The Environmental Imagination and Mid-Nineteenth-Century American Politics

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A dissertation submitted for a PhD in the Department of History

I, Matthew Robert Griffin, confirm that the work presented in this
thesis is my own. Where information has been derived from other
sources, I confirm that this has been indicated in the thesis.

Abstract

This dissertation investigates the environmental imagination of mid-nineteenth-century Americans, studying ideas about the natural world during a transformative period in which technological innovation revolutionised how Americans interacted with nature on the land, in the factory, and on the rails. The historiographical consensus holds that these developments fuelled Americans' belief that nature had become alienated from humanity, a savage realm to be civilised by new technologies. By studying the ways in which ideas about nature intersected with mid-nineteenth-century political culture, my research tells a different story, one in which a firm belief in the interconnections between humans and nature was central. In investigating sources such as newspapers, Congressional records, and personal correspondence, I show that Americans drew upon the latest scientific research to position their society in dialogue with the natural world, rather than alienated from it. While there was a clear awareness that technological innovation expanded human agency, the belief that human bodies and societies were subject to powerful environmental forces and should be brought into line with natural laws was pervasive.

I trace how this conviction fed into a nexus of environmental ideas that underlay the dynamics of power at the heart of mid-nineteenth-century American politics, conditioning how Americans approached crucial political questions. Through a series of thematic chapters, my dissertation shows that political debates surrounding identities, expansion, trade, slavery, and emancipation were the products of diverging interpretations of what these natural forces and laws were and how best to construct policies in light of them. In short, the environmental imagination helps explain how and why mid-nineteenth-century Americans shaped and reshaped their world in the ways that they did.

Impact statement

By bringing the environmental imagination and the study of the politics and society of the mid-nineteenth-century United States into conversation for the first time, this dissertation intervenes in two of the most contested debates of U.S. historiography. Firstly, it alters our understanding of how mid-nineteenth-century Americans thought about their relationship with the natural world. The historiographical consensus holds that the industrial, communication, and transportation revolutions of this period emboldened Americans to believe that they had mastered natural forces and were no longer subject to their influence. On the contrary, I argue that far from considering themselves to be alienated from the natural world, Americans in this period constantly placed their bodies and societies in dialogue with it, shaping their physical environment but also being shaped by it.

Secondly, I show how this pervasive consciousness of the interconnections and interdependence between man and nature shaped the ways in which Americans approached the most crucial political questions of their time, influencing how these issues were framed, debated, and eventually decided upon. To name one example, my final chapter shows how even some of the most racially progressive anti-slavery figures were constrained by their beliefs in the connection between climate and race, informed by research in the field of racial science. As a result, they could not conceive of a truly racially integrated society and circumscribed freedom for former slaves within the geographical limits of the hotter tropical zone to which black people were supposedly naturally suited.

The impact of these contributions will take the form of outputs in scholarly journals and a monograph. I hope to turn two of these chapters into articles in high-quality journals, at least one of which would be published within two years of the submission of this dissertation. I also plan to submit a proposal for a scholarly monograph to a leading press in nineteenth-century U.S. history within the same timeframe. Further publicisation of my findings could take the form of blog posts and podcast appearances, as well as conference papers. In this way, I could bring my research into conversation with scholars working in other fields within the environmental humanities, while the framing of the environmental imagination that I employ could be productively employed by historians working on different time periods. More broadly, should my career in higher education continue as planned, this research would inform my future teaching of undergraduate and postgraduate students, particularly in any courses I design.

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When I look back over my time at school and university, I cannot help but think of moments and decisions that would have taken me down an entirely different path. That I chose this particular one is thanks to many superb teachers who helped me believe in myself and mature as a(n) historian and a person. I'm sure I have long faded from their memories, but I would like to express my gratitude especially to Paddy Owen and Nigel Mills at Mesne Lea, Kimberly Graham at Walkden High, and Liz Riot, Helen Chambers, Ash Newell, and Bill Osborn at Eccles College.

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My family have been a constant, indispensable source of comfort and emotional support throughout the PhD. My step-parents Alan and Daisy, my siblings Caroline and Chris, and my grandmas GG and Brenda have always been there for me, for which I am extremely grateful. Above all, I want to thank my Mum and Dad for showing huge amounts of love, patience, and generosity throughout my lifetime.

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Introduction

In the aftermath of the 1848 presidential contest, the Bostonian Charles Sumner wrote to a close friend that 'the volcanic flames of the election, upheaving the whole land, have now subsided, & even its heats are giving way to a more salubrious atmosphere.' Sumner believed he had found a rare moment of repose that punctuated what Abraham Lincoln famously labelled the 'stormy present' of the mid-nineteenth-century United States.² Yet the clearer air that followed the election would soon again be contaminated by acrimonious disputes, ensuring that the politics of this period more closely resembled the rolling thunder and lightning flashes of a steamy summer storm than the restful stillness of a crisp spring morning. Accusations regarding who provoked such upheaval flew back and forth between political foes. On the brink of the Civil War, Henry Wilson of Massachusetts accused southerners and their peculiar institution of casting 'chilling influences over the land, polluting the very sources of national life... and leaving the traces of its ruinous power upon the institutions and upon the soil of the Republic, which it turns to barrenness and desolation.'3 Supporters of slavery responded in kind. One southern publication sought to remind anti-slavery figures such as Wilson that it 'is the South wind, whether "thick with storm," or warmed with sunshine, which gives us all the beauty and brightness of the earth... It is that Northern blast, on the contrary..., that nips every bud and blights every fruit.'4 Still others feared that the rancorous atmosphere created by such disputes threatened to poison the fruit of the tree of liberty, planted by the Founding Fathers and watered with the blood of revolutionary patriots. It was the duty of the United States to be 'the great moral and political sun to illuminate the world,' a Pennsylvania Congressman reminded his feuding colleagues, spreading 'its brilliant rays' to the less advanced portions of the globe.⁵

Natural metaphors such as these suffused the political rhetoric of the period, featuring constantly in public speeches, private correspondence, and the pages of newspapers and periodicals. Rather than merely rhetorical window-dressing, though, this dissertation reveals that rich structures of meaning underlay the frequent invocations of nature, climate, and other environmental concepts in mid-nineteenth-century American politics. Phrases such as 'climate of opinion,' 'body politic,' and 'political earthquake' have become so embedded in

¹ Charles Sumner to Samuel Lawrence, 29 November 1848, in *The Selected Letters of Charles Sumner*, ed. Beverley Wilson Palmer, 2 vols. (Boston, 1990), i, 255.

² 'Annual Message to Congress', in *Collected Works of Abraham Lincoln*, ed. Roy P. Basler, 8 vols. (New Brunswick, 1953), v, 537.

³ Congressional Globe, 36th Congress, 1st Session, 25 January 1860, 569.

⁴ 'The Nebraska Bill and Speech of Senator Chase', Southern Literary Messenger, xx (1854), 179.

⁵ Congressional Globe, 33rd Congress, 1st Session, 15 March 1854, 354.

our collective vocabularies that we seldom consider the very words that constitute them. Yet language and metaphors that intertwined humans and nature were deeply meaningful to midnineteenth-century Americans, reflecting a broader worldview of crucial importance to the course of American history in this period. Paying close attention to the meaning embedded in these phrases as they featured in the mid-nineteenth-century political lexicon, I will show, reveals much about how Americans saw their world and in turn how this conditioned the ways in which they approached the most crucial political questions of their time.

This dissertation makes contributions to both the intellectual history of the image of the natural world in American society and culture and to the political history of the United States in the mid-nineteenth century. The concept that unites these approaches is the environmental imagination. This term denotes a way of seeing and thinking about the world: how it works, how humans interact with it, and how and why it matters.⁶ While natural phenomena may contain characteristics that can be observed, measured, and quantified with some degree of accuracy, the environmental imagination is by definition more nebulous and subjective. It refers rather to a cluster of assumptions, attitudes, and ideas that are fluid and subject to negotiation and contestation as people encounter new forms of knowledge or ways of thinking about the world. It follows, then, that much of what constitutes the environmental imagination frequently bears little resemblance to what the reality of the natural world was in the period in question. Ideas and attitudes that subsequent generations regarded as inaccurate nevertheless held significant power over those who subscribed them. As the human geographer John Kirtland Wright has remarked, throughout history 'erroneous notions have exerted a powerful fascination over men's minds and mistaken concepts have been hardly less influential than those finally found to be correct.'7

The environmental imagination, of course, is not uniform across different groups, periods, and locations. Everyone has an environmental imagination, in the sense that everyone has a perspective, consciously or unconsciously, on their own and their society's relationship with the natural world. Yet the environmental imagination takes on a wide variety of forms and inflections in different areas of the world, societal groupings, and time periods. Engaging with the environmental imagination means taking what historical figures thought, wrote, and

⁶ For a broader articulation of this concept that has been particularly influential in my formulation of it, see: Jedediah Purdy, *After Nature: A Politics for the Anthropocene* (Cambridge, MA, 2015), 6-7, 22. For other uses of this term in different nineteenth-century American contexts to those studied in this dissertation, see: Lawrence Buell, *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture* (Cambridge, MA, 1995), 1-2; Conevery Bolton Valenčius, *The Health of the Country: How American Settlers Understood Themselves and Their Land* (New York, 2002), 85-6.

⁷ John Kirtland Wright, *Human Nature in Geography: Fourteen Papers, 1925-1965* (Cambridge, MA, 1966), 28.

said about the natural world on their own terms, understanding it to be the product of the social and cultural context in which it arises. In the present day, the environmental imagination of most scientists and environmentalists is intensely ecological, centred around a pervasive awareness of the devastating consequences of man-made climate change on the earth's ecosystems. Yet sceptics continue to deny that human activity could engender such drastic effects; their environmental imagination holds that dramatic changes in the natural world emanate from non-human forces such as God's will or the tilting of the earth's axis.

The environmental imagination is not merely a group of disparate and superficial speculations without significance for the historical development of societies and the natural world with which they interact. On the contrary, the future survival of humanity may depend upon which version of the present-day environmental imagination prevails in the debates over climate change and how to combat it. The environmental imagination can spur political action and socio-economic transformation, for instance by increasing investment in renewable energy or even dismantling some of the defining structures of capitalism, but it can also restrict it by conveying a reassuring message that there is nothing to be done but allow nature to take its course. The environmental imagination in its manifold manifestations has never stood in a one-way relationship with human cultures and societies, never forming either the product of its distinctive social and cultural context or a means by which that context was shaped and reshaped. Rather, it straddles the two, interacting in a dialectical fashion that defies attempts to comfortably categorise causality in any neat, unidirectional schema. Investigating the environmental imagination, therefore, reveals much about the social and cultural context from which it took shape, and thus sheds light on the development of the societies in which it was thought, articulated, and debated.

This dissertation represents the first attempt to bring the study of the environmental imagination into conversation with the political history of the United States in the midnineteenth century. Despite the unceasing interest in this turbulent period among historians and the wider public, no attempt to view its defining political developments through the lens of the environmental imagination has been made. In this study, I will undertake two overlapping tasks. Firstly, I will analyse the environmental imagination as it manifested itself in the political debates that defined this period with the aim of shedding light upon the ways mid-nineteenth-century Americans thought about their relationship to the natural world. As we shall see, the historiographical consensus holds that mid-nineteenth century Americans felt increasingly alienated from nature, emboldened by new technologies to believe that they had obtained unparalleled mastery over the non-human world. My research tells a different

story, one in which a firm belief in the interconnections between humans and nature was central. While there was a clear awareness that human agency had been expanded by technological innovation, the belief that human bodies and societies were subject to the influence of powerful environmental forces and should be brought into line with natural laws was pervasive. These beliefs did not, however, cause Americans to question the wisdom of environmentally exploitative practices; rather, the development of natural resources was thought to be an integral part of the natural order that structured their society. Secondly, I will trace how these convictions fed into a nexus of environmental ideas that underlay the dynamics of power at the heart of mid-nineteenth-century American politics, conditioning how Americans approached crucial political questions. Through a series of thematic chapters, this dissertation demonstrates that political debates were the products of diverging interpretations of what these natural forces and laws were and how best to construct policies in light of them. In short, it will show that the environmental imagination helps explain how and why mid-nineteenth-century Americans shaped and reshaped their world in the ways that they did.

Indispensable to the completion of these two tasks is the concept of political culture. A fixture in the historiography of the United States since the 1960s, studying political culture allows historians to incorporate, in the words of Jack P. Greene, the 'shadowy cluster of assumptions, traditions, conventions, values, modes of expression, and habits of thought and belief that underlay [the] visible elements' of politics. This does not mean abandoning the core elements of political history such as state-building and political institutions, but rather using culture as a means to gain a deeper understanding of the mindset of political actors when they approached these questions. Resisting the temptation to generalise and relapse into a repackaged form of consensus history, recent scholarship on nineteenth-century American political culture has shown not only how different groups of people drew upon different cultures to inform their political actions, but also that shared political concepts and vocabulary can mask divergent interpretations and meanings. To name one prominent example, scholars have convincingly demonstrated that both the Civil War North and South fought to defend what they believed was a distinctively American form of republican freedom, but that this consensus masked disparities of crucial importance to the course of nineteenth-century U.S. history, drawing on a multitude of diverging cultural

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⁸ Quoted in: Ronald P. Formisano, 'The Concept of Political Culture', *The Journal of Interdisciplinary History*, xxxi (2001), 411.

preconceptions.⁹ As Joanne B. Freeman summarises: 'By looking at seemingly familiar political populations and institutions through a cultural lens, such works reveal a deeper logic and a more complex dynamic underlying the conventional political narrative.' ¹⁰

One aspect of the mid-nineteenth-century U.S. political culture that has yet to be fully investigated is how Americans thought about their relationship with the natural world: their environmental imagination. The provenance of nineteenth-century politicians' and political commentators' ideas about environmental concepts, how they thought about the relationship between the natural world and human society, and how these ideas conditioned the ways in which they approached the central political issues of their day are some of the subjects that historians have failed to adequately investigate.¹¹ This represents a curious omission considering that, as we have seen, concepts such as 'climate' and 'nature' were ubiquitously invoked in the politics of this period. If the political culture of the mid-nineteenth century was a complex constellation of ideas, attitudes, and beliefs, this dissertation will show that the environmental imagination is a cluster of stars that, while yet to be fully explored, nevertheless shone brightly and illuminated much in the society around it.

<u>Interconnections and Interdependence: Reassessing the Mid-Nineteenth-Century Environmental Imagination</u>

The changes wrought in the American environmental imagination during the mid-nineteenth century have been the subject of significant scholarly interest. Decades of scholarship in the tradition of intellectual history has demonstrated that ideas about nature were central to the literary and intellectual culture of the United States in this period. Beginning in earnest with American Studies scholars such as Leo Marx and Roderick Nash in the 1960s, investigating the impact of new technological advances on the image of nature in the nineteenth-century United States has become less a cottage industry than a mass production line of excellent scholarship. More recently, there has been an uptick in historical literature detailing the

American Cultural History (Malden, 2008), 421.

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⁹ See, for instance: Michael F. Holt, *The Political Crisis of the 1850s* (New York, 1978); Michael A. Morrison, *Slavery and the American West: The Eclipse of Manifest Destiny and the Coming of the Civil War* (Chapel Hill, 1997); Nicole Etcheson, *Bleeding Kansas: Contested Liberty in the Civil War Era* (Lawrence, 2004). ¹⁰ Joanne B. Freeman, 'Political History and the Tool of Culture', in Karen Halttunen (ed.), *A Companion to*

¹¹ Partial exceptions to this are a couple of studies that have noted the importance of farming to how nineteenth-century Americans approached political questions. See, for instance: Tamara Plakins Thornton, *Cultivating Gentlemen: The Meaning of Country Life Among the Boston Elite* (New Haven, 1989); Adam Wesley Dean, *An Agrarian Republic: Farming, Antislavery Politics, and Nature Parks in the Civil War Era* (Chapel Hill, 2016).

¹² Landmark works in this tradition include: Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (New York, 1964); Perry Miller, *The Life of the Mind in America: From the*

importance of ideas about space, real or imagined, to the American worldview in this period. As Americans attempted to assert themselves as a legitimate national entity and powerful force in world affairs, this scholarship has shown, how they imagined the geography of the American continent and the present and future configurations of their polity within it was of central importance.¹³

The dominant thrust of the historiography on the mid-nineteenth-century environmental imagination establishes two divergent strands of thought as characteristic of how ideas about the natural world developed in this period. One concerns the increasing confidence about the mastery of humans over their environment, fuelled by the construction of the myriad railroads, canals, and telegraphs that began to criss-cross the American landscape. 'A public that had witnessed the joining of the lakes and oceans through the Erie Canal and the deforestation of vast regions to build cities and a nation of farms expressed little doubt, irony, or hesitation about the mastery of human hands over the world,' argues Steven Stoll in a representative passage. ¹⁴ This 'imperial tradition,' to use Donald Worster's categories, has been juxtaposed against an 'arcadian tradition' that stressed the moral and spiritual value of nature. ¹⁵ This second perspective is generally considered to be the preserve of socioeconomic elites, particularly New England transcendentalists such as Henry David Thoreau or Ralph Waldo Emerson, whose writings form the touchstone for the vast majority of

Revolution to the Civil War (New York, 1965), 269-326; Roderick Nash, Wilderness and the American Mind (New Haven, 1973); Thomas Bender, Toward an Urban Vision: Ideas and Institutions in Nineteenth-Century America (Lexington, 1975); John F. Kasson, Civilizing the Machine: Technology and Republican Values in America, 1776-1900 (New York, 1976); Donald Worster, Nature's Economy: A History of Ecological Ideas, 2nd ed. (New York, 1994 [1977]); Barbara Novak, Nature and Culture: American Landscape and Painting, 1825-1875, 3nd ed. (New York, 2007 [1980]); Carolyn Merchant, Ecological Revolutions: Nature, Gender, and Science in New England, 2nd ed. (Chapel Hill, 2010 [1989]); Angela Miller, The Empire of the Eye: Landscape Representation and American Cultural Politics, 1825-1875 (Ithaca, 1993); David E. Nye, American Technological Sublime (Cambridge, MA, 1994); David E. Nye, America as Second Creation: Technology and Narratives of New Beginnings (Cambridge, MA, 2003).

¹³ D. W. Meinig, The Shaping of America: A Geographical Perspective on 500 Years of History, 4 vols. (New Haven, 1986-2004); Anne Baker, Heartless Immensity: Literature, Culture, and Geography in Antebellum America (Ann Arbor, 2006); Martin Brückner, The Geographic Revolution in Early America: Maps, Literacy, and National Identity (Chapel Hill, 2006); James D. Drake, The Nation's Nature: How Continental Presumptions Gave Rise to the United States of America (Charlottesville, 2011); Susan Schulten, Mapping the Nation: History and Cartography in Nineteenth-Century America (Chicago, 2012); Christopher C. Apap, The Genius of Place: The Geographic Imagination in the Early Republic (Durham, NH, 2016); Anya Zilberstein, A Temperate Empire: Making Climate Change in Early America (New York, 2016).

¹⁴ Steven Stoll, Larding the Lean Earth: Soil and Society in Nineteenth-Century America (New York, 2002), 20-1. For other strong statements of this view, see, for instance: Kasson, Civilizing the Machine, passim; Jack Temple Kirby, 'The American Civil War: An Environmental View', National Humanities Center website, http://nationalhumanitiescenter.org/tserve/nattrans/ntuseland/essays/amcwar.htm (accessed 7 December 2018), part 6; William G. Thomas, The Iron Way: Railroads, the Civil War, and the Making of Modern America (New Haven, 2011), 9; Donald Worster, Rivers of Empire: Water, Aridity, and the Growth of the American West (New York, 1992), 1.

¹⁵ Worster, *Nature's Economy*.

historical treatments of the 'arcadian tradition' of environmental thought. ¹⁶ In perhaps the most strident defence of this imperial/arcadian division, Carolyn Merchant has argued that, ever since the Scientific Revolution of the seventeenth century, the duality between humans and nature has been a defining feature of western thought. ¹⁷ Nineteenth-century innovations exacerbated and cemented this trend, Merchant posits, defining a period in which 'the merger of mechanistic science with technology and capitalism... sculpted an American instrumental mentality.' As a result, nature was 'severed' and 'deeply divided into two separate realms, one subservient to economic progress, the other to the human soul,' with the latter 'assigned to the realm of the private.' ¹⁸

Some historical analyses attempt to blend these two traditions. Leo Marx famously showed that, in trying to come to terms with the incursion of the 'machine in the garden,' American authors came to lionise a 'middle landscape' that was neither entirely natural nor completely man-made. David E. Nye has argued convincingly that 'Americans used new technologies not to overrun nature but to complete the design latent within it. Pechnology, in this reading, was not seen as overturning the natural order but rather realising its potential. Yet even these scholars continue to operate within the categories of the imperial and arcadian traditions. 'The prevailing nineteenth-century American view of the natural world' was 'as a target of aggression,' Marx argued in a later work, while 'a smaller cohort of Americans of conscience invoked the concepts of the picturesque, beautiful or sublime Nature as an object of worship.' Nye, meanwhile, asserts that 'the dominant view of nature was that of farmers and pioneers, who were determined to subdue the land' and regarded nature as a series of 'obstacles to be overcome.' Only certain 'counter-narratives,' resisted the urge for domination and entreated Americans to coexist more harmoniously with the natural world. 22

¹⁶ The literature on these titanic figures is, of course, vast. For some of the most well-known examples that treat Thoreau and, to a lesser extent, Emerson explicitly in the context of the 'arcadian tradition,' see: Worster, *Nature's Economy*, part 2; Buell, *Environmental Imagination*; Aaron Sachs, *Arcadian America: The Death and Life of an Environmental Tradition* (New Haven, 2013), chapters 2-3; Max Oelschlager, *The Idea of Wilderness: From Prehistory to the Age of Ecology* (New Haven, 1991), chapter 5; Nash, *Wilderness*, chapter 5

¹⁷ Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco, 1980).

¹⁸ Merchant, *Ecological Revolutions*, 230-1, 258.

¹⁹ Marx, *Machine in the Garden*, passim. See also: Bender, *Toward an Urban Vision*; David Schuyler, *The New Urban Landscape: The Redefinition of City Form in Nineteenth-Century America* (Baltimore, 1986); Sachs, *Arcadian America*, prologue and chapter 1.

²⁰ Nye, *America as Second Creation*, 10. For similar arguments, see also: Ruth Schwartz Cowan, *A Social History of American Technology* (New York, 1997), 205; Richard White, *The Organic Machine* (New York, 1995), especially 30.

²¹ Leo Marx, 'The Pandering Landscape: On American Nature as an Illusion', in Hans Bak and Walter W. Hölbling (eds.), "Nature's Nation" Revisited: American Concepts of Nature from Wonder to Ecological Crisis (Amsterdam, 2003), 39.

²² Nye, American Technological Sublime, 17; Nye, America as Second Creation, 15.

This dissertation will build on the central insight of this scholarship: that nature and the ideas about its relationship to human societies mattered profoundly to mid-nineteenth-century American history. Yet I argue that the environmental imagination of this period is better characterised by a different configuration of ideas than scholars have thus far identified. It is not to be denied that scientific and industrial developments heightened Americans' awareness of their ability to transcend previously problematic natural obstacles. Confidence over the prospects of American progress in an age of railroads, steamships, and factories featured heavily in the political rhetoric of the mid-nineteenth century. Yet it would be equally mistaken to view this period as one in which Americans thought themselves to be largely abstracted from the natural world, with alternative viewpoints existing only in the private sphere. In contrast to the historiographical focus on the alienation between humans and the physical environment, I argue instead that the central characteristic of the environmental imagination of this period was a belief in the interconnection and interdependence between the man and nature. Ideas about mastery frequently and publicly coexisted with notions that more closely align with environmental determinism, the belief that physical environments profoundly shape the societies that inhabit them. This dissertation will show that the natural world was conceived both as providing moral strictures about how society should be organised, providing a model for humans to follow, and also thought to exert influence in intensely practical ways, affecting the reality of how societies are organised. Nature was seen as something to be controlled, exploited, and conquered, while also simultaneously thought to be a force moulding human societies beyond their control.

The environmental imagination under consideration here did not, of course, emerge fully formed in the United States in the middle decades of the nineteenth century. Across the entirety of human history, different groups have attempted to make sense of their relationship with the natural world, a process that has involved a negotiation between often competing ideas of human societies modifying nature and vice versa. From the earliest settlement of North America, ideas about the environment of the continent were of central importance to a variety of populations as they attempted to come to terms with their new surroundings. During the Revolutionary era, the ideological importance of American nature intensified still further, becoming a crucial component of a nascent national identity. The prominence

²³ This dynamic is emphasised in: Clarence J. Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the Eighteenth Century* (Berkeley, 1967).

²⁴ Some examples of the voluminous literature on nature and American national identity in this period are: Robert Lawson-Peebles, *Landscape and Written Expression in Revolutionary America* (Cambridge, UK, 1988); Brückner, *Geographic Revolution*; Drake, *Nation's Nature*; Schulten, *Mapping the Nation*.

afforded to the 'laws of Nature and Nature's God' in the Declaration of Independence reflects how the Founders, and especially Thomas Jefferson, imported the key Enlightenment axiom that principles drawn from the natural world should be carefully studied and applied to human society. This manifested itself most famously in Jefferson's lengthy defence of the vitality and grandeur of the American environment in refuting the thesis, put forward by the French natural historian Buffon, that the natural world in America was degenerate and feebler than that of the Old World.²⁵ Thomas Paine, too, quipped that it was 'absurd,' for 'a continent to be perpetually governed by an island.'²⁶ For these early nationalists, independence from Britain was justified not only by political and economic grievances, but also in the natural environment of the American continent.

While the mid-nineteenth-century environmental imagination built upon these previous ideas, it was also the product of a powerful combination of deep-seated religious beliefs and cutting-edge scientific research that was particular to the period in question. As the Declaration's invocation of 'the laws of Nature and Nature's God' indicates, the elision of the plans or actions of a deity with natural laws, as reflected in the physical environment, was fundamental to the founding and development of the American nation. This statement and others like it reflected a belief in natural theology, the conviction that reason and the experience of nature could be revelatory of God's plans. As a result, the distinction between 'nature' as it relates to the physical environment and 'nature' meaning something that is morally correct and even automatic would not have been so apparent to nineteenth-century Americans, many of whom were accustomed to endowing 'creation,' the natural world that surrounded them, with providential intent.

Theologically, this was not an uncontroversial doctrine, since the belief that true revelation could be obtained by anything other than close engagement with biblical scripture ran counter to some more orthodox strands of Protestantism.²⁷ However, the intellectual contexts of this period ensured that Americans were particularly disposed to follow the teachings of what was commonly called 'the Book of Nature.' During the earliest decades of the Republic, Paine acted as the foremost American representative of a strand of Enlightenment deism that eschewed the singular focus on the Bible and argued that the natural world alone provided proof of the existence of a Creator.²⁸ As the century progressed, an influential cadre

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²⁵ Antonello Gerbi, *The Dispute of the New World: The History of a Polemic, 1750-1900*, trans. Jeremy Moyle (Pittsburgh, 1973), 3-34, 252-67.

²⁶ Ouoted in: Drake, *Nation's Nature*, 2.

²⁷ On the development of natural theology, see especially the essays in: Russell Re Manning (ed.), *The Oxford Handbook of Natural Theology* (Oxford, 2013).

²⁸ Thomas Paine, *The Age of Reason* (Paris, 1794).

of artists and writers, most notably the transcendentalists and the Hudson River School of painters, came to see nature as a place through which one could convene spiritually with God.²⁹ Yet it was not merely radical sceptics who were drawn to nature as a source to divine God's plan. British theological tracts such as William Paley's *Natural Theology* and *The Bridgewater Treatises* were widely reprinted in the United States and used as school textbooks.³⁰ Natural theology did not have to supplant the study of the Bible, since the scripture itself plainly stated that 'God created the heaven and the earth.' Even figures such as Charles Hodge, the preeminent spokesperson of Calvinist Princeton Theology, asserted that, while natural theology should not supersede the Bible, 'the Scriptures clearly recognize the fact that the works of God reveal his being and his attributes,' citing Psalms 19: 'the heavens declare the glory of God; and the firmament sheweth his handiwork.'³¹ As Perry Miller summarised it, 'by a legerdemain that even so highly literate Christians... could not quite admit to themselves, [nature] had effectually taken the place of the Bible.'³²

Yet this faith in providential natural laws very rarely led to a sort of fatalism about the development of American society. Mid-nineteenth-century Americans were not content to passively wait for Providence to inevitably guide their nation to its ultimate destination. Rather, they saw themselves and the technology they wielded as agents consummating God's design for man.³³ The development of American society across space and time were conceived not as overthrowing the natural order, but rather fulfilling it. Machinery, an author in the *New York Tribune* opined, provided 'ancillary forces of nature,' the means through which God's divine plan, as reflected in the physical environment, could be achieved.³⁴ 'Successful art always pursues nature in the attempt to accomplish similar designs,' asserted the Missouri Democrat Frank Blair in discussing the transcontinental railroad, and a 'reasoning mind infers that a wise Providence so arranged the grand instrumentalities of nature, that the sagacity and industry of man might apply them beneficially.'³⁵ The new technologically driven capabilities of mankind were, for these observers, not a rejection or a usurpation of the natural order, but a means to more fully embrace it.

²⁹ See, for instance: Novak, *Nature and Culture*; John Gatta, *Making Nature Sacred: Literature*, *Religion, and the Environment from the Puritans to the Present* (New York, 2004).

³⁰ On importance of these works in the United States: Conrad Cherry, *Nature and the Religious Imagination from Edwards to Bushnell* (Philadelphia, 1980), passim; Gatta, *Making Nature Sacred*, 73-4.

³¹ Charles Hodge, *Systematic Theology*, 3 vols. (New York, 1872), i, 24. My thanks to Andrew Short for pointing me to this quote.

³² Perry Miller, Errand into the Wilderness (Cambridge, MA, 1956), 211.

³³ On this dynamic, see especially: Nye, *America as Second Creation*.

³⁴ 'Help for the Ghosts', New York Tribune, 12 December 1854, 4.

³⁵ Frank P. Blair, Jr., *The Destiny of the Races on this Continent* (Washington, 1859), 14-15.

While contemporary observers are accustomed to viewing science and religion as largely antagonistic, the opposite was true in the mid-nineteenth-century United States. Scientists almost universally saw their investigations not as supplanting religious doctrines but acting in harmony with them. Obtaining more precise knowledge of environmental phenomena, they believed, would enable humans to more precisely divine the workings, or at least the intentions, of God. 'Geological facts are not only consistent with sacred history..., their tendency is to illustrate and confirm it,' the prominent geologist Benjamin Silliman declared in an 1829 lecture.³⁶ Yale scientist James Dwight Dana asserted that there is, 'in nature, not merely a plan of arrangement, but also a plan of progress or development... plainly written out' by 'God, its author.'37 Harvard's Louis Agassiz described his view of the animal kingdom and its distribution throughout the world as 'a Thought of a Supreme Intelligence manifested in material reality.'38 Importantly, these convictions about the revelatory role of science were shared among more public commentaries on the purpose of these investigations. In an article summarising recent scientific findings, an author in a southern periodical described the 'high mission' of science to stand 'in the very presence of the Great Creator, and gaz[e], with constant and ever increasing admiration at the wonderful manifestations of Supreme Intelligence and Supreme Goodness, as displayed in the works of nature.'39

Obtaining knowledge of providential natural laws was considered by many to be tantamount to a civic duty, endowing science with an authority to speak to the social, political, and economic processes that were shaping the lives of all Americans. Science was regarded as not merely abstract theorising about impenetrable natural forces, but also as providing factual and applicable 'useful knowledge' that could be utilised by Americans in their daily lives. ⁴⁰ While processes of urbanisation and industrialisation were accelerating in this period, it should not be forgotten that the majority of the population remained engaged in rural, agricultural pursuits reliant to a large degree upon the weather and the seasons. Even in the industrialising north, at the outset of the Civil War 14.5 million continued to live in rural areas with populations smaller than 2,500, while larger cities harboured only 5 million, with

³⁶ Benjamin Silliman, Outline of the Course of Geological Lectures Given in Yale College (New Haven, 1829),

³⁷ James Dwight Dana, 'Cosmology', Dana Family Papers, Sterling Memorial Library, Yale University.

³⁸ Quoted in: Robert V. Bruce, *The Launching of Modern American Science*, 1846-1876 (New York, 1987),

³⁹ 'Physical Science and its Relation to Natural and Revealed Religion', *Southern Quarterly Review*, iii (1851), 422.

⁴⁰ Bruce, *Launching*, 72-3; Andrew J. Lewis, *A Democracy of Facts: Natural History in the Early Republic* (Philadelphia, 2011).

60 percent of the northern labour force doing farm work.⁴¹ As a result, demand for knowledge about the natural world was high. As one southern author put it in an 1856 article, 'the condition of man is so intimately connected with the various phenomena of the atmosphere that he may, without impropriety, be regarded as a meteorologist by nature.'⁴²

As we have seen, the application of scientific and technological advances has been thought by many historians to have increased the polarisation of the environmental imagination into public expressions of unparalleled human dominance over the natural world and private musings about nature's moral and spiritual value. Yet in many ways the new ways of structuring knowledge that arose in the mid-nineteenth century worked to complicate this supposed bifurcation. As each chapter of this dissertation will show in turn, across several disciplines, from geography to medicine to political economy, innovations in scientific methodologies and frameworks resulted in a consensus that man had not reached a state of alienation from nature, but rather the interconnections and interdependences between human society and the natural world were increasingly evident and important. The dividing line between the human and the physical sciences was not clear cut. Instead, there was a widespread conviction that studying the earth's climate and geography would provide wideranging and relevant insights to those investigating the present state and historical development of human societies.

Perhaps no figure defined mid-nineteenth-century Americans' awareness of and engagement with science more than the German scientist, explorer, and polymath Alexander von Humboldt.⁴³ In replacing the Linnaean method for the categorisation of natural phenomena, which focused on hierarchy and classification, the driving force behind Humboldtian science was the concept of *Zusammenhang*, a term best translated as interconnection or interdependence.⁴⁴ He conceived of the earth as one great living organism in which everything was connected. 'In this great chain of causes and effects,' Humboldt wrote in 1809, 'no single fact can be considered in isolation.'⁴⁵ Humans were not excluded from these intricate, interconnected networks; according to historian Hans Peter Reill, Humboldt desired 'the remoralization of nature and the naturalization of the moral world.'⁴⁶ Climate,

⁴¹ Dean, An Agrarian Republic, 2.

⁴² 'The Physical Geography of the Sea. By M. F. Maury, LL. D', Southern Quarterly Review, i (1856), 151.

⁴³ On Humboldt's impact in the United States, see especially: Aaron Sachs, *The Humboldt Current: Nineteenth-Century Exploration and the Roots of American Environmentalism* (New York, 2006); Laura Dassow Walls, *The Passage to Cosmos: Alexander von Humboldt and the Shaping of America* (Chicago, 2009); Andrea Wulf, *The Invention of Nature: Alexander von Humboldt's New World* (New York, 2015), passim.

⁴⁴ On the importance of this concept, see especially: Margarita Bowen, *Empiricism and Geographical Thought* from Francis Bacon to Alexander von Humboldt (Cambridge, UK, 1981), 215.

⁴⁵ Quoted in: Wulf, *Invention of Nature*, 5.

⁴⁶ Peter Hanns Reill, Vitalizing Nature in the Enlightenment (Berkeley, 2005), 28.

for instance, he defined as important not only in connection with 'the organic evolution of plants, and the ripening of fruits, but also with the feelings and whole mental estate of mankind.'⁴⁷

As this dissertation will show, Humboldt's insights resonated throughout mid-nineteenth-century American science. Yet they were also influential in the broader culture of the period, particularly between the years 1845 and 1860, thanks to the publication of his magnum opus *Kosmos*, the shorter book *Aspects of Nature*, and the reissuing of English translations of many of his earlier works. One scholar has calculated that, between 1840 and 1870, thirty-seven major geographical features in the United States were named after Humboldt, as opposed to eleven in Europe and thirteen in Latin America. Reviews of his writings, which often effectively amounted to extended paraphrasing interspersed with commentary, were effusive in their praise. Humboldt was 'the greatest philosopher of the age,' the *American Whig Review* opined. Humboldt was 'the history of the progress of knowledge, that, for a full half century, the name of a single man continues predominant among the living expounders of nature,' noted a writer in the southern journal *De Bow's Review*, but 'when Humboldt speaks, the world is his audience.' 50

Americans were certainly not the only ones who were formulating their environmental imagination in conversation with the latest scientific research of this period. A full comparative discussion of how the environmental imagination figured in the political culture of other nations cannot be undertaken here, but, as the focus on the impact of Humboldt suggests, my rendering of the American environmental imagination does draw attention to the inescapably trans-Atlantic context in which ideas about the natural world were forged and articulated. The 'degeneracy' debate between Jefferson and Buffon was an instance in which American identity, trussed to the physical environment of the continent, was defined in opposition to European scientific orthodoxy. Yet Americans harboured competing impulses in relation to the 'Old World,' desiring to assert the legitimacy of the new nation as an independent social, political, and cultural entity, while also craving the approval of the

⁴⁷ Alexander von Humboldt, *Kosmos: A General Survey of the Physical Phenomena of the Universe* (London, 1845), i, 346.

⁴⁸ Walls, *Passage to Cosmos*, x.

⁴⁹ 'Aspects of Nature', American Whig Review, xi (1850), 143.

⁵⁰ Prof. C. G. Forshey, 'The Baron Humboldt's Cosmos, Part I', De Bow's Review, ix (1850), 150.

⁵¹ On environmental ideas in European nation-states and their empires, see, for instance: Richard H. Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860* (Cambridge, UK, 1995); Thomas M. Lekan, *Imagining the Nation in Nature: Landscape Preservation and German National Identity* (Cambridge, MA, 2004); Allen MacDuffie, *Victorian Literature, Energy, and the Ecological Imagination* (Cambridge, UK, 2014).

societies from which they had recently split.⁵² In this regard, Humboldt provided a welcome middle ground. A pre-eminent German scientist, Humboldt occupied a privileged position in European high society. Yet he was also a close friend of Jefferson and in his works he consistently lauded the natural magnificence of the Americas. Although a 'European by birth,' one American periodical commented, he was undoubtedly 'an American by adoption.'⁵³

The Humboldtian moment that had such wide-ranging impact in American cultural, intellectual, and, as we shall see, political life was not to last. The publication of *On the Origin of Species* in 1859 and the uptake of the Darwinian view of nature as one defined by competition and strife meant the Humboldtian vision characterised by predominantly harmonious mutual interdependence was superseded in the latter decades of the nineteenth century. The increasing specialisation in late-nineteenth-century science also ran counter to the staggering scope of Humboldt's approach, particularly when it pushed the natural sciences and the human sciences further apart. It was not until the latter part of the twentieth century that Humboldt's innovations were rediscovered by scientists and humanities scholars alike. ⁵⁴ But this remained in the future for Americans in the mid-nineteenth century, the apogee of Humboldt's popularity and influence. A powerful mixture of his alluring view of the natural world with the pervasive doctrine of natural theology endowed the environmental imagination studied here with its central characteristic: a belief in the interconnections and interdependence of human societies with the natural world.

'The Stormy Present': The Environmental Imagination and the Course of Mid-Nineteenth-Century Politics

This dissertation will trace how the consciousness of these two-way connections between humans and nature sheds light on the dynamics of power at the heart of mid-nineteenth-century American politics and society. By drawing on a wide range of source material, including newspapers, Congressional records, and personal correspondence, I demonstrate that the environmental imagination outlined above obtained widespread currency. Extensive networks of print culture, aided by relatively high rates of literacy, new technological innovations such as the telegraph, and non-existent copyright laws, ensured a broad audience

⁵² On this dynamic, see: Kariann Yokota, *Unbecoming British: How Revolutionary America Became a Postcolonial Nation* (New York, 2011).

⁵³ 'Humboldt, Ritter, and the New Geography', New Englander, cxx (1860), 305.

⁵⁴ On these points, see: Sandra Nichols, 'Why Was Humboldt Forgotten in the United States?', *Geographical Review*, xcvi (2006), 405; Sachs, *Humboldt Current*, 236-42; Bruce, *Launching*, especially 4-5.

for these ideas. Access to the latest research into natural phenomena was not solely the preserve of those with the means to obtain the scientific tract in question, since lengthy reviews of these works, often supplemented with extended quotations of key sections, appeared with regularity in popular publications. Visual media such as diagrams, illustrations, and maps were also increasingly employed to make scientific insights comprehensible to a broader audience.⁵⁵

Similarly, readers needed not obtain a copy of the *Congressional Globe* to be familiar with the content of political debates in which this environmental imagination was articulated and contested, since more quotidian forms of print such as newspapers and periodicals were replete with commentaries and often verbatim reproductions of key speeches. National political events were a ubiquitous topic of discussion in the mid-nineteenth-century United States, eliciting commentaries from Americans throughout the nation, inviting comparison of ideas from different geographical areas. This was reflective of an era in which political participation was high and party politics was, in the words of Daniel Walker Howe, 'the first national sport.' As Ralph Waldo Emerson quipped in his journal in 1863, 'you can no more keep out of politics than you can keep out of the frost.'

Political culture, then, provides a fruitful lens through which to study the environmental imagination. Yet, at the same time, these sources do not and cannot lay claim to encompassing all of the ways in which Americans conceived of their relationship to the natural world. Configurations of political and social power ensured that white, male, elite voices predominated in the Congressional debates, newspapers, periodicals, and scientific works that I largely draw upon in this dissertation, to the exclusion of more vernacular forms of environmental knowledge that formed a vibrant and often subversive sub-culture.⁵⁸ As scholars such as Britt Rusert, Bruce Dain, and Ikuko Asaka have shown, free African Americans confronted the racist science that featured prominently in the political debates on questions of slavery and emancipation, powerfully intervening in networks of print and visual culture.⁵⁹ Other scholars have charted enslaved peoples' understandings of their

⁵⁵ On the importance of maps, see: Brückner, *Geographic Revolution*; Schulten, *Mapping the Nation*.

⁵⁶ Daniel Walker Howe, *The Political Culture of the American Whigs* (Chicago, 1979), 15.

⁵⁷ Quoted in: Eduardo Cadava, *Emerson and the Climates of History* (Stanford, 1997), 17.

⁵⁸ For an overview of recent literature on this topic, see: Conevery Bolton Valenčius et al., 'Science in Early America: Print Culture and the Sciences of Territoriality', *Journal of the Early Republic*, xxxvi (2016), 73-123.

⁵⁹ Bruce Dain, A Hideous Monster of the Mind: American Race Theory in the Early Republic (Cambridge, MA, 2002); Ikuko Asaka, Tropical Freedom: Climate, Settler Colonialism, and Black Exclusion in the Age of Emancipation (Durham, NC, 2016); Britt Rusert, Fugitive Science: Empiricism and Freedom in Early African American Culture (New York, 2017).

relationship with the environment of the plantation and its surroundings, which allowed them to create what Stephanie M. H. Camp termed 'a "rival geography"... that conflicted with planters' ideas and demands.' Despite being excluded from much of the formalised scientific activity throughout this period, American women, too, were deeply engaged in producing and consuming environmental knowledge, particularly in the fields of botany and natural history.

My focus on a predominantly literate, white, and male cast of characters does, however, provide a valuable window into how their power was constructed, maintained and, crucially, naturalised. The environmental imagination under investigation here formed an important constituent part of the white male power structures that defined much of formal political life in this period. Inescapably the product of the context in which it was formulated, the environmental imagination bore the indelible imprints of the racial and gendered prejudices that permeated white male thought. The widespread acceptance of the inferiority, increasingly considered to be inherent and essential, of non-whites led many Americans to express the belief that different races had distinctive relationships with the natural world. As the following chapters will demonstrate, most white Americans considered it self-evident that it would be their race, and not indigenous peoples or blacks, who were to be the true inheritors and beneficiaries of the bountiful environment of temperate America. Native Americans, it was believed, would fade out of existence in an entirely natural process of white settler advancement, while blacks would either migrate to more congenial latitudes or risk degeneration and even extinction if they remained in an 'unnatural' geographical position. 62 Similarly, the gendered language that pervaded American portrayals of the natural world reflected a society in which women were widely assumed to occupy an inferior position in the natural hierarchy. As numerous scholars who analyse the intersection of ideas about nature, gender, and expanding American power have shown, the progress of the United

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⁶⁰ Stephanie M. H. Camp, *Closer to Freedom: Enslaved Women and Everyday Resistance in the Plantation South* (Chapel Hill, 2004), xx. Medicine provided another crucial, and always highly gendered, site of contestation for slaves' understandings of the natural world. See: Sharla M. Fett, *Working Cures: Healing, Health, and Power on Southern Slave Plantations* (Chapel Hill, 2002); Marie Jenkins Schwartz, *Birthing a Slave: Motherhood and Medicine in the Antebellum South* (Cambridge, MA, 2006).

⁶¹ Sally Gregory Kohlstedt, 'In from the Periphery: American Women in Science, 1830-1880', Signs, iv (1978), 81-96; Elizabeth B. Keeney, The Botanizers: Amateur Scientists in Nineteenth-Century America (Chapel Hill, 1992), chapter 5; Tina Gianquitto, "Good Observers of Nature": American Women and the Scientific Study of the Natural World, 1820–1885 (Athens, GA, 2005); Rusert, Fugitive Science, chapter 5. ⁶² This angle on American racial thought is discussed in: George M. Frederickson, The Black Image in the White Mind: The Debate on Afro-American Character and Destiny, 1817-1914 (New York, 1971); Brian W. Dippie, The Vanishing American: White Attitudes and U.S. Indian Policy (Middletown, 1982); Mark David Spence, Dispossessing the Wilderness: Indian Removal and the Making of the National Parks (New York: 1999), chapter 1; Dain, Hideous Monster of the Mind.

States was frequently conceptualised as the assertion of martial masculine power and the feminisation of nature and non-white peoples.⁶³

The environmental imagination studied here, then, was a product of the racialised and gendered hierarchies that white male Americans drew upon in order to make sense of their world. Rather than simply a passive reflection of its social and cultural context, though, in what follows I argue that the environmental imagination evidenced in these sources served to consolidate the same hierarchies that had so profoundly shaped it. In practice, the oppression of women and non-white peoples was entirely the product of ideas and decisions that were inescapably of human origin. Yet, by conceiving of and portraying the expansion of white masculine power as 'natural,' by incorporating it into a providential framework manifested on the land itself, this process was endowed with a legitimacy and an inevitability that transcended human agency. William Cronon has argued that nature enables those who 'wish to ground their moral vision in external reality' to 'take disputed values and make them seem innate, essential, eternal, nonnegotiable.' Viewed in this respect, the environmental imagination provided a means through which white male dominance was reinforced and alternative claims to power dismissed and discredited as contrary to the correct, natural order.

The environmental imagination of these figures did not, of course, arise in a vacuum but was rather shaped by engagement with the natural world in multiple forms. As environmental historian Linda Nash has posited in a seminal article, both her environmental history colleagues and those working in other sub-fields should pay closer attention to the ways in which interaction with the natural world shaped human ideas and intentions. As she notes, 'it is through practical engagement with the world, not disembodied contemplation, that human beings develop their plans.' Many politicians and political commentators engaged with the natural world physically as the owners of farmers or plantations. Horace Greeley's papers contain an extensive 'Farmbook' that documents the developments on his land on the outskirts of New York City, while the records of many southern politicians include papers charting daily business at their plantations. ⁶⁶ As Tamara Plakins Thornton has shown, even

⁶³ Works that I have found particularly instructive are: Annette Kolodny, *The Lay of the Land: Metaphor as Experience and History in American Life and Letters* (Chapel Hill, 1975); Merchant, *Ecological Revolutions*; Amy S. Greenberg, *Manifest Manhood and the Antebellum American Empire* (New York, 2005).

⁶⁴ William Cronon, 'Introduction: In Search of Nature', in William Cronon (ed.), *Uncommon Ground: Toward Reinventing Nature* (New York, 1995), 36.

⁶⁵ Linda Nash, 'The Agency of Nature or the Nature of Agency?', Environmental History, x (2005), 68.

⁶⁶ 'Farmbook', Horace Greeley Papers, Rare Books and Manuscripts Division, New York Public Library. For plantation records, see, for example: 'Plantation Books', James Henry Hammond Papers, Manuscripts Division, Library of Congress.

those most closely associated with the industrialisation and commercialisation of U.S. society strove 'assiduously to identify themselves with things rural and agrarian.' Agricultural fairs were major social and political events that regularly featured speeches from prominent politicians from the area, bringing them into contact with the thousands of agriculturalists that made up an important voting bloc. Historian Adam Wesley Dean has shown that 'while engaging in tumultuous politics, radical social change, and violence, northerners brought with them the values and beliefs cultivated through their relationship with farmland.' 69

These connections with the land were supplemented by personal and intellectual networks that brought political actors into contact with renowned scientists and their work. As the following chapters will show, politicians referenced and engaged with scientific treatises regularly in speeches and writings, while in many cases they were also in regular, personal conversation with the authors of those works. Boston, for instance, was home to a particularly vibrant and tightly knit social group that brought together politicians of the standing of Charles Sumner, Edward Everett, and John A. Andrew with scientists such as Louis Agassiz and Arnold Guyot. Correspondence between these figures was plentiful, while they also met in person on numerous occasions. To In the southern states, such networks brought figures such as prominent editor James D. B. De Bow and South Carolina's James Henry Hammond into contact with prominent racial scientists like Josiah C. Nott and other pro-slavery scholars, including the oceanographer Matthew Fontaine Maury.

The environmental imagination political actors learned from these connections, I contend, in various ways shaped, limited, and expanded the political vision of mid-nineteenth-century Americans. The environmental imagination did not, in any direct way, 'cause' the Civil War, the abolition of slavery, or any other major historical development of this period, all of which were the products of vast and complex processes that cannot be neatly attributed to any one single factor. Yet the environmental imagination formed a crucial element of the American worldview and thus conditioned how Americans thought about, approached, and negotiated political flashpoints surrounding questions of slavery, emancipation, trade, expansion, and identity. Across a range of political debates, politicians and commentators from all areas of

⁶⁷ Thornton, Cultivating Gentlemen, 1.

⁶⁸ Ariel Ron, 'Summoning the State: Northern Farmers and the Transformation of American Politics in the Mid-Nineteenth Century', *Journal of American History*, ciii (2016), 347-74.

⁶⁹ Dean, Agrarian Republic, 10.

⁷⁰ These connections within Boston are explored in more detail in chapter 5.

