yellow, and then through brown to black by the 1890s,¹⁵ and it is in the 1880s that we can see an eruption of anxieties about fog and smoke pollution. In meteorological and socio-economic writing on the subject, I identify three main concerns about city fog, all of which intersect with and inform one another, and are connected to a broader set of anxieties about the nature of the city itself. These are: the blurring of seasons; the blotting out of the sun and subsequent darkness in the city; and the effects of fog on physical and moral 'health'.

In 1880, Rollo Russell (1849-1914), meteorologist, social reformer and vice-president of the Royal Meteorological Society published the best-selling pamphlet *London Fogs*, in which he outlined the nature and degree of fogs, and their cost to the city's population. Russell's career was based on the connections he perceived between environment, health and meteorology: scientific and natural-historical observation were for him the means towards a greater understanding of human health and the means of improving it. In all his writing on epidemics, atmosphere and diet, the thread of geological and meteorological determinism is evident.¹⁶ The pamphlet was popular and widely read, becoming 'a touchstone for a number of predominantly aristocratic and upper middle-class pressure groups who campaigned for a reduction in the consumption of domestic fuel'.¹⁷ In the same year *London Fogs* was published, the National Smoke Abatement Institution was formed, and calculated the cost to the capital of each severe fog episode, including in its figures extra washing, destruction of mortar, extra chimney

¹⁴ See Peter Ackroyd, *London: A Biography* (London: Vintage, 2001), pp.431-32.

¹⁵ See 'Heart and Home', p.34.

¹⁶ Bill Luckin, '(Francis Albert) Rollo Russell', *DNB*.

¹⁷ See *DNB*.

sweeping, extra fuel for lights, damage to plants in parks and many more inter-related issues.

Although it is difficult to argue that the writers I discuss here had read *London Fogs*, the pamphlet was a best-seller. In the words of Bill Luckin, it ‘mirrored increasingly pessimistic metropolitan attitudes towards the recurring fog phenomenon; stimulated a wide-ranging newspaper debate; and played a crucial role in establishing the capital’s first anti-smoke pressure group, the National Smoke Abatement Institution’.¹⁸ Russell, then, both responded to and developed anxieties about fog as part of a wider discourse of fear and concern. His arguments, and the tropes and themes he employed in making them, can be productively explored alongside the depiction of fog in novels of the 1880s and 1890s.

Gillian Beer has argued in relation to the cultural assimilation of Darwinism and Freudian thinking in particular that ‘ideas pass more rapidly into the state of the assumption when they are *unread*.’¹⁹ To appropriate this argument here might seem somewhat opportunistic: however, since Gissing, Wilde and Stevenson all experienced the fogs at first hand, and were aware that they constituted a significant part of quotidian life in London, they would certainly have been aware that these fogs inspired debate during the period. Stevenson campaigned for better lighting in London in the 1880s, whilst Vivyan’s discussion of fog in ‘The Decay of Lying’ alludes, albeit in a deliberately ironic and disingenuous fashion, to the problem of city fog. Having argued that the Impressionists invented ‘those wonderful brown fogs’ of London, Vivyan notes that now: ‘fogs are carried to excess [...] the exaggerated realism of their method gives dull people bronchitis.’²⁰

¹⁸ ‘Heart and Home’, p.37.

¹⁹ *Darwin’s Plots*, p.4.

²⁰ ‘The Decay of Lying’ in *Complete Works of Oscar Wilde*, ed. with introd. by Vivyan Holland (London: Collins, 1980), pp. 970-992, (p.986).

In *London Fogs*, Russell goes some way to explain what is new, and what has changed, in the matter of fog in the city:

[...] smoke in London has continued probably for many years to shorten the lives of thousands, but only lately has the sudden, palpable rise of the death-rate in an unusually dense and prolonged fog attracted much attention to the depredations of this quiet and despised destroyer.

[...]

Every year [London's] thick, heavy winter blanket grows thicker, and its summer garments more resemble those which were formerly sufficient for the cold season. This is only to be expected while houses and streets develop at their present rate in all directions. The opinion is strengthening that something must be done, and in England a well-founded opinion always ripens into action.²¹

Russell's diatribe seems to identify this particular moment as a crucial one in thinking about fog: the situation is apparently at breaking point. In this manifesto-like passage, Russell outlines his position that fog has a direct and detrimental effect on health and life in the city. He also suggests other and more archetypal anxieties, introducing the theme I identified above, that the fog blurs seasons and 'difference' in the city. The 'quiet and despised destroyer' which creates disorder in the seasons, and makes summer and winter indistinguishable from one another seems to represent fears beyond those explicitly related to fog, about the silent and stealthy growth of urbanization and industry. The fog appears invidious, protean and strange. On the one hand it is itself the 'thick, heavy, winter blanket' covering the city; on the other, it is what necessitates thick garments in the summer more properly fitted to 'the cold season'. The description of developing 'houses and streets' works in parallel with that of the 'dense and prolonged fog', and together, both powerfully convey the situation about which 'something must be done'. Both urban growth and thick fog are reminders of an inexorable process of modernization, increased population, and the spiralling growth of the city itself, which exaggerate and enhance its unknowable, unfamiliar atmosphere.

²¹ The Hon. R. Russell, F.M.S., *London Fogs*, (London: Edward Stanford, 1880) pp.4-5.

In the face of this ‘silent and despised destroyer’, Russell campaigned to reduce smoke pollution and thereby rid the city of yellow and brown fogs. Though his descriptions of fog are frequently made in meteorological terms, Russell’s interest is not in weather-forecasting and prediction but in the social and economic effects of the fog. The fog both brings together and intrudes into two areas of inquiry: meteorology and social reform. Like many of his meteorological precursors, Russell yoked individual health, well-being, human development and even morality to the weather: unlike FitzRoy or Lamarck, however, he did not attempt to predict that weather, but discussed instead ways in which it might be mitigated, escaped, or avoided, recalling the kind of ‘environmentalism’ associated with eighteenth-century and Hippocratic readings of body and place.

Russell makes a powerful case for the fog as a determinant of human life, asking whether it might be ‘possible that the rarity of true cockneys of the fifth generation may partly be accounted for by the absence of ozone, and the presence of this pernicious ingredient [i.e., smoke] in London?’²² Russell’s suggestion that organic order and the nature of the ‘type’ – cockney - are threatened by changes in nature echoes Leon Faucher’s argument in the 1840s that the Lancashire ‘race’ was in a state of degeneration and decline. Russell also claims, significantly, that fog is more detrimental to health than cold, advancing the death-rate ‘by hundreds per million in a single week’ (p.18). The exacerbating effects of winter and cold weather on scarcity had been confirmed in scientific writing by Darwin,²³ in economic and social writing from Malthus, for whom climate functioned as a check to population,²⁴ to Engels and Henry Mayhew, and was explored and represented in fictional terms from *Mary Barton*,

²² *London Fogs*, p.21.

²³ The effects of severe winter weather on subsistence available and consequent numbers of species or breeds were one of the few instances of the action of climate which Darwin was prepared to allow. *Origin of Species*, p.37. See also Desmond and Moore, *Darwin*, p.247.

²⁴ See Josephine McDonagh, *Child Murder and British Culture 1720-1900* (Cambridge: Cambridge University Press, 2003) on Malthus’s ‘Dame Nature’ in the 1803 second edition of the *Essay on the Principle of Population*. ‘Dame Nature’s’ ‘fecundity was the root of all disasters’, but she also provided positive ‘checks’ to population via periodically severe weather and natural catastrophe, p.88.

as I showed in Chapter 1, to *The Nether World*. Winter cold, then, was an accepted ‘check’, influence or determinant in economic, scientific and literary writing: in making a claim for the fog as more deadly even than cold, Russell challenges received wisdom about climate and population, and identifies the fog as an unprecedented threat to life and health.

The following passages from *London Fogs* introduce the three anxieties I identified at the beginning of this section: blurring of seasons; darkening of or absence of sunlight; and the effects on health and morality of persistent and recurring fog:

The very frequent exclusion of sunshine in cold weather by smoke, and the cold, damp fogs and mists retained by it in the town, cause an increase in the use of spirituous liquors, which again lead to disease, misery and death. The winter gloom of London is very unfavourable to sobriety.²⁵

Not only is the perpetual darkness characterized as leading to alcoholism and in turn ‘disease, misery and death’, it also blankets all other seasons and weather events, which, from Russell’s perspective, inevitably leads to moral decline:

[Londoners] lose, in the first place, that glorious and almost universal privilege of looking upon the clear azure above them, a clear-setting sun or clear-rising moon, the magnificent cloud-castles of summer, the delicate hues and forms of clouds, and the crisp brilliancy of every fine winter morning. They lose, too, all distant prospects, urban or rural, and the pleasant variations of cloud-shadows which delight us in the views of great continental cities, which are not blurred or blotted out by smoke. These things are sermons from nature which humanity has need of.²⁶

In Russell’s narrative of the effects of fog, ‘exclusion of sunshine’ leads to depression, which leads to alcoholism and ‘disease’. In line with his idealization of the rural, Russell assumes an innate moral capacity in the ‘clear azure’ which is inaccessible to Londoners. Russell constructs nature and its variations within a Romantic framework

²⁵ *London Fogs*, p.30.

²⁶ *London Fogs*, p.31.

as having a Wordsworthian potential to teach and improve through its 'sermons'. However, such pastoral idealism is lost where all climatic phenomena except fog have been 'blurred or blotted out'. Faith in the regenerative, cyclical powers of nature is undermined, as both seasons and 'variation' are annihilated. We shall see this idea revisited in *Jekyll and Hyde*, *Dorian Gray* and *The Nether World*.