⁷¹ Fuller coverage of the pro-slavery political connections of Maury and Nott will be provided in chapters 2 and 4, respectively.

the nation and across all parties situated their society in dialogue with its physical environment, with humans capable of influencing, but also being influenced by, the natural world. However, even if all who participated in these debates shared certain commonalities to their environmental imaginations, this should not obscure the fact that, as Eric Foner argues in a different context, such universality 'camouflaged a host of divergent connotations and emphases.' This dissertation will trace how the shared environmental imagination was mobilised in the service of conflicting goals, becoming both symptomatic and constitutive of the rifts that defined the politics of this period. If there was a common acceptance that there were certain natural laws and forces that shaped the development of American society, what exactly these laws were, what effects they had, and who was subject to them, remained controversial questions that divided the nation.

The environmental imagination featured in American political debates in three overlapping configurations. It formed, firstly, an *ideology* that structured the ways in which Americans approached political questions. As an important cluster of ideas, assumptions, and beliefs, the environmental imagination was one of the sources Americans drew upon in formulating their political convictions, conditioning their conceptions of what was possible, prudent, and moral. Studying the ideological role of the environmental imagination can help us better understand the basis upon which Americans in this period made the political decisions that they did. Secondly, the environmental imagination also took on importance as a means through which Americans articulated the processes shaping their society. When attempting to understand their world, Americans frequently took recourse in the familiar language of nature, which provided a common reference point in discussions of often complex issues. This same language could also be a persuasive technique to assert the righteousness of a particular measure, drawing on the widely held faith that 'natural laws' were shaping the past, present, and future of their society. Thirdly, and relatedly, nature provided a source of analogy that helped Americans make sense of their world. By transposing natural processes that could be scientifically investigated and understood onto human society, the application of natural metaphors and analogies made contingent political developments appear more orderly and comprehensible. As the chapters of this dissertation will show, these three elements did not operate exclusively from one another. Rather, they overlapped in multiple configurations, showcasing the important and multifaceted role the environmental imagination played in mid-nineteenth-century American politics.

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⁷² Eric Foner, *Free Soil, Free Labor, Free Men: The Ideology of the Republican Party Before the Civil War*, rept. ed. (New York, 1995 [1970]), x.

To demonstrate this, the following chapters will be structured thematically, each taking one of the most important and controversial political questions of the mid-nineteenth century and studying how the different inflections of the environmental imagination shaped the debates that grew up around them. The first section is composed of three chapters interrogating how the environmental imagination shaped the ways in which Americans thought about the past, present, and future of their nation and its interaction with the wider world. Each chapter takes as its jumping-off point a case study of a scientific treatise that struck a chord with the wider American public in some form, eliciting multiple reviews in journals and newspapers while often also being explicitly referenced in political speeches or debates. While these scientific case studies were not explicitly political, in that they were not written with the aim of making an intervention in any particular debate, they thus nevertheless obtained significant currency in the political discourse surrounding the issue in question. The remainder of each chapter traces how these ideas shaped the ways in which Americans approached the problem at hand, demonstrating that bringing the environmental imagination into conversation with the political history of the mid-nineteenth century can help better explain how and why Americans shaped and reshaped their world in the ways that they did.

Starting with the premise that societies and their identities are socially and culturally constructed, the first chapter investigates how the environmental imagination influenced the development of national, regional, and sectional identities in the decades preceding the American Civil War. It begins with the ideas of the Swiss-American scientist Arnold Guyot, who in a widely read and reprinted 1849 work Earth and Man argued that the development of human civilisation could be best understood as a providentially defined evolution of man's relationship to the natural world. In temperate climates, he opined, environmental conditions stimulated industry, allowing humans to reach their full physical and intellectual capacity. Hotter tropical climates, in contrast, disincentivised industry by lavishing upon their inhabitants profuse natural productions, meaning human development would always be stunted.⁷³ Guyot's ideas about the linkages between climate and civilisation and his categories of environmental 'norms' and 'others' were adapted for a variety of ends. American nationalists keenly appropriated the moral and highly gendered categories of tropicality and temperateness to construct the United States as a providentially favoured temperate entity, situating their nation as the apogee of the natural law of cultural development identified by Guyot. Yet, as the Civil War approached, the categories of

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⁷³ Arnold Guyot, *The Earth and Man: Lectures on Comparative Physical Geography, in Its Relation to the History of Mankind*, trans. C. C. Felton, 11th ed. (Boston, 1857 [1849]).

temperateness and tropicality become increasingly internalised and served to divide, rather than unite, the states. Climatic diversity was harnessed to construct 'the North' and 'the South' as separate geographical entities that were, in important respects, incompatible with one another.⁷⁴

The second chapter expands the frame of reference and argues that the environmental imagination helped mid-nineteenth-century Americans come to terms with the rapid growth and expansion of their nation. Enthusiasm about the seemingly boundless prospects for economic development opened up by the acquisition, conquest, and annexation of vast swathes of western land was accompanied by anxieties about the consequences that these transformations would engender for the society they had built. Humboldtian science, I show, formed a touchstone for Americans as they tried to reconcile these competing currents of confidence and anxiety. Humboldt's theory of isothermal lines allowed him and his scientific followers to depict changes in temperature on a continental and even planetary scale, synthesising otherwise dense and unintelligible tables of data into a more easily digestible form that required but a small level of intellectual engagement to draw comparisons between different regions. In many cases, these developments were harnessed to naturalise what was widely considered to be the United States' Manifest Destiny. Expansionists read God's divine intentions in the natural features of the land, positing that the geographical conformation of mountain ranges and river basins showed that that the United States was providentially predestined to expand to fill the entirety of the North American continent. Framed with highly gendered language and assumptions, the exploitation of the feminised land by masculine Euro-American endeavour was conceptualised as an entirely natural process paralleling the purportedly natural social order. This constituted a powerful rhetorical means of projecting American power and of dismissing the claims of non-white peoples to any part of the continent. In another sense, environmental knowledge also served the entirely practical purpose of demystifying the western territories for settlers and familiarising prospective emigrants with their potential source of living. The connections between the environment and human health, prevalent in both professional and laypeople's understandings of medicine, added further weight to the imperative of gaining accurate information about the environments they would encounter.

⁷⁴ Throughout this dissertation, capitalisation of 'North and 'South' will only be used to refer to the constructed sectional identities. Non-capitalised versions will refer to the states where slavery was and was not legal before Civil War emancipation legislation, except for regions such as 'Deep South' or 'Border South.'

The third chapter shifts the focus to economic policy and reconstructs the debates between free traders and protectionists in the mid-nineteenth century as a battle over which system better conformed to the immutable natural laws that demonstrated how society should be organised. Political economists sought to comprehend and explain these natural laws through scientific means, believing the economy to be inextricably linked with the physical world, rather than inhabiting an autonomous sphere. Concepts of gravitation, motion, and growth appeared with great frequency in the writings of political economists from both sides of the debate between free trade and protectionism, suggesting that both camps drew on an understanding that the correct economic system was that which existed in harmony with the natural world that shaped it. This central, shared assumption spawned a multiplicity of different interpretations, however. Free traders posited that their chosen system was the most natural, arguing that the wide distribution of resources across different climatic zones was a providential injunction that free trade would promote more harmonious social and political relations between the different regions. For their part, while many protectionists readily admitted that free trade would eventually become the most favourable economic system, they countered that it was simply unrealistic given the socio-political circumstances of the period. The enduring importance of the nation in international affairs ensured it would be more natural for each people to develop the resources native to their own soils rather than relying upon imports.

While the first section, composed of these three chapters, investigates debates that resonated throughout the period treated here, the second section studies more specific flashpoints surrounding the most meaningful and controversial topic that largely defined this era: the problem of slavery. These two chapters will begin with case studies that are explicitly political in origin and intention but nevertheless employ scientific research and concepts to discuss the relationship between the natural world and the past, present, and future of their society. The overarching themes remain the same. Scientific ideas about the interconnectedness between humans and nature remained important reference points, constitutive of an environmental imagination that was foundational to the worldview of Americans when confronting these momentous questions.

In these two chapters, the ideas in question connect the capacities of the bodies and minds of different races to the natural world that surrounds them, particularly the climate. Chapter four traces the development and popularity of the climatic theory of slavery, which was crucially informed by racial science that posited that black bodies could only function fully in hot climates. In a series of political debates about the future geographical configuration

of slavery, notably regarding whether it would take root in the newly acquired territories to the south and west of the eastern seaboard states, an influential coalition of border state Whigs and moderate Democrats argued that environmental limits would restrict slavery's expansion within the United States. California, New Mexico, and Kansas, they variously declared, would not support slavery because of their inhospitable climates and lack of staple crops, making the heated debates over these questions a pointless quarrel that risked breaking up the Union for no good reason. These ideas were vigorously contested by more stridently pro- or anti-slavery figures. Southern pro-slavery extremists argued that slavery could flourish in almost any climate and could certainly be employed in, for instance, the California gold mines. By contrast, anti-slavery activists made a moral case against bondage everywhere, arguing that only legislation could bar slavery from taking root in newly acquired territories. Even within these groups though, some variation on the climatic theory of slavery can be discerned. The most extreme pro-slavery figures talked with greater enthusiasm about a bountiful slaveholding empire in the American tropics, lured by its promise of greater material wealth through lucrative harvests of cotton, sugar, and other staple crops. Many anti-slavery commentators, meanwhile, admitted the necessity or at least the economic advantage of black labour in tropical climates where whites supposedly could not function, but argued that they would be most effective as free labourers, rather than enslaved ones.

Leading on from this latter point, chapter five shows how insights from racial science influenced even some of the most progressive proposals for addressing what was often called the 'Negro problem' during the Civil War. Many African Americans rejected outright the racial science that confined them to tropical latitudes, passionately asserting a different vision of the future racial configuration of the continent. Yet these ideas appeared to make little headway with white Republican policymakers. I demonstrate that the dominant Republican response to the question of what would happen to African Americans postemancipation relied upon the doctrine of isothermalism. This held that African Americans were physiologically better suited to warmer climates and thus would voluntarily migrate to them were they freed from the constraints of slavery. This chapter places Republican Civil War-era statements and proposals in a longer lineage of policies aimed at establishing the natural racial geography, such as the long-standing commitment to the colonisation of African Americans in Africa or Central America. As Ikuko Asaka has argued, 'the bottom line for many white northerners was that the space of black freedom should be segregated in

a tropical land, whether that be a foreign locale or a domestic region.'⁷⁵ In my reading, the pervasive linkage of climate and race in the environmental imagination of even stridently anti-slavery Republicans prevented them from thinking expansively and openly about the future of African Americans within the United States.

Each of these chapters, then, demonstrates how the consciousness of the interconnections and interdependence between humans and the natural world influenced the ways in which political questions were framed, debated, and in many cases ultimately decided in the midnineteenth-century United States. Drawing on the latest scientific research and a deep commitment to natural theology and providentialism, those discussing political issues in this period invoked natural laws ubiquitously, portraying them as both moral strictures as to how society should be structured and as constitutive forces that shaped the past, present, and future of their nation. The environmental imagination, then, rather than being disembodied speculation about the relationship between man and nature, mattered profoundly to the course of mid-nineteenth-century American history. Studying how it intersected with political developments sheds new light upon how and why Americans shaped the world in the ways that they did.

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⁷⁵ Asaka, Tropical Freedom, 184.

Section One: The United States and the World

Nature's Nation(s)?: The Environmental Imagination, American Identities, and the Coming of the Civil War

In 1864, forty years after its original publication and decades since it had gone out of print in Europe, a largely obscure work by a Swiss liberal writer was translated into English for the first time and issued by publishing houses in New York, Philadelphia, Boston, Cincinnati, and Baltimore. In *L'homme du Midi et L'homme du Nord*, to give it its original French title, the author Charles-Victor de Bonstetten delineated a whole range of ways in which environmental and especially climatic influences shape the character of the different regions of Europe. Taking the Alps as the dividing line, Bonstetten constructed a dichotomy between the populations of the north of the continent and those of the south, encompassing traits such as liberty, religion, suicide, drunkenness, love, 'indifference to the future,' and 'human sentiments and happiness.' Although neither region emerges entirely unscathed, Bonstetten evinces a clear preference for the north, criticising the southern climate's propensity to suppress personal liberty, create a 'thirst for vengeance,' and promote 'intoxication' via 'sensual gratification.' 2

Aside from contrasting its coolly reasoned constitution with the 'impassioned spirits' that animated the politics of Ancient Rome, Bonstetten had little to say about the new nation across the Atlantic.³ Yet the timing of the reissuing of his work in the United States, with the translated title *The Man of the North and the Man of the South*, did not escape the attention of its readers. Although 'the illustrative references are chiefly European,' opined one reviewer, 'the great principles are the same everywhere, and we may find an interest in endeavoring to apply them to our own North and South.' The republication, a British commentator noted, must have come 'for the sake of the bearing which his remarks have upon the American struggle.' In the preface the anonymous translator disclaimed 'any party spirit' and assured the readers that it was reissued 'wholly on impersonal and philosophical grounds.' Yet given that the work was issued by five publishing houses in Union states and came three years into a bloody civil war between 'the North and the South,' it would have

¹ Ch-Victor de Bonstetten, *The Man of the North and the Man of the South; or the Influence of Climate* (New York, 1864), 34, 160. The original publication is: Ch-Victor de Bonstetten, *L'homme du Midi et L'homme du Nord; ou L'influence du Climat* (Geneva, 1824).

² Ibid, 75, 121, 174.

³ Ibid. 32.

⁴ 'Literary Intelligence', United States Service Magazine, i (1864), 82.

⁵ 'Current Literature', *The Spectator*, 16 April 1864, 455.

⁶ Bonstetten, *Man of the North*, v.

been only logical for Americans to read it as a cultural and philosophical defence of the Union cause on climatic grounds.

This chapter argues that Bonstetten's climatic reasoning fell on fertile ground in the United States, finding an audience that was accustomed to viewing human nature as intimately connected to physical nature. Few observers were what we might consider strict environmental determinists who believed that it was environmental factors alone that guided the course of human development. Even Bonstetten admitted that human actions were 'never wholly traceable to climatic agency.' Yet similarly few assigned environmental factors no role whatsoever. Environmental effects can be roughly divided into two categories: direct and indirect. The first type included the influence of climate on the body, such as the supposedly lethargy-inducing effects of hotter temperatures on the human constitution. The second type encompassed the secondary influence of environmental factors on social, economic, and political institutions. The supposed laziness of those in hotter climates was believed to make them more susceptible to submitting to despotic rule, for instance, while a colder climate was thought to betoken a more watchful population that would jealously guard its political liberties.

In the crucible of the mid-nineteenth century, such beliefs in the intimate connection between the natural world and human society were crucial to attempts to navigate the shifting boundaries of national, regional, and sectional identities. Although Daniel Webster famously declared that he spoke 'not as a Massachusetts man, nor as a Northern man, but as an American,' the reality was not so simple. Antebellum Americans could not simply choose to act or speak as representatives of *either* their state, region, section, or nation; rather, these overlapping scales of identity coexisted in an uneasy balancing act or, quite often, in open tension with one another. A central fact of antebellum life was the constant negotiation and renegotiation of these identities. While nation-building was a vital concern, the federal system ensured that the state functioned as a fundamental unit of political belonging and decision-making, while economic and cultural affinities powerfully, if imprecisely, bound people together with a common regional identity. In times of crisis, especially around the slavery issue, regional interests were subordinated, albeit sometimes briefly and never wholly, to broader sectional concerns that divided the nation into North and South. The process of creating a cohesive national whole, then, was never uncontested and frequently

⁷ Ibid. 10.

⁸ Daniel Webster, 'The Constitution and the Union', in *The Works of Daniel Webster*, 5 vols. (Boston, 1851), v, 335.

became subsumed by the special concerns of the different blocks of identity out of which it was constructed. Excitement about the exceptional character and potential of the United States was never unencumbered by fears about it splintering into competing factions or, perhaps even worse, one state, region, or section becoming unassailably dominant over the others.

As a generation of scholars have shown, identities at all scales are not stable absolutes but rather products of the social and cultural contexts in which they are formulated. In Paul Quigley's words, nationalism was not 'a rigid container' but 'a variable and multidimensional concept that people relate to in different ways in changing contexts.'9 We can fruitfully think about this contingent process of identity construction in terms of what Martin W. Lewis and Kären E. Wigen call 'metageographies,' spatial frameworks that often bear little resemblance to the actual configuration of the globe, but through which people organise their views of the world and the divisions within it. Calling an arbitrary geographical area a nation, they argue, creates metageographical 'ideological structures' that 'will uniformity out of diversity,' allowing nations to become 'reified as natural and fundamental building blocks of global geography.' James D. Drake has productively applied this conceptual framework to the early construction of American national identity, detailing how the 'geographical perceptions' of the Founders enabled them to imagine themselves as an independent nation, providing in sum 'one of the most significant and potent justifications for the nation's founding.'

Metageographical structures like continents and nations only gain their full potency when juxtaposed against an 'other.' Contests between imagined geographical regions such as the global north and the global south or the Orient and the West have been defining features of human history. Another metageographical contrast with a long history in western thought was that of the temperate 'norm' against the tropical 'other.' Scholars have documented how, with the expansion of colonialism into unfamiliar geographical areas, the distinction between tropicality and temperateness was consistently reinforced throughout the early decades of the nineteenth century. Aided by new methods and instruments, scientific studies of the unfamiliar natural world were central to the colonial project and served to retrench a sense of difference between the people of the temperate metropole and those of the tropical

⁹ Paul Ouigley, Shifting Grounds: Nationalism and the American South, 1848-1865 (New York, 2012), 5.

¹⁰ Martin W. Lewis and Kären E. Wigen, *The Myth of Continents: A Critique of Metageography* (Berkeley, 1997), xi, 8.

¹¹ James D. Drake, *The Nation's Nature: How Continental Presumptions Gave Rise to the United States of America* (Charlottesville, 2011), 2.

colony.¹² Ideas about the natural world and its relationship with human society that arose from these studies were crucial in the construction of this duality, forming a prominent example of what historian of science David N. Livingstone calls the tendency to 'think of climate in moral categories' that constituted malleable but powerful ideological tools.¹³ In the words of David Arnold, 'the environmentalist paradigm has been used to establish "otherness," to make contrasts between different societies as well as to explain the cultural and historical idiosyncrasies of any one society.¹⁴

Building on the work of these scholars, this chapter will argue that discourses of environmental inclusion and othering were central to the construction of the various scales of American identities during the mid-nineteenth century. It will show that the interdependence of human society and the natural world was thought to be crucial to the character of societies and important constitutive elements of the identities they formed. The categories of 'norms' and 'others' that were thereby established were in many crucial respects metageographical, to a large degree socially and culturally constructed rather than faithful representations of real environmental or climatic contrasts between regions. That is not to say that such differences did not exist, or that they were not important factors in the history of this period, but to explain how various groups and identifications thought themselves into existence and defined themselves in relation to others.

When mid-nineteenth-century Americans constructed these metageographical 'norms' and 'others,' they drew upon a popular scientific treatise that situated its subjects in the context of their relationship to the natural world: the so-called 'New Geography' of Swiss-American scientist Arnold Guyot. Guyot cherished a fervent belief that the development of human civilisation could be best understood as a providentially defined evolution of man's relationship to the natural world. After he emigrated to the United States in 1848, Guyot's convictions reached a broad audience in the form of his book *Earth and Man*, based on a series of lectures he gave at the Lowell Institute in Boston shortly after his arrival. ¹⁵ Running through more than thirty editions in the United States and reviewed lavishly in numerous periodicals, *Earth and Man* captured the imagination of many Americans, attracted by its

¹² David Arnold, *The Problem of Nature: Environment, Culture and European Expansion* (Oxford, 1996); Mark Harrison, *Climates and Constitutions: Health, Race, Environment and British Imperialism in India* (Oxford, 1999); Richard Drayton, *Nature's Government: Science, Imperial Britain, and the 'Improvement' of the World* (New Haven, 2000).

¹³ David N. Livingstone, 'Race, Space and Moral Climatology: Notes towards a Genealogy', *Journal of Historical Geography*, xxviii (2002), 160.

¹⁴ Arnold, *Problem of Nature*, 12.

¹⁵ Arnold Guyot, *The Earth and Man: Lectures on Comparative Physical Geography, in its Relation to the History of Mankind*, trans. C. C. Felton, 11th ed. (Boston, 1857 [1849]).

mixture of scientific reasoning and data with clear moralistic conclusions oriented around distinctive metageographical constructs. Emphasising the progressive development of civilisation in temperate climates and its degeneration in tropical ones, Guyot argued that the former incentivised labour and industry while the latter discouraged it. He conceived of the changing relationship to the natural world as an entirely natural law of cultural development, with the temperate zone one of environmental possibilism and the tropics destined to deny its inhabitants the full measure of moral and intellectual growth.

When it came to the defining the role of the United States in the development of civilisation, American nationalists appropriated the mantle of temperateness to set it apart from countries in the less favourable climatic zones, most prominently in Central America. Yet this alone was not enough to differentiate the still new nation from other temperate countries in Europe. To this end, they constructed the United States as a distinct geographical entity endowed by Providence with the capacity to expand across the whole of North America and become the new standard-bearer for civilisation. Situated on a geographically distant continent, its unspoiled natural world allowed the United States, conceptualised as 'nature's nation,' to start again unencumbered by the outmoded institutions that hampered the Old World. Furthermore, it was peculiarly favoured with an astonishing diversity of natural productions that would ensure the highest level of socio-economic development. The technologies used to achieve the development of these resources and integrate the different regions into one nation were thus not conceived as destroying or overturning the natural order. Rather, their role was, in the words of historian David Nye, to 'complete the design latent within it.' What was on the one hand clearly the exploitation of the physical environment was

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¹⁶ As countless historians of early American culture have shown, images of the natural world were central to the formation of American national identity. Much of the literature has centred around the changing and contested concept of 'wilderness.' For the most relevant examples, see: Perry Miller, 'The Romantic Dilemma in American Nationalism and the Concept of Nature', *The Harvard Theological Review*, xlviii (1955), 239-53; Roderick Nash, *Wilderness and the American Mind* (New Haven, 1967); William Cronon, 'The Trouble of Wilderness; or, Getting Back to the Wrong Nature', in William Cronon (ed.), *Uncommon Ground: Toward Reinventing Nature* (New York, 1995), 69-90. Some of the most fruitful studies of this topic have been related to literary and artistic perceptions of nature and national identity, such as: Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (New York, 1964); Angela Miller, *The Empire of the Eye: Landscape Representation and American Cultural Politics, 1825-1875* (Ithaca, 1993); Barbara Novak, *Nature and Culture: American Landscape and Painting, 1825-1875*, 3rd ed. (New York, 2007 [1980]). In recent years, a flourishing historical literature has documented the impact of space upon the American sense of self, for instance: Martin Brückner, *The Geographic Revolution in Early America: Maps, Literacy, & National Identity* (Chapel Hill, 2006); Drake, *Nation's Nature*; Susan Schulten, *Mapping the Nation: History and Cartography in Nineteenth-Century America* (Chicago, 2012).

¹⁷ David E. Nye, *America as Second Creation: Technology and Narratives of New Beginnings* (Cambridge, MA, 2003), 10.

simultaneously thought by contemporaries to be entirely natural, the logical and indeed inevitable culmination of the natural law of cultural development.

Concurrent and interlinked with the naturalisation of environmental exploitation was the consolidation of 'natural' white and male power structures. Native Americans diverged from the Euro-American norms of land use and resource development and, as such, few doubted that they would long feature in the 'natural' course of civilisation. Instead, they would vanish in what was conceptualised as a process entirely in keeping with the natural laws shaping human development. Furthermore, the construction of the metageographical 'tropics' was highly gendered, with Central American nations frequently portrayed as effeminate, placed in sharp contrast to normalised Euro-American sexual practices and hegemonic forms of masculinity. Climatically induced indolence, sexual licentiousness, and moral depravity were constantly invoked by white male commentators as characteristic of the peoples they encountered, or imagined, south of their nation's borders.

While the environmental imagination played an important role in constructing a racialised and gendered American national identity, its meanings and significance for identity formation remained contested and multifaceted. Indeed, the emphasis on natural laws also served to undermine the self-fashioning of the unified nation. Although divergent readings of the superiority of the environments of separate regions within the U.S. never disappeared and indeed co-existed with a sense of national coherence in the decades after the founding, in the 1840s and especially the 1850s a process of sectional othering gathered pace. The metageographical construct of 'the North' became increasingly identified with the history and characteristics of rugged New England, while the interests of the metageographical 'South' were more and more tied to the cotton-growing districts of the humid Deep South. The temperate ideal was frequently invoked by Northerners to set themselves apart from those in the U.S. South, which became increasingly trussed to the morally and intellectually degraded tropics. Spokespeople of the southern states, meanwhile, increasingly conceptualised their region as geographically and environmentally distinctive, arguing that this would enable them to flourish independently from the grasping cupidity of the North.

The point here, then, is not to present an entirely new version of the coming of the Civil War, or to argue simplistically that the conflict was directly 'caused' by the diverging environmental imaginations of the two sections. This would unduly sideline the concrete

¹⁸ The essential text on the gendered construction of 'the tropics' by Americans is: Amy S. Greenberg, *Manifest Manhood and the Antebellum American Empire* (New York, 2005).

economic, social, and political fissures that were defining features of the antebellum period, all of which were linked to the multifaceted debate over slavery in the American republic. Yet, as Steven Hahn has put it, "sectionalism" was less a "fact" of politics than an important political construct in the battle over slavery's future.' I argue that studying the different ways in which the environmental imagination took on particular inflections in the decades before the war can provide a productive lens to consider how constructed sectional identities crystallised to the point in which many representatives of the North and South began to see the culture and society of the other section as distinctive and, in important respects, incompatible with their own.

Arnold Guyot, the 'New Geography,' and the 'Geographical March of History'

When the Swiss-born geologist and geographer Arnold Guyot arrived in the United States in 1848, he set about trying to change how geography was written and, in turn, how it was perceived by American audiences. Geography 'should not only describe, it should compare, it should interpret, it should rise to the *how* and the *wherefore* of the phenomena which it describes,' Guyot insisted. 'It is not enough for it coldly to *anatomize* the globe... It must endeavour to seize those incessant mutual actions of the different portions of physical nature upon each other, of inorganic nature upon organized beings, upon man in particular, and upon the successive development of human societies.'²⁰ Rather than primarily a series of detached descriptions of terrestrial and atmospheric phenomena, Guyot here urged his fellow geographers to emphasise the interdependence of these phenomena with the course of human societies. Drawing on his deeply held faith in natural theology, Guyot hoped thus to 'comprehend the purposes of God, as to the destinies of nations, by examining with care the theatre, seemingly arranged by Him for the realization of the new social order, towards which humanity is tending with hope.'²¹

This conviction of geography's higher purpose was a product of Guyot's strong personal religious faith, but also reflected his academic upbringing in Switzerland and Germany.²²

¹⁹ Steven Hahn, A Nation Without Borders: The United States and its World in an Age of Civil Wars, 1830-1910 (New York, 2016), 3.

²⁰ Guyot, Earth and Man, 22. Emphasis in original.

²¹ Ibid. 33.

²² There is no modern biography of Guyot. For details of his life I have relied primarily upon: James D. Dana, *Memoir of Arnold Guyot*, 1807-1884 (n.p., 1886). The most detailed recent treatment of his work in the United States, albeit through the lens of his impact on Henry David Thoreau, is: Richard J. Schneider, *Civilizing Thoreau: Human Ecology and the Emerging Social Sciences in the Major Works* (Woodbridge, 2016), passim.

During his undergraduate studies at the University of Berlin, Guyot attended lectures by such luminaries as Henrik Steffens and G. W. F. Hegel on the philosophy of science and nature, but his greatest inspiration was undoubtedly the German geographer Carl Ritter, whom Guyot eulogised at length in a speech to the American Geographical and Statistical Society in 1859.²³ Guyot's emphasis on the interdependence of human society and the natural world was inspired by Ritter's well-known theory of the world as an organic whole in which everything is interconnected. In Erdkunde, translated into English as Comparative Geography, Ritter wrote that 'there has been lacking a knowledge of the principle of organic unity which pervades the whole... The whole subject of relations is unstudied.'24 For Ritter, alongside his more famous colleague Alexander von Humboldt, the idea of Zusammenhang was of central importance. Perhaps best translated as interconnectedness or interdependence, this term signalled that, in the words of historian Margarita Bowen, 'the earth must be viewed as a whole, dynamic, developing organism made up of nature and man with all moral and intellectual life interconnected with it.'25 In his eulogy of Ritter, Guyot argued that 'none before him perceived so clearly the hidden, but strong, ties which mutually bind mind and nature; these close and fruitful relations between man and his dwelling-place, between a continent and its inhabitants, between a country and the people.' To focus on these relations, Guyot asserted, 'is to begin a new science. It is the science of a living globe... [and] this path alone will lead us to the temple of knowledge. '26

After completing his studies in Berlin, Guyot took up the post of Chair of History and Physical Geography at the university in Neuchâtel in Switzerland before being persuaded to emigrate to the United States by his great friend and fellow scientist Louis Agassiz in 1848. Arriving in Cambridge armed with letters of recommendation from Ritter among others, Guyot soon became a fixture in the social scene of the Boston elite before taking up a role as Professor of Physical Geography at Princeton in 1854.²⁷ As a lecturer, Guyot was in high demand, most notably holding two separate courses at the Smithsonian Institute in 1853 and 1862.²⁸ He also devoted much of his time to reforming educational curricula in Massachusetts and beyond, advocating changing school geography from primarily

²³ Arnold Guyot, Carl Ritter: An Address to the American Geographical and Statistical Society (Princeton, 1860).

²⁴ Carl Ritter, *Comparative Geography*, trans. William L. Gage (Edinburgh, 1865), 10. Emphasis in original. ²⁵ Margarita Bowen, *Empiricism and Geographical Thought from Francis Bacon to Alexander von Humboldt* (Cambridge, UK, 1981), 215.

²⁶ Guyot, *Ritter*, 48, 50.

²⁷ For letter of recommendation, see: Karl Ritter to George Bancroft, 6 August 1849, George Bancroft Papers, Massachusetts Historical Society. For Guyot's social role in Boston, see: Edward Everett to Sir Roderick Murchison, 7 May 1849, Edward Everett Papers, Massachusetts Historical Society.

description to a science investigating the relationship between man and nature.²⁹ It was, however, his first academic engagement following his arrival that was to define his career. In January and February 1849, Guyot gave a series of twelve lectures at Boston's Lowell Institute. Although he spoke in French, there was sufficient interest from Bostonians to warrant a full translation and publication of each lecture in the *Boston Evening Traveller*, with all of the translations later compiled into book form under the title *Earth and Man*. This volume attained such a wide readership that it was published more than thirty times in the United States stretching into the twentieth century, while also going through five British editions and being translated into French, Russian, and German.³⁰

Much of *Earth and Man* was devoted to delineating what Guyot called the 'hidden influences' that the different forms of the continents exercised on the development of human civilisation.³¹ Here Guyot saw great potential for harmonising the studies of geography and history. 'The philosophy of history,' Guyot declared, 'hails now, with joy, the birth of a still younger sister, the Philosophy of Geography, the one a help to the other; both forever as inseparable as man is from nature.'³² The forms, arrangement, and distribution of terrestrial masses, he argued, reveal a plan in which each continent was designed 'to perform a special part corresponding to the wants of humanity.'³³ Civilisation did not develop in the same place, but passes 'from one country to another, from one continent to another, following a certain order' defined, of course, by God. Beginning in western Asia, Guyot argued that the civilisational 'order' had moved westward across the northern continents, reaching its fullest maturity in western Europe and finding a new congenial field of activity in North America. This was 'the geographical march of history.'³⁴

For Guyot, the level of moral and intellectual development was inextricably connected to, indeed to a large degree determined by, the relationship between the geography, topography, and climate of the countries in question and the human societies that inhabited them. Here Guyot followed his inspiration Ritter, who wrote that 'the customs of individuals and nations differ in all countries, because man is dependent on the nature of his dwelling-place.' Earth and Man presented a beguilingly simple duality in which the temperate zone, concentrated

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²⁹ Ibid, 335-6; Bowen, *Empiricism*, 171-2.

³⁰ Details on the publication of *Earth and Man* are taken from: Bradley J. Gundlach, *Process and Providence: The Evolution Question at Princeton, 1845-1929* (Grand Rapids, 2013), 34.

³¹ Guyot, Earth and Man, 241.

³² Guyot, Ritter, 50.

³³ Guyot, Earth and Man, 34.

³⁴ Ibid. 300.

³⁵ Carl Ritter, 'External Features of the Earth and their Impact on History', in *Geographical Studies by the Late Professor Carl Ritter of Berlin*, trans. and ed. William Leonhard Gage (Boston, 1863), 318.

in the northern continents, harboured the 'brain of humanity' and inexorably gained ascendency over the tropical zone, whose inhabitants 'always remained at the bottom of the scale of culture.'³⁶ The crux of the matter was that the climate of the temperate zone facilitated and indeed encouraged activity, while the tropical climate suppressed it. As such, the inhabitants of the tropical zone were oppressed by the natural wealth that surrounded them, leaving them little incentive to undertake further development of its resources. This was, in contrast, the central means of subsistence in the temperate zone, promoting moral and intellectual growth. In the latter case 'all is activity, movement' inciting man to 'constant struggle..., to the vigorous employment of all his faculties,' while in the former 'an extensive heat enfeebles man,' meaning 'the physical instincts of our nature, those of the higher faculties; passion, sentiment, imagination, predominate over intellect and reason.' For man, nature in the temperate zone is 'a useful helper,' while in the tropics 'he is conquered by her.'³⁷

As this last quote indicates, Guyot conceived of the changing dynamic of the human-nature relationship in highly gendered terms. He presented the 'geographical march of history' as the ascendency of 'the mind of man' to 'a sublimer height' in which he learns 'how to subdue nature, and to make her the instrument of intelligence.'38 The choice of pronouns was not incidental but instead representative of a long-standing trope that encoded gendered hierarchies into portrayals of historical development. As Carolyn Merchant has shown, much of western culture was organised around a biblical 'Recovery Narrative' in which men endeavoured to redeem a world fallen after Eve succumbed to temptation in the Garden of Eden.³⁹ In Guyot's telling, the necessary masculine energies could never predominate in tropical climates and instead man 'submits to her [nature's] yoke, and becomes again the animal man... forgetful of his high moral destination.'40 In temperate latitudes, on the contrary, the feminised nature plays a different role: 'less mighty, less gigantesque,... she grants to his active and intelligent labor more than his necessities require.'41 To adopt Merchant's framework, Guyot portrayed a gendered but geographically circumscribed 'Recovery Narrative.' In his reading, the measure, indeed the providentially designed *raison* d'être, of civilisation was for masculine agency to make feminine nature useful, but the ability to achieve this was itself determined by geography, climate, and topography.

³⁶ Guyot, *Earth and Man*, 331, 263.

³⁷ Ibid, 268-70.

³⁸ Ibid. 31.

³⁹ Carolyn Merchant, Reinventing Eden: The Fate of Nature in Western Culture (New York, 2004).

⁴⁰ Guyot, Earth and Man, 269.

⁴¹ Ibid.

In many ways, these ideas were not novel to Guyot or to the mid-nineteenth century. The doctrine of environmental determinism, which held that natural conditions predispose certain societies to follow certain paths of development, had been widely held for centuries. As Clarence J. Glacken has shown, the conviction that the earth's 'climates, its relief [and] the configuration of its continents [have] influenced the moral and social nature of individuals, and have had an influence in molding the character and nature of human culture,' is a constant throughout much of human history.⁴² In the Enlightenment, prominent philosophes such as Montesquieu argued famously that climate influenced and, in many cases, determined patterns of societal growth.⁴³

While Guyot followed in this long philosophical tradition, he employed contemporary scientific theories and forms of evidence to back up his arguments, co-opting some of these theories under the fresh mantle of the 'New Geography'. While earlier observers, including many Enlightenment philosophes, adhered to an interpretation of a 'climate' strictly defined by latitude, Guyot followed Alexander von Humboldt in his more dynamic understanding of climate as dependent upon a multitude of factors particular to a specific locality. ⁴⁴ The 'New Geography' as encapsulated in *Earth and Man* incorporated graphs, charts, maps, and drawings, trumpeting the scientific credentials of its author and the subject treated. Yet these were marshalled in support of easily digestible arguments with clear moral implications, derived from Guyot's conviction of the divine purpose of geographical study. Sweeping contrasts were emphasised throughout, particularly between the Old and New Worlds and the continents of the northern and southern hemispheres. 'The continents composing each of the two groups have common characters,' Guyot argued, with 'the three in the North resembling each other, and the three in the South presenting equally strong analogies.' ⁴⁵

The reviews of *Earth and Man* in newspapers and periodicals were overwhelmingly favourable, suggesting that its combination of precise scientific data with broad moralistic conclusions had substantial success in achieving Guyot's aim of changing how Americans viewed the discipline of geography. In Guyot's hands, remarked a columnist in the *North American Review*, geography is no longer 'a merely descriptive branch of learning, drier than the remainder biscuit after a voyage' but is instead transformed 'into a science, the

⁴² Clarence J. Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the Eighteenth Century* (Berkeley, 1967), viii.

⁴³ Ibid, 565ff.

⁴⁴ See, e.g.: Guyot, *Earth and Man*, 9, 146. On changing definitions of climate in the United States at the turn of the nineteenth century, see especially: Anya Zilberstein, *A Temperate Empire: Making Climate Change in Early America* (New York, 2016).

⁴⁵ Guyot, Earth and Man, 242.

principles of which are definite and the results conclusive. '46 Readers of *Earth and Man*, an author in the *Democratic Review* noted, would find that 'the study of Geography is not, as... is generally supposed, a mere nomenclature of localities; it has far higher aims, and is connected with the destinies of the whole human race, as indicated in the influence of climate and soil upon the physical being.' From the other side of the political aisle, a reviewer in *American Whig Review* echoed these sentiments: 'Geography... is no longer the dry, unmeaning science it once was held to be, involving no great principle and tending to no great purpose; but it is at last felt to be, in its growth and perfection, a foreshadowing of the physical destinies of mankind.'48

It was also surely no coincidence that the works of Carl Ritter received new-found attention in the period Guyot was active in the United States. A series of Ritter's essays were translated into English, collated, and published in the United States for the first time in 1863, popularising Ritter's geographical works and securing him the title, in one author's estimation, of 'one of the foremost philosophers of the nineteenth century.' The works of Guyot, Ritter, and Alexander von Humboldt were considered by one reviewer to constitute a body of work that 'will together be handed down to posterity as an enduring monument of the extent to which the knowledge of nature, and especially of its relations to man, had been carried in the nineteenth century of the Christian era.' The 'old geography' was 'but a description of the earth and its inhabitants... it was not science but topography.' In contrast, 'the new geography is not description but philosophy... It shows how every part is important to every other part.' The reviewer concluded that Agassiz, Guyot, and Humboldt, while they may have been 'Europeans by birth,' were in fact 'Americans by adoption,' working out their new science on a suitably majestic geographical scale.⁵⁰

Guyot and Ritter's conviction that taking the interdependency of humans and the natural world as a central object of inquiry yields new insights into the history and character of human societies seemed to particularly capture the imagination of their American readers. Numerous reviewers echoed Guyot's providential schema in which geographical factors, by affecting the willingness of humans to develop natural resources, determined the potential of each people for civilisation. They agreed that humans were interdependent with the natural world, both acting upon and being conditioned by it. 'We see through all nature,'

⁴⁶ 'Guyot's Comparative Physical Geography', North American Review, 1xix (1849), 251-2.

⁴⁷ 'Notices of New Books', *Democratic Review*, xxv (1849), 96.

⁴⁸ 'Earth and Man', American Whig Review, xiv (1851), 195.

⁴⁹ Ritter, Geographical Studies. Quote from: 'Carl Ritter', North American Review, xcviii (1864), 498.

⁵⁰ 'Humboldt, Ritter, and the New Geography', New Englander, cxx (1860), 286-7, 281, 305.

opined an author in *Southern Quarterly Review*, 'a mutual dependence, a mutual relation, a mutual re-action, of each individual part upon the entire whole.' Humans were integral to these networks and as such those interested in the development of civilisation should attempt 'to comprehend the influence which all these phenomena exert upon his development, whether we consider the growth and decline of individual nations, or the great progress which the human species has made in the course of historic time.' James D. B. De Bow's 1851 address to the College of Charleston took up a similar theme and was clearly inspired by his reading of what he called the 'enlightened geography' of *Earth and Man*. He adverted to the 'striking and beautiful relations and contrasts in the continents, islands, oceans and climates of the earth, as they influence vegetable and animal life, and man and society.' 52

Guyot's gendered contrasts between the temperate and tropical zone and his conviction about the significance of environmental factors to the 'geographical march of history' were also broadly shared outside of articles specifically reviewing his works. When Ralph Waldo Emerson quipped that 'wherever snow falls, there is usually civil freedom,' while 'where the banana grows, the animal system is indolent and... man is grasping, sensual, and cruel,' he surely exaggerated for effect, but it was not an unreasonable approximation of a widely held sentiment.⁵³ The Pennsylvanian poet and travel writer Bayard Taylor, for instance, surmised from his experiences that 'the zone of action and achievement lies between lat[itude] 35th and 55th north. On either side of this belt we have a superabundance of the benumbing or relaxing element,' referring to cold and heat respectively.⁵⁴ In a series of articles for *De* Bow's Review, author J. W. Scott opined at length on the 'Effect of Climate on Human Development,' concluding that 'geography and history tell us that the hot climates of the torrid zone, near the sea-level, produce the richest profusion of vegetable growth...; but that man, in these climes, is inferior; that he has always been inferior in organization and temperament.'55 A Maryland newspaper explained that 'a nature too rich, too prodigal of her gifts, does not compel man to wrest from her his daily bread by his daily toil,' while 'a more economical nature yields nothing, except to the sweat of his brow, every gift on her part is a recompense for effort on his.'56 'Nothing can be more true,' summarised an author in Democratic Review, 'than that the intellectual character of every people is very importantly

⁵¹ 'Physical Science and its Relation to Natural and Revealed Religion', *Southern Quarterly Review*, iii (1851), 437.

⁵² J. D. B. De Bow, 'The Earth and Man', *De Bow's Review*, x (1851), 287-8.

⁵³ R. W. Emerson, 'American Civilization', Atlantic Monthly, ix (1862), 505.

⁵⁴ Bayard Taylor, At Home and Abroad: A Sketch-Book of Life, Scenery, and Men (New York, 1860), 498.

⁵⁵ J. W. Scott, 'Effect of Climate on Human Development', *De Bow's Review*, xxviii (1860), 495.

⁵⁶ 'Human Nature in Different Climates', *Easton Star*, 9 May 1854, 1.

modified and influenced by the physical nature of the country they inhabit. Climate, soil, productions, and the general physiognomy of a country, have a plastic power over the mind.'57

As these examples demonstrate, the relationship to the natural world formed a touchstone when antebellum Americans attempted to understand the development of civilisation and the character of foreign societies. Arnold Guyot's teleological rendering of the 'geographical march of history,' inspired by Carl Ritter's teachings on the interdependence of human society and the natural world, was received to broad popular acclaim in a series of widely read books and reprinted lectures. For Guyot, the level of civilisation corresponded to the ability to develop the natural resources of the area in question. Colder climates incentivised industry and enabled more effective economic, moral, and intellectual growth, whereas hotter temperatures inhibited the development of these faculties. The result of such logic was the construction of a binary opposition that set the civilised, masculine, temperate 'norm' apart from the degraded, emasculated, tropical 'other.'

The Environmental Case for American Exceptionalism

Guyot was enthusiastic about the crucial role his adoptive home was to play in the development of civilisation. He conceptualised the 'geographical march of history' as a steady process of accumulation of knowledge and power within the temperate zone. He referred to Asia, Europe, and North America as 'the three grand stages of humanity,' which formed respectively the 'cradle,' 'the school,' and the 'theatre of manhood' in human development. By reaching the final stage of this development, humans had gained enough power to fully take advantages of America's particularly abundant supply of natural resources, allowing man to 'practise all he has learned and bring into action all the forces he has acquired.'58 Drawing upon his own perspective as a European immigrant, Guyot argued that history and geography had combined in America 'not to give birth and grow to a new civilization, but to receive one ready-made... It is here that all the peoples of Europe may meet together, with room enough to move in; may commingle their efforts and their gifts.'59 The New World environment enabled a new *relationship* between peoples, and between those peoples and the land, which marked the culmination of history's geographical march.

⁵⁷ 'Educational Facilities – United States and Britain', *Democratic Review*, xxv (1849), 436.

⁵⁸ Guyot, Earth and Man, 327.

⁵⁹ Ibid, 297.

Although, as noted, important Democratic organs were enamoured with the explanatory power of the New Geography, and it is not known that Democrats lodged any specific complaints against this portrayal of historical development, Guyot's views nevertheless seemed more in line with the Whig interpretation of history. It is perhaps for this reason that the reviews in Whig organs tended to be longer and more effusive. ⁶⁰ As historian Daniel Walker Howe has shown, antebellum Whigs regarded history as 'the gradual unfolding of a pattern.'61 This was evident in the American Whig Review article on Earth and Man, which conceptualised human history as a process in which 'step by step [humans] have acquired the mastery of the powers and the wider realms of nature, which, seized too soon, would have destroyed them, either by stimulating their growth to a precocious and faulty development.'62 The success of more civilised societies, in this reading, was founded on steady progression and accumulation, rather than the hasty wielding of power. Guyot's rendering of the gradual, organic development of American social and political characteristics chimed with the Whig sentiment expressed by Daniel Webster: 'Our American liberty has an ancestry, a pedigree, a history.'63 Henry Carey, the pre-eminent Whig political economist, drew a telling analogy between the workings of nature and those of human society: 'When nature works most beneficially for man, she works slowly; and what is true in the natural world, cannot be other than true in the social one. Man as rarely profits by violent changes in the societary edifice, as he does by earthquakes, or by waterspouts.'64

Democrats, meanwhile, held a worldview more akin to what historian Lewis C. Perry describes as 'pastlessness,' with one particularly vocal faction professing a belief in a 'Young America' emancipated from the shackles of the Old World's institutions and history. The natural features of the American continent provided the opportunity to begin the world anew with more advanced social and political institutions. 'Our country exhibits none of the hoary remains of ancient civilization, to bind and tetter [sic] reflection to former men and things,' rejoiced an author in *Democratic Review*. 'On the contrary, it everywhere exhibits the freshness and magnificence of nature, which fill the mind with joy for the present

⁶⁰ Compare, for instance, the *Democratic Review*'s comments in 'Notices of New Books' and the *American Whig Review*'s praise in 'Earth and Man.'

⁶¹ Daniel Walker Howe, *The Political Culture of the American Whigs* (Chicago, 1979), 73.

^{62 &#}x27;Earth and Man', 205.

⁶³ Daniel Webster, 'The Rhode Island Government', in *The Writings and Speeches of Daniel Webster*, 18 vols. (Boston, 1903), xi, 220.

⁶⁴ H. C. Carey, *Principles of Social Science*, 3 vols. (Philadelphia, 1858), i, 397.

⁶⁵ Lewis C. Perry, *Boats Against the Current: American Culture Between Revolution and Modernity, 1820-1860* (New York, 1993), part 2.

and hope for the future, instead of reflections on the past.'66 While in England 'the Anglo-Saxon race..., like a hot-house plant, is confined in too small a vessel; it has become restricted in its growth, and requires to be transplanted to a broad and genial soil,' in America 'this has been done.'67 The Democrat and pre-eminent American Romantic historian George Bancroft believed the United States to be exceptional because 'we have approached so near to nature, that we can hear her gentlest whispers... and therefore, the nation receives, vivifies, and applies principles, which in Europe the wisest accept with distrust.'68

However, by no means all those who believed in the new and exceptional status of the United States were as blunt as the *Democratic Review* when it declared that 'the things of the past have but little interest or value for us. Probably no other civilized nation has at any period of its history so completely thrown off its allegiance to the past, as the American.'69 Even Bancroft, the favourite historian of the Young America Democrats, preferred to regard history as, according to Dorothy Ross, a process of 'realization rather than change.' In the ninth volume of his epic History of the United States, Bancroft wrote that 'America neither separated abruptly from the past, nor adhered to its decaying forms. The principles that gave life to the new institutions pervaded history like a prophecy. They did not compel a sudden change of social or of internal political relations; but they were as a light shining more and more brightly into the darkness.'71 Unwilling to surrender the appeal of history entirely, many Americans emphasised the age of American nature as a replacement for the human history provided by Europe. When writing up his tour of the western states, Washington Irving described his impressions of the 'lofty trees... like stately columns' reminded him 'of the effect of sunshine among the stained windows of a Gothic cathedral.'72 Ralph Waldo Emerson, who popularised the very phrase 'Young America,' attempted to straddle the divide between pastlessness and historical importance. While Americans, with 'houses and towns like mosses and lichens, so slight and new,' should be thankful for 'our want of feudal institutions,' it should nevertheless be remembered that 'this land too is as old as the Flood, and wants no ornament of privilege which nature could bestow.'73 These attempts to have it

⁶⁶ 'Educational Facilities', 439.

⁶⁷ 'Practical Annexation of England', *Democratic Review*, xix (1846), 5.

⁶⁸ George Bancroft, 'The Office of the People', in Bancroft, *Literary and Historical Miscellanies* (New York, 1855), 423.

⁶⁹ 'Thomas's Reminiscences', *Democratic Review*, viii (1840), 227.

⁷⁰ Dorothy Ross, 'Historical Consciousness in Nineteenth-Century America', *American Historical Review*, lxxxix (1984), 919.

⁷¹ George Bancroft, *History of the United States from the Discovery of the Continent*, 10 vols. (Boston, 1854-78), ix. 283.

⁷² Quoted in: Michael Kammen, *The Mystic Chords of Memory: The Transformation of Tradition in American Culture* (New York, 1993), 57.

⁷³ Quoted in: Novak, *Nature and Culture*, 226.

both ways, to substitute natural history in place of human history, betray the importance that American nature held for nationalists, allowing them to disavow outmoded institutions but retain a tradition and heritage that, being natural, was unassailably honourable and right.

Little of this reverence was reserved for the humans who had inhabited the continent for centuries before the arrival of European settlers. Like the technologically driven transformation of the western 'wilderness,' the supposed 'disappearance' of Native American tribes was considered by almost all to be an entirely inevitable operation of the natural law of cultural development. The recurring trope of the 'Vanishing American,' historian Brian W. Dippie has shown, was ubiquitous throughout discussions of the 'Indian question' in the decades before the Civil War. 74 Even while some still clung to the possibility that Native Americans could be 'civilised,' at the same time the Native Americans' relationship to the natural world was thought to be such that their lands would inexorably be conquered by more advanced white settlers. An author in the North American Review was representative when he stated that white men simply 'knew better' how to 'improve the bounties of providence' and would thus displace the Native American tribes.⁷⁵ Various authors tellingly employed natural metaphors to describe this process. The tribes would vanish 'as the snow before the sunbeam,' 'like a promontory of sand, exposed to the ceaseless encroachments of the ocean,' or 'like the leaves of the forest that are swept away by the autumn winds. '76 In the 1840s and 1850s, these differences were increasingly thought to be innate and biological. To the leader of the American School of Ethnology Josiah Nott, one of the pioneers of the theory that distinct races were the products of separate creations, it appeared 'as clear as the sun at noon-day, the last of these Red men will be numbered with the dead... You might as well attempt to change the nature of the buffalo.'77 So widespread was the conviction that Native Americans would fall foul of the geographical march of history, that even black abolitionist Frederick Douglass found himself agreeing with the virulently racist Nott. While 'the Indian dies under the flashing glance of the Anglo Saxon,' Douglass asserted, it was 'not so the Negro: civilization cannot kill him. He accepts it becomes part of it.'78

Similarly, if some partisan splits were evident in the question of the United States' relation to the history of the temperate Old World, Americans across party lines were quite clear

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⁷⁴ Brian W. Dippie, *The Vanishing American: White Attitudes and U.S. Indian Policy* (Middletown, 1982).

⁷⁵ 'Heckenwelder's Indian History', North American Review, x (1819), 169.

⁷⁶ All quotes from: Dippie, *Vanishing American*, 13.

⁷⁷ Josiah C. Nott and George R. Gliddon, *Types of Mankind* (Philadelphia, 1854), 69.

⁷⁸ Frederick Douglass, *The Claims of the Negro Ethnologically Considered* (Rochester, NY, 1854), 36.

where their nation was positioned in the temperate/tropical duality that, as we have seen above, held such explanatory power. Operating within the metageographical categories outlined so starkly in Earth and Man, Americans appropriated the mantle of temperateness and the accompanying positive influences on the characters of its inhabitants and the societies they formed, juxtaposing this against inferior nations oppressed by tropical climates. Commentators across party, regional, and sectional lines echoed loudly and frequently what Jedidiah Morse succinctly argued in a 1798 sermon, that the United States is 'situated in the *climate* of freedom, between the extremes of heat and cold.'⁷⁹ A Boston newspaper praised 'the general excellence of climates like ours over those of southern or tropical climes,' noting that the temperate United States escaped from climatic extremes such a 'seasons of ceaseless rain, ceaseless heat, ceaseless cold.'80 The United States, argued the Democratic Review, was located in the 'fairest portion of the temperate zone... its climate is salubrious to a degree not equalled in any region of similar extent.'81 The halls of Congress also witnessed frequent attempts to position the United States at the heart of the temperate zone. A Louisiana Democrat declared that 'God has given us a climate congenial to the highest perfection of man, and a soil that no quarter of the habitable globe can equal,' while a Whig Representative from Tennessee rejoiced that 'we do not go so far south as to penetrate the torrid regions, where the climate alone enervates the race; nor do we stretch so far north, as to embrace the frozen regions, where mankind is dwarfed by winters indescribably protracted and severe.'82

In order to position the United States as a foremost example of the temperate 'norm,' a counterpoint of the tropical 'other' was also required. In the mid-nineteenth century, it was most often Mexico and other Latin American states that provided this necessary foil. 83 A midwestern newspaper diagnosed the deficiencies in Mexican civilisation as stemming from the fact that 'its atmosphere has so much less oxygen in it than ours that the whole economy of life is changed... there is a want of vigor and robust feeling, which our climate affords a healthy man.'84 The prominent Whig Edward Everett employed similar logic when he declared that 'never, while the laws, not of civil society, but of God are unrepealed, will there be a hardy, virtuous, independent yeomanry, in regions where two acres of untilled

⁷⁹ Quoted in: Robert Lawson-Peebles, *Landscape and Written Expression in Revolutionary America: The World Turned Upside Down* (Cambridge, UK, 1988), 71. Emphasis in original.

^{80 &#}x27;The Advantages of Our Climate', Boston Evening Transcript, 21 March 1846, 2.

^{81 &#}x27;America in 1846 The Past – The Future', *Democratic Review*, xviii (January 1846), 57-8.

⁸² Congressional Globe, 29th Congress, 1st Session, Appendix, 24 June 1846, 748; ibid, 36th Congress, 1st Session, 29 March 1860, 1392.

⁸³ Greenberg, Manifest Manhood, 65-77.

^{84 &#}x27;The Climate of Mexico', Milwaukee Sentinel, 28 June 1848, 2.

banana will feed a hundred men.'⁸⁵ The man responsible for directing the survey of the boundary between Mexico and the United States, the Maryland-born topographical engineer William H. Emory, wrote in his 1857 report to Congress that 'the border is embraced in the zone separating the tropical from the temperate, more northern regions,' denouncing Mexico as suffering from 'too much tropical heat.' As such, Emory opined that 'it is fortunate, that two nations, which differ so much in laws, religion, customs, and physical wants, should be separated by... great features in physical geography,' such as the deserts of the southwestern United States.⁸⁶

A variety of Americans, then, inscribed the exceptionalism of the inhabitants of the United States onto the land and climatic features of their nation, juxtaposing it against its southern neighbour. To return to the geographical march of history, another common refrain was to contrast how the environmentally induced characters of these societies have influenced the history and development of the temperate and tropical regions of North America. Although the natural wealth of the tropical regions was almost universally admitted to be of a higher order, many believed this disincentivised the development of mental and physical capacities. By contrast, in the less profusive environment of the colonies that would become the United States, man was encouraged to learn the importance of industry and self-improvement in order to survive. 'The Spaniards inhabited a garden spot at home, and they sought a paradise in America, at a time their northern neighbors were struggling with icebergs,' explained the southern editor James D. B. De Bow. Yet while the Spanish settlers encountered 'a prolific soil [that] yielded them wealth, with only the labor of taking it away,' in order to fully develop man required a more challenging environment from which to wrest his subsistence.⁸⁷ The editor of *Harper's Magazine* held forth on the 'tropical fecundity' and 'rank luxuriance' that combined to make human societies in Central America 'the caricature and shame of human life elsewhere... the tropics and tyranny, combined with the natural sloth of the South, make havoc of Central American history.'88 An author in the *Democratic* Review, while noting his 'skepticism' about those who name climate as the only cause of civilisational defects, nevertheless largely agreed. On the one hand, the Spanish colonists were 'exposed to every temptation which it could not be expected undisciplined men would be able to resist,' being 'stimulated by external objects to every excess.' On the other, the

⁸⁵ Edward Everett, 'Oration Delivered at Plymouth', in *Orations and Speeches on Various Occasions*, 4 vols. (Boston, 1836-68), i, 54.

⁸⁶ Quoted in: Kris Fresonke, West of Emerson: The Design of Manifest Destiny (Berkeley, 2003), 80.

⁸⁷ J. D. B. De Bow, 'Some Thoughts on Political Economy and Government', *De Bow's Review*, ix (1850), 269

^{88 &#}x27;Editor's Easy Chair', Harper's New Monthly Magazine, ix (1854), 408.

Anglo-Americans 'were obliged to clear away the heavy forests, and cultivate the earth, in order to procure subsistence,' ensuring they were 'compelled to practice the most rigid economy.'89

These references to tropical 'temptations' and 'undisciplined men' indicate the importance of ideas about gender and masculinity to construction of the tropical 'other.' The moral degradation imposed by tropical climates was often portrayed in highly sexualised terms. For men from the United States, tropical America formed an object of both fascination and scorn, a place of iniquity and vice that contrasted sharply with the more virtuous sexual practices of the temperate zone. To use Anne McClintock's formulation, American soldiers and explorers envisaged Central America as the 'porno-tropics,' a 'fantastic magic lantern of the mind' onto which they projected their 'forbidden sexual desires and fears.'90 A borderline obsession with the bodies and practices of Latinas characterised Americans' reports of their tropical encounters. In the hotter parts of the day, soldiers in Zachary Taylor's army were known to 'gape as the young women of the Matamoras came down to the river, disrobed without hesitation or embarrassment, and plunged into the stream,' realising at once 'that the Mexican women were different.'91 Leading political figures stoked the fires of white male sexual conquest. Sam Houston encouraged American men 'to take a trip of exploration there, and look out for the beautiful senoritas, or pretty girls, and if you should choose to annex them, no doubt the result of this annexation will be a most powerful and delightful evidence of civilization.'92 These sentiments appeared, entirely unironically, alongside denunciations of the rampant sexuality among the inhabitants of tropical America. In Mexico, one official noted, 'the virtuous are far outnumbered by the vicious. Prostitution is carried out to a fearful extent; and it is quite common for parents to sell their daughters for money to gratify the lust of the purchaser.' Americans lamented the supposed disregard that Central Americans held for the institution of marriage, denouncing the resulting proliferation of 'illegitimate' births. 93

Portrayals of temperate America formed in stark contrast. Having toiled in more northerly and less fruitful environments, escaping the indolence and moral depravity of tropical

^{89 &#}x27;American History', Democratic Review, xxiv (1849), 161, 157.

⁹⁰ Anne McClintock, *Imperial Leather: Race, Gender, and Sexuality in the Colonial Contest* (New York. 1995).

⁹¹ Robert W. Johannsen, *To the Halls of the Montezumas: The Mexican War in the American Imagination* (New York, 1985), 169.

⁹² Quoted in: Greenberg, Manifest Manhood, 88.

⁹³ Quoted in: Fredrick B. Pike, *The United States and Latin America: Myths and Stereotypes of Civilization and Nature* (Austin, 1992), 58-9.

luxury, inhabitants of the United States had simultaneously strengthened their manhood and developed the capacity to make more effective use of the broad range of natural resources that North America harboured. 'The world contains no seat of empire so magnificent as this,' declared William Henry Seward in a speech to Congress, since it 'embraces all the varying climates of the temperate zone, and is traversed by wide-expanding lakes and long-branching rivers.'94 The celebrated explorer and Republican presidential candidate John C. Fremont remarked upon the influence of the vastness of U.S. territory on a moral and intellectual level. 'Shut in to narrow limits,' he mused, 'the mind is driven in upon itself and loses its elasticity,' while conversely the sheer space afforded by the western territories 'reacts on the mind, which unconsciously expands to larger limits and freer range of thought.⁹⁵ Others placed more emphasis on the economic benefits that would ensue from such a fortunate geographical position. An author in the southern periodical De Bow's Review rejoiced in the fact that 'nature has so bountifully endowed the grand and teeming continent on which we live with diversified aptitudes and capacities of production,' meaning that 'the rural economy of the United States embraces almost every variety of culture known to the industry of man.'96 Similar sentiments were echoed by a northern Whig publication: 'in soil and climate, in the possession of forests, fisheries, minerals, & c., indeed in all natural endowments, is there any country upon the habitable globe that can boast of such a profusion?'97

While, as we shall see, the diversity inherent in the climates and productions of the United States was often harnessed to highlight the incompatibility of different regions or sections, in other cases there remained substantial optimism that these differences could be a force for unity rather than division. 'The varieties of climate, soil, and resources of the different sections of our country, by promoting intercourse and trade between them, instead of raising antagonisms to destroy the Union, are constantly adding new inducements of interest to perpetuate it,' argued a Whig author. Southern cotton, the theory ran, needed northern manufacturers and vice versa. Equally, the eastern markets needed western foodstuffs, which in turn were reliant on eastern ports for distribution abroad. ⁹⁸ Some observers interpreted the geographical and topographical features on the continent as evidence that natural diversity was a divine injunction to the regions to closely collaborate for the greater national good. During the rancorous debates around the possibility of introducing slavery in the western territories in the late 1840s, numerous Congressmen lined up to warn that sectional division

⁹⁴ Congressional Globe, 31st Congress, 1st Session, Appendix, 11 March 1850, 262.

⁹⁵ John Charles Fremont, Memoirs of My Life (Chicago, 1887), 30.

⁹⁶ 'National Aspects of Agriculture', *De Bow's Review*, xxvi (1859), 93.

⁹⁷ 'The Creation of Values', American Whig Review, iv (1846), 641.

^{98 &#}x27;Dangers and Safeguards of the Union', ibid, ix (1849), 112-3.

would run counter to the nation's nature. The Rockies and Alleghenies were described by one as 'granite bands formed by an Almighty hand,' to bind the states together, while another declared that 'from the Atlantic coast, through the valley of the Mississippi, on to the Pacific ocean, we were by nature, ay, we were stamped by the hand of God himself, as one nation of men.'99 North America, argued New York Democrat Daniel S. Dickinson, 'presents to the eye one great geographical system,' indicating that 'laws more potent than those which prescribe artificial boundaries, will ordain that it shall be united.'100 The Mississippi River held a particularly mythical importance for many nationalists and was commonly named as evidence of the providential injunction to maintain national integrity. The *Democratic Review*, for instance, labelled it 'the magic cestus which ensures the harmony of the sovereign sisters of the Union, and no peevish eruption of unsisterly jealousy can dispart the silver zone that so firmly and graciously binds their varied climes and products into one common interest.'101

During the Civil War, the time of ultimate national crisis, such appeals to natural phenomena as unifying forces retained their rhetorical potency. On the brink of the conflict, Stephen Douglas pled with his fellow countrymen that 'the great [Mississippi] valley must never be divided. The Almighty has so arranged the mountain and the plain, and the watercourses as to show that this valley in all time shall remain one and indissoluble. Let no man attempt to sunder what Divine Providence has rendered indivisible.' Edward Everett, a Massachusetts Whig with a temperament and political outlook very different from Douglas, similarly stressed the unnaturalness of disunion. 'It is impossible,' Everett declared in a September 1861 speech, 'for the reflecting mind not to behold a bond of union, older than political arrangements and stronger than parchment records, in that great diversity of climate and soil which characterizes the main geographical divisions of the country.' The Commander-in-Chief himself echoed this conviction that natural diversity, properly understood, would hold the country together. In his 1862 message to Congress, Lincoln described the United States as a land 'well adapted to be the home of one national family,'

⁹⁹ Congressional Globe, 29th Congress, 1st Session, 8 January 1846, 169; ibid, Appendix, 9 January 1846, 80. Some of these Congressmen used 'beautifully colored maps' to make their case: ibid, Appendix, 8 January 1846, 278.

¹⁰⁰ Ibid, 30th Congress, 1st Session, Appendix, 12 January 1848, 87.

¹⁰¹ 'The King of Rivers', *Democratic Review*, xxv (1849), 506. See also: 'To the Memphis Convention', *Southern Literary Messenger*, xi (1845), 579; [Robert J. Walker], *Letter of Mr. Walker of Mississippi, Relative to the Annexation of Texas* (Philadelphia, 1844), 8-9.

¹⁰² Quoted in: Henry Nash Smith, Virgin Land: The American West as Symbol and Myth (Cambridge, MA, 1950), 162.

¹⁰³ Edward Everett, 'Agriculture as Affected by the War', in *Orations and Speeches*, iv, 447.

naming its 'vast extent, and its variety of climate and productions,' as 'of advantage, in this age, for one people, whatever they might have been in former ages.' 104

New technologies such as railroads and telegraphs, while widely recognised as marvellous instruments of American progress, were not seen as upending this natural unionist order, but rather thought to strengthen it. The exceptional character of American nature was thought to be enhanced, rather than destroyed, by the application of these technological advances and, in turn, it was thought to be particularly congenial to the 'correct' use of them. Everett highlighted that, by harnessing the natural power of its rivers, American manufacturing was 'calling water into action' rather than wantonly abusing natural resources. The vastness of the American landscape, he added, enabled factories to be 'far more widely distributed, stationed at salubrious spots, and unaccompanied with most of the disadvantages and evils incident to manufacturing establishments moved by steam in the crowded streets and unhealthy suburbs of large cities.' Observers such as Everett were representative of a broader phenomenon in which Americans came to understand machines, in historian Richard White's words, as 'a new manifestation of natural force,' in which 'the natural and mechanical separated only to be intertwined.' 106

In constructing American national identity, railroads and telegraphs were thought to play a particularly important role in enhancing the binding powers provided by rivers, mountains, and valleys. A northern commercial periodical remarked on the 'beauty' of the idea that 'nature,' by securing to the United States a variety of climates, 'invites their interchange' and 'unites them in the kindliest feelings.' Steam navigation, the author continued, evidenced the 'great and glorious tendency' of enhancing this unifying force by 'uniting the remotest parts of the same country' and dispelling 'the difficulties and prejudices arising from differences of laws.' The Missouri politician Edward Bates described the Mississippi River as 'the great natural highway for trade and business... far above all other highways, natural or possible,' but also noted that such highways did not bind every part of every state. As such, 'where a river is wanting we must make a railroad,' which, after all, 'is but an amendment to that magnificent system of internal navigation which nature has made for us in the Mississippi and its branches.' Mississippi Democrat Jefferson Davis employed a

¹⁰⁴ 'Annual Message to Congress, 1862', in *Collected Works of Abraham Lincoln*, ed. Roy P. Basler, 7 vols. (New Brunswick, 1953), v, 527.

¹⁰⁵ Edward Everett, 'Fourth of July at Lowell', in *Orations and Speeches*, ii, 56.

¹⁰⁶ Richard White, *The Organic Machine* (New York, 1995), 30.

¹⁰⁷ 'The Moral Influence of Steam', *Hunt's Merchants' Magazine*, xiv (1846), 500.

¹⁰⁸ 'Department of Internal Improvements', De Bow's Review, xii (1852), 568.

telling metaphor when addressing the people of his state in 1846, describing railroads as 'a chain like system of nerves to couple our remote members of the body politic to the centre of the Union,' joining the natural features of the Mississippi Valley and the Atlantic coast 'like great sinews uniting into concentrated action the power of the right hand and the left.' 109

When Americans sought to construct a national identity in the years between the Revolution and the Civil War, then, discourses of environmental inclusion and exclusion were important tools. The United States was placed squarely in the temperate zone and thus construed to be superior to its tropical neighbours to the south, who were held back by the profusion of natural resources that made it all too easy for the residents of these areas to live luxuriously without the same industry and energy required in temperate climates. In contrast, the experience of settlers in the United States in wresting a living from a more reluctant natural world allowed them to progressively gain knowledge and power that would enable the most efficient use of the natural resources provided by the North American continent. While there were significant partisan differences over whether the transition from temperate Europe to temperate North America formed an evolution or a revolution in historical development, each side broadly concurred that it was Americans' relationship to the natural world that made their nation exceptional. New technologies were thought to aid the United States in taking up its providentially defined role as the standard bearer of civilisation, but they were also portrayed as doing so not by overturning the natural order but rather by strengthening it, augmenting the natural facilities that many Americans believed made their nation great and held their Union together.

The Environmental Imagination and the Construction of Sectional Identities

This construction of the United States as 'nature's nation' was a beguilingly simple and broadly appealing narrative. Juxtaposed against a tropical 'other,' it was a powerful tool that contributed significantly to building American national identity in the first half of the nineteenth century. Yet in other respects, this was also a tenuous and inherently unstable foundation on which to construct a nation. The environments of the United States were so diverse and their meanings so contested that they could just as easily support numerous separate entities with plausible claims to 'natural' independence. Although their brotherhood was naturalised by many antebellum American nationalists, there was nothing inherent that

¹⁰⁹ 'To the People of Mississippi', in *The Papers of Jefferson Davis*, ed. James T. McIntosh et al., 14 vols. (Baton Rouge, 1971-2015), iii, 6.

linked the rocky coastlines of New England with the swampy marshlands of Georgia, or with the Great Plains of the trans-Mississippi west. This was not lost on a great many observers of national affairs in the mid-nineteenth century. As President Franklin Pierce put it in his 1854 annual message to Congress, 'men inhabiting different parts of this vast continent can no more be expected to hold the same opinions, or entertain the same sentiments, than every variety of climate or soil can be expected to furnish the same agricultural products.' Optimistic portrayals of the glorious future that awaited a united nation were often accompanied by warnings about the real possibility of disunion. While recognising that technological innovation held the potential to bind the nation together, an author in the *North American Review* nevertheless noted that, after such rapid territorial expansion, 'the differences of soil and climate, and the imagined conflicts of interest, are as great now as they can ever become.' 111

Even the tropical and temperate divide that did so much work in defining United States as the environmental 'norm' was prone to collapse under scrutiny. It was never entirely clear where the temperate zone stopped and the tropics started, meaning these metageographical categories could be manipulated to apply to different areas depending on the aims of the person or group drawing the dichotomy. Mid-nineteenth-century climatological studies most often located the United States' Deep South in the 'sub-tropical' or 'warm' zone, a liminal environmental space that defied easy classification. Diseases that were endemic to the tropics such as yellow fever also endowed the low-lying areas of the southern states with a significant degree of medical distinctiveness. As such, this region could just as plausibly be tied to the tropical climates of Central America as the temperate environments of the more northerly United States. The moral categories that accompanied these climatic designations could, therefore, be imported and applied within the United States itself, creating an internal 'other' that divided the nation just as powerfully as its juxtaposition against Central American tropicality united it.

Of course, there was nothing inherently natural about the manner in which the United States divided during the sectional crisis, either. As Edward L. Ayers argues, the Civil War did not 'tear the nation in two along a natural, almost perforated line' that divided the agrarian

¹¹⁰ Congressional Globe, 33rd Congress, 1st Session, 6 December 1854, 12.

^{111 &#}x27;Polity of the Puritans', North American Review, 1xix (1849), 496-7.

¹¹² See, for instance: Samuel Forry, M. D., *The Climate of the United States and Its Endemic Influences* (New York, 1842), 21; J. Disturnell, *Influence of Climate in a Commercial, Social, Sanitary, and Humanizing Point of View* (New York, 1860), 10.

cotton-based South from the urban industrial North. ¹¹³ There is no doubt that, as scholars such as Edward Pessen and William W. Freehling have shown, calling the two sections North and South is misleading as these labels 'distort and oversimplify a complex reality, implying homogeneity in geographical sections that, in fact, were highly variegated.' ¹¹⁴ Antebellum Americans surely knew that there were significant environmental and social differences between different regions of what would become the Civil War North and South. As an 1856 *North American Review* article put it, 'the planter in Virginia knows scarcely more, by his own experience, what slavery is in Louisiana, than he knows of the working of a steam-engine in the Cornwall mines' ¹¹⁵

Yet it is also abundantly clear that 'North' and 'South' were labels of crucial explanatory importance in the middle decades of the nineteenth century. As categories, 'the North' and 'the South' were metageographical, corresponding less to the actual environment than to a set of fictional concepts and constructs, but were no less important for it. Studying the environmental imagination is crucial to our understanding of how these sectional identities crystallised and why they took on such importance, since it demonstrates that the key contrasts which featured in the attempt to juxtapose the temperate United States and tropical Latin America were internalised within the national debate. Broadly speaking, in the decades immediately following the nation's founding there was a greater tendency to think of the nation as divided not into North and South but rather into regions shaped by the direct influence of environmental factors upon their inhabitants, such as the supposedly indolenceinducing effects of a blazing sun. In an extraordinary letter, Thomas Jefferson listed a broad range of characteristics of more northerly and more southerly peoples, declaring that a traveller may 'without the aid of the quadrant may always know his latitude by the character of the people' among which he finds himself. The former were 'cool,' 'sober,' and 'laborious,' while the latter were 'fiery,' 'voluptuary,' and 'indolent.' Yet Jefferson stressed that these qualities differed by 'gradations' throughout the United States, rather than forming essential qualities of a Northern and Southern whole. 116 Similarly, Jedidiah Morse's American Geography treated each state's environmentally influenced character in turn. 117

¹¹³ Edward L. Ayers, What Caused the Civil War?: Reflections on the South and Southern History (New York, 2005), 52.

Edward Pessen, 'How Different from Each Other were the Antebellum North and South', *American Historical Review*, lxxxv (1980), 1119; William W. Freehling, *The Road to Disunion*, 2 vols. (New York, 1990-2008).

^{115 &#}x27;Olmstead's Seaboard Slave States', North American Review, lxxxiii (1856), 279.

¹¹⁶ Thomas Jefferson to Chastellux, 2 September 1785, in *The Papers of Thomas Jefferson*, ed. Julian P. Boyd et al., 43 vols. (Princeton, 1950-), viii, 468.

¹¹⁷ Jedidiah Morse, *The American Geography* (Elizabethtown, 1789), 161-472.

When European emigrants come to the New World and 'submit insensibly to these great powers [of climate],' declared the French-American writer J. Hector St. John de Crevecoeur, they 'become in the course of a few generations not only Americans in general, but either Pennsylvanians, Virginians, or provincials under some other name.' 118

Although regional distinctions far from disappeared in the middle decades of the nineteenth century, sectional identities took on intensifying importance and, along with them, the focus shifted more onto the indirect effects of environmental factors in shaping the historical development of the political and social institutions of the North and South. The more direct implications of environmental forces did not vanish entirely, featuring for instance when a Tennessean admonished his correspondents in May 1861 not to 'put too much trust in Southern blood. The hot sun makes man false, and generates the baser passions; don't trust the South.' Yet such portrayals faded into the background of the public debate, largely replaced by investigations into the political and economic divergences of each section.

One important mechanism through which separate sectional identities were constructed was in diverging portrayals of the historical development of the northern and southern states. Northern commentators, keen to appropriate to their section the mantle of temperateness, adopted the ruggedness and sterile soil associated primarily with New England as a badge of honour since it forced the earlier settlers to struggle for their existence and taught them how better to harness the natural elements than those in the more luxuriant South. 'It is to these comparatively barren plains, these sterile hill-sides, to which we owe, in the last result, the prosperity of New England,' declared Edward Everett in an 1849 speech, 'It is precisely to these that we are indebted for that patient industry which is more than a counterbalance for a rich alluvial soil.' Such descriptions were easily transmuted and applied to the North more generally, an example of what art historian Angela Miller has called New England's 'regional imperialism,' in which the region 'claimed for itself a privileged role in the genesis and makeup' of sectional and national identity. ¹²¹ A Pennsylvania Whig described how 'the hardy and intelligent sons of New England, and the sons of the tens of thousands of descendants of the same stock, spread out all over the West,' ensuring that 'the northern man

¹¹⁸ J. Hector St. John [de Crevecoeur], *Letters from an American Farmer*, rept. ed. (London, 1788 [1782]), 58. ¹¹⁹ William Driver to 'Brothers and Sisters', 6 May 1861, John A. Andrew Papers, Massachusetts Historical Society. Emphasis in original.

¹²⁰ Edward Everett, 'Cattle Show at Dedham', in *Orations and Speeches*, ii, 649.

¹²¹ Miller, Empire of the Eye, 176. See, also: Joseph A. Conforti, Imagining New England: Explorations of Regional Identity from the Pilgrims to the Mid-Twentieth Century (Chapel Hill, 2001); Stephen Nissenbaum, 'New England as Region and Nation', in Edward L. Ayers et al., All Over the Map: Rethinking American Regions (Baltimore, 1996), 38-61.

[is] used to labor, and accustomed... to regard labor as the way to competence and wealth,' an outlook different 'than those who are taught to view labor as some view it in the South.' A New Hampshire Congressman agreed that 'the northern people were a laboring people; they shrink not from the most severe trials and deprivations; encountering a rigorous climate,... their reliance was upon their own manly efforts,' rather than 'unproductive idleness.' An author in *Harper's Magazine* was even more hyperbolic, describing how the struggles with the bleak environment made Northerners 'enterprising in the highest degree, a sovereign of the soil... We might almost venture to declare that the North has made a revelation of the grandeur of human labor somewhat analogous to the moral disclosures of Christianity.' 124

For northerners who had been raised to view industry and work ethic as the cornerstones of successful societal development, they often recalled their first visits to the southern states as somewhat of a culture shock. Clearly, many channelled their anger and dismay into criticisms of a system that held millions of people in bondage, but rather than just the treatment of the slaves, it was also very often the eroded, abandoned fields and dilapidated infrastructure that drew much of their ire. Just as the American tropics were described as degraded and environmentally wasteful, many observers portrayed the South an alien world far removed from the thrifty, ordered, agrarian landscape they idolised. 'The soil itself soon sickens and dies beneath the unnatural tread of the slave,' lamented Hinton Rowan Helper in his widely read exposé of southern slave society. 125 Radical Whig and later Republican politician Joshua R. Giddings described Virginia's 'miserable highways, deserted plantations, dilapidated dwellings, [and] uncouth implementations of husbandry,' as evidencing 'the almost total absence of evidence of thrift and prosperity.' Similar portrayals of the southern environment were printed with regularity in anti-slavery newspapers such as William Lloyd Garrison's Liberator. An 1847 column identified 'too evident signs of stagnation or of positive decay... a slovenly cultivation spread over vast fields that are wearing out, among others already worn out and desolate.'127 Writing to another anti-slavery Bostonian upon his return from the lower Mississippi Valley, Samuel Gridley Howe rejoiced that he had found 'a spot of honest, decent earth to rest upon; for

¹²² Congressional Globe, 33rd Congress, 1st Session, Appendix, 27 February 1854, 507.

¹²³ Ibid, 30th Congress, 2nd Session, Appendix, 16 February 1849, 192.

^{124 &#}x27;Monthly Records of Current Events', *Harper's Monthly Magazine*, ix (1854), 837.

¹²⁵ Hinton Rowan Helper, The Impending Crisis of the South: How to Meet It (New York, 1857), 56.

¹²⁶ Congressional Globe, 28th Congress, 2nd Session, Appendix, 22 January 1845, 345.

¹²⁷ Quoted in: Adam Wesley Dean, An Agrarian Republic: Farming, Antislavery Politics, and Nature Parks in the Civil War Era (Chapel Hill, 2016), 28.

truly, after sojourning among the rowdyism, bullyism and depravity of the Southwest, the cold, but comparatively honest and moral Northeast is as Paradise to Purgatory.'128

The divergence of the slave system from the 'norm' of Northern methods of resource development was constantly invoked by anti-slavery commentators to explain the socioeconomic backwardness of Southern society. What Helper labelled slavery's 'pestilential atmosphere' was thought to blight all that it touched, preventing the regions it infiltrated from progressing along with the natural laws of cultural development. ¹²⁹ California Unitarian minister Thomas Starr King, born in New York and strongly sympathetic to the North, lamented the fact that 'the slave system works on minds in our politics just as slavery works on the soil: it sucks the generous juices out of it, withers it, dries it into the sand, and leave it fit only for nettles and weeds.'130 Slavery's opponents rejoiced in comparing the economic and cultural status of free and slave states that border one another, a trope most neatly encapsulated by Alexis de Tocqueville's reflections on the contrasts on either side of the Ohio River. In slaveholding Kentucky, Tocqueville recounted, 'the population is rare; from time to time one descries a troop of slaves loitering in the half-desert fields; the primæval forest recurs at every turn; society seems to be asleep, man to be idle.' On the contrary, in the free state of Ohio, 'a confused hum is heard, which proclaims the presence of industry; the fields are covered with abundant harvests; the elegance of the dwellings announces the taste and activity of the laborer.' 131 This point was hammered home again and again in speeches by anti-slavery Congressmen, perhaps none more famous than Charles Sumner's 1860 tirade against the 'Barbarism of Slavery.' Here Sumner proclaimed that the peculiar institution 'plays the part of a Harpy, and defiles the choicest banquet,' ruining the United States' environmental riches. 132 A Kansas free-state settler and correspondent of Massachusetts abolitionist Theodore Parker wrote of a recent foray into Missouri that 'I could not help but mark the difference between the looks of the Towns along on the border of the river and those on the Kansas side. I see how the same difference as between Liberty and Slavery, the one enriches, beautifies and exalts, the other impoverishes, ruins and degrades.'133

¹²⁸ Howe to Horace Mann, 27 March 1841, in *Letters and Journals of Samuel Gridley Howe*, ed. Laura E. Richards, 2 vols. (Boston, 1909), ii, 104.

¹²⁹ Helper, *Impending Crisis*, 56.

¹³⁰ Quoted in: Dean, Agrarian Republic, 79.

¹³¹ Alexis de Tocqueville, *Democracy in America*, trans. Henry Reeve (London, 1838), ii, 222.

¹³² Congressional Globe, 36th Congress, 1st Session, 5 June 1860, 2593.

¹³³ A. F. Goss to Parker, 20 July 1857, Theodore Parker Papers, Massachusetts Historical Society.

As with the construction of the external tropical 'other,' these renderings of the tropical South were trussed to notions of gender and sexuality. American commentaries on Central America, as we have seen, highlighted the ways in which gender roles and sexual practices diverged from the temperate norm, a product of the climatically induced moral depravity that supposedly characterised that region. Anti-slavery northerners adopted similar tropes to critique the slaveholding states. As Jennifer Rae Greeson has argued, the mid-nineteenth century witnessed the emergence in print of 'the Slave South—a realm created through detailed and repetitious revelations of sadistic violence and vice, particularly torture and sexual "licentiousness." 134 When William Lloyd Garrison chided gradualist anti-slavery figures to 'tell a man to moderately rescue his wife from the hands of her ravisher; tell the mother to gradually extricate her babe from the fire into which it has fallen,' he set the tone for decades of abolitionist condemnation of the slaveholders' immoral family practices and sexual transgressions. 135 Coupled with natural metaphors grounded in the South's unhealthy, semi-tropical climate, these fashioned the South and its slave system as deviant in both environmental and sexual terms. Abolitionist Angelina Emily Grimké, for instance, compared slavery to the 'miasma of some pestilential pool [that] spreads its desolating influence far beyond its own boundaries... Can Northern men go down to the well-watered plains of the South to make their fortunes, without... drinking the waters of that river of pollution... that rolls of Sodom and Gomorrah?' Many a Northerner, she lamented, 'digs the grave of his virtue' in 'our Southern States.' 136

These ubiquitous convictions about the degraded state of the southern environment and its impact on its inhabitants fed two alternative conclusions. On the one hand, there was an undercurrent of deep pessimism, a nagging doubt that perhaps Southern society, and white Southerners as a group, were so different from the temperate North, so close to the tropics, that even the dismantling of the slave system could not bridge the gap. As Nicholas Guyatt has shown, deep into the Reconstruction era, northerners such as Carl Schurz feared that slavery was only an 'intermediate cause' of sectional divisions and that the 'moral miasma of the tropics' continued to infect the South. ¹³⁷ In the midst of the secession crisis, the New

¹³⁴ Jennifer Rae Greeson, *Our South: Geographic Fantasy and the Rise of National Literature* (Cambridge, MA, 2010), 112.

¹³⁵ On this theme, see: Ronald Walters, 'The Erotic South: Sexuality and Civilization in American Abolitionism', *American Quarterly*, xxv (1973), 177-201; Carol Lasser, 'Voyeuristic Abolitionism: Sex, Gender, and the Transformation of Antislavery Rhetoric', *Journal of the Early Republic*, xxviii (2008), 83-114

¹³⁶ Quoted in: Greeson, Our South, 138-9.

¹³⁷ Nicholas Guyatt, 'America's Conservatory: Race, Reconstruction, and the Santo Domingo Debate', *Journal of American History*, xcvii (2011), 974-1000. Schurz quotes at 984.

York diarist George Templeton Strong confided his fear that the 'Northerner and Southerner are aliens, not merely in social and political arrangements, but in mental and moral constitution. We differ like Celt and Anglo-Saxon.' The Virginian Matthew Fontaine Maury opined to his brother that 'the disease, the coat of the thing, is not in cotton or slavery, nor in the election of Lincoln. But it is deep down in the human heart... And I do not think our political doctors will be able to treat the case upon any other diagnosis than this: the country is divided.' 139

The more widely held position among Northerners, though, was that slavery formed the root of all evil and, once replaced by a free-labour system after the Northern model, the South could make a significant contribution to the natural development of civilisation, just as Providence intended. The emphasis on the adverse effects of slavery on the environment, and thus the inhabitants, of the South, left open the possibility that the South could be socially, culturally, and environmentally redeemed. 'Remove slavery, and the tide of free labour will rush towards the South with a surprising swiftness,' argued George Bancroft in a private letter. 'In ten years Virginia will be more peopled and richer, than she ever was before. Texas will be our Italy.'140 Contrary to what was a ubiquitous claim among Southerners, most Northern commentators thus argued that there was nothing inherent in the climate or soil of the slave states that necessitated slavery. 141 A settlement of German free labourers in Texas became somewhat of a cause célèbre among Northern newspapers, who believed it showcased the potential of free labour to regenerate the blighted southern soil that was not, in fact, too tropical to be regenerated by the style of labour system that flourished in the North. 142 All that was required was to effect emancipation and free labour would revivify the slave states. In one of his earliest public pronouncements, William Lloyd Garrison concluded that emancipation 'will banish the poverty of the South, reclaim her barren soil, and pour new blood into all her veins and arteries... There is not a slave State but will exhibit the flush of returning health, and feel a stronger pulse, and draw a freer

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¹³⁸ Quoted in: Susan-Mary Grant, North Over South: Northern Nationalism and American Identity in the Antebellum Era (Lawrence, 2000), viii.

¹³⁹ Maury to R. Maury, 24 January 1861, Matthew Fontaine Maury Papers, Manuscripts Division, Library of Congress.

¹⁴⁰ Bancroft to Samuel S. Cox, 28 January 1865, in *The Life and Letters of George Bancroft*, ed. M. A. DeWolfe Howe, 2 vols. (New York, 1908), ii, 157.

¹⁴¹ This did not mean that even strongly anti-slavery Northerners did not believe that certain areas of the southern United States were only suitable for black labour, as we shall see in chapter five.

¹⁴² See, for instance: 'The Germans in Texas', *New York Times*, 3 March 1854, 4; 'The Question of White Labor at the South', *Cincinnati Daily Press*, 14 March 1861, 1; 'The Slave Power', *Chicago Tribune*, 2 December 1862, 3; A Cotton Spinner, 'Is Cotton Our King?', *Continental Monthly*, i (1862), 247.

breath.' An author in the *New York Times* wrote in 1854 of the cotton growers of Florida that when they 'cease to torture the generous soil and to destroy its fecund powers by injudicious tillage; when they adopt the New-England puritanical neatness, precision, and punctuality in their planting arrangements... then shall the wilderness of Florida blossom as the rose.' 144

It should be noted that not all Southerners who discussed the historical development of their states held views that were entirely incompatible with those Northern ideas outlined here. Some observers in the late 1840s and early 1850s lamented that the North had stolen a march on the South in terms of socio-economic development, locating the root of the problem in the complacency caused by the ease by which natural resources could be extracted. In a presidential address at the Virginia Historical Society's first annual meeting in 1847, future Confederate Congressman William C. Rives argued that 'we have been heretofore too much disposed to content ourselves with the indolent enjoyment of what nature has done for us,' which compared unfavourably to the 'victorious and creative energy' that defined the history of New England. 145 Another Virginian, Matthew Fontaine Maury, bemoaned the fact that his state saw her natural advantages, but 'slept upon them. She knew that Nature had placed them there and made them hers. She never dreamed that man could take them way.' However, Northern states such as New York had, through 'the enterprise of man,' extended their backcountry through schemes such as the Erie Canal, forced into these innovations by the necessities imposed by a less fertile environment. A Southern Democrat summarised these views, explaining the 'great natural cause' behind the South lagging in industrial development. 'Owing to the more sterile soil and bleaker clime of the North,' he argued, 'its people never had as strong inducements or as great addiction to the pursuits of agriculture as prevailed under the more genial sun and amid the greater fecundity of the South.'147

Where there was widespread divergence between the views of the majority of Northerners and Southerners was, of course, in their perspectives on the naturalness of slavery. Even if they did not think the federal government could or should do anything to interfere with slavery in the South, most Northerners thought it to be an incubus on the growth of the southern states, an unnatural aberration out of step with the high destiny of the United States.

¹⁴³ Quoted in: John Ashworth, *Slavery, Capitalism, and Politics in the Antebellum Republic*, 2 vols. (New York, 1995-2007), ii, 163.

^{144 &#}x27;Florida Sketches', New York Times, 31 May 1854, 2.

¹⁴⁵ 'The Virginia Historical Society, 1st Annual Meeting', Southern Literary Messenger, xiv (1848), 54.

¹⁴⁶ M. F. Maury, 'Direct Foreign Trade of the South', *De Bow's Review*, xii (1852), 128-9.

¹⁴⁷ Congressional Globe, 29th Congress, 1st Session, Appendix, 29 June 1846, 741.

Informed by racial science that, as we shall see in chapter four, fed a common perception that black bodies were more suited to hot climates, Southerners argued that the peculiar environment and climate of their states made the labour of African Americans not just advantageous but necessary. As the Mississippi declaration of secession put it, the 'imperious law of nature' dictated that only blacks could stand the harsh 'tropical' sun and the diseases endemic to the low-lying coastal areas of the South. The negroes are by their physical constitutions eminently fitted for a hotter climate and for situations unfavorable to the health of white men,' declared North Carolina's Thomas L. Clingman in an 1858 speech. Similar logic pervaded the pages of pro-slavery periodicals such as James D. B. De Bow's *Review*. In an 1857 article, for instance, De Bow described how attempts to introduce white labour into the plantations but also the cities of the South had caused those white workers to pay 'the forfeit with their lives, of attempting to reverse the course of nature, by assuming to undergo the exposed and exhausting labor, which experience has assigned in this latitude only to the blacks. 150

Of course, the inevitable corollary to this was that the institution of slavery was equally indispensable to the South as black labour. It was simply unthinkable for most Southerners that racial hierarchies could be maintained without coercive force being employed to keep the black workforce in check. 'Slavery is the purpose of his creation,' opined an author in *De Bow's Review* in a representative passage, 'in the very nature and characteristics of the African negro, he is fitted only for slavery and slavery for him.' The economic development of the South, far from being advanced by emancipation, would in fact be disastrously retarded. The South was successful, opined an author in *Southern Quarterly Review*, because it 'observe[s] the order of nature in their relations,' with one race 'suited to a tropical climate, capable of muscular labour, unfitted for intelligent direction' and the other 'active, intelligent, directing, governing—both move on together, in their prescribed spheres, in harmonious unison.' Citing the supposed environmental wastefulness of the postemancipation British West Indies, the North Carolinian Congressman Zebulon Vance prophesised in an 1860 speech that, should slavery be abolished in the United States,

¹⁴⁸ 'A Declaration of the Immediate Causes which induce and justify the Secession of the State of Mississippi from the Federal Union', *Documenting the American South*, at: https://docsouth.unc.edu/imls/missconv/menu.html (accessed 22 September 2018).

¹⁴⁹ 'Annual Address Delivered Before the North Carolina State Agricultural Society', in *Selections from the Speeches and Writings of Hon. Thomas L. Clingman of North Carolina* (Raleigh, 1877), 100.

¹⁵⁰ De Bow, 'The Rights, Duties, and Remedies of the South', *De Bow's Review*, xxiii (1857), 229. See, also: 'Direct Trade of the South', ibid, xiv (1853), 437; 'Is Slave Labor in the Construction of Southern Railroads to be Preferred to Free Labor?', ibid, xix (1855), 728.

¹⁵¹ E. Deloney, 'The South Demands More Negro Labor', ibid, xxv (1858), 506.

¹⁵² 'Is Southern Civilization Worth Preserving?', Southern Quarterly Review, iii (1851), 223-4.

'generation after generation would pass away before we could recover from the shock, and our fertile fields would again resume the primeval look of the forest.' To the South, summarised South Carolina's James Henry Hammond, slavery 'is as natural as the clime itself... it is the order of Providence that slavery should exist among a planting people, beneath a southern sun.' 154

Emboldened by this conviction of the naturalness of slavery, in the late 1850s and early 1860s Southerners more stridently embraced the environmental differences between the two sections in a manner that inverted the common metageographical hierarchy. Tacitly, or sometimes explicitly, adopting the mantle of tropicality, Southerners with greater frequency emphasised the advantages of a hotter climate over the more frigid Northern environment. A 'tropical climate' was labelled by an author in *De Bow's Review* in 1862 as one of the five 'fundamental facts' that distinguished Southern civilisation. ¹⁵⁵ Vocal Alabamian fire-eater William Lowndes Yancey described how the Creator, 'absorbing all minor sub-divisions,' cleaved the United States into two sections: 'he has made the North and the South, the one the region of frost, ribbed with ice and granite; the other baring its generous bosom to the sun and ever smiling under its influence.' The attributes of the people of the two sections Yancey described in the following terms: 'those who occupy the one are cool, calculating, enterprising, selfish and grasping; the inhabitants of the other are ardent, brave and magnanimous, more disposed to give than to accumulate.'156 In a response to a fiery antislavery speech by Salmon P. Chase, a Southern author took up his pen 'to remind Mr. Chase that it is the South wind... which gives us all the beauty and brightness of the earth... that bids the flower to grow, the harvest to ripen,' while the 'Northern blast, on the contrary, which he would have prevail, nips every bud and blights every fruit.' De Bow listed his fellow U.S. Southerners among the 'Southern peoples' who 'habitually undervalue' themselves and 'slavishly imitate the heavy, dull, coarse, clumsy, tasteless races of the North.' In fact, he argued, 'civilization is an exotic in all cold latitudes' such as the Northern United States, while throughout history the 'Mediterranean latitudes' had proved themselves to be 'the only region in which man ever did, or ever will arrive at fully developed,

¹⁵³ Congressional Globe, 36th Congress, 1st Session, 14 March 1860, 1160.

¹⁵⁴ 'Speech on the Justice of Receiving Petitions', in *Selections from the Letters and Speeches of the Hon. James H. Hammond, of South Carolina* (New York, 1866), 34.

¹⁵⁵ J. Quitman Moore, 'Southern Civilization', De Bow's Review, xxxii (1862), 14.

¹⁵⁶ Quoted in: William R. Taylor, *Cavalier & Yankee: The Old South and American National Character* (Cambridge, MA, 1957), 14.

¹⁵⁷ 'The Nebraska Bill and Speech of Senator Chase', Southern Literary Messenger, xx (1854), 179.

intellectual, moral, and physical maturity.' The U.S. South, in this reading, was the true inheritor of the geographical march of history.

It was one thing to assert the moral and physical superiority of the South over the North, but quite another to advance the proposition that the Southern states could function as a separate national entity. To this end, those supporting Southern independence emphasised the natural position of the Southern states, the diversity of its climates, and its profuse, economically valuable environmental resources. As Confederate Vice-President Alexander H. Stephens put it in his famous Cornerstone Address, 'with such an area of territory... with a climate and soil unsurpassed by any other on the face of the earth—with such resources already at our command... who can entertain any apprehensions as to our success.' 159 Similar effusive descriptions of the capacity of the Southern environment to support a self-sustaining nation could be found throughout the rhetoric of belligerent Southerners in the 1850s. 'The South possesses within herself all the elements of complete commercial independence and empire,' declared an author in *De Bow's Review*. 160 It was only through 'adventitious causes' that trade has 'been forced out of its natural channels,' and the natural order needed only to be restored for the South to take its rightful place as king of the world's commerce. ¹⁶¹ A writer for Southern Quarterly Review agreed. 'Looking upon the face of the extended South, we see every reason for gratulation and pride,' he asserted. With resources 'almost beyond calculation in value,' it was clear that 'geography is all in her favour.' 162

The logical result of these arguments was that the South would be perfectly capable, in fact better off, without the North. In a private letter from February 1861, Matthew Fontaine Maury referenced 'certain physical laws which human legislation cannot change' when defending the newly formed Confederacy, making the case that 'the labor of the South was profitable in itself and required no protection from competition abroad.' In contrast, in the North where 'the climate is severe, and the soil stingy; winter is long, and summer short..., the labor was not sufficiently remunerative to stand alone.' According to the radical South Carolinian essayist Louisa S. McCord, while it was through Southern products that 'their store houses are filled, and their ships are laden,' the North's reliance on the South was not

¹⁵⁸ 'Cuba: The March of Empire and the Course of Trade', *De Bow's Review*, xxx (1861), 41-2. For similar sentiments, see also: 'Summer Travel in the South', *Southern Quarterly Review*, ii (1850), 25.

¹⁵⁹ Quoted in: Peter S. Onuf, 'Antebellum Southerners and the National Idea', in L. Diane Barnes, Brian Schoen, and Frank Towers (eds.), *The Old South's Modern Worlds: Slavery, Region, and Nation in the Age of Progress* (New York, 2011), 32.

¹⁶⁰ John Forsyth, 'The North and the South', *De Bow's Review*, xvii (1854), 373.

¹⁶¹ James D. B. De Bow, 'Direct Trade of Southern States with Europe, No. II', ibid, iv (1847), 348.

¹⁶² 'Is Southern Civilization Worth Preserving?', 223-4.

¹⁶³ Maury to Rev. James H. Otey, 23 February 1861, Maury Papers.

reciprocal. For McCord, that 'the South may prosper without the North States' was an eminently practical and indeed desirable proposition. ¹⁶⁴ 'If we take the proper steps, we can, in a very short time, place ourselves in a condition to declare non-intercourse,' declared another Southern writer on the brink of secession. 'We possess, or may possess, not merely the necessaries of life, but most of the luxuries demanded by the highest grade of civilization. All we lack is the determination to make ourselves independent.' ¹⁶⁵

Conclusion

By the outbreak of the Civil War, then, mutually antagonistic inflections of the environmental imagination had developed, contributing significantly to the construction of sectional Northern and Southern identities which for a time largely subsumed regional differences within these metageographical wholes. Many Northerners and Southerners came to imagine their sections as environmentally distinctive entities that were, at least at that crucial moment, incompatible with one another. In the mid- to late-1850s, many Southerners increasingly conceptualised their section as morally and physically superior to the North, capable of surviving and even prospering separately from its deleterious influence. They emphasised the capacity of the Southern environment to produce large quantities of valuable staple crops, not to mention foster the highest development of creative genius and the qualities of human civilisation. That civilisation was, of course, based on racial oppression. Slavery was almost universally naturalised by Southern commentators, posited as the best and indeed the only solution to the labour 'problem' in hotter climates. Emancipation, they argued, would result in the ruin of the fertile fields and undermine the social and economic fabric of the South.

Northerners, in contrast, adopted to their section the mantle of temperateness and environmental possibilism, lionising a past in which their ancestors had to struggle to extract enough natural resources to become prosperous, resulting in the superior development of positive moral and intellectual characteristics. When they looked to the South, many Northerners saw a society that was immoral not just for holding millions of people in bondage but also for the inferior development of natural resources, leading to decrepit and dilapidated fields, infrastructure, and plantations that jarred with their perceptions of how a country should look. Southern laxity was considered to be the inevitable result of a history

¹⁶⁴ Louisa S. McCord, 'Carey on the Slave Trade', Southern Quarterly Review, ix (1854), 119.

¹⁶⁵ J. A. Turner, 'What Are We to Do?', De Bow's Review, xix (1860), 76.

in which lavish nature necessitated little industry to extract a means of survival, ensuring that the Southern character never achieved the same moral grandeur as that of their Northern counterparts. In short, Northerners saw in the South a landscape, and consequently a people, entirely unbefitting a nation that was to be the standard-bearer of civilisation for centuries to come.