The passage also echoes some of the same fears which were articulated in the 1870s debate over the age and future of the sun.²⁷ In this decade, the relatively new and controversial theory that the sun would not indefinitely give out heat and light in sufficient degree to sustain human life was taken up by Darwin, Lord Kelvin and Helmholtz, and encompassed anxieties about the end of human life in this event. The theory also seems to grow out of apparently more archetypal, mythological fears of 'loss of faith in *recurrence*, the loss of any assurance of 'eternal return'',²⁸ which are derived more from the language of nightmare than that of physics. Such fears had been rehearsed in Tennyson's *In Memoriam* (1850), where the poet experiences a dream in which 'Nature's ancient power was lost' and 'there would be Spring no more', and in Dickens' description in *Bleak House* of particles of soot like black snow 'gone into mourning, one might imagine, for the death of the sun'.²⁹ Russell's lament on the darkness and discord in London seems to correspond to the kind of nightmarish vision of the city imagined in James Thomson's 'City of Dreadful Night' (1880) at least as much as to rationalist, meteorological concerns. His appropriation of archetypal and frequently sensationalist anxieties, and translation thereof into a discourse about fog and smoke, places him within a tradition both literary and scientific, and sees him assimilate this tradition into a new kind of meteorological idiom.

²⁷ See Beer, 'The Death of the Sun' in Bullen, pp.159-180.

²⁸ Beer, 'The Death of the Sun', p.165.

²⁹ 'In Memoriam', LVII, (1-2) in *The Victorians: An Anthology of Poetry and Poetics*, ed. by Valentine Cunningham (Oxford: Blackwell Publishers Ltd., 2000), 218-252. *Bleak House*, p.11.

Both the undifferentiated seasons and the absence of sunshine are directly related to concerns about health in Russell's polemic: in particular, the health of the poor. In cramped and unsanitary living conditions, the poor suffered far more from the suffocating effects of the fogs than the better-off, just as the urban labourers in Manchester in the 1840s were more directly affected by the factory smoke than the better-off.³⁰ Unable to open windows, or even, sometimes, leave the house, London's poor huddled in unbreathable and foetid atmospheres. As the death-rate increased with each episode of fog (which, even allowing for some of Russell's more generous calculations, it appears to have done),³¹ social Darwinist thinking inferred that the increase was the result of congenital weakness in the poor which made them unable to withstand the smallest change in living conditions.³² The fog was thus perceived, within the 'catastrophist' construction outlined by Bill Luckin, as accelerating a degenerative process which was already in motion. As Dorothy Porter points out, Darwinistic discourses gave pre-existing prejudice the opportunity of a new terminology, allowing the poor to be understood in biological terms as a race apart, which had the capacity to drag the entire nation down through its innate degeneration.³³ I shall argue below that this categorization of a 'race apart' is also in fact challenged by the insidious and uncontainable nature of fog: but in the writing of both Russell and Rawnsley, it is certainly the working class who are perceived to suffer most from the effects of smoke, pollution and fog.

Hardwicke Drummond Rawnsley (1851-1920) was a Deacon who had been tutored at Oxford by Ruskin, and had taken part in the same famous Hinksey road-mending project as Oscar Wilde. His inclination toward conservationism was

³⁰ 'Heart and Home', p. 33, and Chapter 1 of this thesis.

³¹ 'Heart and Home' p.41.

³² See Luckin, on the 'class-inflected variants of degenerationist discourse' associated with this line of argument, p.41.

³³ Dorothy Porter, "'Enemies of the Race": Biologism, Environmentalism and Public Health in Edwardian England', *Victorian Studies*, 34, 2 (Winter 1991), 159-78, (p.160).

influenced by Ruskin as well as by Wordsworth, for whom he had a ‘profound reverence’, and he followed the traditions of both Ruskin and Wordsworth. campaigning to prevent slate railways at Buttermere and implementing the foundation of the Lake District Defence Society, as well as composing ‘lake poetry’ of his own.³⁴ If Russell’s writing is frequently suggestive of a reappropriation of Romantic terminology, that tradition is even more evident in Rawnsley, who positions himself firmly in the tradition of Wordsworthian ecology and poetry. His description in ‘Sunlight or Smoke?’ (1891) of a journey to Lancashire to examine the causes and effects of smoke pollution encapsulates the anxieties about absence of sun, ‘blurring and blotting’ of nature, and health. Rawnsley places these within a Romantic framework, which also looks forward to the kind of naturalist construction of self and character we shall see in Gissing’s *The Nether World*. Rawnsley’s comparison between the sunshine of a rural environment and the Manchester smoke, though not part of the discussion about London fogs in particular, shows a markedly ‘literary’ description of the ways in which environment was affected by industrial pollution in this period.

Rawnsley frames the opposition between ‘sunlight or smoke’ in both mythological and biblical terms: the station where he alights just outside Manchester reminds him of ‘Heliopolis, the city of the Sun’; he characterizes himself as ‘votary of the great god, Ra’, but is persistently reminded in the industrial environment of ‘Dante’s “Inferno”’, ‘Stygian lakes’, ‘Erebean darkness and dirt’.³⁵ The same tropes of writing about pollution emerge in Rawnsley’s article as Russell’s pamphlet: the lament over the inability to tell when the day ends or begins; the idea of ill-health as a result of environmental conditions; and the invocation of a pastoral ideal. Smoke, fog and absence of sun blot out all that is both morally and physically ‘healthy’, as the article’s description of a small girl who has not seen the sun for a week shows:

³⁴ Graham Murphy, ‘Hardwicke Drummond Rawnsley’, *DNB*.

³⁵ H. D. Rawnsley, ‘Sunlight or Smoke’ in *Contemporary Review*, LVII (1891), 512-524, (pp.512-13).

Nine years she had grown, and a gradely little Lancashire flower the lass was, but she had had to grow with little sun, and the showers had been soot and sulphurous acid, and I gave a good sigh to think of the poor lass's lot, and to contrast her with the children who grow in sun and shower through the length and breadth of our English Lake district.³⁶

The idea of the individual as a flower, dependent upon the soil in which he or she is nurtured, has recurred throughout this thesis: Rawnsley's use of this image in particular seems to allude to Romantic organicist discourse, as does the idealization of the 'children who grow in sun and shower', while 'our English Lake district' invokes the poetic landscapes of Lake poets such as Wordsworth. Smoke and absence of sun are viewed here in the same kind of catastrophist discourse identified by Luckin. They are also described within a framework which adopts Romantic structures of the individual only to lament their desecration by the modern urban landscape, smoke and fog.

Absence of sunshine, the blotting of nature and the effects of fog on health and morality recur in non-literary writing about fog, which appropriates literary tropes and structures in attempts to inspire reformist action. All these themes are also connected to, and strengthen, the vision of the city as propelled towards an increasingly chaotic and intimidating modernity, with streets and houses being built with an alarming rapidity, and individuals losing all sense of self in this sprawling, dark and foggy landscape. The unknowable, unnavigable, labyrinthine city is depicted in close relation to this landscape in both the realist and the Gothic narrative.

³⁶ 'Sunlight or Smoke', p.523.

2. *The Nether World*: Environment, Pessimism and Realism

The Nether World articulates many of the same ideas about the city, the fog and its dangers as those identified above, with the crucial difference that unlike Russell, Rawnsley, and the Smoke Abatement Committee, Gissing envisions no hope for a solution of any kind to the issues he sets out. Though for Gissing the central problem of life for the working class in Clerkenwell is not fog or pollution but poverty, the fog both reflects and mirrors the hopelessness of that life and the impossibility of any alternative as well as constituting a physically unhealthy atmosphere. The theme of *lowness*, of being *underneath* something suggested by the title has perhaps particular significance in relation to the fog, which almost perpetually places a lid on the skies in the novel whilst aspiration and hope are also being crushed or 'lidded'. Fog also acts, with other climatic phenomena in the novel, with apparently antagonistic intent, and is often described as behaving with deliberate 'malice' towards the denizens of Clerkenwell.³⁷ This malice does not emanate from a 'weather god' like the one Hardy invokes in *Casterbridge*, but from a climate which both mirrors and worsens the oppression of the working class. Weather is less 'firmamental' than simply urban, polluted and relentlessly depressing.

Gissing's innate pessimism found its expression in the *fin de siècle* naturalist text which, unlike mid-century realism, held out no hope for reconciliation between external reality and individual nature, inner and outer experience of the world.³⁸ Realist writers like George Eliot and Elisabeth Gaskell had tried to show readers an accurate picture of life for, variously, women, the working class, mill-workers and mill-

³⁷ George Gissing, *The Nether World*, ed. with introd. and notes by Stephen Gill (Oxford and New York: Oxford University Press, 1998), p.7. All further references are to this edition.

³⁸ See Adrian Poole, *Gissing in Context* (London: Macmillan, 1975), in particular pp.7-25, and John Goode, *George Gissing: Ideology and Fiction* (London: Vision Press, 1978) p.15.

owners, in the hope of bringing about change or reform. Gissing, however, avowed his artistic manifesto as an attempt to:

bring home to people the ghastly condition (material, mental and moral) of our poor classes, to show the hideous injustice of our whole system of society, to give light upon the plan of altering it, to preach an enthusiasm for high *ideals* in this age of unmitigated egotism and ‘shop’,³⁹

The Nether World in fact avoids preaching enthusiasm of any kind: ‘unmitigated egotism and ‘shop’ remain undefeated. The pessimistic vision of the novel does not allow for universal sympathies; atomized characters experience life as a struggle for the ‘survival of the fittest’ in a bleak post-Darwinian vision of the city. Climate in the novel is antagonistic, and derives its characterization from Gissing’s own experience of weather and climate as well as his artistic idiom. Gissing, who frequently suffered from depression, found London fog particularly dispiriting, and devoted large sections of his own life to a search for the perfect climate in which his health might improve.⁴⁰

Late Victorian re-workings of the realist novel, and of its earlier guise in the form of the ‘Condition of England’ novel, also required a re-imagining of climate and the weather. The degenerative environment of *The Nether World*, and increasingly bleak visions of the future of humanity towards the *fin de siècle*, also suggested that Dickens’ image in *Dombey and Son* of ‘a good spirit who would take the house-tops off’ and show the humanity below had endured less well than his vision of the black and encroaching ‘dense black cloud’ in the same passage.⁴¹ The idea of Londoners as ‘centres of self’, to use Eliot’s term,⁴² to be explored and sympathized with seemed less

³⁹ Letter, 3rd November 1880. Quoted in Stephen Gill’s introduction to *The Nether World*, p.xi.

⁴⁰ See David Grylls, ‘Determinism and Determination in Gissing’, *Modern Language Quarterly*, 45, No.1, (March 1984), p.62 and Gissing’s own diary entries throughout Pierre Coustillas ed., *London and the Life of Literature in Late Victorian England: The Diary of George Gissing* (Hassocks: Harvester Press, 1978).

⁴¹ Charles Dickens, *Dombey and Son*, ed. with introd. by Peter Fairclough and notes by Raymond Williams (London and New York: Penguin, 1970, rpt. 1985) p.738. All further references are to this edition.

⁴² *Middlemarch*, p.311.

credible than the idea of these selves as involved in an unending and deadly struggle with one another, under a morally and literally polluted sky. As I showed above, all of these images were more than academic in London at the end of the nineteenth century, where fog was a physical reality to be debated and feared. The naturalist narrative, 'concerned with the appalling state of the inner cities'⁴³ explores the fog in this context, viewing it as both a social evil and a symbol of decline and degeneration.

The tropes of writing about fog which Russell and Rawnsley employ also appear in *The Nether World*. However, where a reformist like Russell dramatized his representation of the fog through literary and poetic language and image in order to make the problem clear and to make an impassioned cry for change, Gissing's use of the same language and themes is significant precisely because it rejects this optimism and denies the possibility of change. There is no possibility held out in *The Nether World* of any other kind of world, no pastoral idyll which can realistically be attained, and no expectation of emigration like that undertaken in *Mary Barton*. Jane and John Snowdon and Sidney Kirkwood take a brief holiday in the country, but return after only a few days to the crushing reality of Clerkenwell: there are no characters who live in or have personal knowledge of the countryside in the novel. Unlike Russell, Gissing does not suggest either a retreat to the rural, or the 'pastoralization' of the city as a workable solution. In his use of images shared with the register of meteorological social reform, combined with rejection of their potential as a dynamic for change, Gissing stands in the same relation to smoke-reformist writing as he does to mid-century classic realism. Thus, although the novel attempts a similar psychological realism to that found in earlier realist texts, rejecting the truly improbable, or the purely sentimental, it also rejects realism's optimism or view of itself as a possible catalyst for change. Gissing's own reaction to the atmosphere of late-Victorian pessimism, tempered by his personal

⁴³ *The Modern Gothic*, p.7.

pessimism and depression as well as by changing constructions of the novel, was to establish a space for narrative which stands in the same relation to the realist as it does to the real. *The Nether World* takes what is least hopeful from both.

Gissing's construction of nature as antagonistic, then, intersects with his constructions of the city itself, so that nature and the city behave in the same way, to the same end, and exaggerate one another's effects. As Julian Wolfreys remarks, talking of the weather 'often amounts to talking of the city':⁴⁴ weather, nature and landscape together seem to comprise the felt experience of the city in *The Nether World*, and their operations are often closely linked. The city, in turn, is ambiguously linked to those who live in it, who both cause and suffer its inhospitable climate.

Thus, human activity exacerbates the actions of climate in many of the passages dealing with weather in the city. Clerkenwell is a world of close-packed streets and 'shapeless houses' (p.2) which are covered with 'a ceaseless scattering of mud' (p.10). Weather and industry combine to produce 'odours of oil and shoddy, and all such things as characterized the town, [which] grew more pungent than ever under the heavy shower' (p.203). This last is reminiscent of Arthur Clennam's experience of the rain in *Little Dorrit* (1857), where city rain serves to heighten awareness of dirt and pollution, rather than to cleanse the urban landscape.⁴⁵ The following passage highlights the synchronicity between human activity and climate, and the sense the narrative seeks to convey of each individual existing in a vacuum, unbound by human ties or knowledge of one another:

[C]arts, wagons, vans omnibuses, crossed and intermingled in a steaming splash-bath of mud; human beings, reduced to their mere paltriness, seemed to toil in exasperation along the strips of pavement, driven automaton-like by forces they neither understood nor could resist.

(p.280)

⁴⁴ Julian Wolfreys, *Writing London: The Trace of the Urban Text from Blake to Dickens*, (Basingstoke and London: Macmillan Press Ltd, 1998) p.27.

⁴⁵ Charles Dickens, *Little Dorrit*, ed. with introd. and notes by Stephen Wall and Helen Small (London: Penguin, 1998) p.46.

These insignificant human beings, caught up in a bewildering and unfathomable set of imperatives for existence, are reminiscent of Engels' vision of the workers as 'monads',⁴⁶ and Gaskell's of the Manchester poor leading a 'lottery-like' existence, but again the hope of change which Gaskell and Engels both express is absent from *The Nether World*. The mud reveals the human beings crossing and intermingling like the carts, wagons, vans and omnibuses, yet never truly coming into contact with one another. The forces which drive them are self-interest, hunger and competition, but their lack of self-awareness means that they have no hope of understanding or controverting the forces which both define and determine them. Under a lidded sky of fog and smoke, self-awareness and freedom become even more difficult to achieve.

For much of the narrative, fog is an implied rather than an actual presence, the occasional notability of its absence speaking of its usual frequency. Mention of 'lidded' skies and the rarity of sunshine convey a sense of the predominance of fog in Clerkenwell and, more broadly, in London. In October, however, the sky hangs 'low and murky, or rather was itself invisible, veiled by the fume of factory chimneys' (p.201), and the advent of fog with the autumn is taken for granted, with 'the dreary days when autumn is being choked by the first fogs (p.230). '[T]he fog's artificial night' (p.243) lingers for days, 'allowing little to be seen save the blurred glimmer of gas' (p.257). Where Dickens' artificial night could be read, by Chesterton at least, as 'cosy' and friendly,⁴⁷ Gissing condemns the inhabitants of Clerkenwell to live in a world of almost complete darkness: this, to a large extent, is what constitutes the sense of the subterranean in the novel's title. The sky is 'low, blurred, dripping' (p.263), narrowing the aspirations and damaging the health of those who live under its crushing, choking lid.

⁴⁶ *The Condition of the Working Class in England*, pp.36-37.

⁴⁷ See G.K. Chesterton, *Charles Dickens* (London: Methuen, 1919), p.121 on Dickens as a 'poet' of the fog.

Gissing's depictions of the sun are bleaker still than that of Rawnsley and Russell. There is no anxiety here that the sun will cease to give out enough heat and light for human survival, nor is there any evidence for Tennyson's dreaming fear that Spring will not come again. Rather, the seasons continue to change ceaselessly and relentlessly, and life in Clerkenwell continues without hope of change even in the form of apocalypse. Sun in *The Nether World*, though rare, in fact serves to heighten the misery of the lives lived there. Like Rawnsley, Gissing employs mythological terms when writing about the sun: particularly in Chapter XXIV, 'Io Saturnalia', which describes the August Bank Holiday in Clerkenwell. However, Gissing combines this with a bitter irony, expressive of a sense of debasement both of mythological figures and of sunshine itself: 'Land-lords gave thanks to the Sun-god, inspirer of thirst' (p.105). Throughout *The Nether World*, sunshine intrudes into city life, always apparently against the odds, and almost always serving only to heighten the misery of those who live there. Thus, the sun is 'triumphant, refusing to be excluded even from London workshops' (p.90), where it serves only to make the workers' discomfort more pronounced. The 'blessed sunshine, so rarely shed from a London sky – sunshine, the source of all solace to mind and body' (p.99) is the 'rarest of visitants' (p.126) to Clerkenwell, but in fact gives no such 'solace' when it does visit the city. The sun offers no Apollonian hope of higher things, and neither does it suggest any abatement of misery: it 'serve[s] only to reveal the intimacies of abomination' (p.164).

The combination of darkness, fog, and a sunlight which offers no hope of improvement leads to a particular brand of organic development in the novel which both controverts the analogy between individual and plant, and reinvents it for the late Victorian naturalist narrative. Both Clem Peckover and the solicitor Scawthorne are described as plants in terms similar to Rawnsley's 'gradely young Lancashire flower' and the many other Victorian characters figured in this way. However, the analogy

between character and plant growth is here applied to two of *The Nether World's* most unpleasant characters:

[Clem's] health was probably less than it seemed to be; one would have compared her, not to some piece of exuberant normal vegetation, but rather to a rank, evilly-fostered growth. The putrid soil of that nether world yields other forms besides the obviously blighted and sapless.
(p.8)

On the one hand, then, Clem is not 'normal'; but she is also a natural aberration of the kind nature produces from time to time. Clem is 'evilly-fostered', but this 'evil' is a combination of the antagonistic nature on which Gissing insists throughout the novel and active human agency: Clem's mother has also played her part in rearing this 'growth'. Typically, the 'evil' is predicated on several levels. The soil in which Clem has grown seems to be both metaphorical, insofar as it refers to her upbringing and position, but also to refer to the actual environment in which that upbringing took place, where skies are heavy and dark, and sunshine, when it appears at all, is an almost malignant force.