When making these arguments, Northerners internalised the key assumptions that were used to oppose temperate and tropical America in the construction of national identity, creating an internal 'other' against which the 'true' United States was defined. Although there were partisan splits over the extent to which the new nation represented an evolution or revolution from the history of temperate Europe, Central Americans, particularly Mexicans, were almost universal targets of U.S. nationalist scorn for falling under the spell of their luxuriant climate and prolific soils. In contrast, the more northerly American colonies were forced into industrious extraction of natural resources in order to survive their first years on the continent. Having survived their harsh initiation, though, colonists in what would become the United States were believed to have gained the knowledge and power to progressively develop and capitalise upon the wide array of climates and resources the continent made available to them. What is more, nationalists argued, the natural features of the continent were designed by God to facilitate communication between the regions of the United States, mitigating the effects of environmental diversity and prophesying a glorious future for a united nation. Railroads, telegraphs, and other technological innovations were appropriated into this providential plan, forming extensions of these geographical bonds and augmenting rather than overturning the natural order.

Discourses of environmental inclusion and exclusion, then, were central to the formation of American identities on various metageographical scales in the mid-nineteenth century. The creation of environmental 'norms' and 'others' was a crucial tool in the process of regional, sectional, and national self-fashioning in this period, working to both bolster the construction of a united national community and undermine it, leading to alternative configurations of identity that emphasised loyalty to a particular locality rather than the national whole. Evidently, the environmental imagination was malleable and could be applied to different ends dependent upon the person or group in question and the context in which they acted. Yet it should not be forgotten that, across the wide variety of ways in which the environmental imagination was employed, each drew on a shared conviction that human nature, and the societies humans formed, were intimately connected to and influenced by physical nature. The popularity of the 'New Geography' of Arnold Guyot and his mentor

Carl Ritter evidences the enthusiasm with which Americans in this period received scientific works that took this principle as their guiding philosophy. Versions of Guyot's 'geographical march of history,' in which the natural circumstances of a society's development strongly affected its capacity to attain a level of civilisation, were widely repeated by a large variety of mid-nineteenth-century Americans across regional, sectional, and party lines, all of whom were accustomed to situating the past, present, and future of human society in dialogue with the natural world that surrounded it. The next chapter will expand the frame of reference, exploring the ways in which this consciousness of the interconnections and interdependence between humans and the natural world shaped how Americans reconceptualised their identities on a larger, continental canvas through a study of the ways the environmental imagination intersected with debates surrounding American expansion.

Naturalising Manifest Destiny: The Environmental Imagination, Humboldtian Science, and American Expansion

Concurrent with the making and unmaking of American identities on various scales was a process of significant territorial expansion that, by 1850, resulted in a nation more than four times the size of the original thirteen colonies. For many Americans, this transformative process was the paramount example of the progressive ethos that made their nation exceptional. 'We live in an age of progress, and ours is emphatically a country of progress,' declared President Millard Fillmore in his 1852 Annual Address.¹ Horace Greeley, editor of the *New York Tribune*, asserted proudly that the growth of the United States was unparalleled throughout human history: 'In no former century since Adam was ever half so large an area of the earth's surface reclaimed from its native wildness and rendered subservient to the uses of civilized man.'² Expansionist dreams were not constrained to merely connecting the Atlantic and Pacific coasts, with many advancing a continentalist vision and arguing further that the ports of the Pacific coast would be just the starting point for the long-desired economic penetration of Asian markets.

Not all, perhaps not most, felt this way. As the best scholarship on American ideas about the place of their nation in the world in this period has shown, expansion was a contingent and fraught process that belied any straightforward narrative of uninterrupted territorial growth and divinely ordained mission.³ While, for some, expansion showcased the best of Americans' enterprising progressive spirit, for others the massive incorporation of new territory unleashed a plethora of profound, if often vaguely defined, fears about the consequences of this for the society they inhabited. 'If the age is progressive,' opined a writer in a southern periodical, 'it cannot be denied that it is also, in many cases, a tyrannical one.' John Higham has convincingly argued that, as the Civil War approached, the desire for

¹ Millard Fillmore, 'Third Annual Message', in James D. Richardson (ed.), *Messages and Papers of the Presidents*, 10 vols. (New York, 1902), v, 2717.

² 'More About California', New-York Tribune, 27 December 1848, 2.

³ Some of the most prominent examples from just the last couple of years are: Steven Hahn, *A Nation Without Borders: The United States and its World in an Age of Civil Wars, 1830-1910* (New York, 2016); Andrew C. Isenberg and Thomas Richards, Jr., 'Alternative Wests: Rethinking Manifest Destiny', *Pacific Historical Review*, Ixxxvi (2017), 4-17; Rachel St John, 'The Unpredictable America of William Gwin: Expansion, Secession, and the Unstable Borders of Nineteenth-Century North America', *Journal of the Civil War Era*, vi (2016), 56-84.

⁴ 'The Prospects and Policy of the South', Southern Quarterly Review, x (1854), 432.

'consolidation' replaced the 'boundlessness' that characterised the 1840s.⁵ Often, these seemingly opposing viewpoints were held simultaneously by the same person, who could feel both proud of their nation's growing influence and anxious about the repercussions for the world they knew so well. The ever-astute Alexis de Tocqueville remarked on the seemingly paradoxical worldview of Americans. He perceived two 'astonishing things' about his subjects: 'the great changeableness of most human behavior and the singular fixity of certain principles.' Even while they are 'in constant motion; the mind of man appears almost unmoved.' Historians have borne out Tocqueville's observation and shown that the expansionist impulse of the 1840s and 1850s emanated not from a position of unqualified optimism about the future of the nation, but also because of a latent insecurity about the state of American society.⁷

This chapter examines how Americans navigated these competing currents of confidence and anxiety. In its broadest sense, it demonstrates how mid-nineteenth-century Americans conceptualised and came to terms with the exciting yet alarming growth of their nation. A short answer to this question might be that Americans were ideologically invested in some variation on Manifest Destiny, believing in the exceptional place of the United States in the development of civilisation and perceiving a providential imperative to extend American influence over less advanced regions of the globe. Yet the persistence of fears about expansion's consequences suggests this to be too simplistic. Manifest Destiny may have been ideologically persuasive to some, but they contained precious little in the way of detailed, practical, and unifying prescriptions for the problems expansion engendered. As Steven Hahn has argued, 'most Americans could unite over the appeals of an imagined empire, in economic, political, cultural terms, but the process of empire making proved to be deeply divisive and contradictory.'8 Moreover, it seems entirely plausible that poor farmers from upstate New York or upcountry North Carolina planters struggling with depleted soil cared little for such seemingly abstract theorising about American destiny, focusing instead upon information about the economic realities of the western territories in the hope of reviving their financial fortunes.

⁵ John Higham, 'From Boundlessness to Consolidation: The Transformation of American Culture, 1848-1860', in Carl J. Guarneri (ed.), *Hanging Together: Unity and Diversity in American Culture* (New Haven, 2001), 149-65.

⁶ Quoted in: Richard Drinnon, Facing West: The Metaphysics of Indian-Hating and Empire-Building (Norman, 1997), 336.

⁷ This is the central argument of, among others: Thomas R. Hietala, *Manifest Design: American Exceptionalism and Empire*, rev. ed. (Ithaca, 2003 [1985]); David C. Hendrickson, *Union, Nation, or Empire: The American Debate over International Relations* (Lawrence, 2009).

⁸ Hahn, *Nation Without Borders*, 143.

At the same time, though, entirely disregarding ideological frameworks such as Manifest Destiny would be to throw the baby out with the bathwater. Scholars have convincingly demonstrated that providentialism, the belief in a benevolent deity guiding American affairs, suffused American society in this period. The persistence of the metaphors and language of mission and destiny in political speeches, newspapers, and periodicals should not be dismissed as mere window dressing. James D. Drake argues that it was, in fact, through such rhetorical formulations that early Americans 'enacted themselves as a people. Language is a decision albeit sometimes one made viscerally, without much conscious thought or deliberation.'

Studying how the environmental imagination intersected with expansionist debates, I argue, provides a way to bridge this gap and more satisfactorily understand how Americans negotiated the competing impulses of confidence and anxiety that expansion provoked. In one sense, portraying the extension of American influence across the continent as 'natural,' as a process sanctioned by providential intentions manifested upon the land itself, was a powerful rhetorical means of projecting American power. When John Quincy Adams famously described the islands of Cuba in 1823 as 'natural appendages to the American continent' that 'can gravitate only towards the North American Union, which by the same law of nature cannot cast her off from her bosom,' he was drawing on a widely accepted linkage between nature and God that, in historian William Cronon's words, allowed 'those who wish to ground their moral vision in external reality... to take disputed values and make them seem innate, essential, eternal, nonnegotiable.' Invocations of the geography and topography of the North American continent were crucial tools in expansionists' rhetorical armoury.

In another sense, environmental knowledge also served the entirely practical purpose of demystifying the western territories for settlers and familiarising prospective emigrants with their potential sources of living. The majority of emigrants to the trans-Mississippi west took up agricultural occupations, reliant on the quality of soil and climate for the livelihoods. A New Englander, recently emigrated to Kansas, wrote in 1854 that, upon arrival, 'climate is

⁹ Nicholas Guyatt, *Providence and the Invention of the United States*, 1607-1876 (Cambridge, UK, 2007); Ernest Lee Tuveson, *Redeemer Nation: The Idea of America's Millennial Role* (Chicago, 1968).

¹⁰ James D. Drake, *The Nation's Nature: How Continental Presumptions Gave Rise to the United States of America* (Charlottesville, 2011), 154.

¹¹ John Quincy Adams to Hugh Nelson, 28 April 1823, in *Writings of John Quincy Adams*, ed. Worthington Chauncey Ford, 7 vols. (New York, 1917), vii, 373; William Cronon, 'Introduction: In Search of Nature', in William Cronon (ed.), *Uncommon Ground: Toward Reinventing Nature* (New York, 1995), 36.

what concerns men most, and [is] what they first inquire about.' A correspondent for the *Philadelphia North American* concurred: 'Whenever a stranger arrives in California, his first conversation with the inhabitants and his first questions are concerning the climate and the fertility of the soil.' The connections between the environment and human health, prevalent in both professional and laypeople's understandings of medicine, added further weight to the imperative of gaining accurate information about the environments they would encounter. ¹⁴

Advances in science and cartography made this information increasingly accessible to non-professionals. These sources were particularly powerful since, as William H. Goetzmann has argued, seeking recourse in science 'was a way of letting nature itself decide, not only because it placed the decision beyond the control of mere mortals but also because the decision seemed to depend on the overarching justice of natural law.' While chapter one featured the 'New Geography' of Arnold Guyot and Carl Ritter, of particular interest with regard to American expansion are the related disciplines of climatology, meteorology, and oceanography. The nineteenth century witnessed what one scholar has called the 'transformation of climate discourse.' In the colonial period, American settlers shared a belief that climates across the globe remained constant within latitudes, leading many to erroneously compare points on the American continent with those of a similar latitude in Europe. A Anya Zilberstein has recently shown, interaction with American climates undercut this notion and by the Revolution colonists had developed more localised and accurate models of climate knowledge.

The pioneering work of the German scientist Alexander von Humboldt in developing the theory of isothermal lines also formed an important breakthrough. Depicting changes in temperature across space on large, often colourful maps, Humboldt and his admirers such as the American geographers Samuel Forry (figure 1) and William C. Woodbridge (figure 2) synthesised otherwise dense and unintelligible tables of data into a more easily digestible form that required but a small level of intellectual engagement to draw comparisons between different regions. Eminent Harvard scientist Louis Agassiz praised Humboldt's

¹² 'Kansas', Portland Weekly Advertiser, 25 July 1854, 2.

¹³ Quoted in: 'California', Washington *Daily National Intelligencer*, 30 July 1847, 3.

¹⁴ The best studies of this in the mid-nineteenth-century United States are: Linda Nash, *Inescapable Ecologies:* A History of Environment, Disease, and Knowledge (Berkeley, 2006), chapters 1-2; Conevery Bolton Valenčius, *The Health of the Country: How American Settlers Understood Themselves and Their Land* (New York, 2002).

¹⁵ William H. Goetzmann, Army Exploration in the American West, 1803-63 (New Haven, 1959), 262-3.

¹⁶ James Rodger Fleming, Historical Perspectives on Climate Change (New York, 1998), chapter 4.

¹⁷ Karen Ordahl Kupperman, 'The Puzzle of the American Climate in the Early Colonial Period', *American Historical Review*, lxxxvii (1982), 1262-89.

¹⁸ Anya Zilberstein, A Temperate Empire: Making Climate Change in Early America (New York, 2016).

cartographical innovations for 'vivifying' science and 'causing an entire transformation' in 'every branch of mental activity.' Humboldt's influence stretched far beyond the rarefied airs of learned institutions or specialist scientific clubs, since his works were popularised through the periodical press and newspapers. Often supplementing their articles with dramatic descriptions of Humboldt's explorations in South America, journals from across the political spectrum printed long, predominantly positive reviews of his writings that often amounted to extended summaries of their content. Isothermal maps also appeared in non-specialist publications, appealing because of their ability, in Humboldt's words, to 'speak to the senses without fatiguing the mind.' Even without wading into the text of Humboldt's scientific publications, then, a popular readership could gain knowledge of his theories and obtain a broader understanding of how climate changed across space. ²¹

To demonstrate how the environmental imagination, through rhetorical appeal and by providing practical information about the territories, helped Americans address their anxieties about their nation's expansion, this chapter will contain three case studies. The first treats the widely held discomfort about space and nation, encapsulated in Ralph Waldo Emerson's lament that 'America is formless.'²² Throughout the nineteenth century, the enlargement of the American sphere of influence was bitterly contested by the indigenous peoples that Euro-Americans sought to dispossess. The resulting fluidity and impermanency of boundaries and identities allowed alternative visions of the future territorial configuration of the United States to flourish. In these unpredictable circumstances, the geography and the topography of the American continent appeared to bring a semblance of order and certainty. The point of focus will be William Gilpin, a western politician, explorer, and writer who devoted his career to publicising what he considered to be the inevitable future greatness of the American West.

¹⁹ Louis Agassiz, Address Delivered on the Centennial of the Birth of Alexander von Humboldt (Boston, 1869), 26.

²⁰ Alexander von Humboldt, *Political Essay on the Kingdom of New Spain*, 2 vols. (London, 1814), i, cxxxiii. ²¹ For an overview of Humboldt's multifaceted impact in the antebellum United States, see: Laura Dassow Walls, "The Napoleon of Science": Alexander von Humboldt in Antebellum America', *Nineteenth Century Contexts*, xiv (1990), 71-98.

²² Entry for June 1847, in *Emerson in His Journals*, ed. Joel Porte (Cambridge, MA, 1982), 372.

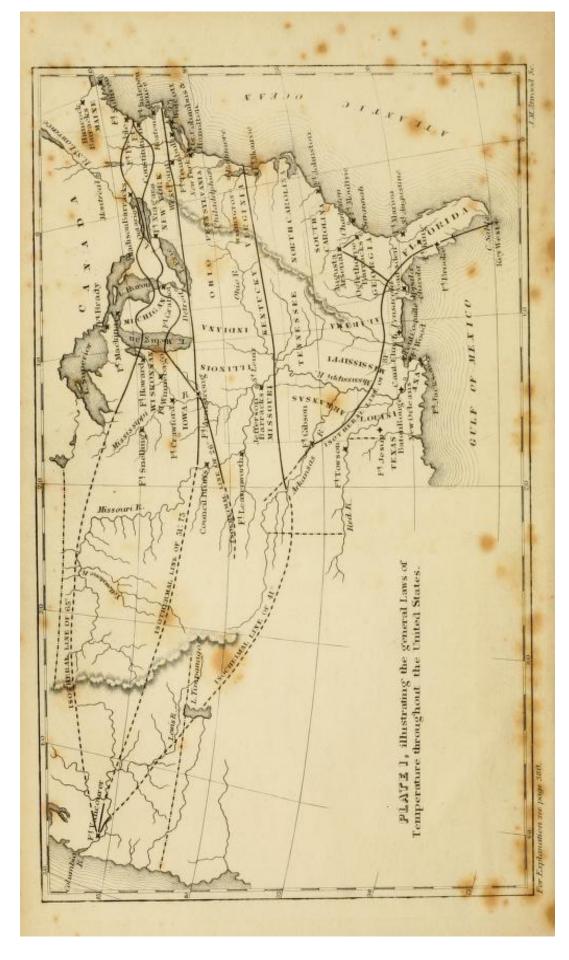


Figure 1: 'General Laws of Temperature throughout the United States', frontispiece to Samuel Forry, The Climate of the United States and Its Endemic Influences (New York, 1842). Accessed 26 July 2018 at: https://archive.org/stream/climateofuniteds00unse#page/n5.

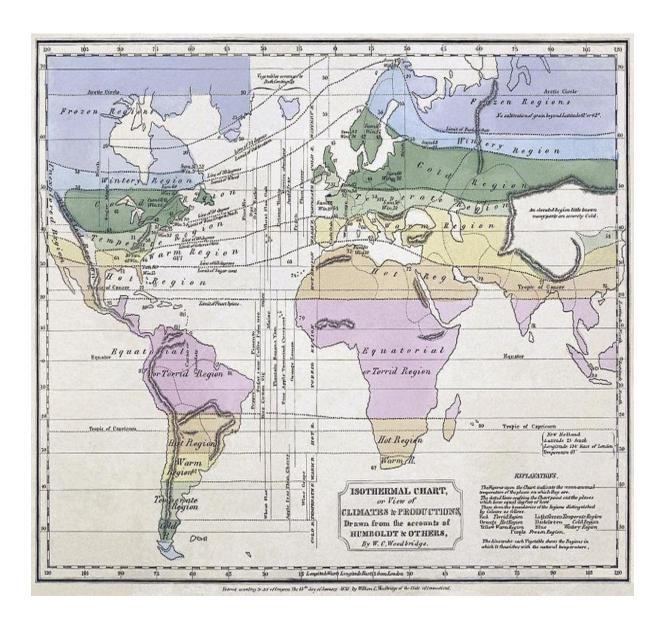


Figure 2: W. C. Woodbridge, 'Isothermal Chart, or View of Climate & Productions, Drawn from the Accounts of Humboldt & Others' (1823). Accessed 26 July 2018 at: https://en.wikipedia.org/wiki/File:Woodbridge_isothermal_chart3.jpg.

From his home towns in Missouri and later Colorado, Gilpin exhorted not only the natural resources of the region but in particular its topography and geography. Crucially, Gilpin relied not simply on rhetorical flourishes but also went to some lengths to integrate Humboldt's climatological theories, positing the existence of an 'isothermal zodiac,' a band of temperature that he believed was most conducive to the development of civilisation. This line, Gilpin argued, linked the cultural centres of Europe and the eastern seaboard with the western territories. Like the examples discussed in chapter one, Gilpin conceived of civilisation as the creature of climate and geography. Although unorthodox, Gilpin's visionary writings were well-received in the eastern states and his fervent lecturing style, striking maps, and experience as an explorer endeared him to frontier audiences.

The second case study will tackle the thorny yet inescapable question of slavery and race. As historians of southern expansionism have shown, hopes of extending slaveholding influence into the western territories and the tropics were borne out of the fear of a future in which emancipation and racial strife undermined the southern social and political order.²³ While many harboured hopes of a bountiful slaveholding empire with the southern United States at its head, they also feared that the acquisition of new territories could lead to their encirclement by free-labour settlers, causing the peculiar institution to consume itself in economic irrelevance or black insurrection. Matthew Fontaine Maury, a Virginian slaveholder embedded in southern political networks, sought to dispel these horrific visions by positing that the Amazon basin could form a 'safety-valve' for southern slaves.²⁴ Maury was also an experienced oceanographer and employed his expertise in formulating this vision. In his book *The Physical Geography of the Sea*, Maury charted on huge maps the distribution of wind currents over the ocean. Inheriting from Humboldt a fundamental belief in the harmonies of nature, Maury asserted that his research also showed the natural unity of the slave states with the American tropics, particularly the basins of the Mississippi and the Amazon, which he read as a providential injunction that both should be developed by slave industry under the guidance of the slaveholders of the southern United States.

The final case study will investigate the work of the western physician Daniel Drake, a longtime resident of Cincinnati and member of the first medical faculty organised west of the Appalachians. Drake sought to address fears about the health of western settlers by

²³ See, for example: Walter Johnson, *River of Dark Dreams: Slavery and Empire in the Cotton Kingdom* (Cambridge, MA, 2013); Matthew Karp, *This Vast Southern Empire: Slaveholders at the Helm of American Foreign Policy* (Cambridge, MA, 2016); Joshua D. Rothman, *Flush Times and Fever Dreams: A Story of Capitalism in the Age of Jackson* (Athens, GA, 2012).

²⁴ Lieut. M. F. Maury, 'Direct Foreign Trade of the South', *De Bow's Review*, xii (1852), 148.

investigating the environmental sources of important diseases and advising on the best means of prevention, frequently framing his publications with topographical and hydrographical maps. As anyone who has read the diaries or letters of western settlers will know, concerns about the 'health,' or, to use contemporary parlance, the 'salubrity' of certain geographical areas were paramount. In particular, 'unacclimated' immigrants to unfamiliar environments were thought to be especially vulnerable to endemic diseases. Adhering to the common understanding of human bodies as porous and subject to environmental influence, Drake's writings combined western boosterism with in-depth medical research, utilising Humboldt's climatological theories about the changes in climate across space to direct western physicians on the best means to prevent disease and treat their patients.

A conviction common to these case studies is that humans continued to be profoundly interconnected with the natural world around them, rather than becoming alienated from it. Whether emphasising the porousness of human bodies and their vulnerability to diseases of environmental origin or pointing to natural phenomena as evidence of divine injunction to expand, the natural world in these readings influences human society in ways beyond man's control. Yet this awareness of the power of the natural world to shape the course of historical development did not lead American expansionists to a sort of fatalism, a passive submission to natural dictates. On the contrary, it served to legitimise exploitative environmental practices as in keeping with the 'natural' course of events. Projects such as the Pacific Railroad, settler agriculture in the western territories, and resource extraction from the Amazon basin were justified on the basis that they were aligned with the providentially defined 'natural order,' as revealed by scientific research.

In this respect, the naturalisation of environmental exploitation worked in tandem with expansionists' gendered assumptions. As scholars studying the intersection of gender and expansion have demonstrated, the projection of human power over the natural world and male power over women were mutually reinforcing.²⁵ In the words of Annette Kolodny, when American men imagined the continent as presenting a bountiful 'virgin land,' they reinforced 'what is probably America's oldest and most cherished fantasy; a daily reality of harmony between man and nature based on the experience of the land as essentially feminine..., enclosing the individual in an environment of receptivity, repose, and painless

²⁵ Annette Kolodny, *The Lay of the Land: Metaphor as Experience and History in American Life and Letters* (Chapel Hill, 1975); Carolyn Merchant, *Ecological Revolutions: Nature, Gender, and Science in New England*, 2nd ed. (Chapel Hill, 2010 [1989]); Amy Kaplan, 'Manifest Domesticity', *American Literature*, lxx (1998), 581-606; Amy S. Greenberg, *Manifest Manhood and the Antebellum American Empire* (New York, 2005).

and integral satisfaction.'²⁶ The gendered vision of the environment served to legitimate environmental exploitation by transposing the 'natural' gender hierarchy onto the land. Just as it was 'natural' for men to maintain a dominant social position over women, so was it 'natural' for the explorer and agriculturalist, envisioned as male, to exert superiority over the environment, portrayed in the feminine roles of nurturer or object of sexual subjugation.

The gendered assumptions encoded into the sources under consideration here, and expansionist literature more generally, thus presented a comforting and reassuring image of 'natural' male progress, eliminating much of the mystery and uncertainty from the process of territorial expansion. Reinforced by scientific investigation that privileged white, male Euro-American forms of knowledge over the considerable expertise of women and indigenous peoples, the environmental imagination of these figures underlay their attempts to reconcile some profound anxieties about the process of societal transformation with a sense of excitement about the possibilities that expansion opened up. It contributed to the potency of expansionist ideology, combating concerns about the formlessness of the nation's new territorial configuration. Yet the environmental imagination also went beyond mere rhetoric and provided essential practical information about the environment of the territories that was lacking in other more amorphous invocations of the United States' Manifest Destiny, addressing concerns about health and livelihood that were central to the settler experience.

'The Truth of Geography': William Gilpin, 'Thermal Science,' and the Geopolitics of American Destiny

A burgeoning literature on American ideas about space documents the multifaceted impact that territorial expansion had on the ways Americans imagined their place in the world.²⁷ In the early decades of the nineteenth century, questions about the future territorial configuration of the United States were often answered with the assertion that there were 'natural limits' beyond which the nation could not expand. Drawing on a long tradition in

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²⁶ Kolodny, Lay of the Land, 4.

²⁷ Christopher C. Apap, *The Genius of Place: The Geographic Imagination in the Early Republic* (Durham, NH, 2016); Anne Baker, *Heartless Immensity: Literature, Culture, and Geography in Antebellum America* (Ann Arbor, 2006); Martin Brückner, *The Geographic Revolution in Early America: Maps, Literacy, and National Identity* (Chapel Hill, 2006); Drake, *Nation's Nature*; D. W. Meinig, *The Shaping of America: A Geographical Perspective on 500 Years of History*, 4 vols. (New Haven, 1986-2004); Susan Schulten, *Mapping the Nation: History and Cartography in Nineteenth-Century America* (Chicago, 2012); Robert H. Wiebe, *The Opening of American Society: From the Adoption of the Constitution to the Eve of Disunion* (New York, 1984); Major L. Wilson, *Space, Time, and Freedom: The Quest for Nationality and the Irrepressible Conflict, 1815-1861* (Westport, 1974).

political thought, highlighted particularly by French Enlightenment thinkers, even the most aggressively expansionist early Americans variously cited the Rocky Mountains, the Pacific Ocean, and the Gulf of Mexico as the natural boundaries of the United States.²⁸ In the 1840s, however, expansionist rhetoric shifted away from the idea of restrictions upon American growth in favour of the boundlessness of its destiny. In historian Robert Wiebe's formulation, many Americans lacked the 'spatial logic' that would have curbed their expansionist impulses.²⁹ 'The Isthmus cannot arrest—nor even the Saint Lawrence!!,' declared the southern editor James D. B. De Bow in an ecstatic proclamation of American destiny, in which he predicted that 'Old Mexico and Cuba' would be the first dominoes to fall on the road to continental domination.³⁰

The realities of American expansion could hardly have been further removed from the inevitable, uncontested process De Bow projected. Indigenous peoples and European colonial settlers fought bitterly against American attempts to conquer the territories they inhabited, while internally more conservative voices decried what they saw as the recklessness and overreach of American power. For many, it seemed the United States had lost its geographical moorings. 'To annex may prove to be annexed,' fretted the writer Theodore Sedgwick in an 1843 letter to the New York Evening Post cautioning against the annexation of Texas, citing the 'diversity of interests' that would necessarily result from such a measure.³¹ Sedgwick and others were perturbed by a situation in which, in the words of historian Rachel St John, 'territorial boundaries were impermanent; national loyalties were conditional; and many alternative configurations of land, power, and people seemed possible.'32 Different groups advocated the absorption of Cuba, British North America, the remainder of Mexico, and other regions of the continent in various configurations throughout the middle decades of the nineteenth century. The current geographical form of the United States was just one of a plethora of ways in which Americans imagined the nation's future extent.

This unstable situation intensified fears about the permanency of the American Union itself. The fact that the nation stretched over such a large territorial extent with little political and

²⁸ Drake, *Nation's Nature*, 1-16; Meinig, *Shaping of America*, ii, especially 199-202, 418-30. On the background of the 'natural limits' concept in political thought, see: Peter Sahlins, 'Natural Frontiers Revisited: France's Boundaries since the Seventeenth Century', *American Historical Review*, xcv (1990), 1423-51.

²⁹ Wiebe, *Opening*, 142.

³⁰ J. D. B. De Bow, 'The South American States', *De Bow's Review*, vi (July 1848), 9.

³¹ Theodore Sedgwick, *Thoughts on the Proposed Annexation of Texas to the United States* (New York, 1844), 28

³² St John, 'Unpredictable America', 57.

social consolidation lent further weight to the possibility that the United States might be sundered into competing confederacies. The secession of the southern states and the outbreak of the Civil War appeared to some to be just the beginning of a fraught, potentially bloody process of multiple nation-makings that threatened to dissolve existing national bonds. A Missourian correspondent of Abraham Lincoln urged the President to push for the annexation of all Mexico to head off 'dreamers of or schemers of a western Republic on the Pacific or a Central Republic in this Valley.' Prominent Army General Winfield Scott, in a private message from October 1860, predicted that four confederacies would emerge from the process begun by southern secession. As a result of these uncertain and fluctuating circumstances, many mid-nineteenth-century Americans feared that their nation's borders would become, in the words of Unitarian theologian William Ellery Channing, 'little more than lines in the sand of the seashore,' liable to be effaced at any moment by the oncoming tide.

Many expansionists went back to nature to address these widespread and profound concerns about geographical and spatial instability. Although the language of 'natural limits' was largely superseded in the middle decades of the nineteenth century, natural phenomena remained crucial and potent reference points for expansionists, who turned to the geography of the American continent to prove that the future United States would be expansive, yet also peaceful, united, and prosperous. Effusive representations of the natural resources of the continent were commonplace throughout the history of European engagement with North America, but in the hands of mid-nineteenth-century expansionists the continent's geography and topography reflected a natural law, a divine plan that the United States should expand to fill its generous confines while retaining its social and political integrity. In the mid-nineteenth century, few figures argued this with more vigour and ingenuity than William Gilpin, a politician, explorer, and writer who served as the first governor of Colorado Territory and, above all, devoted his career to publicising the inevitable future greatness of the American West.³⁶

³³ Samuel T. Glover to Abraham Lincoln, 19 October 1861, Abraham Lincoln Papers, Manuscripts Division, Library of Congress.

³⁴ Winfield Scott to Edward Everett(?), 29 October 1860, Edward Everett Papers, Massachusetts Historical Society. For further examples, see: St John, 'Unpredictable America', 68-9.

³⁵ William E. Channing, A Letter to the Hon. Henry Clay: On the Annexation of Texas to the United States (Boston, 1837), 25.

³⁶ The best biography of Gilpin is: Thomas L. Karnes, William Gilpin: Western Nationalist (Austin, 1970). Useful information on Gilpin's beliefs can also be gleaned from: Henry Nash Smith, Virgin Land: The American West as Symbol and Myth (Cambridge, MA, 1950), 35-41; Schulten, Mapping the Nation, 112-6.

The crux of Gilpin's work was to remove the process of expansion from the realm of human agency, leaving no space for contingency and resistance. Instead, American destiny was secured by the immutable laws of nature. In a speech in Denver on Independence Day 1868, Gilpin asked his audience to remember the Revolution as consummating 'a complete and radical adjustment in the geographical foundations of human institutions,' that shifted the balance of power from 'the huge city of London to the rural shores of the Potomac.' The Civil War was the result of those acting purely on the interests of 'rancorous political parties,' but the Pacific railroad had refocused the nation on its 'sublime mission' of making the continent a united whole in which 'vast geographical and sectional differences... are blended, balanced, and united by permanent accord with the order of nature.' The railroad, Gilpin wrote, had accomplished sublime mission of familiarising Americans with the topographical form of the continent. By showcasing its status as a 'grand amphitheatre surrounded by mountains and external seas,' the railroad had secured the 'perpetuity of the American Union planted symmetrically upon its impregnable foundation' supplied by nature. American greatness was inscribed upon the land, forming a destiny that even the Civil War could only temporarily divert. 'The truth of geography [has] triumphed over the craft of politics,' Gilpin declared.³⁷

It was a familiar refrain, one echoed on countless occasions throughout Gilpin's extensive career in the American West that led historian Bernard DeVoto to label him 'America's first geopolitician.' Gilpin's writings targeted the belief that large swathes of the trans-Mississippi west, particularly the area between the ninety-sixth meridian and the Rocky Mountains, formed 'the Great American Desert,' a largely uninhabitable area that could not be brought to cultivation. This characterisation touched a nerve for Gilpin, who had settled in Missouri, with its eastern border roughly aligned with the ninety-sixth meridian, in the mid-1830s. Far from desolate, Gilpin argued that the Great Plains was in fact a region with great potential for cultivation, both of agricultural products but also valuable minerals such as gold. The climate, too, was 'inspiring to the temper,' conducive to the full development of mental and physical faculties. As the region became increasingly populated by 'the

³⁷ The speech is reprinted in: William Gilpin, *Mission of the North American People: Geographical, Social, and Political* (Philadelphia, 1873), 209-17.

³⁸ Bernard DeVoto, 'Geopolitics with the Dew on It', *Harper's Magazine*, clxxxviii (1944), 313-23.

³⁹ On the Great American Desert concept, see: Smith, *Virgin Land*, 174-83; Martyn J. Bowden, 'The Great American Desert in the American Mind: The Historiography of a Geographical Notion', in David Lowenthal and Martyn J. Bowden (eds.), *Geographies of the Mind: Essays in Historical Geosophy in Honor of John Kirtland Wright* (New York, 1976), 119-47.

⁴⁰ William Gilpin, *The Central Gold Region: The Grain, Pastoral, and Gold Regions of North America* (Philadelphia, 1860), 127. See also: Gilpin, *Mission*, 81-3.

advancing column of progress' and familiar to the masses, Gilpin believed, its providentially defined role in the destiny of the nation would become clear to all.⁴¹

Yet more indicative of the future greatness of the western territories was their topography and geographical location. 'The mission of civic empire,' Gilpin wrote in 1860, 'has for its oracular principle the physical characteristics and configuration of our continent, wherein the Basin of the Mississippi predominates as supremely as the sun among the planets.'42 His works contained lengthy passages of topographical description, revealing what Gilpin believed to be the natural basis for American growth. While he praised the acquisition of territories on the Pacific coast that furthered the 'terrestrial symmetry' of the nation, this was only to be the opening salvo of the grand continental symphony that was to unfold in North America. 43 The continent, he insisted, was a concave shape that 'opens towards heaven in an expanded bowl to receive and fuse harmoniously whatever enters within its rim,' while other continents form 'a bowl reversed, scatter[ing] everything from a central apex into radiant distraction.'44 This showed that while the other continents were destined to contain warring factions, in 'North America a homogeneous unity of language, population, and manners is unavoidable.'45 The 'extraordinary geography of our position,' Gilpin concluded in his inaugural address as Colorado Governor, had 'profound influences which they exercise upon the character of our people and the genius of our future.'46 For Gilpin the geography and topography of North America provided unshakeable evidence that American greatness was inscribed upon the very continent it was destined to expand to fill. The 'holy question' of the destiny of the North American Union lay 'not in the trivial temporalities of political taxation, African slavery, local power, or the nostrums of orators however eminent,' he wrote, but rather in 'the bosom of nature.'47

As this quote indicates, underlying Gilpin's attempts to naturalise American expansion was his gendered conception of nature's roles. When determining a viable route for the Pacific Railroad, 'the national will must wisely listen to and obey her [nature's] prompting,' Gilpin emphasised. As such, the railroad should proceed along the Platte River, the South Pass, and Snake River, culminating on the Pacific at the mouth of the Columbia River. 48 He stressed

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⁴¹ Ibid, 125.

⁴² Ibid, 103.

⁴³ Quoted in: Karnes, Gilpin, 124.

⁴⁴ Gilpin, Central Gold Region, 20.

⁴⁵ Gilpin, Mission, 121.

⁴⁶ 'Colorado', *Chicago Tribune*, 30 December 1865, 2.

⁴⁷ Gilpin, Central Gold Region, 20-1.

⁴⁸ Ibid, 56.

that 'nature leads us point blank' to this route, settling 'by eternal facts, the various opinions which perplex the public mind in locating the continental railroad.'⁴⁹ Since 'nature is the supreme engineer' and 'art prospers only whilst adhering to her teachings,' any other route would be inferior.⁵⁰ Ultimately, though, while nature was a crucial source of wisdom, the goal of these endeavours was to harness natural forces, a process Gilpin frequently framed with sexual imagery. The railroad, Gilpin wrote, would 'throw open' the 'prodigious' resources of the west, which formed an 'overflowing horn of ripening beauty' that Americans would 'occupy... with force and permanence.'⁵¹ By obeying nature's 'promptings', explorers and engineers could best 'penetrate, perforate, or surmount the titanic rigidity' of the western landscape.⁵² Transposing the feminine roles of purveyor of wisdom, source of sustenance, and object of domination onto the human-nature relationship served to frame even such evidently artificial projects as the Pacific Railroad not only as the most efficient means of expanding American power, but also as one that was entirely in keeping with the natural order of things, as reflected in both social power dynamics and inscribed upon the land itself.

While his visions may seem fanciful in hindsight, it would be inaccurate to categorise Gilpin merely as one of many eccentric western boosters that populated the mid-nineteenth-century frontier. Born into a wealthy and politically influential Philadelphia family, his close relatives went on to hold significant positions in several Democratic administrations, which allowed Gilpin to use his personal and familial connections to prominent Jacksonian politicians such as Benton and the Blair family to good effect to advance his own career. His reputation bolstered by his association with prominent Democrats and with the desire for accurate information about the trans-Mississippi west high, Gilpin's writings and speeches were gratefully received by politicians in the eastern states. When preparing for the publication of his first book, *The Central Gold Region*, in the late-1850s, Gilpin responded to requests from the likes of Massachusetts Senator Edward Everett for information and maps of the west. Everett later expressed his thanks for the 'valuable papers,' which he found 'more suggestive and replete with instruction than anything which has yet fallen my way relative to the mighty West.' Articles by Gilpin exhorting the resources and geographical

⁴⁹ Ibid, 33-4.

⁵⁰ Ibid, 43.

⁵¹ Gilpin, Mission, 213.

⁵² Gilpin, Central Gold Region, 33.

⁵³ The best information on Gilpin's political connections and influence is found in: Karnes, *Gilpin*, chapters 1-3. I have also consulted: William Gilpin dictation and biographical material, Bancroft Library, University of California, Berkelev.

⁵⁴ Quoted in: ibid, 250.

majesty of the west appeared periodically in east-coast publications such as the *New York Times* and *De Bow's Review* in 1857 and 1858.⁵⁵ He was invited to lecture at the Smithsonian Institute on 'The Characteristics and Physical Geography of the Western Portion of North America' in 1860.⁵⁶ On the request of Gilpin's political allies in Washington, President Lincoln appointed Gilpin as the first Governor of Colorado Territory in 1861. Missouri Congressman Frank Blair urged the appointment on the basis that Gilpin had done more than any other to illustrate the 'topography, mineral resources, and climate' of that region.⁵⁷

While he enjoyed a favourable reputation among many in the eastern United States, Gilpin was, at heart, a westerner and it was there that his writings and speeches most resonated with the settler population. His numerous lectures were well attended and widely reported in newspapers. The audiences varied, ranging from open-air speeches in public spaces of frontier towns and cities to the more rarefied airs of literary societies. His public cachet was inflated significantly by his presence on the expeditions of John C. Fremont, like Gilpin a close ally of Thomas Hart Benton, whose explorations in the Far West in the 1840s captured the public imagination. Gilpin's exact role in the expeditions is unclear. He receives two short mentions in Fremont's *Memoirs* and Gilpin's own reports of his exploits are doubtlessly exaggerated, but his involvement in the highest profile of mid-nineteenth-century western explorations cannot but have strengthened his reputation as an authority on western geography.⁵⁸ 'It must be borne in mind that Colonel Gilpin speaks entirely from personal knowledge,' one Ohio newspaper reminded its readers, 'having spent much time among the scenes he describes... he may be unquestionably regarded as one eminently competent, from study and experience, to know thoroughly the subject he discusses.' ⁵⁹

Yet it was not only the 'personal knowledge' of Gilpin, Fremont, or any other Euro-American explorer that contributed to the provision of geographical knowledge about the western territories. These figures were not, of course, exploring an unoccupied and uncharted 'wilderness,' but one which had been occupied for millennia by indigenous peoples. Indeed, these expeditions to a large degree relied upon the local knowledge held by indigenous tribes, who entered into agreements with Euro-American explorers by acting as guides or providing

⁵⁵ 'The Great West', *New York Times*, 25 May 1857, 2; 'The Great Basin of the Mississippi', *De Bow's Review*, xxiv (1858), 159-65.

⁵⁶ 'Lecture of Mr. Gilpin', Washington Evening Star, 17 March 1860, 3.

⁵⁷ Karnes, Gilpin, 254.

⁵⁸ Gilpin is mentioned in: John Charles Fremont, *Memoirs of My Life* (Chicago, 1887), 170, 285. On the Fremont expedition and its reception in general, see: William H. Goetzmann, *Exploration and Empire: The Explorer and the Scientist in the Winning of the American West* (New York, 1993), 231-64.

⁵⁹ 'Pikes Peak', *Holmes County Republican*, 3 February 1859, 1.

food.⁶⁰ The reports Fremont penned on his expeditions contained scattered, matter-of-fact references to the contributions of 'Indians' in guiding his party across the dangerous terrains, although of course there were far more allusions to the 'savagery' of the tribesmen who Fremont and his allies frequently fought and massacred.⁶¹

Aside from his presence in and knowledge of these expeditions, Gilpin must have been acutely aware of the persistence of indigenous peoples in the West as a result of his tenure as the Governor of Colorado in the early 1860s. This period featured a long series of clashes between settlers and indigenous peoples, which most infamously manifested itself in incredible settler violence during the Sand Creek Massacre of November 1864. 62 Yet Gilpin's natural teleology showed no regard for any obstacle to white progress. Mexicans and indigenous peoples are entirely erased from Gilpin's visions of the future greatness of the West, which was to be populated with Euro-Americans and European immigrants. Moreover, he portrayed their erasure as completed in keeping with the 'natural laws' on which he placed such weight. Employing some of his favoured natural metaphors, Gilpin lamented the fact that the 'artificial cordon of Indian tribes' had forced 'our pioneer energies... artificially upon the flanks of the continent,' but predicted with certainty that a 'pent-up flood-tide' of white settlement would swiftly bring about the 'obliteration of the Indian barrier' and enable the 'natural course of progress' full play. 63

The erasure of native peoples and Gilpin's vision of the perfection of human civilisation in their stead was endowed with greater legitimacy by his employment of scientific language and concepts. To gain knowledge of the natural world through scientific study, Gilpin asserted, was tantamount to a civic duty which every American must fulfil.⁶⁴ Discerning 'natural laws' and applying them to their own politics and society was the task of every citizen and Americans should 'be certain that the great principles on which they rely to strengthen and perpetuate human rights, are the truthful declarations of exact science, and in harmony with nature.' Of all scientists, Gilpin was particularly enamoured with the climatological theories of Alexander von Humboldt, a 'pre-eminent veteran in science'

⁶⁰ John Rennie Short, *Cartographic Encounters: Indigenous Peoples and the Exploration of the New World* (London, 2009); Brückner, *Geographic Revolution*, chapter 6.

⁶¹ Native American contributions are mentioned, for instance, in: J. C. Fremont, *Report on an Exploration of a Country Lying between the Missouri River and the Rocky Mountains* (Washington, 1843), 8, 10, 43.

⁶² Elliott West, The Contested Plains: Indians, Goldseekers, and the Rush to Colorado (Lawrence, 1998).

⁶³ Gilpin, Central Gold Region, 135-7, 194.

⁶⁴ The civic importance of geographical knowledge in the Early Republic is stressed in: Brückner, *Geographic Revolution*.

⁶⁵ Gilpin, Central Gold Region, 21.

whose 'divine eloquence' Gilpin praised on numerous occasions.⁶⁶ Unlike some other European scientists who denigrated the natural capacities of the American continent, Gilpin argued that Humboldt's 'cosmopolitan genius' led him to look to the New World without prejudice and thus his works invite Americans 'to understand the gigantic proportions of our own great country.' Comparing Humboldt to the very European explorers who 'discovered' America, Gilpin declared that 'as Columbus led forth navigation and commerce... so now, this venerable pioneer of physical science and the arts, marshals us on to penetrate the arcana of the land, to fit society to the broad foundation of the continents, and rear a comity of civilization coequal with the globe.'⁶⁷

From his reading of Humboldt, Gilpin gained an appreciation of the importance of climatology or, as he called it, 'thermal science.' Gilpin drew heavily on Humboldtian language and concepts when explaining at length his theory of the 'isothermal zodiac,' which sought to explain the progress of civilisation as a function of a particular band of temperature. The area most conducive to civilisation was the isotherm with a mean annual temperature of fifty-three degrees Fahrenheit, which he marked with an undulating black line on his isothermal map (figure 3). This line proceeded from what Gilpin labelled 'the great cities of the East' in China, India, and Persia to the Mediterranean, through southern Europe near to Athens and Rome, up to Paris and London, and across the Atlantic to New York, St. Louis, and Denver. Surrounding this black line was a wider red band designating the favoured temperate zone, which widened or contracted in different areas of the globe depending on the range of temperatures in those regions. This band reached up to thirty-five degrees of latitude over the North American continent, forming, as Gilpin was fond of noting, its widest point.⁶⁸ Those looking for an explanation as to the development of civilisation and movement of populations throughout world history, Gilpin believed, must start with the isothermal zodiac. 'Science,' he rejoiced, 'reveals to the world this shining fact, that along it civilization has travelled, as by an inevitable instinct of nature, since creation's dawn.'69

One of the most frequent and powerful means Gilpin chose to communicate the science of natural destiny was visual, in the form of sweeping maps that formed the centrepieces and focal points of his lectures and writings. By translating information into the 'visual language of cartography,' to use David N. Livingstone's phrase, maps had the ability to make unknown areas more comprehensible to a variety of observers, even the illiterate or poorly

⁶⁶ Ibid, 23, 55.

⁶⁷ Ibid, 95.

⁶⁸ See, for instance: ibid, 82; Gilpin, *Mission*, 93-4.

⁶⁹ Ibid, 82.

educated, allowing people to feel like they know the landscape without ever having visited it personally. Gilpin was perfectly aware of their power. To master the geographical portrait of our continent thus in its unity of system, is necessary to every American citizen—as necessary as it is to understand the radical principles of the Federal Government over it, and of political society, he wrote. To the American who assembles within his mental glance every detail of our entire country, from a position correctly selected and rightly understood, a vision of unparalleled splendor is unveiled.

Gilpin rarely missed an opportunity to refer to his maps, including them as frontispieces or figures in his writings, gesturing to them in his lectures, and presenting them to his political correspondents. The isothermal zodiac map (figure 3) was his most ambitious specimen, with bright colours and bold lines clearly demarcating the most favoured climatic zones on a global scale. 'Look upon this map of the world, upon which science delineates the zodiac of empires and the Isothermal axis of progress!' he implored his audience at a lecture in Kansas City, before pointing out the location of the United States at its heart and directing them to recognise 'at a glance the supreme grandeur of our position and destiny.' A report of his appearance at the Smithsonian, too, noted that Gilpin lectured 'with the aid of large maps suspended over the stage.⁷³ To the Missouri General Assembly Gilpin presented two copies of his 'Map of North America' (figure 4), which he intended to aid in deciding the best route for the Pacific railroad by identifying the locations of watersheds, mountain ranges, and the courses of rivers. 74 Gilpin's map of Colorado received huge exposure as the centrepiece of the front page of a January 1865 edition of the New York Herald, which ran a lengthy piece running to a page and a half, almost certainly authored by Gilpin himself, about the favoured position of that state, alongside Gilpin's standard arguments about the privileged role of the United States in 'the isothermal zodiac of empires.'75

Although Gilpin's were certainly eccentric, then, it is not difficult to account for his popularity. Various audiences could have been swept up in Gilpin's fervent enthusiasm and unerring sense of certainty supported by scientific references and detailed maps. His messages were similarly clear. In each case, Gilpin's speeches, writings, and maps

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⁷⁰ David N. Livingstone, *Adam's Ancestors: Race, Religion, and the Politics of Human Origins* (Baltimore, 2008), 176. See also, on isothermal maps in particular: Schulten, *Mapping the Nation*, 107.

⁷¹ Gilpin, Central Gold Region, 18; Gilpin, Mission, 91.

⁷² Western Journal of Commerce, reprinted in: 'An Address', Herald of Freedom (Lawrence, KS), 8 January 1859, 1. The transcript of this lecture took up the majority of the front page.

⁷³ 'Lecture of Mr. Gilpin', 3.

⁷⁴ Karnes, Gilpin, 73.

⁷⁵ 'The Specie Basis of the Republic', *New York Herald*, 23 January 1865, 1-2.

deemphasised political divisions, barely including boundaries between U.S. states or between the different nations of the world (see figures 3-4). Instead, natural features are front and centre, speaking to Gilpin's desire to put his 'solid continental republic' on secure ground and 'restore the preeminent continental character which inspired the generation which founded our Republican Union.'⁷⁶ By effacing division and emphasising natural unity in the ways outlined in this section, Gilpin's works were more than simply the ramblings of an idiosyncratic western booster. Rather, they stressed that region, union, nation, and empire were inextricably interlinked. Provided that petty political strife be subordinated to the United States' grand national and continental destiny as foreseen by the Founding Fathers, the United States would progress as one towards a bright future, unshakeably founded in nature and powerfully revealed by 'thermal science.'

⁷⁶ 'An Address', 1.

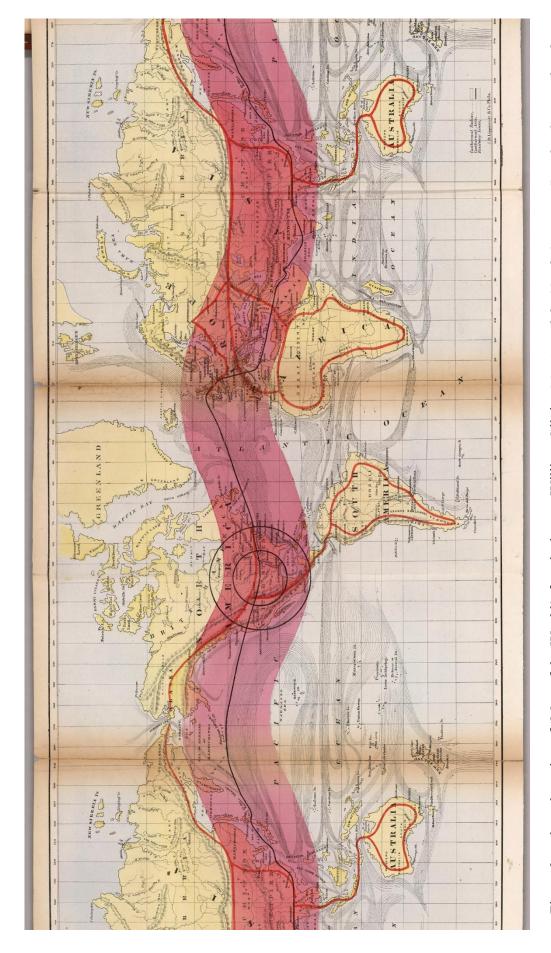


Figure 3: redacted version of 'Map of the World', frontispiece to William Gilpin, Mission of the North American People: Geographical, https://makingmaps.files.wordpress.com/2014/09/02 gilpin world 1872.jpg. Social, and Political (Philadelphia, 1873). Accessed on 26 July 2018 at:



Figure 4: 'Map of North America,' in Gilpin, *Mission*, 24. Accessed on 26 July 2018 at: https://www.flickr.com/photos/internetarchivebookimages/14757785181/.