Scawthorne, however, whose name seems to allude to his stunted development and its comparison to that of a young tree, was not fostered in such soil. Rather, his promising childhood was brought to an end when 'as in almost all such cases, his nature was corrupted' (p.194). The nature of this corruption is not entirely clear, but it seems to be attributed to the hard work he undertook to 'work himself up to a position which had at first seemed unattainable', for which he paid with his 'ideals', 'sincerity', 'disinterestedness' and 'the fine perceptions to which he was born'. Here it is not the predetermined soil which influences character so much as the treatment of the plant whilst it is growing:

To stab the root of a young tree, to hang crushing burdens on it, to rend off its early plant branches – that is not the treatment likely to result in growth such as nature purposed. There will come of it a vicious formation, and the principle also applies to young men.

(p.194)

Scawthorne, by contrast to Clem, is not fostered in a soil which predetermines his character; rather, human interference and the struggle to achieve success have disturbed and spoilt his organic development. Contradictory propositions are put forward in these two passages: here, ‘nature’ purposes the growth and formation of both trees and young men, whilst in Clem’s case, nature seems to have determined her ‘evil’ character. The narrative is unwilling to reconcile itself either to the principle of nature as complicit in ‘evil’, or as overthrown by industrial and human ‘crushing burdens’, which rend and stab both trees and men. This opposition exemplifies the novel’s insistence on degeneration, determinism, industry and human intervention as equally causal, so that fog and darkness also appear at once as cause, effect and model for existence in this ‘nether world’.

Russell’s arguments about the fog and health appear in stark form in *The Nether World*, which also encapsulates the kind of degenerationist discourses Bill Luckin identifies in connection with *fin de siècle* writing about fog. Pennyloaf and Bob Hewett’s small daughter dies during a period of fog and rain (p.265), and her death is so strongly determined by the text’s own rationale of inevitable decline that she is given no specifically identified, named disease. The narrative states only that ‘it’ had ‘a bad cough, and looked much like a wax doll that has gone through a great deal of ill-usage’ (p.265). As Pennyloaf waits with her daughter to see the doctor, she looks down at the child’s face and sees that ‘at that instant it had ceased to live’ (p.267). The doctor himself, knowing the recent state of the child’s health, ‘found the event natural enough’. There is no development of the question of this ‘natural’ death like the disquisition on nature and the unnatural in *Dombey and Son*, simply an acceptance that this is the kind

of nature in which people must live, and their deaths within it are therefore 'natural enough'.

Yet whilst Paul Dombey's death seems determined by the ideology and logic of the novel in which it occurs, plainly showing the limits of what money and economy can achieve by punishing Mr Dombey with the death of his beloved child, the death of the small Hewett girl is necessitated by the environment in which she lives: there is no moral, and no mourning. Paul remains talkative and self-conscious even at the moment of death: the Hewett child is entirely passive and wordless, as are her parents. Bob's only comment is 'thank goodness for that', whilst Pennyloaf's reaction is one of stunned docility. Later in the novel, it is tacitly implied that an older Hewett child has also died, since the first death was of a younger daughter, and Pennyloaf is said to have 'but one child to look after, a girl of two years, a feeble thing' (p.333). Presumably, though not necessarily, this is the child with whom Pennyloaf was pregnant at the time of her other daughter's death: presumably too, the two-year old, 'a feeble thing', is equally destined to an early grave. That neither parents nor narrative should linger over these infant deaths suggests a degenerationist view of their inevitability: one by one, the Hewetts are eliminated through their inability to adapt and survive in reduced living conditions.

This is tempered, however, by the narrative's inclusion of details of the family's diet, their social position and difficulties, so that the kind of absolute degenerative determinism of social Darwinism is avoided:

You should have seen the diet on which [Pennyloaf] lived. Like all women of her class, utterly ignorant and helpless in the matter of preparing food, she abandoned the attempt to cook anything, and expended her few pence daily on whatever happened to tempt her in a shop, when meal-time came around. In the present state of her health [i.e., pregnancy] she often suffered from a morbid appetite, and fed on things of incredible unwholesomeness, [...]. This food was cheap and satisfying, and Pennyloaf often regaled both herself and her children on thick slabs of it.

(pp.266-67)

Pennyloaf is seen to have succumbed to the decline in standards of housewifery suggested by Rollo Russell in *London Fogs*, and pre-figured in earlier anxieties in the 1840s about the decline in household management among women working in factories and mills. According to Russell, the urban environment, so hopelessly dirty and depressing, leads inevitably to a decline in housekeeping and standards.⁴⁸ Pennyloaf also passes on her own biological inheritance of degeneration to her children, through the repeated failure of nurturing which is her own legacy from a drunken mother. Gissing's determinism and pessimism derive from a combination of social conditions, personal failing, climate and the city, so that early death and decline become an over-determined inevitability for the likes of the Hewett children.

One of the most frequent points made about Gissing by critics is his divergence from Dickens. As Linda Dryden observes, Gissing was 'influenced by the naturalist movement on the continent, and found scant humour in the lives of the London poor'.⁴⁹ Unlike Dickens, then, Gissing offers neither comic relief nor the possibility for escape from the lidded, dark and foggy world of Clerkenwell. But it is not only his artistic and personal divergences from Dickens, as well as Eliot, Gaskell and the host of other writers who came before him which necessitate Gissing's literary vision of fog and city climate. As Wolfreys observes, London itself changes and has always changed: each generation and genre of narrative must find its own way to respond to and fictionalize these changes.⁵⁰ Thus, the fog itself, as well as writing and concern about it, shape Gissing's narrative exploration of fog. In its conflation of fog with the city itself, and its characterization of both as menacing and degenerate, *The Nether World* also intersects with more explicitly Gothic narratives of city and fog.

⁴⁸ *London Fogs*, pp.17-19.

⁴⁹ *The Modern Gothic*, p.69.

⁵⁰ *Writing London*, p.12.

4. Man-made weather and the urban gothic

Fog is perhaps so much a part of the London described in both *Jekyll and Hyde* and *Dorian Gray* that it has readily been assumed to be an extra or minor dimension to Stevenson's and Wilde's topographies of the city, and as a result has yielded little direct critical attention. Teasingly, most critical writing on these texts *almost* alludes to the fog, either through its own choice of metaphor or its critical focus, as though even in criticism, the ubiquity and morphic capability of fog is still powerful. Thus, Donald E. Thornes speaks of the foggy 'proliferation of meanings' in *Jekyll and Hyde*,⁵¹ Martin Danahy describes how 'Stevenson's text both reveals and conceals',⁵² unconsciously echoing Stevenson's description of fog in the passage I shall discuss below. Robert Mighall, Kelly Hurley and Linda Dryden all explore the importance of the city and its topography in the narratives, arguing that its perception as a labyrinthine mass; its structures and the moments at which they are transgressed; and the degeneracy associated with it all contribute to the anxieties explored in the texts.⁵³ In this section, I argue that the fog is inextricably connected to all these themes, both as an integral part of the characterization of the city, but also as a characterization which has specific implications and associations of its own. Fog in both narratives has implications for the sense of uncanniness the texts provoke, and for their respective exploration of duality, homosexual subtext and urban decay.

Stevenson and Wilde assume the degeneracy and pessimism in the city which Gissing shares, and heighten these ideas, harnessing fears about the city and life within

⁵¹ *Queer Theories*, p.136.

⁵² Martin A. Danahy, *A Community of One: Masculine Autobiography and Autonomy in Nineteenth-Century Britain* (Albany: State University of New York Press, 1993) p.142.

⁵³ See *The Modern Gothic*; Robert Mighall, *A Geography of Victorian Gothic Fiction: Mapping History's Nightmares* (Oxford: Oxford University Press, 1999) p.242, and Kelly Hurley, *The Gothic Body: Sexuality, Materialism, and Degeneration at the Fin de Siècle* (Cambridge, New York and Melbourne: Cambridge University Press, 1996) p.161ff.

it and channelling those fears through the a narrative which focuses on one (or, pertinently, two) character/s. Rollo Russell had exploited what Linda Dryden identifies in a different context as the popular tendency to link city life with ‘a tendency to degeneration’.⁵⁴ Russell developed this with specific relation to the fog, thus laying the ground for the conceptualization of London as a ‘Gothicized’ and fearful space. Dryden argues that both Stevenson and Wilde ‘employed the conventions of the Gothic’ in order to ‘explore the limits of morality in the contemporary world, and to expose the limits of ‘unnatural desire’.⁵⁵ Although the fates of both Jekyll and Dorian are supernatural, then, they can also be read as parables of the possible results of ‘tampering with nature’ or ‘playing god’. In late-Victorian London, climate had changed, and thus the conventions of the urban Gothic themselves acquire new meanings, and are invested with extra significance.

In this passage from *Jekyll and Hyde*, the murder of Sir Danvers Carew has just been discovered, and Jekyll’s friend, Mr Utterson the lawyer, is taking the police officer in charge of the case to find Mr Hyde, whom they suspect of having committed the murder:

It was by this time about nine in the morning, and the first fog of the season. A great chocolate-coloured pall lowered over the heaven, but the wind was continually charging and routing these embattled vapours; so that as the cab crawled from street to street, Mr Utterson beheld a marvellous number of degrees and hues of twilight; for here it would be dark like the back-end of evening; and there would be the glow of a rich, lurid brown, like the light of some strange conflagration; and here, for a moment, the fog would be quite broken up, and a haggard shaft of daylight would glance in between the swirling wreaths. The dismal quarter of Soho seen under these changing glimpses, with its muddy ways, and slatternly passengers, and its lamps, which had never been extinguished or had been kindled afresh to combat this mournful reinvasion of darkness, seemed, in the lawyer’s eyes, like a district of some city in a nightmare.⁵⁶

⁵⁴ *The Modern Gothic*, p.8.