Matthew Maury, the 'Physical Geography of the Sea,' and the Tropical Slave Empire

While William Gilpin was on the frontier outlining his glorious vision of a geographically preordained continental North American empire, a powerful coterie of southern expansionists was developing schemes that advanced alternative geographical alliances. Many writers and politicians projected a bountiful future in which a hemispheric slaveholding empire, under the direction of the southern United States, would arise in the American tropics, developing its prodigious natural resources through bonded black labour. The Virginia journalist Edward A. Pollard predicted that 'the path of our destiny on this continent lies in... tropical America [where] we may see an empire as powerful and gorgeous as ever was pictured in our dreams of history..., an empire... representing the noble peculiarities of Southern civilization.'⁷⁷ Southern slaveholders shared ideological but also practical links with other New World slaveholding societies. They conceptualised themselves, in historian Matthew Pratt Guterl's words, as residents on an 'American Mediterranean,' connected to Brazilian and Cuban slaveholders by 'a sense of singular space,' by 'institutions, cultures, and "structures of feeling" that were not contained by the nation-state.'⁷⁸

As scholars of slaveholding expansionism have noted, these imperialist impulses emanated from a profound insecurity about the enduring prosperity and even the existence of the slave system on which their society was founded. Walter Johnson has argued that 'beneath the commitment to the exegetes of slavery to their cause lay fearful visions of any future without it,' which caused southern slaveholders to 'displace their fear of their slaves into aggression on a global scale.' Despite the recent colonisation and meteoric growth of a cotton kingdom in the Mississippi Valley, a lingering sense that good quality land fit for slave cultivation would soon be in short supply remained. The soil of the old slaveholding strongholds of the Upper South, many believed, was depleted and thus these states were increasingly vulnerable to being 'abolitionized.' Historian John Majewski has shown that the widespread abandonment of Old South plantations 'reinforced a pervasive sense of decline that took a

⁷⁷ Edward Pollard, Black Diamonds Gathered in the Darkey Homes of the South (New York, 1859), 108.

⁷⁸ Matthew Pratt Guterl, *American Mediterranean: Southern Slaveholders in the Age of Emancipation* (Cambridge, MA, 2008), 1.

⁷⁹ Johnson, River of Dark Dreams, 13-4. See also: Guterl, American Mediterranean; Gerald Horne, The Deepest South: The United States, Brazil, and the African Slave Trade (New York, 2007); Karp, This Vast Southern Empire.

⁸⁰ The thesis that the vulnerability of the Border South drove slaveholding expansionism is developed most forcefully in: William W. Freehling, *The Reintegration of American History: Slavery and the Civil War* (New York, 1994), chapter 8.

heavy psychological toll on politicians, editors, and other public intellectuals who attached great significance to economic progress.'81

More frequently, these concerns were explicitly racial. The fear of being 'pent up' and surrounded by hostile free-labour states invoked the spectre of slave revolt that pervaded southern slaveholding society in the shadow of the Haitian Revolution and analogous, if smaller-scale, domestic insurrections. One Congressman expressed horror at the prospect that white southerners would be 'smothered and overwhelmed by a festering population that was forbidden to migrate, pent in and walled around on exhausted soil—in the midst of a people strong in idleness.'82 Their profound cultural and institutional ties to the Caribbean ensured that American slaveholders were deeply mindful of the example of British emancipation in the West Indies, which they roundly denounced as an unmitigated economic and socio-political disaster. ** Emancipation has destroyed the West Indies*, raged South Carolina's James Henry Hammond, 'ruin—utter, irretrievable ruin, is the only & the certain, & the speedy result that must follow whenever the abolition of Negro Slavery' takes place. ** Paranoid southerners perceived British hands behind a conspiracy to abolitionise the south, for instance by colonising Texas with free-labour settlers and thus preventing the necessary expansion of slaveholding influence. **

The Virginian slaveholder and oceanographer Matthew Fontaine Maury shared these concerns. He referred on several occasions to the 'spirit of emancipation' in the northern states that was 'pressing the black man south.' The resulting 'frightful' concentration of slaves in the southern United States worried Maury, for whom the spectre of a race war loomed large. There will soon be no more Mississippi lands to clear, Maury fretted in an article for *De Bow's Review*, 'and unless some means be devised of getting rid of the Negro increase, the time must come—and sooner or later it will come—when there will be an excess in these states of black people.' Fortunately for Maury, he believed that nature

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⁸¹ John Majewski, *Modernizing a Slave Economy: The Economic Vision of the Confederate Nation* (Chapel Hill, 2009), 26.

⁸² Congressional Globe, 28th Congress, 2nd Session, Appendix, 14 January 1845, 108.

⁸³ On this theme, see especially: Edward Rugemer, *The Problem of Emancipation: The Caribbean Roots of the American Civil War* (Baton Rouge, 2008); Karp, *Vast Southern Empire*, chapter 1; Guterl, *American Mediterranean*, 77ff.

⁸⁴ Hammond to 'dear Sir', 22 August 1845, James Henry Hammond Papers, Manuscripts Division, Library of Congress. Emphasis in original.

⁸⁵ On Anglophobia and Texas annexation, see: Sam W. Haynes, 'Anglophobia and the Annexation of Texas: The Quest for National Security', in Sam W. Haynes and Christopher Morris (eds.), *Manifest Destiny and Empire: Antebellum American Expansionism* (Arlington, 1998), 115-45.

⁸⁶ M. F. Maury, 'The Commercial Prospects of the South', Southern Literary Messenger, xvii (1851), 696-7.

⁸⁷ Maury, 'Direct Foreign Trade', 145.

provided a solution that could act as a panacea for these concerns. ⁸⁸ He argued that the region from the mouth of the Mississippi to the mouth of the Amazon, with its lush and fertile hinterland, formed one great natural system, with favourable wind currents and coastline topography making the latter 'but a commercial appendage' of the former. ⁸⁹ Bringing the Amazon firmly into the U.S. commercial orbit, Maury wrote in 1850 that vessels journeying from the mouth of the Amazon to Europe, Africa, or around either of the Capes 'must stand North, and pass not far from the West Indies,' a fact that makes the Amazon basin closer to the United States than to Rio de Janeiro, the capital and political centre of the Kingdom of Brazil (see figures 5-6). This 'puts practically the mouth of that river almost as much within the Florida pass and under our control, as is the Mouth of the Mississippi.' ⁹⁰ Even Norfolk in Virginia 'is not half as far, in point of time, from the mouth of the Amazon as is Rio in Brazil.' ⁹¹ As such, the question of free navigation of the Amazon was one of 'whether this physical fact shall be converted into a practical one.' ⁹²

Maury portrayed his scheme as providing a 'safety-valve' for the excess slave population, moving slaves from the vulnerable Border States to the more secure, profitable, and environmentally suitable Amazon valley, which was to be 'their last resting-place on the continent.'93 When assailed by an anti-slavery Virginian correspondent about the immorality of his scheme, Maury replied that 'although it would not strike off the shackles of a single man, nor [permit] a single slave to go free, yet it would relieve your own beloved Virginia of the curse, and you would be glad of that.'94 Moreover, by causing the slave states to address the crucial 'question of empire' and heed the imperative to 'increase, multiply, and replenish the earth,' bringing the Amazon basin into the southern commercial orbit would be a crucial step

⁸⁸ Maury's scheme has been analysed in: D. Graham Burnett, 'Matthew Fontaine Maury's "Sea of Fire": Hydrography, Biogeography, and Providence in the Tropics', in Felix Driver and Luciana Martins (eds.), *Tropical Visions in an Age of Empire* (Chicago, 2005), 113-34; Horne, *Deepest South*, chapter 6; Karp, *This Vast Southern Empire*, 143ff.

⁸⁹ Matthew Fontaine Maury, 'On Extending the Commerce of the South and West by Sea', *De Bow's Review*, xii (1852), 395.

⁹⁰ Matthew Fontaine Maury to William Lewis Herndon, 20 April 1850, in *The Papers of William Alexander Graham*, ed. J. G. de Roulhac Hamilton, 4 vols. (Raleigh, 1960), iii, 434.

⁹¹ Maury, 'Direct Foreign Trade', 137.

⁹² Maury, 'On Extending the Commerce', 396.

⁹³ Maury, 'Direct Foreign Trade', 145, 147, 144. The full implications and scientific underpinnings of the idea of the American tropics providing a 'safety-valve' for the superabundant slave population will be investigated further in chapter four.

⁹⁴ Maury to Mary B. Blackford, 24 December 1851, Maury Papers.



Figure 5: 'Valley of the Amazon', frontispiece to M. F. Maury, *The Amazon and Atlantic Slopes of North America* (Washington, 1853). Accessed 26 July 2018 at: https://archive.org/stream/amazonatlantics100maur#page/n7/mode/2up.



Figure 6: 'Gulf Stream and Drift', in M. F. Maury, *The Physical Geography of the Sea* (New York, 1855), plate 17. Accessed 26 July 2018 at: https://archive.org/stream/physicalgeograph01maur#page/n283.

in preventing the region becoming 'Africanized' by a growing black population. ⁹⁵ 'The time will come when the free navigation of the Amazon will be considered by the people of this country as second in importance, by reason of its *conservative* effects, to the acquisition of Louisiana... if it be second at all,' Maury declared triumphantly. ⁹⁶

What seems in hindsight to have been geographical sophistry was lent significant weight by Maury's position within influential political and scientific networks. A slaveholder, Maury's personal papers reveal he was in communication with many of the major southern political figures of the antebellum era. A highly positive piece in *De Bow's Review* contained quotes from southern luminaries such as John C. Calhoun, who labelled Maury a 'man of great ideas.' His personal legacy remains visible in the southern United States today, particularly in his home state of Virginia, where he is memorialised alongside Confederate leaders on Monument Avenue in Richmond and on the University of Virginia's rotunda.

Once regarded as a layman who failed to make any real lasting contribution to American science, recent scholarship on Maury has somewhat rehabilitated his scientific reputation. ⁹⁸ As a self-trained amateur who functioned primarily as a naval officer, Maury was certainly the object of disdain on the part of professional scientists such as Joseph Henry of the Smithsonian Institute. ⁹⁹ Yet other contemporaries of Maury were open to and appreciative of his scientific insights. His research delineating the ocean currents and wind patterns over the sea were gratefully received by mariners and commercial traders. One historian has estimated that a compilation of Maury's wind charts had a distribution of two hundred thousand between their publication in 1848 and the outbreak of the Civil War, doubtless aided by the fact they were available for free. ¹⁰⁰ A reviewer in a southern publication labelled Maury's research as 'amongst the most important scientific movements of the day,' while his work also enjoyed an international reputation. ¹⁰¹ A letter from a London mariner to his fellow ship owners declared that 'it is impossible to over-rate the amount of benefit that may be conferred on navigation & on the commerce of all nations... by means of the systematic observations' undertaken by Maury. ¹⁰² Alexander von Humboldt, too, praised Maury's

⁹⁵ Maury to J. B. Minor, 12 May 1860, ibid.

⁹⁶ Matthew Fontaine Maury, *On the Amazon and the Atlantic Slopes of South America* (Washington, 1853), 63. Italics added.

^{97 &#}x27;Lieutenant Maury', De Bow's Review, xviii (1855), 313.

⁹⁸ See, for instance, the essays in: Helen M. Rozwadowski et al., 'Forum: Matthew Fontaine Maury', *International Journal of Maritime History*, xxviii (2016), 388-420.

⁹⁹ Burnett, 'Maury's "Sea of Fire", 120.

¹⁰⁰ Charles G. Hearn, *Tracks in the Sea: Matthew Fontaine Maury and the Mapping of the Oceans* (New York, 2002), 246.

¹⁰¹ J. B. Auld, 'The Geography of Commerce', *De Bow's Review*, xv (1853), 388-9.

¹⁰² Thomas Challis to the Ship Owners of the City of London, 18 August 1853, Maury Papers.

research in a letter that was published in the Washington press, after the American had sent him a copy of his wind charts along with a map showing the migratory patterns of whales. ¹⁰³

Humboldt's praise must have been particularly gratifying for Maury given that the Virginian regularly cited the German as an inspiration, referencing isothermal lines and reproducing long quotes from Humboldt's works in full. 104 In his magnum opus *The Physical Geography* of the Sea, which went through eight U.S. editions in six years after its publication in 1855 and was translated into numerous European languages, Maury described the ocean in Humboldtian terms, portraying it as 'part of the exquisite machinery by which the harmonies of nature are preserved.'105 Indeed, the very term that formed the title of that work was, in fact, first used by Humboldt in a letter to Maury as the latter was composing the book. 106 Just as Humboldt had gathered extensive information on the natural history and environmental phenomena of the tropics on his celebrated voyages, Maury instructed his naval colleagues to catalogue the flora and fauna of the Amazon basin on their explorations. The research should reflect more than simple facts, however. Maury joined Humboldt in believing in the importance of using all human senses to gather a full picture of the complexity of nature and advised his colleagues accordingly to 'note down and take note of everything that you see, hear, feel, or think while on the way down.' This suggests that Humboldt's influence stretched even further than has been previously recognised by historians, calling into question Laura Dassow Walls's assertion that his 'rampantly liberal politics allied him to the North as certainly as it alienated him from the South, in the developing polarization of antebellum America.'108

Humboldt also crucially informed Maury's ideas about the influence of environmental forces on human society. Perhaps Maury's favourite quote from the German scientist, reproduced in several of his writings, was as follows:

As the external face of continents, in the varied and deeply indented outline of their coasts, exercises a beneficial influence on climate, trade and the progress of civilization, so also in the interior, its variations of form in the vertical direction, by mountains, hills and valleys and elevated plains, have consequences no less important. Whatever causes diversity of form or

¹⁰³ 'Baron Humboldt's Opinion of Lieutenant Maury's Wind and Current Charts', *Weekly National Intelligencer*, 26 October 1850, 2; Maury to Humboldt, 6 September 1849, Maury Papers.

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¹⁰⁴ For Maury on isothermal lines, see especially: Maury to D. A. Robertson, 4 January 1859, reprinted in: 'Pacific Railroad', *Richmond Enquirer*, 28 January 1859, 2.

¹⁰⁵ Matthew Fontaine Maury, *The Physical Geography of the Sea* (New York, 1855), 53.

¹⁰⁶ Burnett, 'Maury's "Sea of Fire", 116-7.

¹⁰⁷ Maury to Herndon, 20 April 1850, in *The Papers of William Alexander Graham*, ed. J. G. de Roulhac Hamilton, 4 vols. (Raleigh, 1960), iii, 434.

¹⁰⁸ Walls, "Napoleon of Science", 72.

feature on the surface of our planet—mountains, great lakes, grassy steppes, and even deserts surrounded by a coast-line margin of forest—impresses some peculiar mark or character on the social state of its inhabitants.¹⁰⁹

In one case, Maury used this quote to answer his own rhetorical question: 'Can it be so, that climate which, with its multitudinous influences, so strongly impresses itself upon the vegetation of a country, upon its beasts, birds and fishes—upon the whole face of organic nature—should produce no effect, either upon the outer or the inner man?' Unlike Humboldt though, who never explicitly framed his work in religious terms, Maury read these dynamics of influence as overt indications that God was acting as a beneficent guiding hand shaping society's development. As a result, for Maury 'no expression uttered, nor act performed by [the agents of nature] is without meaning.' 111

The 'physical facts' of oceanography topography, Maury argued, clearly pointed to its natural unity and the providentially privileged commercial position of the southern United States. 'There are rivers in the ocean,' was a familiar refrain across Maury's writings and of these rivers the Gulf Stream was the most important (see figure 6). 'There is in the world no other such majestic flow of waters,' Maury wrote, portraying it as 'the connecting pipe' between 'the furnace of the torrid zone' and the 'caldrons' of the Caribbean Sea and Gulf of Mexico in the hemispheric thermal system, 'the circulation of atmosphere arranged by nature.' These flows, and the commerce that would inevitably travel along them, formed part of the great 'system of compensations' that Maury identified as central to nature on Earth and throughout the universe. The treasures that would flow down the Amazon and into the ports of the Mississippi on the Gulf coast, Maury noted in this vein, would 'assist to balance the stream of gold which we are to expect and almost to fear from California' to the west. The west.

The chief beneficiaries of the flow of tropical American goods would be the U.S. states bordering the Gulf of Mexico. Thanks to its privileged position at the confluence of the 'natural highways in the ocean' that emanated from the Amazon and the Mississippi, this

¹⁰⁹ Lieut. M. F. Maury, 'Great Commercial Advantages of the Gulf of Mexico', *De Bow's Review*, vii (1849), 521.

¹¹⁰ Ibid, 518.

¹¹¹ Maury, *Physical Geography*, 69.

¹¹² Ibid, 25, 47-8.

¹¹³ Ibid, 169.

¹¹⁴ Quoted in: Horne, *Deepest South*, 118.

favoured basin formed, Maury argued, the 'Cornu Copia of the world.' 115 Casting the natural riches of the American tropics in the role of the generous Mother, Maury rejoiced that nature 'has, with her lavish hand, grouped and arranged all those physical circumstances which make nations great,' concluding that 'upon their green bosom rests the throne of the vegetable kingdom,' ready to be usefully harnessed by masculine industry. 116 Furthermore, a comparison of the different topographical formation of the coastlines of the southern United States and the area around Rio de Janeiro pointed to this vaunted destiny. Gesturing to a topographical map at the Virginia Mercantile Convention in 1851, Maury invited his audience to contrast the 'stiff, rigid shoreline' of South America with the 'finely articulated and beautifully contrasted shore lines of the northern hemisphere.' An observer need only 'study these features on a map of the world, and he will perceive how that nature has decreed that the seat of maritime power, strength and greatness, shall be in the northern, not in the southern hemisphere.'117 'Physical agencies' would prevent the inhabitants of South America from 'becoming a maritime people... for ages,' since the natural riches of the continent's interior would divert the energies of South Americans into agriculture, a fate 'written in the fields, whispered in the breeze, and felt in the climate.' 118

While William Gilpin drew on the research and cachet of western explorers such as John C. Fremont in formulating his vision of the future United States, Maury also frequently referenced the 1851 Amazon expedition of his cousin, the Naval Commander William Lewis Herndon. Herndon's ensuing report, encyclopaedic in detail and lavishly illustrated, was submitted to the Secretary of the Navy in January 1853 and published by order of the House of Representatives in two volumes a year later, with a circulation running in the tens of thousands. Drawing on Maury's oceanographic research, Herndon affirmed the natural interconnectedness of the Amazon and Mississippi, musing on how a 'bit of green moss,' would float from the source of the Amazon, 'down through the luxurious climes, the beautiful skies, and enchanting scenery of the tropics,' across the Caribbean, and into the Gulf of Mexico, where it would meet the flow of the Mississippi. As a result, Herndon argued, the United States was the nation 'most interested in the free navigation of the

¹¹⁵ Maury, 'Great Commercial Advantages', 517; Maury to Herndon, 20 April 1850, in *Papers of Graham*, ed. Hamilton, iii, 434.

¹¹⁶ Ibid, 516.

¹¹⁷ Maury, 'Commercial Prospects', 693.

¹¹⁸ M. F. Maury, 'Valley of the Amazon', De Bow's Review, xv (1853), 40-1.

¹¹⁹ William Lewis Herndon and Lardner Gibbon, *Exploration of the Valley of the Amazon*, 2 vols. (Washington, 1854). Distribution figure from: Horne, *Deepest South*, 107. ¹²⁰ Ibid, i, 62.

Amazon,' since its 'geographical position, the winds of Heaven, and the currents of the ocean' ensured it would 'reap the lion's share of the advantages to be derived from it.' 121

Maury's scheme was also publicised in leading southern journals, many of which ran lengthy promotional articles. 122 Importantly, Maury's language and logic was also echoed by other southerners commenting on potential expansion. Many of these commentators emphasised the geographically favoured position held by the Gulf of Mexico. Promoting the acquisition of Cuba, southern editor Leonidas W. Spratt wrote for the Richmond Enquirer that the Gulf was supplied by 'the two greatest valleys upon the face of the earth... In the progress of the next fifty years, the commerce and trade that must concentrate upon the Gulf of Mexico, will far exceed anything that man heretofore dreamed of in his wildest imaginations.' 123 In a speech to a southern commercial convention, James D. B. De Bow cited the scientific 'fact' that 'Nature has gradated the great slopes of America' to show that 'even the principal products of South America, and of Central America, must seek a market outlet in the Gulf of Mexico..., where the basins of America concentrate their waters.' Promoting the idea of a railway across the Isthmus of Panama, a commentator in a southern periodical wrote that the Gulf was a truly 'American sea,' where the 'natural highways to the ocean... come together and unite mountains, plains and valleys teeming with treasures from the mineral, the vegetable and the animal kingdoms.'125

For Maury and his southern supporters, there was no doubt that slavery was to be the means to develop the Amazon Basin. 'That valley is a slave country,' Maury declared bluntly. 'The European and the Indian have been contending with its forests for 300 years, and they have made no impression,' showing that the work of clearing the vegetation and reaping the crops 'must be done by the African, with the American axe in his hand.' In the heat of the tropics, where 'the African delights to dwell,' Maury wrote, only forced black labour, supervised by whites, could consummate the 'task that man has to accomplish.' The motivation here was plainly southern focusing on the advancement of slaveholding interest. 'The real question at

¹²¹ Ibid, i, 367.

¹²² E.g. Maury, 'Great Commercial Advantages'; Maury, 'Commercial Prospects'; Maury, 'On Extending the Commerce'; Maury, 'Direct Foreign Trade'; Maury, 'Valley of the Amazon.' Maury also wrote a series of letters under the pseudonym 'Inca' to the *Washington National Intelligencer*, collected in: Maury, *On the Amazon*.

¹²³ Leonidas W. Spratt, 'Destiny of the Slave States', *De Bow's Review*, xvii (1854), 280-1.

¹²⁴ 'The Material Progress of the United States, By J. D. B. DeBow', *Southern Quarterly Review*, ix (1854), 526.

¹²⁵ 'The Panama Railway and the Gulf of Mexico (review)', *Southern Literary Messenger*, xv (1849), 443. For further examples in this vein, see: W. J. A. Bradford, 'Central America', *De Bow's Review*, xxi (1856), 10; A. V. Hofer, 'The Central American Question', *De Bow's Review*, xxi (1856), 129.

¹²⁶ Maury, 'Commercial Prospects', 696.

issue is a sectional one,' wrote Maury in a private letter, '& with the South it is a question of empire.' 127

Maury's conviction about the southern United States' expansive destiny, then, drew on the mixture of confidence and anxiety about the future of slavery that characterised southern slaveholding society in the mid-nineteenth century. Forming both the consummate act of a commercially pre-eminent slaveholding empire and a way to avert racial catastrophe within the southern United States itself, Maury and many other southern commentators viewed the opening of the Amazon to U.S. commerce as a natural development in the future of the American continent. Drawing on his reading of Humboldt, especially regarding the mutually constitutive relationship between human society and the natural world, Maury saw the ocean currents as a means to determining God's divine plans. The 'rivers in the ocean' demonstrated that together the Mississippi and the Amazon formed a natural system that superseded the latter's status as under the nominal political control of Brazil. The commercial configuration of the continent, Maury believed, should be brought into line with these natural laws and systems. Opening the natural Amazonian 'safety-valve,' in short, would alleviate the demographic, racial, and political threats to the southern slave system.

Daniel Drake, Medical Geography, and the 'Health' of the West

Gilpin and Maury used climatology and its related disciplines to project an expansive future for the United States in the late decades of the nineteenth century. The more immediate realities of western settlement, however, necessitated the application of climatological science to the territories the United States already owned. For the vast majority of Americans, the western regions of the continent remained a terra incognita. The staggering scale of expansion, with thousands upon thousands of bodies moving into relatively unknown locales, thus prompted a scramble for information about the local environments that would form their new homes. Travelogues and eyewitness reports were eagerly seized upon by both individuals and the daily and periodical presses, all hoping to unearth the essential guide to the best places to settle, or indeed to learn whether it was worth setting out for the new territories at all.

The desire for in-depth, accurate information was made even more acute by the widely held popular belief that many common diseases were a function of the particular local

¹²⁷ Maury to J. B. Minor, 12 May 1860, Maury Papers.

environment.¹²⁸ This meant that the bodily health of the settlers was thought to be inextricably linked to the natural world around them. As Kathryn Shively Meier has shown, during the antebellum and Civil War periods an 'experiential understanding of health' was dominant, driven by the 'conventional belief... that nature – weather, miasmas, the southern climate, seasonal shifts, flora, and fauna – was a major cause of disease and mental unfitness.' Some landscapes and geographical features were seen as inherently unhealthier than others. In particular, locales with stagnant air and water were to be avoided, with swamps and their surrounding regions thought to be especially dangerous, as evidenced by advisory articles in prominent newspapers and periodicals. So 'Without a constant supply of pure air, consisting of those proportions of oxygen, nitrogen, and aqueous vapor which nature has combined in the common atmosphere, we can expect neither a healthful body nor a vigorous mind, asserted a writer in *North American Review*. In the same vein, an emigrant newly settled in California noted in his diary that 'we Selected quite an elevated cite [sic] for our tent, that we might escape the unhealthey [sic] Mist as Much as possible, and have a free circulation of good fresh air.' 132

Unfortunately for prospective western emigrants, consistent and reliable information about the western territories was lacking. Those hoping to discover a clear consensus amidst the maelstrom of books, letters, and pamphlets were disappointed. 'We do not remember to have seen such conflicting accounts of any country as have reached us in regard to this land of promise,' fretted the *Boston Evening Transcript* in relation to California, 'according to some it is a paradise fertile in all that can minister to the comforts of civilized man, while others represent it a "God-forsaken region," where climate, soil, and population combine to render it detestable.' The *Democratic Review* also bemoaned the 'conflicting accounts' of California circulating on the east coast. 'No general description can well apply to California,' an author insisted, since such a wide-ranging region with prominent topographical features like the Sierra Nevada mountain range, 'will naturally present the utmost variety.' ¹³⁴ Tellingly, the sheer variety of competing reports on western environments became the

¹²⁸ Nash, *Inescapable Ecologies*; Valenčius, *Health of the Country*.

¹²⁹ Kathryn Shively Meier, "The Man Who Has Nothing to Lose": Environmental Impacts on Civil War Struggling in 1862 Virginia', in Brian Allen Drake (ed.), *The Blue, the Gray, and the Green: Toward an Environmental History of the Civil War* (Athens, GA, 2015), 68.

¹³⁰ Megan Kate Nelson, 'The Landscape of Disease: Swamps and Medical Discourse in the American Southeast, 1800-1880', *Mississippi Quarterly*, lv (2002), 535-68.

^{131 &#}x27;Wyman on Ventilation', North American Review, lxiii (1846), 466-7.

¹³² Entry for 25 November 1849, Isaac Sherwood Halsey diary, Bancroft Library, University of California, Berkeley.

¹³³ 'California', *Boston Evening Transcript*, 8 October 1847, 2.

^{134 &#}x27;California', Democratic Review, xxiii (1848), 169-70.

subject of satire in the east-coast press. One widely circulated article concerned an intrepid reporter who met a man who claimed to have come 'jes' from Caleforny.' When asked about the climate of the area, the man replied that 'you can choose their any climate you like—hot or cold—and that without travellin' more than fifteen minutes.' From the top of the 'Sawyer Navayday' mountain one can observe two wholly different climates, 'the one hot and the t'other cold,' and thus from the top of the mountain 'you can without movin' kill either summer or winter game, just as you like.' 135

The situation was complicated further by the fact that not all of those who migrated to the new territories did so through the more familiar temperate latitudes within the United States. As one physician wrote, 'the belief that one climate is more favorable than another is universal, and probably well founded,' yet it was not just the inherent healthiness or unhealthiness of the area that mattered, but also 'the adaptability of constitution to climate.'136 In addition to the Overland Trail, other popular routes to the Pacific coast passed around the horn of South America or across the Isthmus of Panama in Central America, in a combination of ships, wagons, and later railroads. Drawing on medical tracts that studied the British colonial experience, tropical diseases were widely thought to be particularly problematic for 'unacclimated' whites. 137 An Army Lieutenant who had taken the Panama route declared in a widely reprinted letter that 'the climate is, without doubt, the most pestiferous for whites in the whole world... Even the acclimated resident of the tropics runs a great risk in staying any time in Chagres; but the stranger, fresh from the North and its invigorating breezes, runs a most fearful one. '138 As Aims McGuinness has shown, engineers directing the construction of the Panama railroad, despite looking upon Panamanians as racially inferior, preferred to rely upon their labour, primarily because of the 'perception that in the Panamanian climate such men would work more efficiently and fall ill at a slower rate than foreigners.'139

These views should not be dismissed as stemming from superstition or folklore. In fact, the linkage of disease and the local environment developed from a long tradition in medical

¹³⁵ 'Climate of California', *Boston Evening Transcript*, 3 January 1849, 4. See also the same story, with the same title, in: *Daily Ohio Statesman*, 29 January 1849, 3; *New Hampshire Gazette*, 6 February 1849, 1.

¹³⁶ Benjamin Phillips, 'Scrofula; its Nature, Causes, Prevalence, &c.', *Southern Medical and Surgical Journal*, ii (1846), 549.

¹³⁷ On British colonial engagements with tropical medicine, see especially: Mark Harrison, "'The Tender Frame of Man": Disease, Climate, and Racial Difference in India and the West Indies, 1760-1860', *Bulletin of the History of Medicine*, lxx (1996), 68-93. On Americans using British sources, see: Nash, *Inescapable Ecologies*, 27-9.

¹³⁸ 'Travel Across the Isthmus', *Baltimore American and Commercial Daily Advertiser*, 20 December 1848, 2. ¹³⁹ Aims McGuinness, *Path of Empire: Panama and the California Gold Rush* (Ithaca, 2008), 59-61.

research, dating back at least to the Greek physician Hippocrates. In his famous treatise *Airs*, *Waters*, *and Places*, Hippocrates argued that travelling physicians should pay close attention to atmospheric conditions in the place of diagnosis, positing that most diseases were the product of poor air quality. The name malaria, for instance, comes from the Italian *mala aria*, literally meaning bad air. The authority endowed upon Hippocrates' theories by his status as the so-called 'father of medicine' meant that the linkage of climate, miasma, and disease causation endured well into the nineteenth century. This was only superseded in the 1870s and 1880s by the germ theory of French biologist Louis Pasteur, who showed that diseases were in fact caused by micro-organisms rather than air-borne miasmas. ¹⁴⁰

Such advances in medical theory still lay ahead of physicians in the 1840s and 1850s. 'It is generally believed that a large proportion of the abnormal conditions of the human system are referable to external influences,' commented a writer in a leading medical journal. 'We speak of the diseases of northern and southern latitudes, of mountainous and marshy districts, and every one recognizes the distinctions. '141 In his 1842 climatological study, the physician Samuel Forry listed a plethora of atmospheric factors that 'produce a sensible effect on our organs,' including 'its serenity and humidity, changes of electric tension, variations of barometric pressure, the admixture of terrestrial emanations dissolved in its moisture, and its tranquillity as respects both horizontal and vertical currents.' ¹⁴² Forry's work, which drew upon the statistics provided by the Army Meteorological Department, was a paramount example of the new climatology that sought out patterns in large data sets and synthesised them for public consumption. Since climate is 'of the highest interest to man in every conceivable relation of his earthly existence,' concluded the *Democratic Review*, Forry's 'excellent work' should receive the 'thanks, not only of the scientific world, but in a peculiar degree, of his countrymen at large.' The new climatology, agreed the New York Tribune, 'is scarcely less important to our industrial and commercial interests than the discovery of new lands.'144

The most prominent attempts to apply the insights of the new climatology to the health-related problems of western settlement were undertaken to the Ohio physician Daniel Drake. Born in New Jersey in 1785, Drake graduated from the University of Pennsylvania's medical

¹⁴⁰ Frederick Sargent, *Hippocratic Heritage: A History of Ideas about Weather and Human Health* (Oxford, 1982).

¹⁴¹ W. L. Jones, 'On the Relations between the Climate and Diseases of our State', *Southern Surgical and Medical Journal*, vi (1850), 528.

¹⁴² Samuel Forry, The Climate of the United States and Its Endemic Influences (New York, 1842), 127.

¹⁴³ 'Climatology of the United States', *Democratic Review*, xi (1842), 449-50.

¹⁴⁴ 'Literary Intelligence', New-York Tribune, 20 January 1857, 6.

programme, where he studied under famed physician Benjamin Rush, and moved west to Cincinnati in 1800. For the rest of his life he was a staple of medical life in the Midwest, founding the Medical College of Ohio in 1819 and becoming editor of several leading western medical journals. His Cincinnati residence became a common stopping point for east-coast residents touring the Midwest, while he appears to have been the consultant of choice for many ailing Midwesterners. Joshua Speed, for instance, remembered that Abraham Lincoln wrote to Drake from Springfield regarding some secretive medical problem. Obituaries upon his death in 1852 appeared in both local midwestern newspapers and more national publications, remembering him as 'the father of western medicine.' 147

Crucially, Drake did not view medicine from an entirely elitist perspective that precluded engagement with the wider public in something other than a physician-patient relationship. After receiving negative reviews for a specialist medical tract he authored early in his career, Drake recognised that 'any work that is purely physical, however preeminent its merits may be, will have in this country a very limited number of readers; and it is only by connecting it with theology, ethics, politics, or belles lettres, that its general celebrity can be insured.' A strict Baconian, Drake subscribed to the idea that medical knowledge was, within reason, available to all who sought it. 'Hitherto, the philosophers have formed a distinct caste from the people; and like kings have been supposed to possess a divine right of superiority,' Drake declared, 'but this delusion should be dispelled... and the distinction between scientific and unscientific, dissolved.' ¹⁴⁹

This dovetailed with Drake's equally strongly held conviction that medicine was best practiced locally, with an in-depth knowledge of the environmental circumstances of the region in question. 'Physical causes lie at the bottom of whatever differences the maladies of different portions of the earth may present,' he argued, and thus it was of crucial importance to investigate 'those physical conditions, which may be presumed to exercise an influence, either directly or indirectly, on health.' ¹⁵⁰ When researching for his magnum opus A Systematic Treatise... on the Principal Diseases of the Interior Valley of North America,

¹⁴⁵ On Drake's social status, see especially: Emmet Field Horine, *Daniel Drake: Pioneer Physician of the Midwest* (Philadelphia, 1960), chapter 18.

¹⁴⁶ Ibid, 345.

¹⁴⁷ Representative obituaries can be found in: 'Death of Dr. Drake', *Kalida Venture*, 12 November 1852, 2; 'The Late Dr. Daniel Drake', *Washington Weekly National Intelligencer*, 20 November 1852, 4.

¹⁴⁸ Quoted in: Henry D. Shapiro and Zane L. Miller (eds.), *Physician to the West: Selected Writings of Daniel Drake on Science and Society* (Lexington, 1970), 57.

¹⁴⁹ Drake, 'Introductory Lecture for the Second Session of the Medical College of Ohio', in ibid, 171.

¹⁵⁰ Daniel Drake, A Systematic Treatise, Historical, Etiological, and Practical, on the Principal Diseases of the Interior Valley of North America, 2 vols. (Cincinnati, 1850), i, 2, 60.

published in 1850, Drake undertook an exhaustive trip across thirty thousand miles of the interior of the continent, cataloguing information about the soil, minerals, animals, and plants in order to understand what he called the 'medical geography' of the region. ¹⁵¹ Drake also relied heavily upon the observations of locals, sending out circulars that were reprinted in his medical journals asking for observations about the environments of the regions in question. ¹⁵² The end result was a work of breathtaking scope, encompassing not simply the climate, flora, and fauna of the region but also the social habits of those who lived there. ¹⁵³ In this, Drake consciously echoed Alexander von Humboldt's attempts to synthesise and describe reams of environmental information to portray a complex yet harmonious picture of the region, all focused on illuminating the interaction of an environment and its inhabitants, rather than simply depicting the terrain itself. ¹⁵⁴ Humboldt himself is reputed to have labelled Drake's *Systematic Treatise* as 'a treasure among scientific works.' ¹⁵⁵

The local knowledge that Drake privileged, though, showed significant racial and class-based bias, meaning the picture he constructed of the medical geography of the western interior could only be a partial one. His circulars were directed to the highly literate white readership of medical journals, while he also approached leading physicians based in certain regions directly. ¹⁵⁶ If Drake gained any medical insight from the non-white peoples he met on his extensive travels through the interior valley, he did not credit them in the *Systematic Treatise*. In fact, although the subtitle of this work promised to discuss diseases 'as they appear in the Caucasian, African, Indian, and Esquimaux,' Drake had little to say about the medical state of his non-white subjects. Indeed, the separation of these racial 'types' in the subtitle suggests Drake considered them to be susceptible to different forms of disease, with the experiences of non-whites less applicable to white settlement than those of Caucasians. As with Gilpin, indigenous peoples appear to Drake as just passing figures in what will become the white man's West. In a concluding passage to *Systematic Treatise*, he looked forward to the forging of a 'new national constitution—physical and mental—of which the Anglo-Saxon will be the basis and the governing element.' In a speech at an Ohio

¹⁵¹ On Drake's trip, see: Frank A. Barrett, 'Daniel Drake's Medical Geography', *Social Science and Medicine*, xlii (1996), 793.

¹⁵² Horine, *Drake*, 370-7. A copy of a circular is reprinted in: 'To the Physicians of the Western States', in Shapiro and Miller (eds.), *Physician to the West*, 184-7.

¹⁵³ Drake, Systematic Treatise.

¹⁵⁴ On the Humboldtian character of medical geography, see: Valenčius, *Health of the Country*, 166.

¹⁵⁵ Quoted in: Otto Juettner, Daniel Drake and His Followers: Historical and Biographical Sketches (Cincinnati, 1909), 82.

¹⁵⁶ A copy of a circular is reprinted in: 'To the Physicians of the Western States', in Shapiro and Miller (eds.), *Physician to the West*, 184-7.

¹⁵⁷ Drake, Systematic Treatise, i, 701.

university, Drake expressed some 'regret, that they have perished in our presence,' yet the disappearance of the Indians was nevertheless an entirely natural process in which the 'deluging wave' of white settlement condemned them to 'their heroic and sorrowful fate.' 158

His methodologies were fundamentally exclusionary, then, but in drawing his conclusions Drake retained perspective on the realities of western settlement and the necessity of demystifying the health implications of migration for a wider white audience. As Conevery Bolton Valenčius has argued, although Drake's works were largely aimed at western physicians, they also proved to be 'an introduction for many people, not just medical professionals, into the character and prospects of the territories in their country's West.' One of Drake's earliest works gave readers a sweeping overview of Cincinnati, including three maps, information about demography, the price of land, markets, banks, projected improvements, and much more in addition to a rudimentary medical geography of the city that eschewed much of the scholarly apparatus common to more specialist publications. Instead, Drake offered direct advice to emigrants on the diseases to which they will be most liable, as well as basic preventative measures such as where best to live and what times of the day they should be covered up. Outlining his rationale in the introduction, Drake simply stated that he intended to outline 'what there is in a new country, that can recommend emigration thither.'

Drake also had a political motive for allaying the fears of new migrants and aiding their transition to their new environments. Witnessing the transformations that western migration was producing in American politics and society, Drake posited that the American nation was analogous to a 'sort of arch' held together by the 'weight' of the west on top, with the metropolises of New York City and New Orleans acting as 'pedestals' connected to the west by the 'superstructure' of the arch, formed of natural features such as the Hudson and Niagara Rivers and the Great Lakes. As long as the west remained a united whole, the structure would remain standing, but the competing 'pedestals' of New York and New Orleans threatened to split it into two, a disastrous event that, Drake believed, would spell the end of the American experiment. Explaining this theory to his audience at an 1833 lecture in Kentucky, Drake directed his audience to view his 'Hydrographical Map of North

¹⁵⁸ Daniel Drake, Discourse on the History, Character, and Prospects of the West (Cincinnati, 1834), 21-2.

¹⁵⁹ Valenčius, *Health of the Country*, 165.

¹⁶⁰ Daniel Drake, Natural and Statistical View, Or Picture of Cincinnati and the Miami County (Cincinnati, 1815), 181.

¹⁶¹ Ibid. vi.

¹⁶² These ideas are most fully developed in his 1833 lecture 'Remarks on the Importance of Promoting Literary and Social Concert', in Shapiro and Miller (eds.), *Physician to the West*, 225-38.

America' (figure 7) that was displayed in the lecture hall. It noticeably downplayed political divisions such as state boundaries and emphasised instead the natural features of the country, 'the great valleys and basins' that, Drake argued, bore out the west's crucial role in the political structure he was describing. 'Here dwells the conservative power,' Drake declared, but to fulfil this role 'the people of the interior... must weave among themselves a firm web of brotherhood, and become still more closely united in social feeling, literary institutions, and manners and customs.' He believed that 'the cement of future adhesion among all the states exudes, to speak figuratively, from the soil of the West... it is the interior of the sovereign body politic, embracing the vital organs, which distribute nourishment throughout the outer parts' 163

This was a telling choice of metaphor. For Drake, providing medical insight into the western states for migrants was a crucial component of maintaining a healthy body politic, not just in the west, but in the United States as a whole. Adhering to the prevailing medical orthodoxy that closely linked the health of the human body with the 'healthiness' of the environment they inhabited, Drake dedicated himself to compiling a medical geography of the west that would serve as a guide to physicians and laypeople when coming to terms with the new environments they inhabited. Compiling information from personal research and the observations of correspondents, Drake sought to contribute to the provision of reliable, actionable information to migrants that would ease the transition to their new homes, aid social cohesion, and maintain the health of the national body politic.

¹⁶³ Ibid, 226-32.



Figure 7: 'A Hydrographical Map of the Interior Valley of North America', frontispiece to Daniel Drake, *A Systematic Treatise, Historical, Etiological, and Practical, on the Principal Diseases of the Interior Valley of North America* (Cincinnati, 1850). Accessed 26 July 2018 at: https://archive.org/stream/systematictreati00drak#page/n9.

Conclusion

The environmental imagination, then, was crucial to how a wide variety of Americans attempted to negotiate the competing impulses of confidence and anxiety engendered by the expansion of the United States in the mid-nineteenth century, enabling them to come to terms with the massive growth of their nation. The language of nature, always implicitly and often explicitly gendered, featured heavily in expansionist rhetoric, capitalising upon the widely accepted linkage between nature and God to portray the territorial growth of the United States as conforming to the dictates of Providence, whose instructions were inscribed upon the natural world itself. For William Gilpin, the geography and topography of the North American continent indicated that the destiny of the United States was to expand to fill its generous confines. In the context of widespread fears about the 'formlessness' of the future United States and the consequences of expansion for the endurance of the national form, Gilpin argued that the 'concave' shape of North America provided unshakeable evidence that its future inhabitants would be one common and indivisible people.

Ironically, similar arguments about the importance of natural phenomena in determining the continent's destiny were also harnessed for entirely sectional ends. Matthew Fontaine Maury claimed to have discovered the salvation of southern slaveholding society in the currents of the Atlantic, which he interpreted as divine missives that the southern states should press for unrestricted access to the Amazon basin. 'Rivers in the sea,' Maury argued, made the mouth of the Amazon far closer to the Mississippi and the southern United States than to Rio de Janeiro, a natural fact that demonstrated its providential role in the development of the American tropics. Moving slaves to the Amazon from the Border States, Maury believed, was a solution to commonly held fears that white southerners would be 'smothered' by an overwhelming black population, hemmed in on all sides by free labour states. This 'safety-valve,' therefore, was both a means of furthering southern commercial and imperial interests and also a way to mitigate the profound fears of a future in which slavery, and thus the socioeconomic foundation of southern life, was under serious threat.

Although fantastical in hindsight, the visions of Gilpin and Maury should not be dismissed as mere rhetorical devices or simply further examples of the powerful but somewhat empty ideology of Manifest Destiny. In fact, they were sustained by what was then considered innovative scientific insight. Maury made heavy use of his own oceanographic research into the currents of the seas, for which he had achieved world-wide acclaim. Although not a professional scientist, Gilpin eagerly employed the language of Alexander von Humboldt

when developing his theory of the 'isothermal zodiac,' a band of temperature stretching around the globe that was supposedly more conducive to civilisation, in which the United States of course occupied pride of place as the culmination of human development. Both employed maps heavily throughout their works, taking advantage of new cartographic innovations that allowed them to synthesise large bodies of information into more easily digestible visual form and thus communicate their theories to broader audiences.

Daniel Drake received more professional training than either Gilpin or Maury, but providing useful information that was broadly applicable to numerous readers and situations was a primary goal of his medical writings. A pre-eminent physician who played a leading role in midwestern medicine, Drake's works compiled detailed environmental information in the hope of more effectively preventing and diagnosing diseases that he, in common with the majority of mid-nineteenth-century Americans, associated closely with the interaction of human bodies and the natural world. Drake provided basic preventative advice to new western emigrants, often combining medical insight with an overview of the socio-economic situation in various midwestern cities. With reliable information about the 'healthiness' of every part of the west greatly desired but sorely lacking in the east, Drake thus sought to encourage healthy migration while also furthering the social cohesion of his region, which he believed was the key to maintaining the integrity and prosperity of the United States as a whole.

Drawing on their common intellectual inspiration Alexander von Humboldt, all three of these figures advanced visions in which humans were connected to and influenced by the natural world around them, whether by linking climate and civilisation, portraying expansion as a divinely ordained 'natural' event determined by continental geography and topography, or by emphasising the porousness of human bodies in the formation and transmission of disease. Yet the consciousness of these interconnections did not lead them to critique exploitative environmental practices, but instead legitimised the extension of human power over nature by framing projects such as the Pacific Railroad and the development of the Amazon basin as being themselves part of the unalterable laws of nature. The righteousness of these measures, expansionists asserted, was inscribed upon the land itself, evidence of a divine injunction to develop the natural resources waiting to be harvested from the American continent. Like the gendered and racialised hierarchies encoded into the methodologies and language employed by male Euro-American expansionists, ultimate human superiority over the physical environment was considered not a usurpation of the natural order, but rather its ultimate fulfilment. The next chapter will extend this analysis to another crucial aspect of

American interaction with the wider world, investigating how this pervasive awareness of the interdependence between human society and the natural world also shaped the ways midnineteenth-century Americans framed, approached, and contested questions of political economy.

Nature's Economy: The Environmental Imagination and Political Economic Thought

The transformation of the United States' relationship with the wider world in the midnineteenth century was not merely the result of territorial expansion. Americans were also constantly engaged in debating how best to leverage the economic resources of their nation in order to increase their influence in global affairs, incorporating insights from the relatively new discipline of political economy. As with the discussions surrounding territorial expansion, of paramount importance to political economic debates was a firm belief that natural laws, rather than simply human actions, guided economic processes. As historians of European economic thought have shown, towering figures of the early decades of the study of political economy such as Adam Smith, David Ricardo, and Thomas Malthus interpreted the economy in light of natural laws that they understood to be comprehensible through the systematic and scientific study of the physical world. This led early European political economists to engage with the overlapping fields of natural science and natural philosophy. Charles Clark has argued with reference to the late-eighteenth and early nineteenth centuries that, 'the belief, implicit or explicit, that economics has some affinity with natural science, is somehow grounded in nature, and is regulated by natural laws towards a natural order, is a constant.' Margaret Schabas concurs: 'not only were economic phenomena understood mostly by drawing analogies to natural phenomena, but they were also viewed as contiguous with physical nature.'2

Taking these insights as starting points, this chapter will investigate how the environmental imagination of mid-nineteenth-century Americans shaped the ways they conceived of the central economic questions of their time. In addition to the works of political economists, public discussions of political economic issues will also be analysed. While the academic study of political economy was becoming more specialised, political debates, public speeches, and articles in newspapers and periodicals remained vibrant fora for engagement with these themes in the mid-nineteenth century, providing evidence of which elements of the political economic scholarship were shared and explored in the wider public arena. The centrality of economic matters to the wider political landscape of the United States in this period was widely acknowledged. The Virginia politician M. R. H. Garnett went so far as to

¹ Charles Michael Andres Clark, *Economic Theory and Natural Philosophy: The Search for the Natural Laws of the Economy* (Aldershot, 1992), 19.

² Margaret Schabas, *The Natural Origins of Economics* (Chicago, 2015), 2.

state that 'in free countries, the chief questions, which divide parties, depend for their resolution, on the principles of Political Economy. Nearly all the arguments which have resounded in our legislative halls, and on our hustings, for the last twenty years... are professedly drawn from this science.' The free trade advocate Francis Lieber labelled economics 'a science of lofty and liberal character,' and included it as one of the 'branches' of politics, because 'a man would be but ill qualified to legislate for a State, who would be ignorant of the general laws affecting its productive capacity.' All in all, as Michael O'Brien affirms, 'political economy was the modern discipline par excellence... no genre was more at the heart of politics, and its insights had a share in moving men to struggle and civil conflict.'

The inescapable backdrop to political economic discussions was, of course, the increasing importance of industrialisation and new technologies to the American economy. The historian Maxine Berg has demonstrated that what she calls 'the machinery question' was one of the central themes with which early political economists had to grapple. The advent of the steam engine and other inventions drastically reduced the amount of labour required to extract natural resources and manufacture them into consumer goods, transforming the relations of production that underlay the economy of the first half of the nineteenth century and engendering significant social and political changes. Human exploitation of the environment was more efficient and lucrative than ever before.

Yet, even in this context, the natural world was believed to be a force significantly influencing the American economy in ways beyond human control. This chapter will show that the beliefs of the founding generation of political economists regarding the importance of natural laws to the functioning of economic systems continued to define the discipline. On a basic level, those studying and commenting on political economy had to engage with the fact that, even with significant technological advancements, certain products could only be naturally grown in certain areas of the world because of geographical and climatic limitations on their cultivation. In other senses, too, climate and geography were thought to determine migration patterns, trade routes, and the productive capacities of different peoples. Man was moulded by nature, even as he was shaping it to an unprecedented extent.

³ 'The Distribution of Wealth', Southern Quarterly Review, xi (1847), 1.

⁴ Lieber paraphrased in: 'The Commercial Age', *De Bow's Review*, vii (1849), 232.

⁵ Michael O'Brien, Conjectures of Order: Intellectual Life and the American South, 1810-1860, 2 vols. (Chapel Hill, 2006), ii, 877.

⁶ Maxine Berg, *The Machinery Question and the Making of Political Economy*, 1815-1848 (Cambridge, UK, 1980).