⁵⁵ *The Modern Gothic*, p.31.

⁵⁶ Robert Louis Stevenson, ‘The Strange Case of Dr Jekyll and Mr Hyde’ in *The Strange Case of Dr Jekyll and Mr Hyde and Other Tales of Terror*, ed. with introd. and notes by Robert Mighall (London: Penguin, 2002), p.23. All further references are to this edition.

The passage appears, in part or in whole, in almost every critical study of the text: though its inclusion here might seem almost over-determined, I argue for a range of meanings and allusions here which have previously gone unremarked, and identify them through a reading which is alert to the particular significance of the fog. The presence of fog here clearly both enhances and embodies that sense of ‘confusion, foreboding, and uncertainty about the future’ so often typified by fog in the narrative.⁵⁷ Utterson’s is a journey not just through fog, but towards the lengthy process of discovery of Jekyll’s dual identity, which is as shrouded, disguised and sequestered as the city itself beneath the fog.

After Elaine Showalter’s essay on *Jekyll and Hyde* which argued for a homoerotic subtext to the narrative,⁵⁸ critics have developed the idea of the ‘queerness’ of the text in ways which are useful here. The fog blurs divisions and boundaries not only in the way Russell had feared, but also, through the specific nature of what it reveals and conceals, between supposed binary oppositions (night/day, light/dark, nightmare/reality) so that inversions are broken down, no longer sustaining one another but constantly calling one another into question.⁵⁹ This breakdown of opposition works to raise questions about Utterson himself, whose own indeterminate sexuality has also been identified in recent criticism.⁶⁰ Whilst the narrative has set Utterson up as a normalizing, restrained and restraining influence both on Jekyll himself and the other young men he has apparently known and counselled, his status as separate from and untainted by transgression is broken down in this passage.

Utterson is not figured as an outsider, separate from and observing the fog: rather, as the fog reflects human emotion (‘mournful’, ‘haggard’), it envelops him as

⁵⁷ John E. Thornes and Gemma Metherill, ‘Monet’s “London Series”’ in Sarah Strauss and Ben Orlove eds, *Weather, Climate, Culture* (Oxford: Berg, 2003), p.150.

⁵⁸ ‘Dr Jekyll’s Closet’, p.113.

⁵⁹ See Jonathan Dollimore, *Sexual Dissidence: Augustine to Wilde, Freud to Foucault* (Oxford: Clarendon Press, 1991) on the nature and politics of inversion, pp.48-54.

⁶⁰ Donald E. Thornes, terms Utterson ‘thoroughly queer’. *Queer Theories*, p.139.

part of the degenerate city, blurring his sense of nightmare and reality, day and night, light and darkness. The undermining of Utterson's character as fixed, stable and 'normal' also prefigures questions about the relation of Hyde to Jekyll. Neither the narrative nor Jekyll himself proposes that they are direct opposites: Hyde is a smaller, entropic, degenerate *part* of Jekyll, variously compared to a son, a troglodyte, a child and an ape.⁶¹ Jekyll's transformation into Hyde is not an inversion but rather an uncovering of the duplicity and complexity of the self which ultimately destroys both subject and stability, raising the same questions about identity and spheres of the self which the fog plays out here.

The passage also seems to intersect with many of the concerns outlined by Russell and Rawnsley. 'The first fog of the season' tells us that fog is expected and accepted; whereas the weather had been considered unpredictable and random during the mid-Victorian controversy in meteorology, fog has brought with it a new predictability in climate, since it can be anticipated at much the same time each year. The fog also, however, carries with it a suggestion of the random, since it is blown at the whim of the wind, and creates night or day without a moment's notice. That the events in the narrative take place at this cusp of seasons, when the autumn is beginning to gain ascendance, suggests a moment of crux for the story: yet the seasons seem mainly characterized by fog or its absence, as though the cyclical movements of the fog have displaced traditional seasonal change.

The 'pall' of brown vapour indicates a funereal atmosphere, which is then undermined and made uncertain in the same sentence, as the wind 'charges and routs' the vapours: for a moment, all seems clear, before becoming shrouded and invisible once again. The syntax of the paragraph echoes the restless movement of wind and fog, as clause after clause rush upon one another in breathless succession. Rosemary

⁶¹ See *Jekyll and Hyde* pp.137, 142, 179, 181.

Jackson has described how, in the 'fantastic' narrative (of which *Jekyll and Hyde* is an example) 'chronological time is [...] exploded, with time past, present and future losing their historical sequence and turning towards a suspension, and eternal present':⁶² here, the 'degrees and hues' of twilight are in neither chronological nor chromatic order, but rather alter at random: 'here', 'there' and 'here' again. The city seems, like Dickens' London in *Bleak House*, 'in mourning for the death of the sun':⁶³ 'haggard' and 'mournful'. Yet London is also chronically weary and disordered because true night and darkness have been displaced and can therefore have no true opposition.

Although it is 'nine in the morning', there is little of the aubade in the description of Soho: rather, its 'muddy ways and slatternly passengers' appear indifferent to night or day. Having stated the hour as morning, the narrative goes on to describe night: 'dark like the back-end of an evening'; 'degrees and hues of twilight'. The theme insisted upon by Russell and Rawnsley, that those who live with fog and smoke are indifferent to morning and night, is evident here, with lamps that are neither lit for the evening nor put out in the morning, so that the 'nightmare' to which Utterson compares the city is displaced from night to day. As in *The Nether World*, G.K. Chesterton's formulation of 'every lamp [...] a warm human moon' and 'every fog [...] a rich human nightfall'⁶⁴ does not allow for the disorder and displacement engendered here, where the lights are never truly bright, and the night never truly falls. Fears of non-recurrence, associated with 'the death of the sun', are dramatized, as too is the fear of immorality (the 'slatternly passengers' in Soho) and of what might be occurring during the moments when the wind blows a shroud of fog across the individual's line of vision.

⁶² Rosemary Jackson, *Fantasy: the Literature of Subversion*, (London and New York: Routledge, 1981, rpt 1998) p.47.

⁶³ *Bleak House*, p.11.

⁶⁴ *Dickens*, p.121.

Transgression of class boundaries, too, is suggested in this passage: Utterson's journey, like Dorian's to the opium den,⁶⁵ takes place in a carriage rather than on foot, yet its path through the dismal quarters of Soho recalls the figure of the wandering *flâneur*, intrigued by visions from alien parts of the city. Hyde, Jekyll and Dorian, as we shall see, all transgress class boundaries by their fascination with the East End, Soho and the meaner streets of the city. However, the very efficacy of these boundaries is called into question by the fog, which, like Dickens' black cloud, rolls on 'to corrupt the better portions of the town'.⁶⁶ The degenerative potential of the city is both realised and figured by the fog, which, by its very insidious and uncontrollable nature, undermines the idea of the working- or any other class as a separate race which might exist in different and unrecognisable sections of the city.

Henry Mayhew's survey of prisons in the capital described the polarities (in itself an appropriately climatic metaphor) of the city thus:

Viewing the Great Metropolis, therefore, as an absolute world, Belgravia and Bethnal Green become the opposite poles of the London sphere - the frigid zones, as it were, of the Capital; the one icy cold from its exceeding fashion, form and ceremony; and the other wrapt in a perpetual winter of withering poverty.⁶⁷

The fog, to borrow an image from climate change in our own century, was in a sense melting these polar ice-caps. Where, in *Little Dorrit*, the prisoners at Marshalsea are effectively contained and separate to the extent that they cannot experience the same climate as the rest of the city, such boundaries and demarcations seem uncertain in the *fin de siècle* narrative. The poor did not exist in a climate of their own (though living conditions made existing climate more difficult to live with): rather, all Londoners lived

⁶⁵ Oscar Wilde, *The Picture of Dorian Gray*, ed. with introd. and notes by Peter Ackroyd (London: Penguin, 1985), pp. 201-03. All further references are to this edition.

⁶⁶ *Dombey and Son*, p.738.

⁶⁷ Henry Mayhew and John Binny, *The Criminal Prisons of London and Scenes of Prison Life* (London: Frank Cass, 1968) p.4, cited in Adrian Poole, *Gissing in Context* (London and Basingstoke: Macmillan Press Ltd, 1975), p.31.

under the darkened skies, with the fog journeying at random between the two 'polarities'. In 1889, Charles Booth in *Life and Labour of the People* created a colour-coded map of London, with areas coloured according to Booth's own devised class system, giving 'a physical, geographical dimension to social divisions in the city that could be perceived at a glance'.⁶⁸ The fog, however, was not contained by such theoretical boundaries, and appeared with equal frequency in the regions of the city Booth had so carefully and colourfully categorized. Wilde's *Dorian Gray* both articulates and exploits this transgressive potential.

Like *Jekyll and Hyde*, *Dorian Gray* is concerned with the duality of the self, morality and evil in a nightmarish city. However, degenerationist fears seem to be developed further in this narrative. They are, I argue, closely connected to the fog. On many levels, *Dorian Gray* is a book of scent, odour and vapour: from the first paragraph, different kinds of vapour and smell fall over one another to produce a synaesthetic sensuality. 'The studio was filled with the rich odour of roses'; the 'heavy scent of the lilac' comes through the open door, mingling with 'the more delicate perfume of the pink-flowering thorn' (p.6). This atmosphere of perfume and odour increasingly lends itself to, and is allied with, descriptions of fog and smoke.

The novel shows a process of corruption and degeneration which is not directly associated with the working class, but rather originates from middle- and upper-class individuals and contaminates those beneath them. Wotton corrupts Dorian, who ultimately destroys Sybil and James Vane as well as Basil Hallward. Dorian's corrupting influence spreads across the city, emanating from its highest social strata and penetrating to its lowest.