As with the previous two chapters, in political economic discussions environmental factors were raised to the level of unimpeachable moral authority by a pervasive faith in natural theology, the conviction that God's divine plans manifested themselves through the physical world and could be discerned by the study of it. When nineteenth-century Americans discussed economic policy with reference to nature and the natural, the moral and physical definitions of those words were inextricably intertwined in their minds. What was thought to be 'natural' in the sense that it was part of the physical environment was also thought to be 'natural' in the sense of being inherently correct and beyond reproach. The physical environment was viewed by many as analogous to what was irreprovably right, elevating environmental phenomena to positions of great rhetorical and political power. As the scholar Robert Brown has noted with reference to the European context, 'because the two sets of laws [social and physical] were supposed not to differ in their essential features, the physical laws which regulated the course of Nature were thought of as moral commandments..., and moral laws as the natural regularities which Society both should, and largely did, obey.'7 These moral natural laws were thought to be comprehensible through the scientific study of the natural world. Practitioners of political economy and those who engaged in political economic debates conceived that the discipline should first and foremost seek to discern and interpret the natural laws that both showed how the economy should be constructed and also shaped how it was constructed through methods that were self-consciously scientific. In common with chapters one and two, then, what follows here shows that scientific modes of studying the natural world became lenses through which Americans' knowledge about their society was structured.

The first half of this chapter will demonstrate the interplay of the moral and the physical aspects of the natural laws of the economy by studying attitudes towards different economic pursuits in the mid-nineteenth-century United States. It will show how different moral values were equated to different economic roles. Agricultural labour, with its proximity to the natural world, was seen by some groups, most prominently the Jeffersonians and their antecedents, as a morally superior vocation to urban manufacturing. Yet increasingly few Americans held this to be an absolute, recognising the need for a complementary mixture of agriculture and manufacturing in the national economy. Importantly, this was thought to be in line with natural economic laws, as manifested in the physical environmental characteristics of the American continent, which many believed would mitigate the supposed dangers of a focus on manufacturing. Scientific study of the natural world and the

⁷ Robert Brown, *The Nature of Social Laws: Machiavelli to Mill* (Cambridge, UK, 1984), 10-11.

innovations that resulted from it were also widely thought to resolve the moral dangers of economic growth as forecasted by Thomas Malthus, who argued that population growth would always outstrip food supply, leading inexorably to a lower quality of life. The application of agricultural science, many Americans asserted, would obviate Malthusian catastrophe by increasing yields and supplying the growing population. As formulated by these observers, scientific innovation was not simply an artificial means of overcoming a natural obstacle but rather served to augment and fulfil the latent natural capacities of the earth. It was, thus, entirely in keeping with natural economic laws.

The largely partisan debate between protectionism and free trade that framed much of the political economic discussions of the mid-nineteenth century will then be brought into focus. Democrats, in keeping with the more cosmopolitan outlook we discussed in chapter two, supported free trade as a means of extending their nation's political and economic influence beyond its national borders. Their opponents, Whigs and later Republicans, with some notable exceptions, adhered instead to protectionism, holding that tariffs were the most effective means to protect the nation's economic and especially industrial interests. 8 There were sectional divides too, with southern slaveholders generally most keen to avoid tariffs that might reduce the economic value of their staple produce. By studying these economic debates through the lens of the environmental imagination, however, this chapter reminds us that the divide between protectionists and free traders should not be overstated. Neither side argued in absolutes, with the majority of free traders accepting the necessity of some limited trade barriers, while between 1830 and 1930 even the highest tariff rates never exceeded fifty percent. Moreover, both used strikingly similar language when discussing economic matters, couching their arguments in the language of nature and articulating a belief that economic systems should be brought into line with natural economic laws that could be identified and assessed through the application of scientific methods. This was the product of a shared environmental imagination that placed human society in dialogue with the natural world around it, shaping it but also being shaped in return.

This common environmental imagination took on different inflections and emphases for free traders and protectionists. While both agreed that nature and its laws shaped the economy, where the two sides differed was in their interpretation of these natural laws and, moreover, the implications they had for the policy of their specific political moment. Drawing heavily on natural theology, free traders argued that the distribution of desirable productions in

⁸ Douglas A. Irwin, Clashing Over Commerce: A History of US Trade Policy (Chicago, 2017), 182-93.

⁹ Ibid, passim.

different climates around the globe was a divine injunction that nations should open their borders and trade freely with each other, promoting harmonious social and political relations. Global commerce, they believed, was analogous to a bodily system that was self-regulating and functioned best without outside interference, with the corollary that protectionists measures were aberrations on this natural economic order. Protectionists concurred that the most efficient development of society depended on discerning God's will through a study of the natural world. Some of the most prominent American protectionist thinkers such as Henry Carey and Friedrich List were even willing to concede that free trade could eventually become the superior and most natural economic system. However, they did not believe that free trade was a realistic option in the mid-nineteenth century, since it required more cosmopolitan political and social relations. Until that came to pass, protectionism was for these figures the necessary stepping stone in economic development, allowing less developed nations to develop their industrial potential and compete with other nations of a more equal footing. Cosmopolitan free trade might at some unspecified future time become the natural economic system, but in the mid-nineteenth century it was protectionism and nationalism that were most in line with the natural course of economic development.

In common with the previous two chapters, then, here I will explain how the environmental imagination shaped the ways in which mid-nineteenth-century Americans envisaged the place of their nation in the wider world, conditioning the ways in which they approached the major political questions of their time. Chapter one treated how the environmental imagination helped Americans assert their identities on multiple scales, regional, sectional, and national, in this turbulent period, while chapter two studied how it influenced their attempts to conceptualise and come to terms with the future territorial expansion of their nation across the continent. Here, it is the economic relationships with other nations on the American continent and beyond that are the focus, showcasing how the environmental imagination shaped the ways in which Americans imagined the expansion of their nation's power through trade and economic relationships, rather than simply through territorial conquest and annexation.

Agriculture, Manufacturing, and the Moral Dimension of Political Economy

The discipline of political economy originally grew out of the study of moral philosophy in the mid-eighteenth century. Before publishing the *Wealth of Nations*, Adam Smith was best known for his 1759 work *The Theory of Moral Sentiments*, a long discourse staking out his

positions on several issues in moral philosophy. Other figures from the Scottish Enlightenment who played important roles in shaping the early years of political economy had a similar background. David Hume joined Smith in pondering how morally fallible humans could nevertheless create seemingly orderly and intelligible economic institutions. Dugald Stewart, Professor of Moral Philosophy at the University of Edinburgh, popularised the political economy of Smith in his lectures at that institution in the late-eighteenth and early-nineteenth centuries. ¹⁰ In Enlightenment France, the physiocrats predated Smith and his Scottish counterparts by more than a decade in linking economics and moral development. Prominent physiocratic theorists such as François Quesnay emphasised that productive work was the source of national wealth, idealising agricultural labour for its closeness to the land and disparaging the artificial, displaced nature of city life. ¹¹ While the early nineteenth century saw the rising influence of moral pessimism, resulting in Thomas Carlyle's famous description of political economy as a 'dismal science,' even Thomas Malthus argued that 'the science of political economy bears a nearer resemblance to the science of morals and politics than to that of mathematics.' ¹²

Many political economists in the mid-nineteenth-century United States sought to situate themselves in this tradition of moral philosophy and remained constantly engaged in elucidating the ethical dimensions of their research. 'The principles of political economy,' opined Francis Wayland, free trader and president of Brown University, 'are so closely analogous to those of Moral Philosophy, that almost every question in the one, may be argued on grounds belonging to the other.' Dorothy Ross has noted that, particularly in New England, economic subjects were taught as part of a course in moral philosophy, one which 'studied human affairs as the realm within which individuals sought moral improvement.' Indeed, those teaching and studying political economy in the nation's universities frequently transcended disciplinary boundaries. John McVickar, Episcopalian minister and one of the foremost American political economists of the early nineteenth

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¹⁰ On Smith, see: Donald Winch, 'Adam Smith: Scottish Moral Philosopher as Political Economist', *Historical Journal*, xxxv (1992), 91-113. More generally, see the essays in: Istvan Hont and Michael Ignatieff (eds.), *Wealth and Virtue: The Shaping of Political Economy in the Scottish Enlightenment* (Cambridge, UK, 1985).

¹¹ See, for example: Ryuzo Kuroki and Yusuke Ando (eds.), *The Foundations of Political Economy and Social Reform: Economy and Society in Eighteenth-Century France* (Abingdon, 2018), especially chapters 3-6; Phillippe Steiner, 'Physiocracy and French Pre-Classical Political Economy', in Warren B. Samuels, Jeff E. Biddle, and John B. Davis (eds.), *A Companion to the History of Economic Thought* (Malden, 2003), 61-78.

¹² T. R. Malthus, *Principles of Political Economy*, rept. ed. (New York, 1922 [1820]), 434.

¹³ Francis Wayland, *The Elements of Political Economy* (New York, 1837), vi.

¹⁴ Dorothy Ross, *The Origins of American Social Science* (New York, 1991), 36. Also useful on these connections are the essays in: William J. Barber (ed.), *Economics and Higher Learning in the Nineteenth Century* (New Brunswick, 1993).

century, held a post as Professor of Moral Philosophy at Columbia College. ¹⁵ George Tucker, former Congressman and Professor of Moral Philosophy at the University of Virginia between 1825 and 1845, was also responsible for the teaching of political economy at that institution. ¹⁶

As a result, prominent American political economists claimed for their discipline a position of the utmost importance in facilitating the well-being of the society around them. Henry Carey thought that economic development was a means to human redemption and thus that protectionism would bring the greatest benefit to all humanity. Free trade, on the other hand, he traced as the cause of many wars throughout human history. ¹⁷ Carey's fellow protectionist Friedrich List also counselled that the study of political economy must not 'disavow the exigencies of the future nor the higher interests of the whole human race. Political economy must rest consequently upon Philosophy, Policy, and History.'18 Free traders shared these lofty goals. President of South Carolina College Thomas Cooper said of political economy that he knew of 'no branch of knowledge more directly bearing on the great concerns of human life, or the efficient means of human happiness.' One author in the *Democratic* Review compared Adam Smith to Paul in Christianity, praising Smith as 'the first to reveal, in the glory of its simplicity and beauty, the eternal doctrine of Free Trade.'²⁰ James D. B. De Bow dedicated much of his journal to commercial affairs, stating by way of justification that 'commerce is the parent of civilization' and 'the whole foundation of political economy' was the attempt 'to improve the physical condition of mankind and add to their comforts.'21

A physiocratic linkage of agricultural labour, working close to the natural world, and moral superiority was a common theme in the political economic writings of the first half of the nineteenth century. Many subscribed to the argument of Smith, himself inspired by the French physiocrats, that 'of all the ways in which a capital can be employed,' agriculture 'is by far the most advantageous to the society.' This occasionally manifested itself in outright

¹⁵ Joseph Dorfman, *The Economic Mind in American Civilization 1606-1865*, rept. ed., 5 vols. (New York, 1966 [1946]), ii, 516-22.

¹⁶ O'Brien, Conjectures of Order, ii, 907-13.

¹⁷ On this aspect of Carey's thought, see: Daniel Walker Howe, *The Political Culture of the American Whigs* (Chicago, 1979), 112. On free trade as precipitating war, see: Carey to James Buchanan, 21 December 1857, in H. C. Carey, *Letters to the President on the Foreign and Domestic Policy of the Union, and Its Effects, as Exhibited in the Condition of the People and the State* (Philadelphia, 1858), 3-6.

¹⁸ Frederick [sic] List, National System of Political Economy, trans. G. A. Matile (Philadelphia, 1856), 63.

¹⁹ Thomas Cooper, Lectures on the Elements of Political Economy (Columbia, SC, 1826), 23.

²⁰ 'The History and Moral Relations of Political Economy', *Democratic Review*, viii (1840), 303-4.

²¹ 'The Origin, Progress, and Influence of Commerce', *De Bow's Review*, i (1846), 114; 'The Commercial Age', 232.

²² Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, rept. ed. (London, 1904 [1776]), book ii, chapter v, 12.

hostility to manufacturing pursuits, which Thomas Cooper denounced as increasing 'the wealth of a few capitalists, at the expense of the health, life, morals, and happiness of the wretches who labour for them.' These sentiments were later echoed famously by the fire-eating social theorist George Fitzhugh and northern radical reformers such as Thomas Skidmore. Aside from this belligerent minority, some of those who recognised the importance of industry and manufacturing to the national economy nevertheless professed the moral superiority of agriculture. The protectionist Daniel Raymond argued that no branch of labour should be given priority, yet directly working on the land ensures more 'elevated and liberal minds' while the workshop 'hardens the heart, contracts the mind, and corrupts the passions.' Even Alexander Hamilton, one of the earliest advocates for investment in manufacturing, conceded in his famous *Report on Manufactures* that husbandry is 'a state most favourable to the freedom and independence of the human mind... [and] has *intrinsically a strong claim to preeminence over every other kind of industry*.' And the strong claim to preeminence over every other kind of industry.'

These sentiments were more widely held, featuring in the writings and speeches of politicians and commentators with no formal economic training. Almost a decade before the publication of *Wealth of Nations*, Benjamin Franklin had listed three ways that nation could acquire wealth: 'The first is by War ... This is Robbery. The second by Commerce which is generally Cheating. The third by Agriculture the only honest Way.'²⁷ Few of the later commentators were as blunt as Franklin, but agriculture retained its status as a more moral pursuit. Jeffersonians, to borrow the language of Richard Hofstadter, propagated an 'agrarian myth' that fashioned the independent farmer as the national hero for his ability to live in simple abundance.²⁸ John A. Dix, a politician firmly in the Jacksonian Democratic tradition, argued that agriculture was 'in short, the basis of all national industry' and should thus be afforded special protection and reverence.²⁹ On the other side of the aisle, Horace Greeley, himself the owner of a large farm in upstate New York, also said of farming that 'its origin and progress are nearly identical with those of civilization.'³⁰ An Illinois Representative

²³ Thomas Cooper, Two Tracts: On the Proposed Alteration of the Tariff; and On Weights & Measures (Charleston, 1823), 21.

²⁴ See: Christopher W. Calvo, 'An Antebellum Political Economy: Industry, Trade, and Finance in the Antebellum Mind' (PhD Dissertation, Florida International University, 2010), chapter 5.

²⁵ Daniel Raymond, *Elements of Political Economy* (Baltimore, 1823), 216.

²⁶ 'Alexander Hamilton's Final Version of the Report on the Subject of Manufactures, 5 December 1791', *Founders Online*, National Archives: http://founders.archives.gov/documents/Hamilton/01-10-02-0001-0007 (accessed 25 February 2018). Italics in original.

²⁷ Benjamin Franklin, 'Positions to be Examined, 4 April 1769', ibid: http://founders.archives.gov/documents/Franklin/01-16-02-0048 (accessed 25 February 2018).

²⁸ Richard Hofstadter, *The Age of Reform* (New York, 1955), especially 23-9.

²⁹ 'On the Tariff', n.d., John A. Dix Papers, Rare Books and Manuscripts Library, Columbia University.

³⁰ 'Agriculture', n.d., Horace Greeley Papers, Manuscript Division, Library of Congress.

echoed Greeley in a speech to Congress, asserting that 'it is among the tillers of the soil where we most generally find the men of strong arms and brave hearts, and those virtues of honesty, frugality, and firmness, and patriotism, which must ever constitute the enduring and imperishable bulwarks of national strength and national security.'³¹

Yet, for the vast majority of mid-nineteenth-century Americans, this was hardly the end of the story. Regardless of the supposed moral benefits of agriculture, most realised that a successful national economy was built on a productive relationship between agriculture and manufacturing. Although agriculture continued to employ the most workers and create the most value-added to the economy throughout the antebellum period, manufacturing was growing at a rapid pace.³² This growth, combined with the revolutions in transportation and communication, Steven Hahn has argued, 'both deepened and transformed the linkages that market intensification had been promoting.'³³ Commerce, agriculture, and manufacturing simply could not be separated.

As a result, political economists theorised on the contributions of all these branches to economic and moral development, arguing that a healthy mix of both was in line with the economy's natural laws. David Ricardo, one of the most influential British classical economists, countered Smith's maxim about the superior natural productiveness of agriculture, arguing instead that 'there is not a manufacture which can be mentioned, in which nature does not give her assistance to man, and give it too, generously and gratuitously.' This critique was echoed by American political economists, with free trader Jacob Cardozo agreeing that 'Nature concurs with man in each of the arts of life.' Friedrich List, the influential protectionist, argued vigorously that a mixed economy enabled a nation to become 'more civilized, politically more developed and more powerful than any merely agricultural country.' To concentrate only on agriculture, List continued, would be 'like an individual carrying on his material production with the privation of an arm.' Although they recognised and celebrated the power of 'King Cotton' in the economic growth of their section, and indeed the United States as a whole, southerners also frequently advocated the

³¹ Congressional Globe, 33rd Congress, 1st Session, 28 February 1854, 502.

³² On the continued economic prominence of agriculture: Jeremy Atack and Fred Bateman, *To Their Own Soil: Agriculture in the Antebellum North* (Ames, 1987), 3-4.

³³ Steven Hahn, A Nation Without Borders: The United States and its World in an Age of Civil Wars, 1830-1910 (New York, 2016), 112.

³⁴ David Ricardo, *On the Principles of Political Economy and Taxation*, rept. ed. (London, 1821 [1817]), chapter 2, note 10.

³⁵ J. N. Cardozo, *Notes on Political Economy* (Charleston, 1826), 7. For similar arguments from a northern free trader, see: John McVickar, *Outlines of Political Economy* (New York, 1825), 94-5.

³⁶ List, *National System*, 72, 241-2.

development of manufacturing to cement their economic and commercial advantages. As recent historiography has suggested, most southern leaders were not opponents of industrial pursuits, but were instead often eager to invest in railroads and factories to complement their region's natural wealth.³⁷ To this effect, James D. B. De Bow wrote in the *Charleston* Courier that, 'whilst agriculture is the blessed employment of man, manufactures then is the twin sister, treading together with her ever the ways of pleasantness and peace.'38

Lingering fears of the immorality of urban life, Leo Marx has famously argued, led Americans to idealise a 'middle landscape' of cultivated farmers' fields, superior to both an unkempt wilderness and insalubrious urban landscapes.³⁹ In keeping with this outlook, those commenting on political economic matters sought to harmonise American manufacturing with the natural landscape, arguing that the geography of the American continent would mitigate its potential moral dangers. The Massachusetts Whig Edward Everett highlighted that the United States was 'calling water into action' rather than wantonly abusing natural resources. In contrast to European industrial areas, mills were 'stationed at salubrious spots, and unaccompanied with most of the disadvantages and evils incident to manufacturing establishments moved by steam in the crowded streets and unhealthy suburbs.'40 An author in the Atlantic Monthly contrasted the English engineer, who 'defies all opposition from river and mountain, maintains his lines straight and level, [and] fights Nature at every point,' with the American, who is 'always respectful (though none the less determined) in the presence of natural obstacles to his progress, bows politely to the opposing mountain range. '41 In one of its earliest issues, Scientific American also portrayed factories as acting in harmony with and enhancing the United States' natural landscape: 'The lovely waterfalls of the North and the South that had sung their wild songs responsive only to the winds and the woods for centuries, are now waking the merrier music of the shuttle and the spindle.'42

Mid-nineteenth-century Americans, then, very rarely advocated for either agriculture or manufacturing, but argued that a balance between the two was most in keeping with the natural laws of the economy. This would ensure rapid economic progress and the proper

³⁷ See, especially: Frank Towers, Diane L. Barnes, and Brian Schoen (eds.), *The Old South's Modern Worlds*: Slavery, Region, and Nation in the Age of Progress (New York, 2011).

³⁸ Quoted in: John F. Kvach, *De Bow's Review: The Antebellum Vision of a New South* (Lexington, 2013), 31. ³⁹ Leo Marx, The Machine in the Garden: Technology and the Pastoral Ideal in America (New York, 1964). As Thomas Bender pointed out, this preference was shared by urban workers as well as the literary giants that are the focus of Marx's study: Toward an Urban Vision: Ideas and Institutions in Nineteenth-Century America (Lexington, 1975).

⁴⁰ Edward Everett, 'Fourth of July at Lowell', in *Orations and Speeches on Various Occasions*, 4 vols. (Boston,

⁴¹ 'Railway-Engineering in the United States', Atlantic Monthly, ii (1858), 644-5.

⁴² 'Resources of America', *Scientific American*, 11 March 1848, 197.

development of the morals of American citizens. Henry Clay, one of the strongest advocates for investing in manufacturing, emphasised in one of his earliest speeches on economic matters that 'in inculcating the advantages of domestic manufactures, it never entered the head... of any one, to change the habits of the nation from an agricultural to a manufacturing community. No one, I am persuaded, ever thought of converting the plowshare and the sickle into the spindle and the shuttle.'43 Even Thomas Jefferson, who wrote often and eloquently on the moral superiority of an agrarian over an urban life, agreed that 'an equilibrium of agriculture, manufactures and commerce is certainly become essential to our independence... These three important branches of human industry will grow together and be really handmaids to each other.'44 Moreover, while clearly advocating for the development of natural resources for human ends, those commenting on political economic issues went to some length to portray this balance as natural, in harmony with the peculiar characteristics of the American environment and thus best suited to the moral progress of the population.

The Science of Political Economy and the Malthusian Debate

In addition to this belief in the overlap between political economy and moral philosophy, mid-nineteenth-century American political economists also inherited from their European forebears the conviction that economic phenomena and processes could be understood using scientific methods and language. They understood the economy as functioning according to a set of natural laws and sought to comprehend them through scientific means. While economists today believe the economy can be controlled through artificial measures such as interest rates, Margaret Schabas has shown that political economists in these earlier periods viewed the economy not as part of an 'autonomous sphere' but instead 'as contiguous to physical nature' and 'as part of the same natural world studied by natural philosophers.' In his most famous work, British classical economist David Ricardo argued that market forces are 'rendered permanent by the powers of the laws of nature.' Ricardo and his fellow classical economists such as Smith and Malthus were influenced by the great scientific minds

⁴³ Henry Clay, 'On Domestic Manufactures', in *The Speeches of Henry Clay*, ed. Calvin Colton, 6 vols. (New York, 1857), i, 9.

⁴⁴ Quoted in: Drew R. McCoy, *The Elusive Republic: Political Economy in Jeffersonian America* (Chapel Hill, 1980), 228.

⁴⁵ Schabas, Natural Origins, 2.

⁴⁶ Ricardo, *Principles*, chapter 6, paragraph 36.

of the previous centuries. ⁴⁷ Francis Bacon's advocacy of expanding scientific knowledge through inductive reasoning and close observation were especially foundational. Adam Smith owned Bacon's complete works, while John Stuart Mill rhapsodised in *A System of Logic* that Bacon 'taught mankind to follow experience, and to ground their conclusions on factors instead of metaphysical dogmas.' ⁴⁸ Similarly, Newtonian language abounded in the writings of these thinkers. In Smith's works prices 'gravitate' while 'motion' and 'centres of repose' are crucial concepts. The use of *Principles* in the titles of political economic treatises by Ricardo, Malthus, Carey, Mill, and John Ramsay McCulloch was derived from Newton's famous *Principia* volumes. ⁴⁹

Mid-nineteenth-century Americans on both sides of the debate between protectionism and free trade inherited a comparable outlook on the overlap between natural laws, scientific methods, and economic processes. The New York political economist Francis Wayland enthused about the 'inconceivable importance to a nation, of science, and of the labors of those who are devoted to the discovery of the laws of nature, and to the invention of new modes of applying these laws, to the service of man.' Henry Carey, a devotee of August Comte's positivist empiricism, described the mission of 'the whole science of political economy' as discovering the 'laws' which govern the relationship between man and the earth, the 'great and only machine of production.' Alongside Washington and Franklin, Carey listed Alexander von Humboldt as a man he admired for his 'anxious desire to render service to their fellow men,' while the two men also met during one of Carey's visits to Europe. Leave the service of th

Humboldt was also cited positively by northern free traders such as Charles Sumner, who wrote to his friend Richard Cobden of his admiration of Humboldt's work 'revealing the harmony of the universe.' The Democrat and Secretary of the Treasury Robert J. Walker wrote in his 1849 annual report to Congress that 'the laws of political economy are fixed and certain.' He advised his fellow lawmakers to 'let all international exchanges of products move as freely in their orbits as the heavenly bodies in their spheres... In the absence of

⁴⁷ Deborah Redman, *The Rise of Political Economy as a Science: Methodology and the Classical Economists* (Cambridge, MA, 1997).

⁴⁸ Ibid, 19n20; John Stuart Mill, 'A System of Logic, Part II', in *The Collected Works of John Stuart Mill*, ed. John M. Robson, 32 vols. (London, 1974), viii, 879.

⁴⁹ Redman, Rise of Political Economy, 219, 212n12.

⁵⁰ Wayland, *Elements*, 54.

⁵¹ Henry C. Carey, *The Harmony of Interests: Agricultural, Manufacturing, Commercial* (Philadelphia, 1851), 123.

⁵² H. C. Carey, *Principles of Social Science*, 3 vols. (Philadelphia, 1858), iii, 70.

⁵³ Sumner to Cobden, 9 July 1850, in *The Selected Letters of Charles Sumner*, ed. Beverley Wilson Palmer, 2 vols. (Boston, 1990), i, 301.

southern free trade advocates were equally keen to lay claim to the mantle of empirical scientific observation of natural economic laws. James D. B. De Bow declared that, after Bacon, 'the world, itself, from this moment, began to be one great school-house, taught no longer by robed philosophers and cloistered monks, but by every atom distributed from the all-bounteous hand of Nature.' Similarly, an author in *De Bow's Review* wrote that 'the laws of trade are just as fixed and unalterable as those that preside over the motions of the planetary masses, or that regulate chemical affinities; and it is just as absurd to attempt to modify or regulate the former by legislation as the latter.' 56

Although mid-nineteenth-century American political economists inherited this comparison between scientific methods and economic laws from their European forebears and contemporaries, in other senses they also mobilised scientific advancements to distinguish their conclusions from those of European economists. More specifically, they contradicted the pessimistic arguments of Thomas Malthus about the prospects for unlimited future economic growth. Malthus was renowned, then as now, for his theory that prodigious human reproduction would lead to an unsustainable level of population growth. While he recognised the significant impact of technological development, particularly in manufactures, Malthus believed they could not avert this gloomy fate, as they would increase consumption and present workers with more opportunities for unproductive leisure activity.⁵⁷ Classical economists often distinguished between the potential for technology in manufacturing and agriculture. Thanks to technological developments, 'there are no limits to the bounty of nature in manufactures,' argued the Scottish economist John Ramsey McCulloch, 'but there are limits, and those not very remote, to her bounty in agriculture... it is impossible to apply capital indefinitely even to the best soils, without obtaining from it a constantly diminishing rate of profit.'58

The Malthusian thesis caused significant controversy in the United States, with most of the participants in the debate, albeit with notable exceptions, refuting his pessimism.⁵⁹ As a

⁵⁴ Congressional Globe, 30th Congress, 2nd Session, Appendix, 9 December 1848, 13.

^{55 &#}x27;The Commercial Age', 227.

⁵⁶ A. W. Ely, 'Our Commercial Relation with the British American Colonies', *De Bow's Review*, xii (1852), 231.

⁵⁷ Paul Conkin, Prophets of Prosperity: America's First Political Economists (Bloomington, 1980), 38.

⁵⁸ J. R. McCulloch, *The Principles of Political Economy* (Edinburgh, 1843), 170.

⁵⁹ For an overview of the Malthusian debate in the Early Republic that emphasises opposition: James Russell Gibson, *Americans Versus Malthus: The Population Debate in the Early Republic, 1790-1840* (New York, 1989). For an account that emphasises the minority that were more amenable to the doctrine: Dennis Hodgson, 'Malthus' Essay on Population and the American Debate over Slavery', *Comparative Studies in Society and History*, li (2009), 742-70.

method of satisfying the needs of a growing population and escaping the Malthusian vice, Americans often emphasised the importance of implementing scientific methods to better understand natural laws, which in turn would ensure continued economic growth. As Horace Mann wrote, 'agriculture requires knowledge for its successful operation. In this department of industry, we are in perpetual contact with the forces of nature. We are constantly dependent on them for the pecuniary returns and profits of our investments, and hence the necessity of knowing what those forces are.' Agricultural workers, noted Democrat James Wadsworth in a speech given to the New York Agricultural Society, required an in-depth knowledge of natural phenomena such as the seasons and different types of soils. 'Is it to be supposed,' he asked rhetorically, that farmers 'require less of the light of the highest science than the merchant or the manufacturer?' 61

Advances in agricultural science contributed to the optimism many Americans felt about the prospect of increasing productivity. Improvements in farming methods, Steven Stoll argues, were elevated to an 'ethic' and 'the richness of a well-managed tilth became a standard against which civilization in the United States could be judged.' Widespread use of more efficient machinery was perhaps the most visible manifestation of change in agricultural practice in the first half of the nineteenth century. Yet biological and chemical innovations were arguably of comparable significance and were frequently cited as sources of optimism that the productive power of soils could be restored through the use of readily available fertilisers, giving rise to what Stoll has called a type of 'manure religion' in the antebellum period. From the nation's inception, American scientists had shown an interest in modes of agricultural improvement, a pursuit that received significant impetus with the introduction of the scholarship of the German Justus von Liebig and his fellow agricultural chemists in the 1840s. The principles of agricultural chemistry, argued South Carolina economist Jacob Cardozo, could 'instruct us in the mode by which the processes of Nature may be more completely imitated. The principles of agricultural chemistry in the processes of Nature may be more completely imitated.

⁶⁰ Quoted in: Ariel Ron, 'Henry Carey's Rural Roots, "Scientific Agriculture," and Economic Development in the Antebellum North', *Journal of the History of Economic Thought*, xxxvii (2015), 266-7.

⁶¹ Quoted in: Carey, Harmony of Interests, 209.

⁶² Steven Stoll, Larding the Lean Earth: Soil and Society in Nineteenth-Century America (New York, 2002), 30-1

⁶³ Peter D. McClelland, Sowing Modernity: America's First Agricultural Revolution (Ithaca, 1997).

⁶⁴ Stoll, *Larding*, 49-54, quote at 61.

⁶⁵ Homegrown methods are emphasised in: Benjamin R. Cohen, *Notes from the Ground: Science, Soil, and Society in the American Countryside* (New Haven, 2009). The importance of Liebig is stressed in: Margaret W. Rossiter, *The Emergence of Agricultural Science: Justus Liebig and the Americans, 1840–1880* (New Haven, 1975).

⁶⁶ Cardozo, Notes, 17.

These ideas were circulated more widely in agricultural newspapers but also in journals with a broader audience such as De Bow's Review, in which one author referred 'with enthusiasm, to the labors of Liebig &c.,' to prove that 'Malthus need not dread a world starving from over population, when the capacities of its soil may be augmented almost indefinitely by means within our control.'67 Another southern writer scorned the Malthusian doctrine as 'no less absurd than revolting,' for ignoring scientific progress, 'the inventive genius of man, and his powers of discovery and improvement.'68 Southern agricultural improvers like Virginian Edmund Ruffin moved in circles with other prominent intellectuals and politicians seeking to reform the region, such as James Henry Hammond and the poet William Gilmore Simms.⁶⁹ Northern political and intellectual elites also showed significant interest in agricultural reform as a means to the moral improvement of their society, often practising these techniques on their own farms. 70 The personal correspondence of the politician and historian George Bancroft, for instance, shows him both soliciting advice about farm management and recommending agricultural literature to his political correspondents.⁷¹ Such networks and debates found perhaps their most public outlet in the form of agricultural societies and the fairs they organised. These events, especially in the 1840s and 1850s, were truly mass gatherings, with the population of Syracuse reported to have doubled during the New York State Agricultural Society Fair, with regular updates printed in the state's major newspapers.⁷² Although, as Ariel Ron shows, these fairs and the agricultural reform movement at large were not fully funded or directed by political parties, figures such as Bancroft, Edward Everett, and William Seward were invited to hold the keynote addresses at New England fairs, expounding on the importance of further research and development of agricultural science.⁷³

Malthusian pessimism regarding the limits on agricultural productivity was most firmly refuted by Henry Carey. Employing a trope that features frequently throughout his work, Carey argued that Malthus's theory of population implies that man 'is becoming nature's

⁶⁷ 'American Legislation', De Bow's Review, ii (1846), 115.

⁶⁸ 'The Distribution of Wealth', Southern Quarterly Review, xi (1847), 41.

⁶⁹ Drew Gilpin Faust, A Sacred Circle: The Dilemma of the Intellectual in the Old South, 1840-1860 (Philadelphia, 1977).

⁷⁰ Tamara Plakins Thornton, *Cultivating Gentlemen: The Meaning of Country Life Among the Boston Elite* (New Haven, 1989).

⁷¹ For instance: J. G. Yeomans to Bancroft, 8 February 1864, George Bancroft Papers, Massachusetts Historical Society; Andrew S. Fuller to Bancroft, n.d., ibid; Bancroft to John A. Dix, 3 January 1861, Dix Papers.

⁷² Ariel Ron, 'Summoning the State: Northern Farmers and the Transformation of American Politics in the Mid-Nineteenth Century', *Journal of American History*, ciii (2016), 347-53.

⁷³ Ibid. For Bancroft: J. P. Beckman to Bancroft, 27 June 1844, Bancroft Papers. For Everett: 'Cattle Show at Springfield' and 'Agricultural Society at Danvers', in *Orations and Speeches*, iv, 52-9, 65-74. For Seward: 'Address Before the Vermont Agricultural Society', in *The Life of William H. Seward with Selections from his Works*, ed. George E. Baker (New York, 1855), 76-83.

slave.' Carey wondered rhetorically whether this left man 'any room for hope, or must he live on, knowing that in virtue of a great and over ruling law, the time must come when they who own the land will hold as slaves all those who need to work it?'⁷⁴ This was the inverse of Carey's vision of societal development. He frequently imagined the earth as a bank that lends its produce for the use of man but requires punctual repayment in order to continue yielding profusely.⁷⁵ These 'payments' took the form of fertilisers and other chemical stimulants that would replenish the soil and not only increase yields, but also reduce the labour required to harvest the produce. Manure, Carey is reported to have quipped, is the 'lifeblood of the nation.'⁷⁶ The British classical economists erred, Carey argued, in treating man 'as a mere machine' without considering that he is 'a being capable of intellectual and moral improvement.'⁷⁷

Agricultural science, for Carey, enabled man to add value to nature, capitalising on the potential latent in the natural world that was ready to be unlocked. Here Carey echoed the conclusions of the French naturalist Buffon, who argued influentially in a 1778 work that the seventh and final stage of human development was one in which man 'seconded' the operations of nature to ensure she could be 'developed to her full extent.' Similar sentiments were widely held in the mid-nineteenth-century United States. For the Connecticut Democrat John Niles, steam-driven industry was 'enlivening and animating the whole face of nature, and diffusing contentment and happiness throughout the whole extent of our wide-spread territory.' The spirit of this was captured more prosaically by Ralph Waldo Emerson, who in his lecture 'The Young American' described railroad iron as 'a magician's rod,' that has 'increased [the] acquaintance [of] the American people with the boundless resources of their own soil,' and awakened the 'sleeping energies of land and water.'

The agents of change in Emerson's lecture, 'the young Americans' themselves, were, of course, male. Emerson called upon 'active young men to withdraw from the cities and cultivate the soil' in order to vindicate the 'free, healthful, strong' America, 'the land of the

⁷⁴ Carey, *Principles of Social Science*, iii, 364.

⁷⁵ Ibid, ii, 15; H. C. Carey, *The Past, the Present, and the Future* (Philadelphia, 1848), 95.

⁷⁶ Quoted in: Conkin, *Prophets of Prosperity*, 284.

⁷⁷ Carey, *Harmony of Interests*, 210.

⁷⁸ Clarence J. Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the Eighteenth Century* (Berkeley, 1967), 655-85.

⁷⁹ Congressional Globe, 29th Congress, 1st Session, Appendix, 15 June 1846, 984.

⁸⁰ Ralph Waldo Emerson, 'The Young American', in *The Collected Works of Ralph Waldo Emerson*, ed. Robert E. Spiller, 10 vols. (Cambridge, MA, 1971), i, 226.

laborer.'81 As we have seen in previous chapters, casting the human-nature relationship in such gendered terms was a powerful means by which Americans justified their exploitation of the physical environment, subsuming these practices within the natural order that structured their society. James D. B. De Bow encapsulated this aspect of the environmental imagination when he wrote that, thanks to scientific innovation, 'nature, in the great revelation of moral and physical principles she is making to man, shows herself no longer the partial stepmother... In the conquest which she is giving to human intellect over matter, she opens to man's free use her broad valleys and rich mountains, and bids him to work out his own destiny and shape them to his purposes by the magic powers of science with which she is clothing him.'82 Here the feminised nature gladly welcomes man's conquest, even providing instructions, in the form of scientific insight into her 'moral and physical principles,' as to how this conquest can most effectively harvest from 'her broad valleys.'

As such, the development of natural resources through agriculture and manufacturing were conceptualised as not only adjuncts of, but rather integral to, natural power hierarchies. 'Man's conquest of the mountains,' Perry Miller has argued, was considered to be 'not a violation of Nature but an embrace.' Mechanical forces were, in this reading, merely realising the economic potential of nature rather than destroying it, making the United States what David Nye has termed a country of 'second creation.' As Alexis de Tocqueville wrote of the Americans he encounters, while they are 'the daily witness[es] of wonders,' they 'do not see anything astonishing in all this' and 'get accustomed to it as the unalterable order of nature.' Progress, in short, was in itself a natural law, an appropriation of the gifts already latent in the natural world in harmony with Providence's intentions for the progress of the American nation.

Free Trade Ideology and the 'Natural' Course of Commerce

Common to mid-nineteenth-century American economic thinkers and commentators, then, was the conviction that natural laws dictated that some mixture of agriculture and manufacturing, supplemented by scientific and technological innovation, should define the

⁸¹ Ibid, i, 228, 230.

⁸² James D. B. De Bow, 'The Destiny of New Orleans', De Bow's Review, x (1851), 440.

⁸³ Perry Miller, *The Life of the Mind in America: From the Revolution to the Civil War* (New York, 1965), 306

⁸⁴ David E. Nye, *America as Second Creation: Technology and Narratives of New Beginnings* (Cambridge, MA. 2003).

⁸⁵ Quoted in: ibid, 9.

American national economy. Looking through the lens of the environmental imagination at the arguments about trade policy that framed much of the political economic debate in this period similarly highlights the commonalities between the free-trade and protectionist approaches hidden beneath the combative rhetoric. Both couched their arguments in the language of nature, drawing on a shared environmental imagination which held that economic systems should be brought into line with providentially defined natural laws as manifested in the physical environment. Some leading protectionist thinkers even conceded that free trade would, in an ideal world, be the naturally sanctioned means of economic development. The difference was that free traders thought that their chosen system could be implemented straight away, whereas even those protectionists who saw free trade as an eventual goal believed a political realignment towards cosmopolitanism would need to take place before the world economy was ready for free trade, with a nationalist, protectionist stage the only natural intermediate arrangement.

When free traders thought about the natural laws of the economy, they cast their eyes across the Atlantic to Britain. The foundational texts of classical political economy were engaged in defending their interpretations using the language of nature. Free trade, Adam Smith consistently emphasised throughout Wealth of Nations, was a system of 'natural liberty' that allowed commerce to take its natural course.86 He attacked those 'projectors' who would restrict freedom of trade and 'disturb nature in the course of her operations in human affairs,' when in fact 'it requires no more than to let her alone, and give her fair play in the pursuit of her ends, that she may establish her own designs.'87 Other early political economists stated more explicitly than Smith that this was a product of providential intent. Decades before the publication of Wealth Of Nations, David Hume wrote that 'Nature' and 'the Author of the world' had endowed the earth with a 'diversity of geniuses, climates, and soils, to different nations' and as a result has ensured 'mutual intercourse and commerce' would be the most advantageous state of affairs. 88 The influential David Ricardo summarised these viewpoints when he stated that, 'under a system of perfectly free commerce, each country naturally devotes its capital and labour to such employments as are most beneficial to each... By stimulating industry, by rewarding ingenuity, and by using most efficaciously the peculiar powers bestowed by nature, it distributes labour most effectively and most economically.'89

⁸⁶ The French physiocrats, who influenced Smith's thinking in this regard, popularised the slogan 'laissez-faire, laissez-penser,' which is best translated to 'let nature take its course': Schabas, *Natural Origins*, 49.

⁸⁷ Adam Smith, Essays on Philosophical Subjects (London, 1795), lxxxi.

⁸⁸ David Hume, 'Of the Jealousy of Trade', in *Essays: Moral, Political, and Literary*, rept. ed. (London, 1889 [1758]), 343, 346.

⁸⁹ Ricardo, *Principles*, chapter 7, 11.

These views found a more public outlet in the debates surrounding the proposed abolition of the mercantilist Corn Laws that gripped British politics in the 1830s and 1840s. Supporters of the removal of these tariffs often argued that free trade was a providentially sanctioned and entirely natural economic system, while restrictions upon it were artificial and contrary to natural laws. Their leader, Richard Cobden, held fast to the belief that free trade was an integral part of a providential internationalist order, the completion of which could only be facilitated by the removal of burdensome restrictions on international exchange. Another free trade advocate noted that 'the varieties of climate, situation, and soil, afford to every country some advantages in the employment of industry not possessed by others.' Thus, protectionist measures are 'mischievous' in 'diverting the industry of the country' away from these natural channels and creating 'a mass of artificial interests.'

The anti-Corn Law movement resonated on the other side of the Atlantic. Cobden maintained regular correspondence with northern free traders such as Charles Sumner, who saw Cobden as an ally in causes ranging from world peace to opposition to slavery. ⁹² Southern figures who strongly disagreed with Sumner on the slavery issue still saw Cobden and his fight against the Corn Laws as an ally in the free trade cause. South Carolina Senator George McDuffie celebrated the success of the Anti-Corn Law League as a sign that 'the banner of free trade shall wave in triumph over the whole world, & beneath its ample folds "the nations of the earth may pitch their tents in peace." ⁹³ For his part, despite his aversion to slavery, Cobden reciprocated the thanks that southerners bestowed upon him, writing in 1859 of his appreciation of 'the great service' that John C. Calhoun 'rendered to the cause of Free Trade,' with arguments 'characterized by a force of logical reasoning which has never been surpassed.' ⁹⁴

Like their British counterparts, American free trade economists also went to great lengths to portray their chosen economic system as natural. The Virginian Thomas R. Dew drew no analytical distinction between the national and worldwide division of labour. 'An active and free commerce will enable each section and each latitude to produce the commodity which naturally benefits it,' Dew told the senior class at William and Mary College. Trade 'is like

⁹⁰ Simon Morgan, 'The Anti-Corn Law League and British Anti-Slavery in Transatlantic Perspective, 1833-1846', *The Historical Journal*, lii (2009), 95-6. See also: Mark Mazower, *Governing the World: The History of an Idea* (London, 2012), 38-48.

⁹¹ Henry Parnell quoted in: Joseph Coohill, 'Free Trade Agendas: The Construction of an Article of Faith, 1837-50', *Parliamentary History*, xxx (2011), 198.

⁹² See, for example: Sumner to Cobden, 9 July 1850, in *Letters of Sumner*, ed. Palmer, i, 301.

⁹³ Quoted in: Brian Schoen, *The Fragile Fabric of Union: Cotton, Federal Politics, and the Global Origins of the Civil War* (Baltimore, 2009), 191.

⁹⁴ Quoted in: O'Brien, Conjectures of Order, ii, 917n86.

the native spring of the rock,' he continued, 'best and most abundant when suffered to flow through the channel into which nature directs it, but often diminished, and sometimes wholly destroyed, by an attempt at improvement.'95 The argument that free trade facilitated the natural global division of labour was echoed by northern economists. Brown University president Francis Wayland asserted that 'every one perceives that God has bestowed upon different districts of the same country, different advantages,' and the same applied to 'different quarters of the globe.' Yet it was similarly obvious that 'every nation, and every individual of that nation, desires the productions of every other nation.' The very clothes worn and food eaten by northerners, Wayland argued, was proof 'that every latitude of both hemispheres, and almost every country on the globe, are tributary to his happiness.' 96

The idea that the dispersal of different products around the globe legitimised free trade was more widely held outside of these economic specialists. In his 1845 yearly report as Secretary of the Treasury, the Democrat Robert J. Walker noted that 'soil, climate, and other causes, vary very much, in different countries, the pursuits of which are most profitable in each; and the prosperity of all of them will be best promoted by leaving them, unrestricted by legislation, to exchange with each other those fabrics and products which they severally raise most cheaply.'97 His sentiments were echoed in the *Democratic Review*, which counselled that 'it is as unnatural to legislate for the existence of manufactures in a country where nature has denied their existence... as for a legislature to will that the ocean be turned into dry land, or that stones shall be converted into loaves of bread.'98

Many of these commentators couched their advocacy of free trade in the language of health and bodily dynamics, depicting the world as an organism with natural 'arteries' of commerce giving it life and vigour. Like Maury, Missouri politician Frank Blair praised the sagacious free trade policies of Britain: 'It is this which has made her the heart of the world of commerce, its life-giving currents imparting strength and power to resist the combined despotisms of Europe.'99 Blair aside, the most vigorous and frequent use of this language can be found in southern journals that envisaged the southern United States as supplanting Britain as the beating heart of the world's commerce. A writer in *Southern Quarterly Review* regretted that New York City had, at present, claimed position as 'the mighty heart of the

⁹⁵ Thomas R. Dew, Lectures on the Restrictive System (Richmond, 1829), 22, 90.

⁹⁶ Wayland, Elements, 88, 172.

⁹⁷ Congressional Globe, 29th Congress, 1st Session, Appendix, 4 December 1845, 11.

⁹⁸ 'On the Influence of Protective Duties of the Manufacturing Prosperity of a Country', *Democratic Review*, xi (1842), 54.

⁹⁹ Frank P. Blair, Jr., Colonization and Commerce (n.p., 1859), 5.

commerce of the Western world,' remarking that 'you almost feel the pulsations of those huge arteries' as you approach. ¹⁰⁰ The fluid that those arteries were pumping, however, was of southern origin; it was cotton, not the iron and coal of the northern hinterland, that was the 'life-blood' and 'the main sinews' of its commerce. ¹⁰¹ The Mississippi River, not the Erie Canal, should be the true, natural 'commercial artery,' or 'ventricle' of North America. ¹⁰² Attempts to restrict trade from freely passing along these 'natural channels,' argued a writer in *De Bow's Review*, would be 'a drawback on the healthy and vigorous action of the whole system.' ¹⁰³

This disparagement of protectionist measures as unhealthy and unnatural was the inevitable corollary of free trade rhetoric. Restrictions on commerce, for these figures, artificially and unnecessarily intervened to alter the natural laws of the economy. 'An attempt to force water upstream would not be more disastrous,' then attempting to intervene in the natural course of trade, argued an author in the *Democratic Review*. ¹⁰⁴ Free trade, noted another writer, would on the contrary place commerce on 'a more natural foundation,' and the products that make up this trade would 'like hardy plants... stand the rude blasts of the wind, the shock of the tempest, when the more tender shoots of a hot-house nourishment would lie trailed and withering upon the ground.' They would be nourished not by 'the laws of man,' which are 'of a frail and transient character,' but rather by 'the laws of nature,' which 'are as eternal as their Author, and that which is founded upon them is marked with permanence and vitality.'105 Perhaps the strongest denunciation of unnatural protectionist sophistry came from South Carolina author Louisa S. McCord. Henry Carey and other protectionist thinkers, McCord charged, were trying to force southerners 'from our natural occupation' by advocating that cotton, 'in spite of nature,' be manufactured as well as grown in the southern states. McCord saw this as 'substituting... Dr. Smith's natural course of things... by Mr. Carey's protective tariffs.' Carey's aim, she believed, was to further racial equality and in so doing he neglected to adhere to 'how, in varying situations, God may have suited man to

¹⁰⁰ 'The Sources of National Wealth', Southern Quarterly Review, iii (1843), 354.

¹⁰¹ 'The Danger and Safety of the Republic', ibid, xiv (1848), 151; 'Currency and Exchanges', ibid, i (1842), 84.

¹⁰² 'Great Commercial Advantages of the Gulf of Mexico', *De Bow's Review*, vii (1849), 513; 'Reciprocal Treatises of Commerce', ibid, xiv (1853), 533.

^{103 &#}x27;Direct Trade of the South', ibid, xiv (1853), 439.

¹⁰⁴ 'The Second War of the Revolution', *Democratic Review*, v (1839), 508

¹⁰⁵ 'The Home-League', ibid, ix (1841), 551

his varying circumstances, or what capacities he may have given him for acting in those circumstances.' 106

The frequent references to God, Providence, and a Creator in these sources evince the centrality of natural theology. Even agricultural scientists, engaged in discovering more efficient methods of extracting and manipulating natural resources, expressed the conviction that nature expressed the will of the Creator and that their work was furthering his divine plan. John Pitkin Norton, the Yale-based agricultural chemist, enthused that each step a farmer 'gains in the knowledge of nature, should lead him toward nature's Creator, and the best farmer should be the best Christian.' ¹⁰⁷ It was in this context that Francis Wayland, himself a Baptist theologian, portrayed the global division of labour, evidenced in the different soils and climates of the Earth, as divinely ordained. ¹⁰⁸ Wayland was echoed by others such as the Pennsylvania's Henry Vethake, who argued that the economic order was governed by 'the Author of nature,' whose superintending influence ensured that free trade would enable the 'greatest amount of human happiness.' ¹⁰⁹

Southern commentators were no less vociferous in linking natural theology and political economy. As we have seen in chapter two, the Virginian oceanographer Matthew Maury studied ocean currents to discern faster and more efficient trade routes for ships, motivated by his certainty that this research allows humans to 'look up through nature to nature's God... Unchanged and unchanging alone, the ocean is the great emblem of its everlasting Creator.' The currents that bear ships around the world have their own divinely ordained 'duties to perform,' Maury continued, and thus the study of them would bring commerce more in line with the providentially sanctioned natural order. The inextricable link between religion and commerce was also noted by an author in *De Bow's Review*, who argued that, 'in the hands of God,' commerce 'has frequently been made the honoured instrument for advancing the cause and kingdom among men,' and as such 'it is the prerogative of Christianity to regulate, to elevate, and to sanctify commerce.' The beneficent social and political influence of the deity on the natural world was, for another southerner, shown by the fact that 'nature seems to have taken peculiar care to disseminate

¹⁰⁶ Louisa S. McCord, 'Carey on the Slave Trade', Southern Quarterly Review, ix (1854), 124, 125, 149, 137-

¹⁰⁷ John Pitkin Norton, 'An Address Before the Hartford County Agricultural Society', John Pitkin Norton Papers, Sterling Memorial Library, Yale University.

¹⁰⁸ Wayland, *Elements*, passim.

¹⁰⁹ Henry Vethake, *Principles of Political Economy* (Philadelphia, 1844), 309.

¹¹⁰ M. F. Maury, *The Physical Geography of the Sea* (New York, 1855), 238, 50, 53.