This process is prefigured in Wotton's cigarette smoke, whose 'blue wreaths' (p.5) seem to be metaphorically blown and increased across the city. After his rejection

⁶⁸ *The Modern Gothic*, p.42.

of Sybil Vane, Dorian sees that 'from some chimney opposite a thin wreath of smoke was rising. It curled, like a violet riband, through the nacre-coloured air' (p.100). Though the morning is of a warm, spring day, the 'wreath' of the smoke recalls Wotton's cigarette, and also injects a funereal element to Dorian's consciousness. The comparison to 'a violet riband' anticipates the 'scarlet threads of life' (p.107) in which Dorian tries to discern a pattern in the next chapter. From here on, however, Dorian's behaviour increasingly seems to echo the patterns of movement associated with fog itself, as he is seen 'creeping at dawn out of dreadful houses and slinking in disguise into the foulest dens in London' (p.167), spreading corruption and despair. If we also accept Elaine Showalter's thesis of Dorian as syphilitic, contaminating those with whom he comes into contact,⁶⁹ the metaphor is more striking still. Since fog was associated both with disease and with immorality and licentious behaviour in what Bill Luckin calls 'catastrophist' writing of the period, Dorian's fog-like movements embody two of the most alarmist and striking images of this 'catastrophist' thinking.

If Dorian then, an upper-middle-class dandy, echoes and behaves like the fog, his behaviour undermines the degenerationist discourses which feared the working classes and viewed them as a source of possible contagion. Like both Jekyll and Hyde, Dorian is compelled to wander from region to region of the city, penetrating and contaminating its depths and its heights. Mighall argues that the 'topography of the body and the body politic is mapped out on the geography of the city':⁷⁰ but whilst many of Dorian's lowest points occur in the most degenerate areas of the city (the opium den in particular), his worst crime (the murder of Basil Hallward) takes place in Grosvenor Square. Both the most and the least wealthy areas of the city are equally foggy, in all senses. The fog and Dorian himself undermine what prove to be

⁶⁹ See Elaine Showalter, 'Syphilis, Sexuality and the Fiction of the *Fin de Siècle*', in Ruth Yeazell ed., *Sex Politics and Science in the Nineteenth-Century Novel* (Baltimore: John Hopkins University Press, 1986), pp.190-210 (pp.195-97).

⁷⁰ *Geography of Victorian Gothic Fiction*, p. 244.

superficial urban structures and hierarchies, unconfined as they are by the topographical distinctions of the city. In large measure, Dorian Gray is the personification of the ‘silent and despised destroyer’ imagined by Rollo Russell in *London Fogs*.

Here, at a crucial point in the narrative before Hallward’s discovery of his secret, Dorian is walking home on ‘the eve of his own thirty eighth birthday’ – again, fog appears at a moment of crux and change – and the narrative’s ominous comment, ‘as he often remembered afterwards’ signposts the importance of the following passage:

He was walking home about eleven o’clock from Lord Henry’s, where he had been dining, and was wrapped up in heavy furs, as the night was cold and foggy. At the corner of Grosvenor Square and South Audley Street a man passed him in the mist, walking very fast and with the collar of his grey ulster turned up. He had a bag in his hand. Dorian recognized him. It was Basil Hallward. A strange sense of fear, for which he could not account, came over him. He made no sign of recognition, and went on quickly in the direction of his own house.

But Hallward had seen him. [...]

‘Dorian! What an extraordinary piece of luck! [...] I thought it was you, or rather your fur coat, as you passed me. But I wasn’t quite sure. Didn’t you recognize me?’

‘In this fog, my dear Basil? Why, I can’t even recognize Grosvenor Square. I believe my house is somewhere about here, but I don’t feel at all certain about it...’

(p.162)

Here, as in *Jekyll and Hyde*, fog changes the landscape. People, landmarks and streets are seen and then veiled at the whim of the wind which, after Hallward’s murder, blows the fog away to leave the sky ‘like a monstrous peacock’s tail, starred with myriads of golden eyes’ (p.175). Fog makes immorality easier to contemplate and to commit, just as the smoke reformers and catastrophist thinkers had feared when they imagined immorality unchecked in fog-swathed alleys and dwellings.⁷¹

Dorian later uses the fog’s unhealthy associations to usher Hallward into his house quickly so that the act will not be witnessed: ‘[c]ome in, or the fog will get into the house’ (p.163). But immorality and deception begin with Dorian’s statement that he

⁷¹ Luckin observes that ‘where there was incessant fog, it was much easier to lose sense of self and social responsibility’, ‘Heart and Home’, p.42.

cannot find his house, and did not recognize Hallward in the fog. The fog also emphasizes Dorian's own duality, through Hallward's easy metonymic substitution: 'I thought it was you, or rather your fur coat.' The narrative moves towards the ultimate problem of what Dorian *is*, or might be: a picture, or a man? A fur coat, or the person inside it? What is the difference, and does it matter anyway? The fog raises these questions, but equally, makes them impossible to answer.

As Hallward emerges from the fog he is, like Dorian, identified only by his outer clothing: a man in a grey ulster with his collar turned up. Again, the syntax of the passage echoes the fragmentary nature of the acquisition of fact and knowledge: 'He had a bag in his hand. Dorian recognized him. It was Basil Hallward.' Random facts, random details, emerge for no apparent reason – note that Hallward does not seem to come out of either South Audley Street or Grosvenor Square, but rather appears at their intersection, passing Dorian suddenly and without warning, revenant from the past and harbinger of doom at the same time. The 'strange sense of fear' Dorian experiences on seeing him can be explained within the narrative context of Hallward's significance as a figure from Dorian's past, who knows that he cannot still be as young as he looks, and whose moralistic world-view opposes Lord Henry's and Dorian's own hedonism. Like Utterson, Hallward is a normalizing influence in the narrative against the 'queerness' of both Lord Henry and Dorian. Also like Utterson, Hallward's normalizing force is open to question as a result of his own apparently dissident desires for Dorian himself. The fog and the fragmentary nature of what it reveals and displays underlines the instability of his characterization. But Dorian appears to find his own fear 'strange'; the fog, it seems, both responds to and creates an environment in which fear, and especially unnameable fears, are rife. Hallward, coming from a period in Dorian's life which he had thought past and forgotten, is more specifically also a figure for the uncanny, his

appearance belonging (from Dorian's perspective) to what Freud termed 'that class of the frightening which leads us back to what is known of old and long familiar.'⁷²

Revenants, repetition, recognition and recurrence all direct us to the Freudian uncanny. The passage uses 'recognize' or 'recognition' four times, with each use responding to and echoing another. Thus, Dorian 'recognized' Hallward, but 'made no sign of recognition'; Hallward asks Dorian, 'Didn't you recognize me?', to which Dorian replies that he 'can't even recognize Grosvenor Square'. Dorian's failure to signal his recognition connects the first two occurrences, whilst Hallward's question alerts the reader to Dorian's imminent lie, thus linking the word back to its original occurrence in the passage. This is also picked up on by Dorian himself, who echoes it in his facetious assertion that he cannot even recognize the square. There is a circularity to the recognition in the passage, then, which itself underlines the innate uncanniness of re-cognition – 'knowing again'.

In 'The Uncanny', Freud refers to that sense of the *unheimlich* which occurs 'when, caught in a mist perhaps, one has lost one's way in a mountain forest'.⁷³ A strictly climatic interpretation would not allow the conflation of mist and fog in this argument, since mist and fog are different in degree and in kind.⁷⁴ Such meteorological pedantry is unnecessary here, since they are in fact used interchangeably in the passage from *Dorian Gray* above, and it may be said at least that being lost in a mist or a fog would constitute a very similar experience. Both mist and fog produce the kind of disorientation and repetition of the same thing which is profoundly uncanny. In the case of *Dorian Gray*, the repetition is reinforced at every level, so that the 're-cognition' becomes itself repetitive. If mist and fog are uncanny in the effects they produce, where

⁷² Sigmund Freud, 'The Uncanny' in *Art and Literature*, ed. by Albert Dickinson, trans. under general editorship of James Strachey. Penguin Freud Library, 15 vols. (London: Penguin, 1985), XIV, 335-376, (p.340). All further references are to this edition. Though Freud was at this time working on 'Studies in Hysteria', the uncanny had already been identified in the nineteenth century, and attempts made to taxonomize and explain it.

⁷³ 'The Uncanny', p.359.

⁷⁴ Fog consists of a thicker cloud of water droplets than mist, and is produced from a different set of meteorological circumstances.

‘every attempt to find the marked or familiar path may bring one back again and again to one and the same spot’,⁷⁵ ‘artificial’ fogs, whose colour, kind and nature have been changed by human activity seem especially well suited to represent that uncanniness. A fog which is brown or yellow in colour, and which is the result of human activity and pollution, exists in a strange relation to nature and culture: the fog is a weather phenomenon which is not ‘natural’, random, chaotic or unpredictable. If climate in industrial Manchester seemed displaced by various artificially created climates and atmospheres, weather itself in *fin de siècle* London was both unnatural and uncanny in its convergence with man-made phenomena.

Both *Jekyll and Hyde* and *Dorian Gray* are narratives of the uncanny. In both, the aspect of the self which should have remained secret and hidden is revealed: both describe the ‘doubling, dividing and interchanging of the self’⁷⁶ which is innately uncanny. Jekyll’s *unheimlich* experience, when he looks down to see that his hand has become, unbidden, ‘corded and hairy’: the hand of Edward Hyde (p.66) enacts the uncanniness inherent in the idea that ‘man is not truly one, but truly two’ (p.56). *Dorian Gray* contains that element of the uncanny whereby there is uncertainty over whether an inanimate object is in any degree alive, insofar as the portrait itself changes and adapts. Both texts employ the fog in their depiction of the uncanny, particularly where it enhances Dorian’s ‘strange sense of fear’, and Utterson’s impression of Soho as ‘like some city in a nightmare’. But all this doubling, secrecy and revealing is also the product of the triumph of man over nature, consciously willed and worked for by Jekyll, wished for by Dorian. The texts are concerned with the disastrous consequences of the ‘doubles’ which Jekyll and Dorian create. The fog, a newly ascendant phenomenon of the urban climate, inadvertently created and then endured by humanity in a Pyrrhic victory over nature itself, has in this context a new significance in both

⁷⁵ ‘The Uncanny’, p.360.

⁷⁶ ‘The Uncanny’, p.356.

texts. I am not arguing that Wilde and Stevenson contrived their narratives out of the same ecological fervour for which Jonathan Bate argues in Wordsworth's poetry,⁷⁷ or that they sought to illustrate metaphorically the consequences of man's industrial triumph over nature. Rather, the murky fog constitutes a powerfully apposite symbol for the contemporary confusion about the respective places and capabilities of man and nature.

Fog in the narrative acquires new resonance in the *fin de siècle*, bringing with it a set of meteorological and social concerns about the future of industry, climate and the urban population. Whether Gissing, Stevenson and Wilde set out to do so or not, through their adoption of the same tropes and themes which occur in non-literary writing about fog, they represent and develop the arguments put forward by Rollo Russell, and in doing so, sharpen the contemporary sense of fog as an alarming and dangerous phenomenon. Russell and Rawnsley, in turn, frequently make their arguments in a literary register, through the personification of the 'despised destroyer', or the literary image of the individual as flower. Rawnsley's own status as a poet clearly inflected his language and descriptions, but also strengthens a sense of reciprocity between fog, pollution, the literary text, social polemic and meteorology itself.

Meteorology as a discipline was also shaped and changed by the fogs: the easy, engaging style of polemic in *London Fogs* opened up the issue to the common reader with no meteorological knowledge, and connected it with urgent social issues of the 1880s and 90s. Whereas the subjectivity inherent in the language of the weather had made it difficult for FitzRoy to establish a scientific and objective register for his own meteorological writing, the accessibility of 'talking about the weather' makes Russell's argument readable and comprehensible. Russell's social reformist meteorology did not

⁷⁷ See *Romantic Ecology*, p.10 and *passim*.

attempt prediction, but rather sought to explicate the nature of fogs and highlight their dangers. Russell's personification of the fog as an actively, intentionally malign force (the 'despised destroyer') assists in the process of engaging the reader with the problems his pamphlet identified, rather than undermining any claims about the 'scientific' nature of the discipline. FitzRoy had taken the manifest significance of weather to the individual as the rationale and impetus for predicting that weather; Russell's response to the same significance was rather to read two areas of inquiry – meteorology and social reform – as fundamentally connected. Thus at the same time, a claim is being made for the influence of weather, and for the importance of both study and even improvement of that weather, through 'smoke abatement'.

Fog had come to define the climate of London, as we see in narratives of all kinds during the last decades of the century. It was also a predictable, regular weather event. The 'prophesies' and 'prognostications' I have identified in earlier or provincial novels vanish from fiction in the *fin de siècle*, since 'continuance' of fog has become a given in these texts. To return once again to Sergeant Troy's definition, the fog constituted both 'narrative' and 'episode'. Both were of urgent concern to social reformists like Russell, whilst the novelists I have discussed constructed atmospheres in which specific 'episodes' of fog embodied and exploited this concern. Ultimately, it seems the only predictions made by either meteorologists or novelists were of doom - both in weather and in the future.

CONCLUSION

Talking about the weather, in the Victorian period and in its novels, can be a revealing activity. To talk about the weather is also to talk about oneself, the place and society one inhabits, and futures either expected or feared. Descriptions of weather in the novel offer powerful metaphors for all these questions: factory smoke evokes the all-encompassing model of industry; bleak east winds battering the Brontës and the characters in their novels emphasize the frailty of the female body against nature; catastrophic deluge figures the explosion of sexuality and desire; disastrous and unexpected harvest weather shows the perennially malign universe exercising its power to destroy individuals at random whim; and London fog becomes the archetypal image associated with the expanding, unknowable, crime-ridden city.

However, this thesis has shown that each of these images has significant contemporary connections with nineteenth-century theories of climate and weather. By pausing on the weather and considering in detail the wider societal discussions about and responses to climatic theories with which it was associated, it becomes possible to identify and explore these connections. The metaphors, descriptions, images and tropes which recur in narrative depictions of the weather have become so familiar that they have often gone unremarked in literary criticism. Yet Victorian narrative itself insists on 'talking about the weather' as a slippery, deceptive practice which can disguise any number of different intentions and meanings. In the same way, when Victorian novels themselves discuss, describe or display weather, they are frequently also 'talking about' many areas of human

experience. Reading weather *as weather*, and, as such, as part of an intense and often contentious conversation in which the Victorians were continually engaged allows us to see that when novelists use weather to determine events, as a metaphor, or as something predicted, they engage in and even shape this broader conversation.

This thesis has shown how the polluted atmosphere of industrial Manchester gave rise to a number of anxieties about environment itself, and the individual's place within that environment. The intense concerns about the city's climate enabled Leon Faucher to recruit pre-existing ideas deriving from eighteenth-century constructions of climate, weather and their effects in metaphors through which he articulated his arguments about the Manchester economy. In a cultural context where climate was thought firstly to be of enormous importance in determining health and development, and secondly to be under threat from rapid industrial growth, the frequency and nature of individual exposure to weather constituted a powerful and resonant tool to articulate anxieties about the economy, industry and their human consequences.

In *Mary Barton* however, the problem set out in relation to industrial labourers is not that they become acclimatised to unchanging environments and are therefore increasingly susceptible to weather events, but that the weather is a perennial, unpredictable part of the incomprehensible 'economic climate'. By the end of the novel, almost all the characters are dead or in Canada, or planning to follow Mary and Jem there. The 'environmentalism' which underpinned Victorian searches for climates in which the individual might find health, happiness or sustainable employment seems, in *Mary Barton*, to suggest that the Manchester climate was so perilous, and its changing weather so painfully experienced, that the best hope must lie in moving away from it entirely.

For Charlotte Brontë, all climates, and almost all weather within them, were to be feared, for a variety of different reasons. In *Jane Eyre*, tropical and Indian climates contain

a degenerative potential, to which even the 'elastic' Jane refuses to expose herself. Like the factories of industrial Manchester, places within England itself can also act like climates and cause illness, most notably in the pestilential atmosphere of Lowood school. By reading Brontë's climates in the context of medical and environmental influences on her own responses to weather and to climate, I have demonstrated that her representations of bodily health and imperialism are more closely connected than has previously been recognized. The defining factor behind Brontë's representations of climate and weather in the narrative, I have argued, is her interpretation of climatic theories in circulation during the period. *Jane Eyre* represents a somewhat anomalous moment in Brontë's representation of the individual's relationship to climate, in which Jane is able to avoid the perils of a number of alternative climates and to survive the weather to which she is continually exposed. In Brontë's later fiction, and throughout her correspondence, contemporary ideas about the relationships between bodily economy and climatic events are presented with both fear and pessimism. All the Brontës' literary works were produced from within a society, as well as a particular local environment, which perceived climate and weather as having pronounced effects on mind, body, and place. The varying responses and interpretations to these assumptions underpin the Brontës' markedly contrasting narrative climates and their effects.

By contrast, in *The Mill on the Floss*, George Eliot shows neither the perils of daily weather, nor of foreign climates, but the potentially catastrophic forces of the English climate itself. Once again, by focussing in detail on weather events and reading them specifically and carefully as such, we can see the narrative responding to, questioning and interrogating several contemporary theories. To depict a flood which radically alters the shape of the narrative by destroying human life, and to describe a physical environment which has been determined by flooding over centuries was, as I have shown, a controversial

undertaking in 1859. Not only does the flood, through its catastrophist associations, seem to disrupt the gradualist atmosphere of the rest of the novel, but it does so in fundamentally climatic terms. In insisting upon the flood as a powerful agent of permanent change, Eliot recalled diluvial theories which had long since been discredited and which seemed especially discordant in the immediate context of Darwin's *Origin of Species*. The flood also undermined the contemporary insistence on the temperate, unchanging nature of the English climate itself, which had been central to the arguments such as that in the *Cornhill Magazine* that 'weather changes but climate remains'.¹ The flooding of St Ogg's is a contentious yet, I suggest, under-read weather event in Victorian fiction, whose multiple resonances and significances become clear only when we read it specifically, contextually, and historically, as a flood.

Though Victorian writers insisted upon the profound effects which the weather might have on the individual and on the economy, my argument has demonstrated that attempts to understand or predict the weather were perpetually subject to derision and disbelief. Hardy's forecaster in *Casterbridge* dramatically enacts contemporary suspicions about those who would attempt to state what the coming weather might be. Fall's recapitulation of some of the distinguishing features of the 'conjurors' of early nineteenth-century Dorset has led reviewers and critics alike to read him as part of the lost world of Wessex. Yet in his simultaneous differences and distance from these conjurors, Fall suggests a more complex set of influences. Hardy's novel was composed in a cultural climate in which attempts to predict the weather had long been treated with suspicion, and had been publicly discredited in the 1860s. I have argued that *Casterbridge's* strange and anomalous weather prophet draws on this moment in meteorology. If Fall himself is a character with various meteorological legacies, the weather itself in *Casterbridge* also

¹ 'On the Weather', p. 578.

invokes intersecting chronologies, suggesting both the perennially hazardous nature of an economy dependent on the weather, and the changes and parallels between agriculture in the 1840s and 1880s.