^{111 &#}x27;Christianity and Commerce', De Bow's Review, xxvi (1859), 257.

her blessings among the different regions of the world, with an idea to the mutual intercourse and traffic among mankind, that the natives of the globe might have a kind dependence upon one another, and be united together by their common interest.'112

Mid-nineteenth-century free trade supporters went to great lengths to portray unrestricted commerce as the natural economic system. Drawing on the insights of the classical political economists such as Smith and Ricardo and learning from the rhetoric of the contemporaneous British struggle to repeal the Corn Laws, these free traders stressed that the dispersal of different productions in the various climates and regions of the world was irrefutable evidence that nature sanctioned the free trade economic order. These views were given further weight by widely held natural theological ideas that explicitly linked the natural order with a divinely ordained plan to ensure the beneficial development of mankind. Frequently, global commerce was couched in the language of health, portraying the earth as analogous to a self-regulating bodily system that functioned best when left free from artificial interference. Protectionist regulations were, for these figures, unnatural, unhealthy, and contrary to God's plan.

Natural Systems in Mid-Nineteenth-Century Protectionist Thought

In engaging with these free trade arguments, two protectionists showed themselves to be of particular importance, guiding protectionist thought in a way that no single American free trade thinker did. Henry C. Carey, a Whig and later Republican, is judged by many scholars to have been the most influential and original American political economist of the midnineteenth century. 'No other early American economist was half as stimulating and provocative or as suggestive and prophetic,' argues Paul Conkin, while Daniel Walker Howe notes that he was the first American economist to garner an international reputation, with his works being translated into several languages, as well as reprinted in American periodicals and newspapers. 113 The German-American Friedrich List, meanwhile, was the chief architect of what Marc-William Palen calls 'Listian nationalism,' which he judges to have been one of the two most influential schools of trans-Atlantic political economic thought in the midto late-nineteenth century, alongside 'Cobdenite cosmopolitanism.' Carey and other

^{112 &#}x27;The Anatomy of Navigation Laws', Southern Quarterly Review, xvi (1850), 432.

¹¹³ Conkin, *Prophets of Prosperity*, 261; Howe, *Political Culture*, 108-9.

American protectionists such as James Blaine and William McKinley, Palen notes, often took their cues from List's work. 114

An examination of Carey and List's writings shows that the free traders' use of the language of nature and the conviction that economic systems should strive to be natural was shared by protectionists. They believed that for an economic system to function at optimum efficiency it would require alignment with natural laws. Bringing the economy and the natural world into harmony, moreover, would ensure the greatest amount of human happiness and allow society to develop at the optimum rate. While both Carey and List expressed a belief that free trade would eventually *become* the natural economic system, they differed from free traders in their assessment of what was possible and expedient in their particular historical moment. Protectionism, for these thinkers, was a necessary building block in the natural economic development of the United States, with a too hasty adoption of free trade the symptom of a naïve assessment of the world's political and economic realities.

In this vein, Carey and List did not share the convictions of George Fitzhugh when he claimed that free trade inevitably 'pinches, nay, almost starves, nine tenths of the populations of the large cities where it has taken up its residence, in order to build up more than princely fortunes for a few vulgar, cunning, selfish millionaires.' In fact, these prominent midnineteenth-century protectionists endorsed free trade as the ultimate goal of economic policy. 'Nobody can admire free trade more than I do,' wrote Carey to Charles Sumner in 1847, conceding that protectionism is in an idealistic sense 'all wrong' but nevertheless 'a necessary act of self-defence.' In a letter to Democratic Treasury Secretary Robert J. Walker, Carey insisted that 'in regard to the advantage that would result from freedom of trade, there can exist no difference of opinion. We are all free-trade men.' Carey was liberal in his quotation of Adam Smith throughout his writings, appropriating him as a 'pure' free trade theorist, an opponent of British imperialism who recognised the importance of a diversified national economy. Smith's maxim that 'commerce is regarded as the handmaid

¹¹⁴ Marc-William Palen, *The 'Conspiracy' of Free Trade: The Anglo-American Struggle over Empire and Economic Globalisation*, 1846-1896 (New York, 2016), xvi and passim.

¹¹⁵ Fitzhugh, 'Uniform Postage, Railroads, Telegraphs, Fashions, Etc.', De Bow's Review, xxvi (1859), 658.

¹¹⁶ Quoted in: Palen, 'Conspiracy' of Free Trade, 10.

¹¹⁷ Carey to Walker, 24 December 1850, in Henry C. Carey, *The Prospect: Agricultural, Manufacturing, Commercial, and Financial at the Opening of the Year 1851* (Philadelphia, 1851), 3.

of agriculture,' Carey argued in one of his semi-regular articles for the *American Whig Review*, had been lamentably supplanted by his successors into 'Commerce is King.' 118

As this last example suggests, Carey directed his ire against free trade as manifested in the economic policy of mid-nineteenth-century Britain. While 'real and perfect freedom of trade would produce unmixed good,' the British government and the economic theorists who supported it were instead propagating a twisted form of free trade that was instead only 'productive of unmixed evil.'¹¹⁹ Carey frequently compared British economic policy to slavery, decrying it as 'an insane effort to compel the world to permit her everywhere to interpose herself between the producers and the consumers of the fruits of the earth.'¹²⁰ These statements were representative of American protectionist responses to British free traders, the majority of which were characterised by a virulent Anglophobia and a belief that advocating free trade was part of a British 'conspiracy' to cement their world domination.¹²¹ Some advocates of protection were even less charitable than Carey and included Smith as one of the main abettors of 'the great conspiracy against mankind' being perpetrated by the British government.¹²² A Washington D.C. newspaper quoted Carey at length before advocating that 'the American people in a body, and as with one voice,' advocate for increased tariffs in order to 'break the colonial vassalage.'¹²³

Like Carey, Friedrich List was initially drawn to free trade as an ideal economic system. In theory, he stated early in his career, lack of restrictions on commerce would allow trade to 'flow in its natural current.' To be realisable, however, a free trade economic system would require significantly different social and political arrangements to those that dominated the mid-nineteenth-century world. A 'world republic,' List asserted, would be required 'to secure the fulfilment of the dreams of the free traders,' yet this was a goal that could only be brought to fruition 'centuries hence.' In the present moment, List argued that right-minded thinkers and policy-makers should jettison the 'cosmopolitical economy' of free trade idealists such as Smith and Jean-Baptiste Say and concentrate instead on what he believed to be the true political economy of that particular period. The organisation of

¹¹⁸ [Carey], 'What Constitutes Real Freedom of Trade: Chapter III', American Whig Review, xxxii (1850), 366.

¹¹⁹ [Carey], 'What Constitutes Real Freedom of Trade: Chapter I', ibid, xxxii (1850), 128.

¹²⁰ Carey, *The Prospect*, 7.

¹²¹ Palen, 'Conspiracy' of Free Trade, passim.

¹²² Calvin Colton, *The Rights of Labor* (New York, 1847), 89.

^{123 &#}x27;Agriculture and Manufactures', Washington Daily Intelligencer, 2 May 1848, 3.

¹²⁴ List to Charles J. Ingersoll, 10 July 1827, in [Friedrich List], *Outlines of American Political Economy* (Philadelphia, 1827), 7.

¹²⁵ Friedrich List, *The Natural System of Political Economy*, trans. and ed. F. O. Henderson (London, 1983 [1837]), 29; List, *National System*, 64.

¹²⁶ List, *National System*, especially 189-207.

the world into distinct nations would thwart attempts to construct a free trade system and as such free traders would join the 'practical men' who 'have always found it both necessary and judicious to regulate commerce and to restrict trade in various ways.' The division between idealistic free trade and realistic protectionism was echoed in the periodical press, with one southern author writing that, 'the idea of absolute free trade between nations, is a mere figment of the brain,' for it 'supposes equality and reciprocity, which,' in that historical moment, 'cannot be found.' Millard Fillmore believed that universal free trade was 'beautiful... in theory,' but would require a 'political millennium' to come to fruition.

List's 'practical' and, according to the title of one of his works, 'natural' system was centred around the realisation of the indispensable presence of the nation in global affairs, which formed a 'vital intermediate stage between the individual and the whole world.' Central to List's theory was the recognition that different nations, with varied natural resources and socio-political institutions, required different economic systems. The efficacy of protective measures, List insists, 'depends entirely upon the condition of the nation,' which could be as different as 'giants and dwarves, youths and old men.' 131 As a result, 'do nature and common sense intend that one procrustean bed should accommodate all these different countries?' 132 Of particular importance was the level the nation had reached on List's fivestage development model, which began with the 'savage state,' progressed through the pastoral and agricultural stages, and culminated with agriculture, manufacturing, and commerce being combined into one whole system. The transitions from the savage to the pastoral and the pastoral to the agricultural stages, List argued, were best achieved through free trade between manufacturing and agricultural nations, which would allow the aspiring agricultural nations to maximise the exports of their valuable natural resources. It was the crucial transition from agriculture to manufacturing that required protectionism as a stimulus for what List termed 'infant industries.' Continued commitment to free trade during this period, he believed, would prevent the development of industrial capabilities and leave the agricultural nation in thrall to more powerful nations that had already developed their manufacturing power.¹³³ The adoption of the right trade policy at the right time would

¹²⁷ List, Natural System, 19.

H., 'The Protective Policy', Southern Literary Messenger, viii (1842), 275.

¹²⁹ Fillmore, 'On the Tariff Bill of 1842', in *Publications of the Buffalo Historical Society, Volume X: Millard Fillmore Papers, Volume 1*, ed. Frank H. Severance (Buffalo, 1907), 216.

¹³⁰ List, Natural System, 29.

¹³¹ List to Charles J. Ingersoll, 12 July 1827, in [List], *Outlines*, 10-11.

¹³² List, Natural System, 42.

¹³³ This model was developed throughout List's writings, but for the clearest statements of this view see: List, *National System*, 72-3, 115, 188, 309. Secondary analysis of List's work can be found in: William Henderson, *Friedrich List: Economist and Visionary*, 1789-1846 (Oxford, 1983), 143-202; Keith Tribe, 'Friedrich List and

invariably further the nation's economic development, with the eventual goal of all nations advancing to the fifth and final stage, when the world would be prepared for the implementation of universal free trade.

Yet his environmental imagination also led List to include an important caveat. In a manner reminiscent of the theories of Arnold Guyot and William Gilpin outlined in previous chapters, List argued that countries in the ill-defined 'tropical' or 'torrid' zone were naturally unfit to develop manufacturing capabilities and instead were best served by acting effectively as supply stores for nations in the 'temperate' zone, which was implicitly understood to include the United States and northern Europe. The configuration of the 'international division of labor,' List emphasised, was mostly dependent on environmental factors. 134 Countries of the torrid zone would be making a 'very fatal mistake' were they to try and develop manufacturing capabilities, as they had 'received no invitation to that vocation from nature,' while as compensation they possessed 'a natural monopoly' on valuable agricultural products. 135 List argued that, in addition to the products that could be grown in each zone, the hot climate of the torrid regions made its inhabitants ill-disposed to the labour necessary to develop manufacturing power. The temperate zone alone was, for List, 'the region of intellectual and physical effort,' as a 'moderate temperature is much more favorable than either extreme to the development and use of power,' with the 'rigor of winter' encouraging 'habits of labor, foresight, order, and economy.' Hotter, more extreme temperatures, on the contrary, bred physical and intellectual laxity and made the inhabitants of the torrid regions indolent and unproductive. 136

In contrast to the backwardness of the tropical zone, the temperate United States occupied a privileged position in List's environmentally influenced global division of labour, enjoying a climate suited to the complementary development of manufacturing, agriculture, and commerce and thus possessing the potential for superior intellectual and socio-political capabilities. As a result of these privileged conditions, the U.S. and other countries of the temperate zone were 'under obligations, above all others to carry national or domestic division of labor to its highest degree of perfection, and only to resort to the international or foreign trade, for such augmentation of wealth and comfort as it is properly fitted to

the Critique of Cosmopolitical Economy', *The Manchester School*, Ivi (1988), 17-38; David Levi-Faur, 'Friedrich List and the Political Economy of the Nation-State', *Review of International Political Economy*, iv (1997), 154-78; Dorfman, *Economic Mind*, ii, chapter 22.

¹³⁴ List, *National System*, 231-2, 242-3.

¹³⁵ Ibid, 75-6.

¹³⁶ Ibid, 75, 296.

afford.'137 In order for the 'infant industries' of the United States to be developed to their full capacity, in short, the focus should be on the domestic market and thus protectionist tariffs were required. Only when these industries had progressed sufficiently for the United States to pass to the fifth and final stage of his development model, List argued, should free trade once again become its prevailing economic system.

This was a theme often emphasised by other American protectionists. In his famous *Report on Manufactures*, Alexander Hamilton advocated a mixed economy in order to afford an 'extensive domestic market for the surplus produce of the soil,' supplying wants domestically rather than through imports.¹³⁸ 'The dictate and demand of nature is that we should improve the gifts she has put in our hands,' declared a writer in the *New York Tribune*, while 'it is absurd and ruinous to go to a distance for articles whose raw material exists in profusion all around us, and for the manufacture of which we have every natural facility.'¹³⁹ Given the 'immense country, with every variety of soil, and climate, and geological structure' enjoyed by the United States, argued a northern Whig publication, it would be entirely 'unnatural' to adopt the British system of extensive imports.¹⁴⁰ By continuing to import products from abroad that could be obtained domestically, argued a North Carolina Democrat on the eve of the Civil War, the U.S. ignores the 'bountiful gifts of God showered upon us,' and 'blindly, and with a fatuity unparalleled, turn[s] from these treasures in our midst.'¹⁴¹

Henry Carey saw in the development of the domestic market the potential to alleviate the sectional tension that was a central feature of antebellum life. Although never holding elected public office, Carey was nevertheless very often engaged in exerting political influence. According to one scholar, Carey 'almost bombarded congressmen, cabinet members, and even presidents with detailed letters or extended policy proclamations.' He was consulted on economic matters by Presidents and Secretaries of the Treasury, while also holding weekly meetings with select congressmen. A large dinner held in Carey's honour in 1859 was attended by figures such as Pennsylvania Senator and future Secretary of War Simon Cameron and 1860 presidential candidate John Bell. ¹⁴³ Carey's public presence was

¹³⁷ Ibid, 243.

^{138 &#}x27;Hamilton's Final Version'.

¹³⁹ 'The Utopians of Free Trade', New York Tribune, 11 December 1850, 4.

¹⁴⁰ 'The Infancy of American Manufactures', American Whig Review, i (1845), 55.

¹⁴¹ Congressional Globe, 36th Congress, 1st Session, 29 February 1860, 932.

¹⁴² Conkin, *Prophets of Prosperity*, 312.

¹⁴³ On Carey's political connections, see: Palen, 'Conspiracy' of Free Trade, 10-11; Howe, Political Culture, 108; Rodney J. Morrison, 'Henry C. Carey and American Economic Development', Transactions of the American Philosophical Society, lxvi (1986), 1-2.

reinforced by his influence in the daily and periodical presses. He held the role as economic consultant for important Whig, and later Republican, newspapers like the New York Tribune and *Philadelphia North American* for spells during the 1850s, while also functioning as the go-to political economist for Whig journals such as the American Whig Review. 144 A similarly important indicator of his influence was his frequent citations in opposing Democratic journals and newspapers, as well as among free trade political economists, many of whom felt compelled to respond to Carey's interpretations. 145

Carey hoped to exert this political influence to halt the nation's slide towards civil war. He lamented the recklessness that he saw as characteristic of both sides of the brewing sectional conflict over slavery in the 1840s and 50s. 'There are two diseases raging in the Union,' Carey opined in his Pennsylvania newspaper in 1849: 'Anti-Slavery and Pro-Slavery.' 146 The solution, Carey argued, was to introduce protective measures as a means to stimulate domestic manufacturing and thus to open up a better, more natural market for American agricultural products. Carey endorsed Adam Smith's view that British imperialism and its attempt to monopolise trade had 'broken altogether the natural balance' governing the world economy, causing Britain to resemble 'one of those unwholesome bodies in which some of the vital parts are overgrown,... which has been artificially swelled beyond its natural dimension' and could cause 'dangerous disorders upon the whole body politic.' Instead of artificial transportation of goods over long distances, Carey argued, 'in the natural course of things, the fashioner, whether of wood or of wool, takes his place by the side of the producer of the food he is to consume.'148

Misguided free trade policies that fail to recognise the realities of the mid-nineteenth-century world, Carey asserted, were at the root of the sectional quarrel. 'In the question of commercial policy lies the whole difficulty,' he wrote during the tumultuous debates surrounding the Compromise of 1850. Had the high Tariff of 1842 been maintained and not undermined by the Democratic Treasury under Robert J. Walker, the 'California question' that was agitating the Union would not exist. 149 The desire to satisfy foreign demand for American agricultural products had led to mismanagement of land on the eastern seaboard, causing an exodus of farmers searching for new and fertile land further west. As a moderate

¹⁴⁴ Palen, 'Conspiracy' of Free Trade, 10; 'Political Economists', American Whig Review, xii (1850), 376-88.

¹⁴⁵ For example: 'Carey's Principles', North American Review, ciii (1866), 580.

¹⁴⁶ [Carey], 'Two Diseases Raging in the Union', *The Plough, the Loom, and the Anvil*, i (1849), 91. ¹⁴⁷ [Carey], 'What Constitutes Real Freedom of Trade: Chapter II', *American Whig Review*, xxxii (1850), 228. ¹⁴⁸ Carey, Past, Present, Future, 112.

¹⁴⁹ [Carey], 'On the True Causes of Existing Difficulties', *The Plough, the Loom, and the Anvil*, iii (1850), 39. Italics in original.

Whig until the party disbanded in the mid-1850s, Carey had an inherent distrust of rapid expansion over space. Although western migration could in theory proceed as a 'natural and healthy operation,' the voracious demand for land had unnaturally accelerated the process. Carey fretted that this process had unleashed the virulent debates over the status of slavery in the territories, a direct result of seeking to indulge the demands of distant consumers, rather than supplying the domestic market.

Northeastern capitalists and southern slaveholders were equally culpable in Carey's eyes. Again and again, the Union 'has been stricken down by Southern measures that have enriched the people of Massachusetts,' Carey wrote to South Carolina Governor James Henry Hammond in March 1860. Northeastern manufacturers 'have a monopoly & they mean to keep it,' he lamented. Yet, as noted above, southerners had been some of the most vehement free trade supporters, to the detriment, so Carey believed, of both their own section and the Union as a whole. John C. Calhoun, for example, 'sowed the seeds of sectionalism, abolitionism, and disunion, on the day on which he planted his free trade tree,' a plant which has since born fruit in the form of 'exhaustion of the soil of the older States, and consequent thirst for the acquisition of distant territory, in Kansas murders and Harper's Ferry riots; in civil and foreign wars.' 152

The only means of avoiding disaster would be to implement protectionist tariffs and encourage the domestic market. Carey advised the southern states to cease feeding the profits of Britain and their New England capitalist allies and instead to 'mine its own coal, smelt its own ore, and make its own cloth, in harmony with the North.' This would align both sections in the 'harmony of interests' that would exist should events be allowed to take their natural course, increasing their mutual dependency and engendering closer relations. 'The grower of cotton suffers when the operatives in cotton factories and the workers in mines and furnaces are unemployed,' Carey noted, 'and the latter suffer when adverse circumstances diminish the return to the labour of the farmer and planter.' These economic corrections, promoting the system that nature demands, would do more than any political attempts at conciliation: 'Ten years of efficient protection to the farmer and planter in their efforts to seduce the loom and the anvil to take their places by the side of the plough and

¹⁵⁰ Carey, *Principles of Social Science*, i, 71.

¹⁵¹ Carey to Hammond, 17 March 1860, James Henry Hammond Papers, Manuscripts Division, Library of Congress.

¹⁵² Carey to editor of *Memphis Daily Enquirer*, 31 March 1860, printed in appendix to: Stephen Meardon, 'Henry C. Carey's Memphis Letters', *Journal of the History of Economic Thought*, xxxvii (2015), 4.

^{153 &#}x27;On the True Causes', 41.

¹⁵⁴ Carey, *Harmony of Interests*, 49.

harrow, would do more towards solving this great question, now esteemed so difficult, than "free-soil" votes and Wilmot "provisoes" could accomplish in a century. 155

Conclusion

Mid-nineteenth-century American protectionists and free traders drew on a shared environmental imagination that placed their society in dialogue with the natural world, seeking to align the American economic system with what they believed to be innate natural laws. The economic debates that featured prominently in the political landscape centred around the interpretation of these laws and their implications for the most prudent economic course. The tools with which mid-nineteenth-century political economists approached the application of these natural laws to their society were drawn from two disciplines that were formative for the development of political economy in its early decades. Firstly, they inherited assumptions drawn from the European Enlightenment study of moral philosophy, that certain economic roles promoted particular ethical values and that a wise economic course would have beneficial effects for the moral development of their society. Secondly, American political economists shared with their European predecessors a belief that the natural laws governing economic phenomena and processes could be understood using scientific methods and language. Yet Americans were not simply empty vessels for European ideas, instead taking the lead in identifying ways in which scientific investigation could bring the economy more efficiently into harmony with nature to secure limitless future economic progress.

This shared environmental imagination took on different inflections depending on the individuals' assessment of the political and economic realities of the mid-nineteenth-century moment. For free traders, it was self-evident that unrestricted commerce was the natural economic system. They inherited this view from their British counterparts, including influential classical political economists such as Adam Smith and David Ricardo, as well as the contemporaneous struggle against the mercantilist Corn Laws led by Richard Cobden. For free trade supporters, the fact that different products were indigenous to different portions of the globe provided ample evidence for their assumption that God had intended nations to trade freely with one another, promoting harmonious relationships through unrestricted commercial exchange. The global body, to use a frequent free trade metaphor,

^{155 &#}x27;The Slave Question', The Plough, the Loom, and the Anvil, i (1849), 411. Italics in original.

functioned best when left unencumbered by artificial interventions, allowing healthy and natural trade to pump life force through its commercial arteries.

Many protectionists were not wholly averse to these conclusions. Even some of the most strident advocates of higher tariffs occasionally expressed the opinion that complete freedom of trade was a desirable end goal for economic policy and would, at some unspecified future time, indeed be the most natural economic system. Realism, however, showed a different path. Sober investigation of the mid-nineteenth-century world, protectionists insisted, showed that the kind of cosmopolitan socio-political structures that free trade would require simply did not and for many years would not exist. The enduring importance of the nation in global affairs dictated a more specialised economic policy adapted to the particular environments of the nation in question. In this context, it would be more natural for each nation to introduce tariffs to develop its industrial capacities. Recognising the naturalness and justice of these measures, protectionists argued, would spur a nation down the path of economic development, promote sectional conciliation, and even, according to Henry Carey, halt the United States' slide towards civil war.

Section Two: The Problems of Slavery and Race

The first section of this dissertation has demonstrated how the environmental imagination influenced the ways Americans negotiated the place of their nation in the wider world. In debates surrounding national and sectional identities, territorial expansion, and economic policy, ideas about man's relationship to the natural world were of crucial importance to the way in which these important issues were framed and discussed. Pioneering works in the fields of geography, climatology, and political economy provided important points of reference for participants in these debates when they sought to understand, contest, and reshape the ways in which their nation interacted with the wider world. Combined with a pervasive faith in natural theology and a providential understanding of human society, the environmental imagination that emerged from mid-nineteenth-century Americans' engagement with these works placed their society firmly in dialogue with the natural world that surrounded it. Humans were capable of shaping their environments to an unprecedented extent, but their bodies and the societies they formed were simultaneously subject to powerful natural laws that moulded the course of societal development. Discerning these natural laws and debating their implications for policy-making was a central task of midnineteenth-century politics.

While each of the preceding three chapters took a scientific theory or treatise as its departure point, tracing how it influenced political debates over the length of the period under consideration, the second section will focus more specifically on particular political flashpoints and trace how the environmental imagination featured in and influenced them. The questions under consideration in this section were probably the most consequential and politically explosive of any in mid-nineteenth-century American politics: the future of slavery and the destiny of the races. As the examples of the debates about the naturalness of southern slavery in chapter one and Matthew Maury's Amazonian safety valve in chapter two indicate, these questions pervaded almost every other topic in the politics of this period. They dominated the political debate most completely, though, when the discussion turned to the potential extension of slavery into newly acquired or newly settled territories in the west and south of the nation, the controversies surrounding which will form the focus points of chapter four. The final chapter will then consider the political deliberations around what would happen to African Americans when slavery was abolished after the Civil War.

A shift in emphasis and a switch of topical focus distinguishes the second section from the first, then, but the overarching arguments and themes remain the same. The chapters that follow show that a belief that natural laws, defined by God and discernible through the

scientific study of humans' relationship with the natural world, were guiding the development of the United States and the world was foundational to the mid-nineteenth-century American environmental imagination. This ubiquitous conviction served in various contexts to limit, expand, or reshape the political vision of those who engaged in them, with significant consequences for how these crucial questions were framed, debated, and ultimately decided.

The Climatic Theory of Slavery: The Environmental Imagination and the Slavery Extension Debates

Recent scholarship has positioned the slaveholding south not as 'the great exception to modern progress,' but instead as 'one of several building blocks of American modernity.' Southern slavery, historians have emphasised, was deeply embedded in the networks of capitalism that increasingly defined the nineteenth-century world.² To gain economic advantage, slaveholders were constantly looking for ways to more efficiently exploit their environments, using methods that were recognisably modern. The cotton gin had of course revolutionised cotton production, but in the middle decades of the nineteenth century some of the most profitable interventions were biological, rather than mechanical. The trial and implementation of different and more pest-resistant forms of cotton enabled increased quality and productivity.³ As early as the mid-eighteenth century, Joyce E. Chaplin has shown, the Lower South was a site of significant agricultural reform.⁴ In Walter Johnson's vivid depiction, such was the effect of slaveholders on the natural environment of the 'Cotton Kingdom' that, from the air, the landscape 'would have presented a visual image of the whole of nature arrayed in the service of a single plant.'5 Slavery, to use Erin Stewart Maudlin's phrase, was an 'ecological regime,' with slaveholders, in addition to exerting their mastery over humans, manipulating and dominating their environments also.⁶

Despite the evident and unprecedented ways in which slaveholders were transforming their environments to suit their needs, this chapter argues that if we switch the focus to the environmental imagination, to how many Americans thought about the relationship between slaveholders, slavery, and the natural world, the dynamic shifts. Many observers placed great faith in natural laws to decide the future trajectory of slavery's development, positing that the environment in various, profoundly important ways limited and shaped the geographical

¹ Frank Towers, Diane L. Barnes, and Brian Schoen, 'Conclusion: The Future of the Old South', in Frank Towers, Diane L. Barnes, and Brian Schoen (eds.), *The Old South's Modern Worlds: Slavery, Region, and Nation in the Age of Progress* (New York, 2011), 310.

² For the recent literature of slavery and capitalism, see especially: Walter Johnson, *River of Dark Dreams: Slavery and Empire in the Cotton Kingdom* (Cambridge, MA, 2013); Sven Beckert, *Empire of Cotton: A New History of Global Capitalism* (New York, 2014); Edward E. Baptist, *The Half Has Never Been Told: Slavery and the Making of American Capitalism* (New York, 2014).

³ Alan L. Olmstead and Paul W. Rhode, *Creating Abundance: Biological Innovation and American Agricultural Development* (New York, 2008), 99-100.

⁴ Joyce E. Chaplin, *An Anxious Pursuit: Agriculture and Modernity in the Lower South, 1730-1815* (Chapel Hill, 2012).

⁵ Johnson, River of Dark Dreams, 156.

⁶ Erin Stewart Maudlin, *Unredeemed Land: An Environmental History of Civil War and Emancipation in the Cotton South* (New York, 2018), 53.

reconfiguration of the institution. Specifically, when many mid-nineteenth-century Americans engaged with the question of slavery's future, they approached the issue with a conviction that slavery was a creature of the climate, dependent upon a congenial environment for the growth of valuable staple crops and, crucially, for the labour of black slaves.

To be clear, this chapter will not seek to rehabilitate the 'natural limits' thesis that was so influential in historical accounts of the coming of the Civil War from the early twentieth century. Revisionist historians such as Charles Ramsdell argued that slavery had reached its 'natural and impassable frontiers' by the 1840s, viewing the sectional tensions that slavery extension generated as pointless political agitation on the part of a 'blundering generation' of inept politicians. This is not the case I seek to advance here. Clearly, in light of the latest research outlined above, we cannot accept wholesale the revisionists' picture of a static society hemmed in by insurmountable environmental obstacles, much less characterise the Civil War as an avoidable blunder for this reason. As such, I will not argue that Americans were in any meaningful way correct to rely upon natural forces to regulate and shape the future of the peculiar institution. Yet the fact that these notions were, in hindsight, erroneous does not rob them of their historical importance. In our justified eagerness to disavow the conclusions of the revisionists, we should not throw the baby out with the bathwater and neglect to consider ways in which the environment was *thought* by participants in the slavery extension debates to influence the future of slavery in the United States.

Indeed, many antebellum politicians and commentators postulated some variation on a climatic theory of slavery that assigned bondage its place on the continent, almost always in the southern United States and/or the warmer, more tropical latitudes of Central and South America. A moderate informal coalition of politicians and commentators argued that environmental restrictions would limit slavery's expansion within the United States. This group, mostly made up of midwestern Democrats and border-state Whigs, asserted that much of the United States' new territorial acquisitions was unsuited to the large-scale production of the most profitable slave-grown crops and would thus prove unattractive as a destination for slaveholders. Those figures based their assumptions on a belief that slavery was fundamentally an economic institution. Eschewing the moral aspects emphasised by both pro- and anti-slavery radicals, for this group slavery extension was predominantly a matter

⁷ Charles W. Ramsdell, 'The Natural Limits of Slavery Expansion', *Southwestern Historical Quarterly*, xxxiii (1929), 101. The clearest statement of the 'blundering generation' thesis is: J. G. Randall, 'The Blundering Generation', *Mississippi Valley Historical Review*, xxvii (1940), 3-28.

of profit and loss. Where large amounts of the most profitable crops could be grown using bonded black labour, slavery would gain a foothold, while in areas without slavery's staple crops and better adapted to free white labour, it would not take root. While providing a framework for viewing the future trajectory of slavery, this perspective did allow for some variation, with some arguing that slavery could indeed flourish in some areas of California but not in Kansas and vice versa. Generally, though, the climatic theory of slavery prompted visions of the southward movement of slavery into more tropical latitudes with bountiful harvests of desirable cash crops.

The climatic theory of slavery and its implications certainly did not go unchallenged. Stridently anti-slavery figures were in a minority, though vocal and growing as the Civil War approached, when they argued that without Congressional restriction slaveholders would take their chattels in even more northerly states like Oregon and Nebraska. African Americans, in particular, strongly refuted attempts to leave the destiny of slavery to natural laws. Human legislation, according to these figures, was the only way to limit the spread of slavery within the United States. Anti-slavery radicals advanced a moral case against bondage, portraying, as we have seen in chapter one, southern slavery as an entirely unnatural system unbefitting a nation with such a vaunted destiny. Yet, as shall be explored in more detail in chapter five, often even these figures admitted the necessity of black labour, and occasionally even slavery itself, in more tropical latitudes that were supposedly unsuited to the bodily constitution of white workers.

Southern pro-slavery extremists sometimes openly flaunted their intentions to convert slave labour into mining or domestic servitude, predicting a diversified form of bondage should slaveholders be permitted to carry slaves into territories less adapted to the growth of staple crops. Yet, as we have seen with Matthew Maury in chapter two, even figures within this group spoke with more conviction and enthusiasm about a bountiful slaveholding empire in the tropics, where they could be certain that highly profitable products, most notably cotton, could be grown and where they believed black slaves could labour with impunity. Moreover, the southern states did not speak with one voice, and many border-state figures joined more moderate northerners in positing that environmental factors restricted slavery's extension into more northerly latitudes, but often paired this with the assertion that the regions to the south were naturally adapted to the institution and its labourers. Overall, then, the environment was thought to have influence on the extension of slavery in ways beyond merely imposing 'natural limits' on its development. While relatively few commentators

thought that slavery had nowhere to go in the 1840s and 1850s, equally few saw no role for natural factors at all.

This chapter will track the formulation and development of the climatic theory of slavery, investigating the preconceptions on which it was based, and from whence these stemmed. As in the previous chapters, these views were founded upon a powerful combination of religious conviction and the latest scientific research. Appeals to 'the laws of Nature and Nature's God' were common during the slavery extension debates, betraying a pervasive conviction in natural theology. God had created the environments of the territories in question, the argument ran, which in turn decided whether slavery could be profitable there or not. Who was man, therefore, to attempt to controvert these divine dictates? To understand God's natural laws and how they influence the future of slavery, many argued, the latest scientific insights and methods should be employed to ascertain information about the lands under debate. Alexander von Humboldt's theory of isothermal lines, as we have seen in chapter two, had significant political resonance in the debate over American expansion, and it was also employed by politicians and commentators debating the future of slavery to more accurately determine the relative temperature of the east and west coasts. Of even greater importance, though, was the burgeoning field of racial science, which purported to scientifically prove that black bodies were more suited to hotter climates and thus slaves would not work effectively, in extreme cases even survive, where the environment was not congenial.

This powerful amalgamation of providential geography and supposedly unassailable racial science fed into an environmental imagination that endowed natural phenomena with significant power to shape the geographical reconfiguration of slavery. In what follows I will take a case study from each of the three main flashpoints of the slavery extension debates and situate it in its wider context, showing how the climatic theory of slavery operated in each of these momentous historical moments. Firstly, I will study the extremely influential *Letter... Relative to the Annexation of Texas* written by the Democratic Senator from Mississippi Robert J. Walker in January 1844, as the debate surrounding Texas annexation was reaching its height. Seeking to reassure northern audiences that incorporating this territory would benefit the nation as a whole, rather than just southern slaveholders, Walker argued that Texas would open a 'safety valve' that would 'drain' the excess slaves from the less environmentally favourable Upper South. He drew heavily upon the 1840 census, which purported to show that black residents of more northerly states had a much higher mortality rate than those in the more congenial Deep South, entrenching already prevalent notions of

the close relationship between climate and race. The 'safety valve' argument was received to great acclaim by his fellow Democrats and border-state Whigs, becoming a central argument in favour of annexation. Southerners more stridently committed to slavery were not immune to such reasoning either, as we have seen with Matthew Maury's Amazonian 'safety valve' in chapter two. Walker did receive pushback from some sceptical anti-slavery figures, but on the whole indications suggest he tapped into a widely held conviction that slavery was naturally headed south, a process that Texas annexation would only facilitate.

The second point of focus will be Massachusetts Whig Daniel Webster's 7 March 1850 speech to Congress. Renowned by scholars as an eloquent appeal for 'the Constitution and the Union' during the debates ignited by the Wilmot Proviso and preceding the Compromise of 1850, it also formed a key marker for both supporters and opponents of the climatic theory of slavery. Webster was the most visible and well-known representative of a common view among Congressmen and moderate commentators on the issue of slavery extension into the territories ceded by Mexico in 1848, which held climate and geography, designed by God, would prevent slavery from taking root. Drawing heavily on racial science, Webster and his supporters argued that the climate was unsuited for black bodies, while the most profitable staple crops, mainly cotton, could not be grown at all, or at least in sufficient quantities to entice slaveholder migration. This thesis provoked a greater range of responses than Walker's arguments, reflecting the heightened sectional tensions that the question of slavery in the Mexican Cession had stoked. The geographical character of these territories was contested by more stridently pro- and anti-slavery figures, who judged them to be more congenial to slavery, at least in a diversified form that used force labour in gold mines or domestic servitude. Nevertheless, some pro-slavery extremists conceded the climatic point and focused more on the legal question surrounding equal access to federal territories, in hope of gaining more fertile, tropical lands for their slaves in the future.

Finally, I will consider the defence of the doctrine of popular sovereignty as articulated by Illinois Democrat Stephen Douglas during the debates surrounding his Kansas-Nebraska Act in 1854. In defending his highly controversial bill, Douglas set out a forceful defence of the environment's role in determining the future of slavery. In line with Walker and Webster, Douglas and his supporters argued that climate would settle the question of whether slavery would take root in Kansas and Nebraska. A core principle of popular sovereignty was that residents of the territories knew their environments best and would thus be most opportunely placed to judge whether it would be congenial to slavery or not. Even more than in the aftermath of Webster's 7 March speech, the Kansas-Nebraska Act and the accompanying

articulation of the climatic theory of slavery provoked a firestorm of debate. The repeal of the Missouri Compromise was for many anti-slavery figures a step too far, providing irrefutable evidence of the influence of the Slave Power in the U.S. government. The assertion that climate prevented slavery in Kansas, directly adjacent to the slaveholding state of Missouri, struck them as nonsensical. Yet the arguments advanced by Walker in the 1840s, that the Upper South states would, in the near future, witness a drainage of their excess slaves, retained their currency. Opposition to the climatic theory of slavery was more prominent than a decade earlier, but the idea that slavery's fate should most safely be left to 'Nature and Nature's God' remained powerful.

Robert J. Walker, the Safety Valve Thesis, and Texas Annexation

Robert J. Walker's January 1844 Letter was an important intervention in the debate surrounding Texas annexation. Published in the run-up to the 1844 election, a particularly contentious time in the annexation controversy, the Letter sought above all to convince a sceptical northern and non-slaveholding readership that the incorporation of the territory served the interests of Americans from both sections, rather than simply enlarging the profits of southern slaveholders. In short, he wrote to his fellow Democrats a few months later, he wanted to prove that annexation was a 'great national & truly American measure.'8 After rehearsing the basic arguments for annexation's constitutionality and prophesying a nightmarish future should Britain gain control of the territory, the Letter launched into an explanation of what became known as the 'safety valve thesis.' Addressing an anti-slavery audience directly, he asked them to consider the consequences of the abolition of slavery for the northern states. He played on racial fears that transcended section, arguing that 'three million free blacks would be thrown at once, as if by convulsion of nature' onto these states, expecting protection and habitation. The annexation of Texas, on the other hand, was a panacea for this 'great evil.' Its 'genial and salubrious' climate would induce African Americans steadily southwards where, because of 'the African being from a tropical climate,' their 'comfort and condition would be greatly improved.' The territory's fertile cotton-growing soil would draw slaveholders there in equal measure with its promise of higher profits, diffusing the slave population over a larger area. As opposed to the sudden

⁸ Robert J. Walker to the Democratic Party of Mississippi, 4 May 1844, Robert J. Walker Letter Book 1833-48, Darlington Collection, Special Collections Department, University of Pittsburgh.

and revolutionary upheaval that would result from direct and immediate abolition, the process would be 'gradual and progressive, without a shock, without a convulsion.'9

Walker's motivations in writing this letter may legitimately be brought into question. Having made his fortune as a land speculator in Mississippi, he forged a career in politics as a Jacksonian Democrat. Soon after the publication of his *Letter*, Walker also penned a pamphlet attacking Henry Clay, the Whig nominee for the 1844 election, distinctly aimed at a southern audience, linking Clay to northern abolitionists and claiming that the only way to thwart their designs was to annex Texas immediately. This may suggest that Walker's assertion of the anti-slavery character of annexation was motivated only by cynical political expediency. Yet there are also countervailing pieces of evidence. Walker evidenced a personal antipathy to slavery, freeing his own slaves in 1838. 'Slavery as a domestic institution,' he declared, 'is worse than monarchy as a political one.'¹¹

In any case, for our purposes, whether Walker in fact personally believed that slavery would drain away upon annexation is less important than the fact he correctly thought this would resonate with his intended audience. As a piece of propaganda, the *Letter* was intended purely to convince those wavering on the issue by presenting a case that would appear plausible. None of his rhetorical strategies, as Stephen Hartnett argues, would work unless they 'somehow captured the imagination and *rang true*, as it were, with at least a large portion of the voting U.S. population.' The cultural background of Walker's *Letter*, its positive reception, and its political potency, therefore, are of interest since they evince a widespread conviction that environmental factors could be relied upon to shape the future of the peculiar institution. They also demonstrate that this facet of the environmental imagination influenced the way this important political debate was framed and conducted.

The *Letter* was reprinted in full in important newspapers and widely distributed in privately funded books and pamphlets. It was rapturously received by Democrats, revered as the textbook case for annexation. One of Walker's correspondents wrote to the Mississippi Senator asking for a replica, bemoaning that he had attempted to obtain copies of the *Letter* in pamphlet form, only to find them 'all sold out & not any copy left.' The Democratic

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⁹ [Robert J. Walker], Letter of Mr. Walker of Mississippi, Relative to the Annexation of Texas (Philadelphia, 1844), 13-15.

¹⁰ Frederick Merk and Lois Bannister Merk, Slavery and the Annexation of Texas (New York, 1972), 98.

¹¹ Quoted in: H. Donaldson Jordan, 'A Politician of Expansion: Robert J. Walker', *Mississippi Valley Historical Review*, xix (1932), 379.

¹² Stephen Hartnett, 'Senator Robert Walker's 1844 *Letter on Texas Annexation*: The Rhetorical Logic of Imperialism', *American Studies*, xxxviii (1997), 34. Italics in original.

¹³ Aaron Leggett to Robert J. Walker, 5 March 1844, Walker Letter Book.

vice-presidential nominee George M. Dallas from Pennsylvania wrote that the Letter came 'like manna in the way of a starved people,' serving to unite the once-divided party behind the annexationist banner. ¹⁴ The praise was no less effusive following the Democrats' narrow victory in the November 1844 election. Looking back on the campaign a year after the publication of the Letter, the Democratic Review named it as 'the principle cause in... the nomination and election of Polk to the Presidency.' The same article listed comments from luminaries including ex-Presidents Andrew Jackson and James Madison attesting to Walker's personality and influence, remarking that he is 'without the slightest blemish on his moral character.' The North Carolinian Wilmington Gazette described the Letter as 'the Archimedean lever of the election,' while the Washington Union asserted in 1847 that it had 'roused the whole country' and was 'as effective in setting forth the truth with its trumpet tones, as Paine's Common Sense was in arousing and convincing the American people at the commencement of their revolution.'16 Opponents of annexation recognised Walker's influence, too. Theodore Sedgwick, for example, noted in his anti-Texas pamphlet that he planned to respond directly to Walker due to the succinctness of his argument, the ubiquity of the *Letter*, and his 'standing and official situation.' ¹⁷

Historians, too, have long noted the *Letter*'s significance. Numerous scholars have noted its extensive distribution, with two of them describing it as 'an unparalleled media sensation' that 'ran rampant' across the northern states. ¹⁸ Another historian has called it 'a masterpiece in which he [Walker] set forth and reconciled all of the arguments for annexation. ¹⁹ Frederick Merk has labelled the 'safety valve' aspect of Walker's thesis as one of the three key issues in the annexation debate, alongside the defence of slavery expounded most prominently by John C. Calhoun and the slave-power conspiracy thesis advocated most strongly by anti-slavery northerners such as John Quincy Adams. ²⁰ Many historians have made the connection between Walker's arguments and the underlying racial fears held by Americans both north and south of the Mason-Dixon line. ²¹ While a significant number of

¹⁴ Quoted in: Thomas R. Hietala, *Manifest Design: American Exceptionalism and Empire*, rev. ed. (Ithaca, 2003 [1985]), 50.

¹⁵ 'Robert J. Walker', *Democratic Review*, xvi (1845), especially 160-3.

¹⁶ Quoted in: Hietala, *Manifest Design*, 50-1n98.

¹⁷ Theodore Sedgwick, *Thoughts on the Proposed Annexation of Texas to the United States* (New York, 1844), 8.

¹⁸ Hartnett, 'Walker's 1844 Letter', 32; Merk and Merk, Slavery and the Annexation of Texas, 9.

¹⁹ David M. Pletcher, *The Diplomacy of Annexation: Texas, Oregon, and the Mexican War* (Columbia, MO, 1973), 140.

²⁰ Frederick Merk, 'A Safety Valve Thesis and Texas Annexation', *Mississippi Valley Historical Review*, xlix (1962), 413.

²¹ For instance: Joel H. Silbey, *Storm Over Texas: The Annexation Controversy and the Road to Civil War* (New York, 2005), 34-5; Hartnett, 'Walker's 1844 *Letter*', 31; Merk, 'A Safety Valve Thesis', 415, 437; Hietala, *Manifest Design*, 26-37.

northerners were united in opposition to slavery as an institution, few were motivated by deeply held humanitarian concern for the slaves themselves. By invoking the spectre of impending race war, Walker tapped into a deep vein of anxiety and prejudice that pervaded even the non-slave states. Yet few scholars have connected the safety valve thesis with the American environmental imagination, neglecting to recognise that, by positing a climatic theory of slavery that predicted mass slaveholder migration to more tropical latitudes, Walker and other advocates of the safety valve thesis both drew on and in turn reinforced widely held convictions that environmental phenomena could be relied upon to shape slavery's future.

Walker referred directly to the returns of the 1840 census in making the case that blacks were more suited to warmer climates. This iteration of the census was the first to include a compilation of those deemed 'insane or idiot,' a blanket term for mental illness. Described by one scholar as 'one of the most amazing tissues of statistical falsehood and error ever woven together under government imprint,' the 1840 census purported to show that there was an extraordinarily high proportion of 'insane or idiot' blacks in the northern states, as high as one in fourteen in Maine, while the proportion in southern states was as low as one in 4,310 in Louisiana. The methods were dubious to say the least, as northern towns were credited with mentally ill blacks even though other returns showed there were no blacks resident there at all. Yet the statistics collected by the census continued to be influential. Walker argued that, were blacks to migrate northwards, many of them would 'perish from want or exposure' to an unfamiliar climate and those that survived would fill prisons and 'asylums of the deaf and dumb, the blind, the idiot and insane,' to overflowing. The census, he claimed, showed that these predictions in fact constituted 'sad realities.' 24

The bogus census returns also underlay the arguments of many other commentators. Proslavery southerners, of course, rejoiced at what they took as vindication of their view that the peculiar institution provided better conditions for blacks. 'So long as [free blacks] furnish little else but materials for jails, penitentiaries, and madhouses,' crowed a southern periodical, 'we cannot desire to be the destroyers of the dependent race.' The fallacies of the census were accepted by many northerners, too. Blacks, wrote the *Democratic Review*, 'shrink before the more bracing winters of a more northern latitude,' while they 'exult in the

²² Albert Deutsch, 'The First U.S. Census of the Insane (1840) and Its Use as Pro-Slavery Propaganda', Bulletin of the History of Medicine, xv (1944), 475, 472.

²³ Ibid, 475.

²⁴ Walker, *Letter*, 12-13.

²⁵ 'Reflections on the Census of 1840', Southern Literary Messenger, ix (1843), 350.

sunshine of the tropics,' in a climate 'the most favourable in the whole globe for the development of the negro race.' A Maine Whig could not deny 'that a cold climate is not as congenial as a warm one to a race of people who originated within the tropics, and under the burning sun and perpetual summer of Africa' or indeed that there was 'more proneness to insanity' among blacks in northern latitudes. Former slaves, he argued, fled north only to avoid the oppressions of slavery and 'but for this we should see no black colonists in Canada.' Theodore Sedgwick, a strong opponent of annexation, likewise admitted that the difference in numbers of deaf, dumb, and insane blacks between the different sections of the Union 'is owing, no doubt, mainly to the fact that the northern climate is unsuited to the Africans.' 28

The census thus lent a further sheen of legitimacy to an idea that had, in fact, been circulating in American political discourse for many decades. In Notes on the State of Virginia, to name perhaps the most prominent example, Thomas Jefferson had written of blacks that the 'greater degree of transpiration renders them more tolerant of heat, and less so of cold, than whites.'29 The arguments from the 1850s and 1860s outlined in chapter one regarding the necessity of slavery in the southern states were echoes of similar statements made by preeminent pro-slavery figures from earlier decades. Thomas Roderick Dew declared in 1832 that 'the history of colonization furnishes no example whatever, of the transplantation of whites to very warm or tropical latitudes without signal deterioration of character, attended with an unconquerable aversion to labor.' However, Dew also argued that colder climates would not permit black servitude, to the extent that even states such as Virginia were 'too far North.'30 In southern latitudes, asserted James Henry Hammond in 1836, black slavery is 'as natural as the clime itself... It is the order of Providence that slavery should exist among a planting people, beneath a southern sun.'31 The political theorist and South Carolina Senator William Harper similarly maintained in 1838 that 'there does not now exist on the face of the earth, a people in a tropical climate, or one approaching to it, where Slavery does not exist, that is in a state of high civilization, or exhibits the energies which mark the progress towards it.'32 Slavery, one slaveholder told the British-born geographer and

²⁶ 'Re-Annexation, in its Influence on the Duration of Slavery', *Democratic Review*, xv (1844), 15-16.

²⁷ Congressional Globe, 28th Congress, 1st Session, Appendix, 16 February 1844, 593.

²⁸ Sedgwick, *Thoughts*, 43.

²⁹ Thomas Jefferson, *Notes on the State of Virginia* (Richmond, 1853), 150.

³⁰ 'Professor Dew on Slavery', in *The Pro-Slavery Argument, as Maintained by Some of the Most Distinguished Writers of the Southern States* (Philadelphia, 1853), 484.

³¹ 'Speech on the Justice of Receiving Petitions for the Abolition of Slavery in the District of Columbia', in *Selections from the Letters and Speeches of Hon. James H. Hammond of South Carolina* (New York, 1866), 34.

³² 'Chancellor Harper's Memoir on Slavery', in *Pro-Slavery Argument*, 67-8.

explorer George William Featherstonhaugh, 'solves the labor problem for us, Sir. Whites can't stand our tropical sun.'33

The assertion that black labour was more suited to warmer latitudes appeared to find practical validation in the shifting demographic make-up of the antebellum southern states. In what Herbert G. Gutman has described as 'one of the great forced migrations in world history,' hundreds of thousands of slaves were transported from the Upper South to the Lower South.³⁴ Between 1790 and 1860, the Upper South lost 750,000 blacks, with Virginia and Maryland's share of the national slave population sinking from sixty to eighteen percent.³⁵ North Carolina, Kentucky, and South Carolina joined Maryland, Delaware, and Virginia as net slave-exporting states by the 1820s, while even Georgia and Tennessee exported more slaves than they imported by 1850.36 These developments were certainly not lost on contemporaries. A northern writer predicted that by 1860 the Border States 'will have passed through their transition trials, and this whole area, three times as large as all New-England, and even now having a greater population, will be free-soil.'37 Even ardently pro-slavery voices such as James D. B. De Bow were forced to admit that Kentucky 'must be free' and the day would come 'when the superior southern demand shall draw off by degrees her slaves, and the continued increase of white population shall make the relative proportion of colors but a fraction of what it is now.'38 For these observers, in William W. Freehling's words, 'the flow of slavery downward seemed as irreversible... as sand in the hourglass.'39

The widespread belief in the greater capacity and profitability of black labour in warmer climates led many to understand these demographic shifts as a series of rational decisions taken to further the slaveholders' economic interests, reflecting a desire for unspoiled fertile lands in a climate congenial to their enslaved workforce. An Ohio Democrat argued that 'the existence of slavery was a counting house question, and would be decided according to the profits made.' Its future expansion would take place 'according to the sun,' and as such he 'should live to see Kentucky, Missouri, and Virginia' become free states. ⁴⁰ A New Hampshire Democrat agreed that 'the march of the institution has been gradually southward; one State after another giving way by force of interest, at the moment of superiority of free

³³ Quoted in: William W. Freehling, *The Road to Disunion*, 2 vols. (New York, 1990-2008), i, 16.