The fogs of late Victorian London recapitulate and develop many of the concerns set out in earlier novels, in disquieting ways. Though the smoke pollution which contributed to these yellow, black and brown fogs echoes that in industrial Manchester earlier in the period, novelists and commentators at the *fin de siècle* interpreted the relationship between urban pollution and climate very differently. In the texts I have explored, fears of degeneration and decline are sharpened by post-Darwinian readings of the city and the individual, and the sense of a race in decline is not limited to readings of workers in polluted or unhealthy environments, but to a broader sense of a degenerate and degenerating city.

The idea of the 'living barometer' is absent from writing of all kinds about life in London at the end of the nineteenth century, suggesting that exposure to changeable weather had become less a concern than perpetual existence within, or under, a heavy, polluted blanket of fog. Climate continued to define place, but the place itself also seemed to have created and defined that climate. Throughout the period, weather had been figured as apparently random though divinely ordained; unpredictable; and as Eliot's Mrs Poyser states, 'sent' by 'One above'.² Yet when the weather became depressingly predictable, precisely because it was so manifestly affected by human activity, such certainties were challenged. Gissing's *Nether World* shows humans toiling in bewilderment in this degenerate atmosphere, a hell on earth filled with a damned species. Wilde and Stevenson, even more alarmingly, use the fog to disrupt basic assumptions about the place and role of man in the universe. The fog created an environment in which it seemed almost possible

² *Adam Bede*, p. 193.

that a doctor might create for himself a murderous double, or a man might go out into the city causing untold harm and pain, whilst presenting a smiling innocent face to society all the while. The alarmist and gothic literary responses to the fog represent a particularly striking moment in literary engagement with the meteorological, and in many ways seem to prefigure our own sense of a climate gone awry, and the literary depictions of environmental catastrophe in our own century.³ However, the concerns explored and represented in late Victorian depictions of London are also profoundly indebted to a society which reads weather, climate, individual and society as engaged in continual and dynamic relationship with each another.

Throughout the Victorian period, novelists respond to moments of particular interest, dissent or debate in the vast and seemingly incomprehensible area of climate. This thesis has identified five moments of literary interconnections with climatic theories and meteorology, but the relationship between Victorian narrative fiction and climate is one which could be further explored in several directions. Though Eliot's *Mill* is the clearest literary response to diluvial theories, for example, Noah's flood as an agent of change is invoked in a more fleeting sense throughout the Victorian period; the trajectory of diluvialism in a post-Darwinian cultural climate could be significantly extended. I have focused largely on questions of climatic influence on race as they were adopted and recruited in metaphors, or in defining 'England' against 'tropical' or Indian climates, but

³ Parallels from popular contemporary fiction might include the conclusion to Nick Hornby's *How to Be Good*, where the end of a dying marriage is set in the heavy rain and flooding experienced in Britain in autumn 2000. The protagonist and narrator describes it as 'the kind of rain you're supposed to get after a nuclear attack': 'we are drowning because we have abused our planet, kicked it and starved it until it has changed its nature and turned nasty'. *How to be Good* (London: Penguin, 2001), p. 243. Margaret Atwood's *The Blind Assassin* sees an unreliable elderly narrator describing a past of lies and deception from the perspective of a present where global warming makes that past even more dissonant, having taken place in a different climate as well as a different social and political environment. *The Blind Assassin* (London: Virago Press, 2001). In *Oryx and Crake* (London: Virago, 2004), Atwood develops the theme in a science-fiction novel where the fragmentary remains of humanity exist in an over-heated, post-apocalyptic world, remembering a lost society which existed in the period which is now our own future, where climate change had altered the human calendar by, for example, necessitating a change from June to February for university Graduation ceremonies.

foreign climates themselves in the Victorian novel present a fertile area for discussion in this context: Rider Haggard's *She* (1887), and Conrad's *Heart of Darkness* (1899) in particular invoke the foreign climates not only as 'Other', but as exerting a formative and sinister influence on those who inhabit them.

Dr Johnson suggested that the English spoke to one another of the weather because weather is so changeable and so unreliable as to provide a constant cause for concern and inquiry.⁴ For Victorian writers, pamphleteers, journalists and many other writers, however, this was only a small part of their constant and often highly-charged relationship to climate. By attempting to predict the weather, forecasters became inevitably associated with claims to preternatural and prophetic powers, as though to know the weather would be to know truths beyond the merely human. The individual who breathes in polluted air, or shelters from the weather too frequently, or exchanges the temperate English climate for a one which is perilously tropical, or forgets that the weather might at any time wreak catastrophe, is constantly shown to be in danger in the Victorian novel. When the weather itself seems to be man-made, it came to encapsulate nameless terrors about individual, place and nature. The contrast between polite, meaningless 'talk about the weather', and the individual's vexed, difficult but inescapable relationship to that weather and to climate, is, I argue, an arresting and pervasive feature of Victorian writing.

⁴ *The Idler* 24th June 1758 in Bate, Bullitt and Powell, p.36.

METEOROLOGICAL REPORTS.

(SUPPLEMENTARY.)

Tuesday, Jan. 20, 8 a.m.	B.	R.	D.	W.	F.	X.	O.	I.	H.	R.	S.
Nairn.. ..	28'39	29	—	W.	4	8	9	o.	6	0'29	2
Aberdeen..	28'45	31	—	S.W.	6	8	9	s.	1	0'14	4
Leith.. ..	28'57	35	1	W.N.W.	4	8	9	s.	—	—	4
Ardrossan	28'68	41	4	N.W.	10	10	8	s.	8	0'54	6
Galway ..	29'27	36	1	W.N.W.	5	10	5	h.	4	0'08	4
Queenst'wn	29'43	40	1	W.	5	10	6	o.	—	—	4
Wednesday, Jan. 21, 8 a.m.	B.	E.	D.	W.	F.	X.	O.	I.	H.	R.	S.
Nairn.. ..	29'15	34	2	N.W.	6	8	9	o.	—	—	3
Aberdeen..	29'08	37	3	W.N.W.	8	8	1	b.	6	0'25	5
Leith.. ..	29'26	37	3	W.	5	8	2	b.	—	—	5
Ardrossan	29'43	41	2	N.W.	8	10	8	s.	7	0'48	5
Portrush ..	29'46	40	3	W.	9	12	2	b.	—	—	6
Galway ..	29'71	40	1	N.W.	2	6	7	o.	3	0'25	2
Queenst'wn	29'82	44	1	W.	3	10	6	o.	4	0'32	3
Holyhead..	29'62	44	2	W.S.W.	5	10	7	o.	2	0'13	5
Liverpool..	29'53	41	2	W.N.W.	5	12	6	o.	3	0'09	5
Pembroko	29'75	45	3	W.N.W.	5	8	6	o.	—	—	4
Penzance ..	29'31	47	2	W.N.W.	4	11	6	o.	2	0'17	4
Jersey ..	29'31	48	4	W.	7	10	4	o.	6	0'15	7
Brest	30'03	46	4	W.	4	7	9	o.	3	0'12	4
L'Orient ..	29'36	48	4	W.	3	7	8	o.	—	—	3
Rochefort..	30'10	45	1	W.	3	7	7	o.	—	0'04	4
Plymouth..	29'84	45	2	W.	7	9	3	b.	—	—	4
Weymouth	29'76	46	3	W.N.W.	6	10	7	o.	2	0'15	5
Portsmouth	29'71	41	2	W.	8	11	7	o.	2	0'15	6
Kow	29'63	40	3	W.S.W.	4	—	2	o.	—	—	—
London ..	29'61	39	2	W.	5	10	4	o.	—	—	—
Yarmouth	29'47	33	3	W.N.W.	10	10	9	o.	—	—	3
Scarboro' ..	29'33	36	3	W.N.W.	6	10	1	b.	10	0'51	3
Shefilda ..	29'32	36	3	N.W.	5	8	1	b.	—	—	3
Helder ..	29'28	41	—	W.N.W.	6	—	9	o.	—	—	3
Bayonne ..	—	49	—	S.W.	2	—	9	o.	—	—	3
Lisbon ..	30'25	43	—	E.N.E.	2	—	—	f.	—	—	3

Explanation.

B. Barometer, corrected and reduced to 32° at mean sea level; each 10 feet of vertical rise causing about one-hundredth of an inch diminution, and each 10° above 32° causing nearly three-hundredths increase. E. Exposed thermometer in shade. D. Difference of moistened bulb (for evaporation and dew point). W. Wind, direction of (true—two points $\frac{1}{2}$ of magnetic). F. Force (1 to 12—estimated). X. Extreme force since last report. O. Cloud (1 to 9). I. Initials:—b., blue sky; c., clouds (detached); f., fog; h., hail; l., lightning; m., misty (hazy); o., overcast (dull); r., rain; s., snow; t., thunder. H. Hours of R.—Rainfall, snow, or hail (malted), since last report. S. Sea disturbance (1 to 9). Z. Calm.

Drum and cone all round on Monday.

Probable.

Thursday.

Friday.

SCOTLAND.

N.N.W. to W.S.W., strong; with snow. | S.W. to N.W. and to N.E., strong to fresh.

IRELAND.

N. to W. and S.W., strong; rain or snow. | W.S.W. to N.N.W. and E.N.E., fresh; with snow..

W. CENTRAL.

N.W. to S.W., squally; snow or rain. | As next above.

N.W. FRANCE.

As next above. | Similar.

S. W. ENGLAND.

As above. | W. to N. and E., fresh; some snow.

S. E. ENGLAND.

W.N.W. to S.S.W., and back, strong; some snow. | N.W. to N.E., fresh; snowy.

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