³⁴ Herbert G. Gutman, *Slavery and the Numbers Game: A Critique of* Time on the Cross (Champaign, 1975), 103.

³⁵ Freehling, *Road to Disunion*, i, 24.

³⁶ Steven Deyle, Take Me Back: The Domestic Slave Trade in American Life (New York, 2005), 44-5.

³⁷ 'The King of Rivers', *Democratic Review*, xxv (1849), 514.

³⁸ 'Kentucky', *De Bow's Review*, vii (1849), 205.

³⁹ Freehling, *Road to Disunion*, i, 23.

⁴⁰ Congressional Globe, 28th Congress, 2nd Session, 25 February 1845, 343.

has come fairly in competition with slave labor.'⁴¹ Bostonian man of letters Alexander H. Everett also echoed these sentiments. He named the 'obvious' fact that 'slaves cannot be in two places at the same time.' Cotton cultivation would prove to be far more profitable in the southwestern territories because of their cheap and fertile land, and thus slaveholders would be drawn to them, making the Upper South available for free labourers.⁴²

Drawing on the pervasive linkage of climate and race, many commentators professed the belief that these decisions were entirely in keeping with the laws of nature. These figures framed the southward migration of slavery with natural language and metaphors. 'Slavery is silently and slowly rolling its dark wave towards a tropical sun,' noted a Pennsylvania Democrat, 'and God grant that, in His own good time, its subjects may find there happy institutions as well as a congenial clime.'43 Other Congressmen echoed these sentiments, pointing to 'the inevitable gravitation,' and 'the gradual but certain flow' of the black race to climates more 'congenial to their natures' to make sense of these demographic shifts. 44 The 'whitening' of Kentucky and the concurrent replacement of slavery with free labour, a newspaper editor from that state predicted, would occur 'without danger, crime, or disturbance of society, by the easy, gradual, and unseen, but imperative action of the law of nature. '45 Such was the pull of southern latitudes to black slaves, one Congressman asserted, that were these areas made available to them, attempting to stop their draining into Texas and Central America 'would be as vain as to prescribe periods for the flight of migratory birds, or to establish by law boundaries to protect the tropical insects from the frosts of winter.'46

Many African Americans flatly refuted these notions of the racial difference. Attacking the bogus use of statistics in the 1840 census, one free black author denounced its attempts 'to make 19 crazy men out of one man... Freedom has not made us mad; it has strengthened our minds by throwing us upon our own resources, and has bound us to American institutions with a tenacity which nothing but death can overcome.' As Britt Rusert has convincingly demonstrated, this rejection of white racist science did not lead African Americans to abandon scientific methods. Rather, they constructed their own 'fugitive science' to refute

⁴¹ Ibid, 24 January 1845, 189.

⁴² 'The Texas Question: A Letter from Alexander H. Everett', *Democratic Review*, xv (1844), 258.

⁴³ Congressional Globe, 29th Congress, 2nd Session, 1 March 1847, 554.

⁴⁴ Ibid, 31st Congress, 1st Session, Appendix, 6 June 1850, 706; ibid, 30th Congress, 1st Session, Appendix, 25 July 1848, 952; ibid, 11 July 1848, 905.

⁴⁵ Quoted in: Freehling, *Road to Disunion*, i, 469.

⁴⁶ Congressional Globe, 22 February 1845, 324-5.

⁴⁷ 'Vital Statistics', *Liberty Standard*, 11 April 1844, 2.

its conclusions. ⁴⁸ As the black abolitionist Hosea Easton argued in an 1837 treatise: 'Analyze a black man, or anatomize him, and the result of research is the same as analyzing a white man.' ⁴⁹ James McCune Smith maintained that statistics retained usefulness for refuting racist notions, even while he attacked their manipulation in the 1840 census by pro-slavery activists to supposedly prove black inferiority. Their power lay in the fact that 'figures cannot be charged with fanaticism,' McCune Smith posited in a letter to the *New-York Tribune*, 'like the everlasting hills, they give cold, silent evidence, unmoved by the clouds and shadows of whatever present may surround them.' ⁵⁰

Of course, not every white American was so sanguine about the prospects of slavery receding from the Upper South following the annexation of Texas either, although their focus was less on repudiating the scientific underpinnings of the climatic theory of slavery and more on exposing the political machinations behind the 'safety valve' rhetoric. The United States' pre-eminent Whig newspaper, the New York Tribune, was indignant that even New Englanders such as Alexander Everett 'gravely argue that Annexation would hasten the Abolition of Slavery in the Union! Can this be honest?' The Tribune reeled off the considerable evidence that annexation was a pro-slavery plot, including the zealous speeches of defenders of slavery and the 'machinery and men' who blew 'the Texas bubble.' Just because a new market had been opened to slavery did not mean it would drain out of the Upper South, but would serve rather to raise prices, encourage 'slave-breeding,' and expand the 'accursed' trade in slaves, keeping the institution alive in these states.⁵¹ This latter point was taken up by other anti-annexationists, one of whom believed that 'it is by slave-breeding and slave-trading that these [Upper South] States subsist.' By annexing Texas, a new market would be opened for these activities, unnaturally prolonging its existence by 'breath[ing] new life into it, where its end seemed near.'52 A northern Congressman pushed back against Walker's attempts to argue that annexation would benefit the north, believing that annexation was 'hatched and got up as a southern question, for the benefit of the South; for the strengthening of her institutions; for the promotion of her power; for her benefit, for the advancement of her influence.'53 Charles Sumner, meanwhile, decried annexation in a

⁴⁸ Britt Rusert, Fugitive Science: Empiricism and Freedom in Early African American Culture (New York, 2017).

⁴⁹ Hosea Easton, A Treatise on the Intellectual Character, and Civil and Political Condition of the Colored People of the U. States (Boston, 1837), 47-8.

⁵⁰ McCune Smith to the Editor, *New-York Tribune*, 1 February 1844, 4.

⁵¹ 'Hon. Alex. H. Everett', ibid, 27 November 1844, 2. Italics in original.

⁵² 'A Letter to the Hon. Henry Clay, on the Annexation of Texas to the United States', in *People's Edition of the Entire Works of W. E. Channing, D. D.*, 2 vols. (Belfast, 1843), i, 307.

⁵³ Congressional Globe, 28th Congress, 2nd Session, 16 January 1845, 132.

private letter as 'one of the most bare-faced acts of political profligacy that has ever occurred in this country.' Far from facilitating the operation of natural laws, then, for these figures Texas annexation was an entirely artificial measure designed to prolong the institution's life where it would naturally die out.

However, it is important to note that opposition to annexation did not necessarily always correlate with a rejection of the safety valve thesis and the climatic theory of slavery. Some rejected annexation precisely because they agreed with Walker that it would hasten the end of slavery in the Upper South. This view was held prominently by important southern Whigs with connections to slaveholding interests but an ingrained opposition to hasty expansion. The South Carolinian Waddy Thompson, U.S. minister to Mexico between 1842 and 1844, believed that 'in a very short time two thousand negroes will be removed to Texas,' comprising 'such a tide of emigration that has never before been witnessed.' Texas had the best cotton-growing country in the world, meaning that prices would be raised and the institution called into question in the Upper South. To 'open Texas as a safety valve into and through which slavery will slowly and gradually recede,' he feared, would hasten abolition. Thompson admitted that, if he believed emancipation would be beneficial to the South, he would favour annexation, but he did not think so, and as such pledged himself to oppose the measure.⁵⁵ Both anti-slavery northerners and pro-slavery southerners were 'equally delusive' in their belief that Texas would strengthen the institution, a Georgia Whig Senator argued. 'An accumulation of the slave population in Texas, by drains from the southern States' would lead to a reduction in the number of states interested in slavery. The institution 'would still exist' but would be 'shorn of its strength.'56

While a vocal portion of stridently anti-slavery and anti-southern figures denounced Texas annexation as a pro-slavery plot, then, a significant coalition of more moderate border-state Whigs and midwestern Democrats agreed that slavery would, in the near future, recede from the Upper South and flow into the Lower South and Central America. The shifting demographic make-up of the slaveholding states combined with the results of the 1840 census to suggest that not only was slavery demonstrably moving southwards, but that these developments were the inevitable results of environmental factors, with slaveholders being drawn southwards by more fertile soil and a climate supposedly more suited to black labour. Viewed in this light, Robert J. Walker's *Letter* was in keeping with the broader

⁵⁴ Charles Sumner to Richard Monkton Milnes, 1 May 1844, in *The Selected Letters of Charles Sumner*, ed. Beverley Wilson Palmer, 2 vols. (Boston, 1990), i, 137.

^{55 &#}x27;Waddy Thompson Jr. On Annexation', Niles' National Register, 13 July 1844, 316-8.

⁵⁶ Congressional Globe, 28th Congress, 1st Session, Appendix, 8 June 1844, 702.

environmental imagination. His assertion that slavery would naturally 'drain' into Texas and Central America as a result of natural laws was echoed by many commentators, both northern and southern, with only African Americans consistently engaging in attempting to refute the scientific underpinnings of this theory. Walker's intervention was successful, therefore, as it was only one of the most publicly visible manifestations of a more widely held climatic theory of slavery that emphasised its fecundity in tropical latitudes but questioned its effectiveness in more temperate climes.

Daniel Webster, the Wilmot Proviso Debates, and Slavery in the Mexican Cession

Texas to formally became part of the United States on 19 February 1846, but this was far from the end of the strife on the nation's southwestern border. Mere months after the Texas annexation controversy officially concluded, the Mexican-American War broke out, resulting in a relatively swift victory that enabled the United States to annex vast swathes of Mexican territory in what is now the southwest of the nation. However, as contemporaries realised, this was just the opening salvo in what was to become a long-standing debate about the state of slavery in the territories that proved to be an existential threat to the Union's survival. As Ralph Waldo Emerson prophetically phrased it: 'Mexico will poison us.'57 These territories were far larger than Texas and came with the substantial prize of access to the Pacific. Moreover, the status of slavery was perceived as being open to greater contestation. The Republic of Texas had, since its founding in 1836, permitted slavery within its borders and the vast majority of Anglo settlers originated in the slaveholding states. In other parts of Mexico, however, slavery was forbidden, but after the territories were annexed to the United States, this was thrown into doubt. It was inevitable, then, that the question of slavery in the Mexican Cession would form a political flashpoint of enormous consequence for the future development of the nation. In historian Michael F. Holt's words, bringing this issue to the fore 'truly was opening a Pandora's box of evils, for it could never again be closed.'58

Daniel Webster's speech to Congress on 7 March 1850 and the responses to it form logical reference points when attempting to ascertain how the climatic theory of slavery operated in the debates surrounding slavery in the Mexican Cession. Best remembered as a forceful and

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⁵⁷ Quoted in: James M. McPherson, *Battle Cry of Freedom: The Civil War Era* (New York, 1988), chapter 2. ⁵⁸ Michael F. Holt, *The Fate of their Country: Politicians, Slavery Extension, and the Coming of the Civil War* (New York, 2004), 4.

eloquent appeal to retain the Union at all costs, at the very outset of the speech Webster famously professed to speak 'not as a Massachusetts man, nor as a Northern man, but as an American.' He feared that Americans were living in a time of 'considerable dangers to our government and institutions,' with the different sections combining to 'throw the whole sea into commotion, to toss its billows to the sky, and disclose its profoundest depths.'59 The seeds of this particular storm had been sown more than three years earlier, on 8 August 1846, when the little-known Pennsylvania Democrat David Wilmot introduced his famous Proviso proposing to forbid slavery's introduction in the new territories. Historians such as David Potter, James McPherson, and Eric Foner have all pointed to the Wilmot Proviso as the key starting point on the road to Civil War.⁶⁰ It unleashed a series of heated exchanges both inside and outside of the halls of Congress, dividing north and south to an unprecedented extent. Numerous attempts were made to broker a compromise between the two warring factions, the most significant of which was drafted by Webster's fellow Whig Henry Clay of Kentucky and introduced in January 1850. Clay hoped to satisfy pro-slavery southerners with a strengthened Fugitive Slave Law, while he tried to placate anti-slavery northerners by admitting California as a free state and abolishing the slave trade, although not slavery itself, in the District of Columbia. Utah and New Mexico territories, meanwhile, would be admitted on the principle of popular sovereignty, allowing their inhabitants to choose to either allow or forbid slavery there.

It was to defend this measure that Webster rose on 7 March. He sought to defuse the tensions surrounding the slavery extension issue by portraying it as a question already solved by irrevocable natural laws. 'As to California and New Mexico,' Webster declared, 'I hold slavery to be excluded from those territories by a law even superior to that which admits and sanctions it in Texas—I mean the law of nature—of physical geography—the law of the formation of the earth.' This law, above all human enactments, 'settles forever... that slavery cannot exist in California and New Mexico.' He grounded this view in two fundamental and interlinked ideas. The first was based in the geography and topography of the territories. Webster labelled California and New Mexico as 'Asiatic in their formation and scenery... composed of vast ridges of mountains, of enormous height, with sometimes broken ridges and deep valleys.' While there may be 'some valuable land' in California, by and large he judged the landscape to be 'barren—entirely barren,' certainly not suited to cotton

⁵⁹ Congressional Globe, 31st Congress, 1st Session, 7 March 1850, 480.

⁶⁰ David Potter (completed and edited by Don E. Fehrenbacher), *The Impending Crisis*, 1848-1861 (New York, 1976), chapters 1-5; McPherson, *Battle Cry of Freedom*, chapter 2; Eric Foner, 'The Wilmot Proviso Revisited', *Journal of American History*, lvi (1969), 262-79.

cultivation. Webster paired these assessments with a fundamental conception of slavery as an economic institution, largely shorn of its moral dimensions. He emphasised that he was treating 'slavery in the gross, of the colored race, transferable by scale and delivery, like any other property.' As a result, he asked rhetorically, 'who expects to see a hundred black men cultivating tobacco, corn, cotton, rice, or anything else, on lands in New Mexico, made fertile only by irrigation?' The prospect of more fertile soil, and thus better profits, in Texas and other areas of the Deep South, would dissuade slaveholders from taking their chattels into the western territories. After laying out these arguments, he addressed anti-slavery figures who were pushing for direct prohibition of slavery on terms similar to the Wilmot Proviso. He chided that to do so would merely be to 'reaffirm an ordinance of nature' and to 'reenact the will of God,' and thus that their agitation was endangering the existence of the Union for a mere abstract principle.⁶¹

Webster's speech became a touchstone for supporters of the Compromise and the climatic theory of slavery. Charles Albion Tuttle, a California resident who would later preside over the 1856 Republican Convention, praised the 7 March speech as 'a great patriotic and intellectual effort' while the Wilmot Proviso supporters 'are endangering that great fabric of our government.' Webster's speech, largely because of its repudiation of the Wilmot Proviso, was also positively received by many southerners. 'With such a spirit as Mr. Webster has shown,' the *Charleston Mercury* commented, 'it no longer seems impossible to bring this sectional contest to a close.' On the other hand, New Englanders, particularly the more outspoken anti-slavery figures, expressed a profound sense of betrayal that Webster was, as they saw it, aiding and abetting the 'slave power.' Fellow Massachusetts Whig Fitz Henry Warren, for instance, denounced Webster's speech and the Compromise as 'a virtual surrender of everything without even the reservation of marching out with the honors of war.' The anti-slavery poet James Russell Lowell labelled Webster 'the most meanly and foolishly treacherous man I have ever heard of.' 65

These conflicting reactions were reflective of long-standing disputes about the geography of the territories and their suitedness to black slave labour and staple crop growth. An

⁶¹ Congressional Globe, 31st Congress, 1st Session, 7 March 1850, 480-1.

⁶² Tuttle to his wife Maria, 12 May 1850, Charles Albion Tuttle Papers, Bancroft Library, University of California, Berkeley.

⁶³ Quoted in: Holman Hamilton, *Prologue to Conflict: The Crisis and Compromise of 1850*, rept. ed. (Lexington, 2015 [1964]), 79.

⁶⁴ Quoted in: Michael F. Holt, *The Rise and Fall of the American Whigs: Jacksonian Politics and the Onset of the Civil War* (New York, 1999), 489.

⁶⁵ James Russell Lowell to Sydney Howard Gay, November 1850, in *The Letters of James Russell Lowell*, ed. Charles Eliot Norton, 2 vols. (New York, 1894), i, 187.

examination of these debates shows the participants' awareness of contemporary scientific advancements in relation to geography and meteorology. As we have seen in chapter two, the parameters of these disciplines were shifting significantly in the first half of the nineteenth century, with a marked shift towards a more localised, empirically based approach to recording climate data that eroded the credibility of treating climatic zones as consolidated and constant belts stretching around the whole of the globe. As Alexander von Humboldt vividly demonstrated with his theory of isothermal lines, temperature did not depend simply on how close an area is to the equator, but rather more on altitude and proximity to the coast. The west coast of the American continent, for example, Humboldt and his climatologist disciples found to be much milder in climate than the east. As chapter two demonstrated, while climate data had been previously compiled in long and cumbersome tables, Humboldt's findings were translated into cartographic form, revealing previously hidden patterns of temperature fluctuation across the globe in a visually appealing form.

References to isothermal lines can be unearthed in the political debates surrounding the settlement and government of the new western territories. 'The Pacific coast is totally different in temperature from the Atlantic. It is far milder,' declared the New York Senator John A. Dix. 'Lines of equal temperature—isothermal lines, as they are technically denominated—traverse the surface of the earth in curves of varied eccentricity in reference to parallels of latitude,' he explained. ⁶⁶ An Ohio Whig echoed Dix when considering the possibility of slave labour taking root in the territories: 'I do not know that it may not be done there; for... just as you go west upon this continent, the line of latitude changes in temperature, so that you may have a very different isothermal line as you approach the Pacific Ocean.' The *New York Evening Post* reminded its readers that, although New Mexico and southern California are on the same latitude as South Carolina and Georgia, it should 'be borne in mind that the Pacific coast is far milder in its temperature than the Atlantic.'

While some showed an awareness of the scientific theories regulating climate over space, the vast majority of politicians and commentators had never visited the territories themselves, so were reliant upon second-hand accounts for their knowledge of its landscape and potential productions. Yet these reports themselves painted contradictory pictures of the territories' environments, meaning that debate participants could effectively select which

⁶⁶ Congressional Globe, 30th Congress, 1st Session, Appendix, 26 June 1848, 866.

⁶⁷ Ibid, 24 July 1848, 1163.

⁶⁸ 'Senator Benton and the Proviso', New York Evening Post, 14 June 1849, 2.

version suited their pre-existing ideological convictions. The most commonly referenced account of the territories was authored by the future Republican presidential candidate John C. Fremont. Having already explored and reported on the lands between the Missouri River and the Rocky Mountains in 1842, Fremont set out on his second expedition in summer 1843, hoping to map the second half of the Oregon trail. In 1845, the Senate and the House of Representatives each ordered ten thousand of the subsequent report combining Fremont's first two expeditions. 69 'The name of Fremont is immortalized among the great travelers and explorers, and will doubtless survive as long as those of the Sierra Nevada, or of the Sacramento,' declared a writer in the Southern Literary Messenger in a review of this report.⁷⁰ Fremont's third expedition, which began in summer 1845, did not yield the same exploratory insights, but only served to enhance his fame even further. He joined the U.S. army's engagement in the California Republic's Bear Flag Revolt, acting as the Governor of California Territory in 1847 before being subjected to court martial and dismissal from the army. As a result, his report from this expedition was much shorter, but still provided hitherto unknown detail of California's climate and geography. Again, in motions passed on 5 and 15 June 1848, Congress ordered twenty thousand copies of both this Geographical Memoir and the accompanying map of Oregon and California.⁷¹

These printed sources were the principal means through which politicians and commentators read Fremont's insights. His works were reviewed in many periodicals from both north and south and were often referred to in articles or speeches dealing with the territories' geography, sometimes in lengthy quotes. Fremont's political connections, for example with his father-in-law and venerable Missouri Democratic Senator Thomas Hart Benton, also drew him personally into these circles. Massachusetts Democrat George Bancroft described how hearing Fremont recount his explorations was like 'being carried among snowcapped mountains of Switzerland and his account of the valleys and beautiful runs of water were enough almost to make you think that the Garden of Eden was the other side of the mountain. Yet Fremont's reports were wide-ranging enough to suit almost any interpretation. While a Maine Democrat quoted Fremont's findings at length to prove the

⁶⁹ John C. Fremont, *The Exploring Expedition to the Rocky Mountains in the Year 1842, and to Oregon and Northern California in the Years 1843-44* (Washington, 1845).

⁷⁰ Quoted in: Allan Nevins, Fremont: Pathmarker of the West, rept. ed. (Lincoln, 1992 [1939]), 345.

⁷¹ John Charles Fremont, *Geographical Memoir Upon Upper California*, Senate Miscellaneous Document No. 148, 30th Congress, 1st Session.

⁷² See, for example: 'More About California', *New York Tribune*, 27 December 1848, 2; 'Climate of California', *Mississippi Free Trader*, 3 January 1849, 2; 'California', *Southern Quarterly Review*, xvi (1849), 82-115.

⁷³ George Bancroft to Mrs. E. D. Bancroft, 15 February 1845, in *The Life and Letters of George Bancroft*, ed. M. A. DeWolfe Howe, 2 vols. (New York, 1908), i, 260.

'salubrity and geniality' of the territories, a Kentucky Whig could also cite the same report to legitimise his assertion that 'nine-tenths of it is either rough, barren, and inaccessible mountains, whose summits are covered with everlasting snows.'⁷⁴

Supporters of Webster concurred with this latter perspective, with moderate northern Democrats and border-state Whigs the most enthusiastic proponents of this view. 'If we come down those mountainous ridges which abound in New Mexico,' declared Henry Clay, 'the nature of its soil, its barrenness, its unproductive character, everything that we know, everything that we hear of it, must necessarily lead to the conclusion... that slavery is not likely to be introduced there.' Directly addressing advocates of the Wilmot Proviso, he pleaded: 'What more do you want?... You have nature on your side—facts on your side and this truth is staring you in the face, that there can be no slavery in those territories.⁷⁵ Truman Smith of Connecticut called the territories 'desolate regions' where anyone who planned to take slaves 'would only be worthy of a commission of lunacy.'⁷⁶ The North American Review argued that slavery 'is already shut out from this territory... not by the law of Congress, but by the law of God. The physical characteristics of the country are adverse to the existence of African slaves; the soil and the climate will not tolerate their presence.'77 The President for much of the debates James K. Polk was also a devotee of this view, both in public and private. In his 1848 message to Congress, he professed the belief that the whole debate around slavery was 'rather abstract than practical... From the nature of the climate and productions in much the larger portion of it, it is certain it could never exist.'⁷⁸ In his diary, too, he wrote two years earlier that 'slavery would probably never exist' in California and New Mexico.⁷⁹

Even ardently pro-slavery southerners who were generally belligerent on matters of slavery extension appeared to concede some of these points. The *Charleston Mercury*, a supporter of John C. Calhoun, admitted that 'no slaves can pay in California... As a practical question, the area of slavery will not cover sterile mountains, sandy plains, or mere grain-growing regions.' Georgia Whig Alexander Stephens wrote to his half-brother in a private letter that

⁷⁴ Congressional Globe, 30th Congress, 1st Session, Appendix, 16 May 1848, 553-4; ibid, 30th Congress, 2nd Session, Appendix, 17 February 1849, 223.

⁷⁵ Ibid, 31st Congress, 1st Session, 5 March 1850, 118.

⁷⁶ Ibid, Appendix, 8 July 1850, 1184.

⁷⁷ 'Action of Congress on California and Territorial Question', *North American Review*, lxxi (1850), 535-6.

⁷⁸ James K. Polk, 'Fourth Annual Message', in *A Compilation of the Messages and Papers of the Presidents*, ed. James D. Richardson, 11 vols. (Washington, 1902), vi, 2490.

⁷⁹ Entry for 19 December 1846, in *The Diary of James K. Polk During His Presidency*, 1845 to 1849, ed. Milo Milton Quaife, 4 vols. (Chicago, 1910), ii, 283.

⁸⁰ Quoted in: Chaplain W. Morrison, *Democratic Politics and Sectionalism: The Wilmot Proviso Controversy* (Chapel Hill, 1967), 194n3.

he considered the Wilmot Proviso controversy as 'a humbug' with the value of 'goat's wool.'81 Long-standing Democratic Congressman from South Carolina Robert Barnwell Rhett believed it to be improbable 'that a single planter would ever desire to set foot within' the limits of the new territories. 82 The Richmond Southerner went further, admitting that 'the country proposed to be ceded to us by the late treaty with Mexico..., the Almighty has Wilmot Provisoed. Should the free States consent (and they never will,) that slavery shall be allowed there, still the climate and country forbid it.'83

Southerners emphasised above all that they were contending for the principle of equal access to the territories, setting a precedent for other future acquisitions. The 'Southern Address', which was authored by John C. Calhoun and signed by a whole host of radical pro-slavery southerners, stated that they do not insist on the extension of slavery per se 'but that we shall not be prohibited from immigrating with our property, into the Territories of the United States.'84 While there may not be an immediate prospect of extending slavery into California, declared a Georgia Democrat, for the southern states it remains 'a practical question... of momentous, vital import... We war against this principle; and if you were to propose to prohibit slavery in the moon, I would stand here and battle against it.'85 The anti-Proviso Virginia Whig Jeremiah Morton admitted that 'the South did not think the Territories would be a proper theatre for slave labor. She did not mean, however, to yield the principle, that the precedent might hereafter by urged against her.'86

A somewhat smaller number of commentators did not go quite as far as to say that slavery would not take root in any of the Cession, but instead advanced the view that these territories were home to a variety of climates and productions and would thus be split accordingly. The Delaware Whig John Clayton, chairman of the bipartisan and bisectional Committee on the New Territories, presented this perspective when he reported the group's discussions to Congress in July 1848. 'While it was admitted on all sides that by far the greatest portion of the Territories was properly adapted to free labor, and would necessarily be free soil forever,' he summarised, 'it was also with equal unanimity conceded that there was a portion of it where free labor never could be introduced, owing to the climate and productions of that

⁸¹ Quoted in: Freehling, Road to Disunion, i, 461.

⁸² Congressional Globe, 29th Congress, 2nd Session, Appendix, 15 January 1847, 246.
83 Quoted in: 'Anti-Slavery Feeling in Virginia', *North Star*, 9 June 1848, 2.

^{84 &#}x27;Southern Address', in *The Papers of John C. Calhoun*, ed. Clyde N. Wilson and Shirley Bright Cook, 28 vols. (Columbia, SC, 2001), xxvi, 235.

⁸⁵ Congressional Globe, 30th Congress, 1st Session, Appendix, 7 July 1848, 892-3.

⁸⁶ Ibid, 31st Congress, 1st Session, 6 February 1850, 114.

portion.'⁸⁷ More belligerent figures from both sections agreed that, should compromises be made, the split should be imposed in accordance with the geography of the territories. The anti-slavery Maine Democrat Hannibal Hamlin adamantly believed that slave labour could not best free labour in cultivating even the most well-adapted region, let alone the largely mountainous western territories, but admitted that 'if we are to draw lines of compromise,' it should be done in accordance with 'the features, soil, and productions of the country.'⁸⁸ The fire-breathing pro-slavery southern Democrat Howell Cobb also stated in a letter to a correspondent that 'soil, climate, and the general adaption of the country to slave labor are the great elements that must mould and regulate the institutions of those territories.'⁸⁹ A Louisiana Whig summarised these views: 'there is a law-maker whose power is supreme—whose decrees cannot be controlled by human enactments. That law-maker is Nature.'⁹⁰

Several southern radicals eschewed this compromising tone and argued that not only should slavery be permitted to enter the territories, it would in fact be the best mode of developing its resources. Rejecting the argument that it was excluded by environmental obstacles, several politicians argued that slavery was well capable of diversifying and becoming the dominant mode of labour in that sphere. Future Confederate President Jefferson Davis declared to Congress that he believed 'the pursuit of gold-washing and mining is better adapted to slave labor than to any other species of labor recognized among us.' He judged slave labour to be 'essential, on account of climate, productions, soil, and the peculiar character of cultivation' of California and New Mexico. 91 While the 'European races now engaged in working the mines of California sink under the burning heat and sudden changes of climate,' Davis asserted, 'the African race' was 'altogether better adapted' to these climatic characteristics. 92 Similarly, a South Carolina Democrat grounded the southern attempts to obtain equal access to California in the fact that 'it is founded on the laws of God, written on the climate of the country,' that 'nothing but slave labor can cultivate profitably that region of the country.'93 The disagreement, then, was not that certain zones were better suited to black and slave labour than others, but whether the Mexican Cession was located within these zones.

⁸⁷ Ibid, 30th Congress, 1st Session, 19 July 1848, 950.

⁸⁸ Ibid, 29th Congress, 2nd Session, Appendix, 16 January 1847, 196.

⁸⁹ Howell Cobb to William Hope Hull, 17 June 1850, in 'Correspondence of Robert Toombs, Alexander H. Stephens, and Howell Cobb', *American Historical Association Annual Report for the Year 1911*, ed. Ulrich B. Phillips (Washington, 1913), 201.

⁹⁰ Congressional Globe, 31st Congress, 1st Session, Appendix, 28 February 1850, 215.

⁹¹ Ibid, 14 February 1850, 134.

⁹² Ibid, 29 January 1850, 249.

⁹³ Quoted in: ibid, 29th Congress, 2nd Session, 4 February 1847, 295.

Underlying many articulations of the climatic theory of slavery lay a fundamental conception of slavery as an economic system. 'Slavery,' declared New York editor James Gordon Bennett, 'is a great fact... It has long ceased to be an abstract question of Morals,' but was instead an economic reality and indeed a necessity. Bennett reminded abolitionists that 'slave labor is the basis of a Southerner's prosperity... How [that wealth] has been obtained is foreign to the subject.'94 The *American Whig Review* largely agreed: 'The people of the North, looking upon slavery merely as a form of government, and which might be erected upon any soil and in any climate, have placed too little confidence in nature and necessity.' Slavery, the writer believed, would go only where it could be profitable, a fact too easily dismissed by supporters of the Wilmot Proviso. 95 A constituent wrote to Georgia Senator Howell Cobb arguing that 'the *interest* of slaveholders' will stop them from wishing to emigrate to the new territories 'on account of the incompatibility of soil, climate [and] productions.'96

These arguments were informed by the latest developments in the field of racial science, which had taken on new levels of sophistication and popularity even in the years since the Texas annexation debates. In the eighteenth and early nineteenth century, the monogenist environmentalist view had been largely dominant, propagated by figures such as Princeton academic Samuel Stanhope Smith, who theorised that the colour of skin was the result of climatic influences, rather than any inherent trait, and did not contradict the unity of the human race. 'Even the blackest negro,' he wrote in an 1810 essay, 'when first born, does not exhibit his true complexion till after he has been some time exposed to the contact of the external air.' What is more, he continued, skin colour could change over time and, should the blacks in the United States be allowed freedom of movement, they would 'whiten,' improving their overall condition.⁹⁷

The problem for monogenists was that, thanks to the abolition of slavery in the northern states and the free blacks already resident there, this theory could be tested. The persistence of blackness among these freemen, Bruce Dain has convincingly argued, meant that 'environmentalism's logic would consume itself, leading to denials of human unity and

⁹⁴ 'The Slavery Question in Black and White', n.d., James Gordon Bennett Papers, Rare Books and Manuscripts Division, New York Public Library. Emphasis in original.

^{95 &#}x27;Policy of the Nation in Regard to Slavery and Its Extension', American Whig Review, xi (1850), 227.

⁹⁶ Henry L. Benning to Howell Cobb, 23 February 1848, in 'Correspondence of Toombs, Stephens, and Cobb', ed. Phillips, 100-1.

⁹⁷ Samuel Stanhope Smith, Essay on the Causes of the Variety of Complexion and Figure in the Human Species (New Brunswick, 1810), 55n.

common nature.'98 This much was also pointed out by an author in the *Democratic Review*, who in an 1850 article scorned the environmentalist theory on the grounds that 'the white and the black come to the country of the red man, and we are told in support of that theory, not that the two former assimilates to the latter, but that the black assimilates to the white! and neither assimilates to the aboriginal red man!'99 By the time this critique was published, the monogenist viewpoint was already under sustained attack from racial scientists. Leading the charge was the Alabama physician Josiah Nott, labelled by Michael O'Brien as 'arguably the most famous Southern intellectual of his day.'100 Rather than stressing the adaptability of blacks to their environment, Nott and his allies argued for inherent black inferiority in all climates except hot and humid ones reminiscent of their African 'homeland,' with the corollary that white people were best adapted to temperate latitudes. 'All testimony combine [sic] to establish the fact that cold climates are most unfavourable to the health and longevity of blacks,' Nott wrote in the southern journal *De Bow's Review*. ¹⁰¹ Whites, on the other hand, become 'attenuated and feeble' in tropical climes, while 'the Black man seems to enjoy his fullest vigor and elasticity, in climates far more intemperate and insalubrious.' ¹⁰²

That there were significant differences between the monogenist viewpoint of Samuel Stanhope Smith and that propounded by Nott and others, should be plain. The former argued for the unity of the human race, with racial differences not inherent, but rather the result of environmental phenomena beyond the control of individuals. The latter countered that blacks were a distinct species fundamentally and intrinsically different and inferior to whites. In one important sense, though, the polygenist argument involved not a rejection of the determining power of the environment, but rather a recasting of it. The climate may not be the originator of racial differences, but in practice its influence was in Nott's reading no less significant. As blacks supposedly originated in a tropical African climate, that was to be their home forever, an unchangeable and natural fact that could not be overcome. Climate was here a static and conservative, rather than a transformative force, but no less important for it.

⁹⁸ Bruce Dain, A Hideous Monster of the Mind: Race Theory in the Early Republic (Cambridge, MA, 2002), 39.

^{99 &#}x27;Natural History of Man', Democratic Review, xxvi (1850), 335.

¹⁰⁰ Michael O'Brien, *Conjectures of Order: Intellectual Life in the American South*, 2 vols. (Chapel Hill, 2006), i, 242.

¹⁰¹ 'Physical History of the Negro', *De Bow's Review*, iv (1847), 277.

¹⁰² 'Unity of the Human Race', Southern Quarterly Review, ix (1846), 9.

The polygenist viewpoint obtained widespread acceptance. Some southern commentators criticised it for diverting from the scriptural doctrine of one single creation. 103 Yet, as George Fredrickson has argued, 'what is most striking is not that polygenesis encountered opposition from the spokesmen of conservative Christianity but that, even in its aggressively secular form as put forth by Nott, it won as much acceptance as it did. '104 Southern journals such as De Bow's Review and the Southern Quarterly Review expressed their enthusiastic support for polygenist doctrines and often ran long articles authored by Nott or other polygenist thinkers. 105 Important southern politicians such as the South Carolina Senator James Henry Hammond engaged the polygenists in person. 'I wish I had your knowledge of comparative anatomy and physiology,' wrote Hammond to Nott. 'Have your Science and Philosophy of man furnished you with any certain knowledge of the causes which enable the negro to stand heat better than the Caucasian...?' 106 Nott and the polygenists gained a valuable ally in the respected Swiss geologist Louis Agassiz. After emigrating to the U.S. in 1847, Agassiz was invited to give a series of twelve lectures at Boston's Lowell Institute, which were reprinted at length in northern newspapers such as the New York Tribune. 107 Having already developed a theory of animal distribution that emphasised the importance of climatic zones, it was a small step to endorsing the theory that races of men, too, were adapted to particular latitudes. He considered it a 'demonstrated fact' that the 'natural limits of different races' coincided roughly with those of animals. 108 With Agassiz lending his considerable weight to the polygenist cause, conservative northern journals such as the American Whig Review and the Democratic Review were also receptive to these new racial ideas. 109

The polygenist zonal theory of the races was central to the climatic theory of slavery. It allowed the advocates of this theory to ground the assertion that blacks were more suited to working in warmer climates in the latest scientific advancements, presenting their southward movement as part of an entirely natural process. 'Climate and population are continuing to drive slavery further and further South,' argued a Kentucky Whig, 'to the latitude where free labor could not flourish' while simultaneously 'climate and population would banish slavery

¹⁰³ William Stanton, *The Leopard's Spots: Scientific Attitudes Towards Race in America, 1815-59* (Chicago, 1960), 182-98.

¹⁰⁴ George M. Fredrickson, *The Black Image in the White Mind: The Debate on Afro-American Character and Destiny, 1817-1914* (New York, 1971), 84-5.

¹⁰⁵ E.g. 'Physical History'; 'Unity of the Human Race'.

¹⁰⁶ James Henry Hammond to Josiah C. Nott, 3 August 1845, James Henry Hammond Papers, Manuscripts Division, Library of Congress.

¹⁰⁷ E.g. 'The Animal Kingdom: Third Lecture by Prof. Agassiz', New York Tribune, 25 October 1847, 1.

¹⁰⁸ Quoted in: Stanton, Leopard's Spots, 101.

¹⁰⁹ Reginald Horsman, *Race and Manifest Destiny: The Origins of American Racial Anglo-Saxonism* (Cambridge, MA, 1981), 132-40.

from the northern latitudes.' Should slavery be taken into the 'mountains or in the valleys of Oregon or California,' asserted a New Jersey Whig, blacks would simply 'starve or freeze to death.' The Illinois Democrat Stephen Douglas echoed these conclusions, asking sarcastically in allusion to Oregon and California that 'when you ascend toward the heavens..., covered with eternal snows, do you not think that you have found a charming country, and a lovely climate for the negro, and especially for the profitable employment of slave labor?' On the other end of the environmental spectrum, the *New York Journal of Commerce* argued, in 'low moist climates, during the season for field labor, the negro in his congenial climate is vigorous and healthy, but no white man ever has or can survive five years who works in the field.' 113

Northern anti-slavery figures, particularly free blacks, continued to vehemently counter this rhetoric. 'It is said that we cannot prosper in a cold climate,' wrote Frederick Douglass, but 'there is no truth in the proposition. We can become acclimated just where any other members of the human family can be acclimated, and can live as well and long as any others.' Douglass counselled his fellow free blacks not to be 'gulled into the notion that this climate is unfavorable to our development and progress,' arguing to the contrary that 'we need not look beyond the limits of the Northern States for every facility which we need for our improvement and elevation.'114 In a series of articles in a northern commercial periodical, James McCune Smith took on the racial scientists on their own turf, using statistics to show that, should the slaves be freed, they would 'attain a longevity not very much below that attained by the Europ-American population under milder temperature[s].'115 The old environmentalist theories of ethnology that argued for racial differences being the result of climate continued to enjoy currency among anti-slavery radicals. James Russell Lowell wrote in the National Anti-Slavery Standard that it is 'beyond question... that physical structure, and of the color of the skin, may all be referred to climatic causes, and do not in the least countenance the theory of essential diversity of race.'116

These radical anti-slavery and non-extensionist figures were equally dismayed by the widespread acceptance of the climatic theory of slavery, seeing it as a symptom of a pro-

¹¹⁰ Congressional Globe, 29th Congress, 2nd Session, 25 July 1847, 997.

¹¹¹ Ibid, 30th Congress, 1st Session, Appendix, 24 July 1848, 1151.

¹¹² Ibid, 31st Congress, 1st Session, Appendix, 14 March 1850, 373.

¹¹³ Quoted in: 'Refuge of Oppression', *Liberator*, 10 November 1848, 177.

¹¹⁴ [Frederick Douglass], 'A Few Words to Our Own People', North Star, 19 January 1849, 1.

¹¹⁵ [James McCune Smith], 'The Influence of Climate on Longevity, with Special Reference to Life Insurance, Part II', *Hunt's Merchants Magazine*, xiv (1846), 415-6.

¹¹⁶ Quoted in: 'Ethnology', North Star, 16 February 1849, 1.

slavery plot to ensure the expansion of the peculiar institution. 'The slaveholders are bent on securing the new territories for slavery,' wrote Charles Sumner to Richard Cobden in July 1850. 'They have been fighting with desperation & have been aided by traitors at the North. Webster's apostacy is the most bare-faced.' David Wilmot answered the charge that his Proviso was unnecessary by warning his fellow non-extensionists that 'we are to be dosed with narcotics—manipulated into a state of somnambulism, and not allowed to wake up until the deed of shame is accomplished, and California and New Mexico are teeming with slaves.' Horace Greeley was one of a number of anti-slavery figures to point out other unpromising climates in which slavery as an institution had flourished. 'Have these advocates for natural exclusion never heard of Russia?' he asked indignantly. 119

At the heart of these disagreements was a fundamentally different conception of slavery as an institution. Rather than simply viewing slavery as an economic phenomenon, many of its opponents emphasised its moral and political wrongs, albeit often those committed against white Americans. Greeley noted that slavery was 'not a mere industrial institution in this country' but was 'a great political machine, whereby the minority in the Republic has long ruled the majority.'120 The slavery extension issue was 'not a question of mere dollars and cents,' emphasised an New York Congressman, 'it is a question whether, in the government of the country, she shall be borne down by the influence of your slaveholding aristocratic institutions, that have not in them the first element of Democracy.' 121 The Ohio radical Thomas Corwin professed not to care whether the geography of the territories allowed slavery or not. 'My objection is a radical one to the institution everywhere.' Horace Mann critiqued Webster for 'drawing moral conclusions from physical premises' and 'determining the law of the spirit by geographical phenomena.' Slavery 'depends not upon climate, but upon conscience,' he declared. 123 Slavery, for these figures, was an inherently unnatural and artificial institution maintained by nefarious special interests and as such did not, and indeed could not, abide by any natural laws.

Yet, as with southern pro-slavery radicals, not all non-extensionists and anti-slavery figures eschewed the climatic theory of slavery entirely. Wilmot, despite warning about the devious

¹¹⁷ Charles Sumner to Richard Cobden, 9 July 1850, in *Letters of Sumner*, ed. Palmer, i, 302.

¹¹⁸ Congressional Globe, 29th Congress, 2nd Session, Appendix, 8 February 1847, 316.

^{119 &#}x27;Webster and Slavery', New York Tribune, 9 March 1850, 2.

¹²⁰ Ibid

¹²¹ Congressional Globe, 29th Congress, 2nd Session, Appendix, 10 February 1847, 344.

¹²² Ibid, 30th Congress, 1st Session, Appendix, 24 July 1848, 1163.

¹²³ Horace Mann to James Richardson et al., 3 May 1850, in *Horace Mann's Letters on the Extension of Slavery into California and New Mexico* (Washington, 1850), 5-6.

designs of those who claimed the Californian environment prohibited slavery, nevertheless stated that 'slavery has its abiding place, and freedom its home. Let the limits of each be sacredly observed.'124 John A. Dix of New York, another strong opponent of extension, confessed that some areas of the southern United States required black labour, but immediately added the caveat that 'admitting the necessity of slave labor there, the admission furnishes no argument in favor of the extension of the African race to territories in which no such necessity exists.'125 A prominent northern Whig periodical hurriedly stated that they 'do not mean here to contend, that in countries suited by their climate to the temper and habits of the African race, the institution of slavery may not be preferable to that of negro or Mexican barbarism.' Instead, they hoped to express their opposition to the peculiar form slavery took in the southern United States, where it presented 'the singular spectacle of a republic of landholders, governing with a despotic power a nation of slaves,' a system inconsistent above all with American republicanism. ¹²⁶ As these quotes suggest, even many strong opponents of slavery's extension into the new territories did not reject the climatic theory of slavery, believing instead that while slavery had its natural place in hotter climatic zones, California and New Mexico were not encompassed within these, and thus attempts to expand slavery into these areas were unnatural and to be resisted.

The climatic theory of slavery, then, was a considerable force in the debates surrounding the expansion of slavery into the Mexican Cession. Advocates of reconciliation between the two sections, notably Daniel Webster, sought to soothe tensions by reassuring more belligerent figures that irrevocable natural laws had already settled the question of whether slavery could take root in these territories. Drawing on recent innovations in racial science, they argued that blacks would not work effectively in the barren and mountainous regions of the Cession and thus that economically minded slaveholders would not take them while there were greater profits to be made in more tropical latitudes. More stridently pro- or anti-slavery commentators challenged this view and asserted that the environment of the territories placed no barriers to slavery's introduction there. However, figures on both sides continued to subscribe to the climatic theory of slavery in some form, but did not see California and New Mexico as lying within the zones in which slavery was prohibited. Environmental factors still loomed large when politicians and commentators envisioned the future development of slavery.

¹²⁴ Congressional Globe, 30th Congress, 1st Session, Appendix, 3 August 1848, 1078.

¹²⁵ Ibid, 26 June 1848, 866.

^{126 &#}x27;Remarks on the Resolution of the Southern Caucus', American Whig Review, ix (1849), 226.

Stephen Douglas, Popular Sovereignty, and the Kansas-Nebraska Act Debates

Battle over the extension of slavery was rejoined four years after Webster's speech. The theatre of conflict shifted to the Nebraska territory, which had remained largely unorganised since the Louisiana Purchase of 1803. As with the territories of the Mexican Cession, legislating for the government of this area took on notable importance in the context of significant migration from the eastern seaboard. In particular, commercial interests desired the organisation of the territory in order to receive the public land grants required for the construction of the transcontinental railroad with its terminus at Chicago. As part of the Louisiana Purchase, the Nebraska territory was, unlike the Mexican Cession, subject to the Missouri Compromise's restriction on slavery and as such should have been admitted on those terms. Yet radical pro-slavery southerners were concerned that the admission of free-soil states carved out of the Nebraska territory would tip the political balance of power decisively in favour of the north. A group centred around the so-called 'F Street Mess', which included powerful Senators from Virginia and South Carolina, made clear that they would insist on slaveholder equality should a bill to organise the Nebraska territory be presented to Congress.¹²⁷

This simmering conflict was brought into the open by the Illinois Democrat Stephen Douglas, chairman of the Committee on Territories, when he reported to the Senate an amended version of a bill to organise the Nebraska territory on 4 January 1854. An ardent expansionist and supporter of the northern route of the transcontinental railroad, Douglas felt the urgency of organising the admitting the Nebraska territory acutely. Realising that the bill, which was to become known as the Kansas-Nebraska Act, was unlikely to pass without southern support, Douglas attempted to satisfy them by not explicitly upholding the Missouri Compromise's restriction on slavery. Instead, in the bill's wording, 'when admitted as a state or states, the said territory, or any portion of the same, shall be received into the Union, with or without slavery, as their constitution may prescribe at the time of their admission.' This was the principle of popular sovereignty that Douglas and his supporters hoped would enable

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¹²⁷ This paragraph and the two that follow are based on Robert W. Johannsen, *Stephen A. Douglas* (New York, 1973), 374-434; Nicole Etcheson, *Bleeding Kansas: Contested Liberty in the Civil War Era* (Lawrence, 2004), 1-49; James A. Rawley, *Race and Politics: "Bleeding Kansas" and the Coming of the Civil War* (Lincoln, 1969), 21-57; McPherson, *Battle Cry*, 121-30; Potter, *Impending Crisis*, 145-76.

¹²⁸ Quoted in: Johannsen, *Douglas*, 405.

the smooth organisation of the territory, allowing the inhabitants of the territories themselves to choose whether to allow slavery or not.

In the report that accompanied the Kansas-Nebraska Act, Douglas's committee pointed to the 1850 Compromise bill, which had, in sections also largely drafted by Douglas, organised Utah and New Mexico without restriction on slavery. Mexican law, which prohibited slavery, had, they argued, been superseded by the 1850 Compromise, a precedent they invoked for ignoring the Missouri Compromise's restriction on slavery in the Nebraska territory. Attempts to manoeuvre around the issue were thwarted, however, when the Kentucky Whig Archibald Dixon introduced an amendment explicitly repealing the Missouri Compromise. Douglas eventually agreed, but predicted correctly that it would 'raise a hell of a storm.' ¹²⁹ In the years that followed, the Kansas-Nebraska question was the central topic of debate in American politics, dealing a final blow to the already teetering Second Party System and unleashing a bloody civil war in Kansas. 'The extension of Slavery is the all engrossing, absolutely commanding Sectional issue,' declared an 1856 circular of the newly formed Republican Party. 130 Salmon P. Chase concurred, writing to a fellow antislavery activist that 'everybody admits that the Slavery question is now of paramount importance. The fate of every other measure is, indeed, determined almost absolutely by its relations to this.'131

In defending the Kansas-Nebraska Act, Douglas and his supporters articulated another version of the climatic theory of slavery, attempting to calm the fears of northern anti-extensionists that slavery would take root in the Nebraska territory if the settlers were allowed the choice. 'Every intelligent man knows that it is a matter of no practical importance,' Douglas wrote, 'the cry of extension of slavery has been raised for mere party purposes by the abolition confederates and disappointed office seekers.' As with Webster, who Douglas supported during the debate surrounding the 1850 Compromise, the Illinois Democrat argued that the unfavourable soil and climate of the Nebraska territory would prevent the proliferation of slavery there. The whole question 'comes back to the principle of dollars and cents,' Douglas argued, 'whenever the climate, soil, and productions preclude

¹²⁹ Quoted in: McPherson, Battle Cry, 122.

¹³⁰ 'Circular of the National Executive Committee of the Republican Party', n.d., Blair Family Papers, Manuscripts Division, Library of Congress.

¹³¹ Chase to Ichabod Codding, 22 April 1854, in *The Salmon P. Chase Papers*, ed. John Niven, 5 vols. (Kent, OH, 1993-8), ii, 384.

¹³² Stephen Douglas to the editor of the *Concord State Capitol Reporter*, 16 February 1854, in *Letters of Stephen A. Douglas*, ed. Robert W. Johannsen (Urbana, 1961), 289.

the possibility of slavery being profitable, [the inhabitants] will not permit it.' ¹³³ Given the more northerly latitude of this territory, it might be expected that this would be more widely accepted than the argument that the environment of California, New Mexico, and Utah would prevent slavery from flourishing. However, this was in fact the opposite of the case, as Douglas's opponents could point to the proximity of the slaveholding state of Missouri on Kansas's eastern border. While the environment of the Mexican Cession was still somewhat unknown, the relative nearness of the Nebraska territory served only to harden the convictions of both the supporters and opponents of the climatic theory, further reducing the opportunity for reconciliation.

The group that most strongly linked the climatic theory of slavery with a defence of popular sovereignty was the familiar coalition of border-state Whigs and moderate northern Democrats. An Illinois Democratic Representative predicted that, should the territory be organised with land grants guaranteed by the government, there would be 'in a short time, three Yankees to one southern man,' a development which would 'settle forever that question between free and slave labor as to that region.' Any apprehensions to the contrary, he continued, exist only 'in heated imaginations.' A New Hampshire Democrat invoked a higher power, which he claimed had 'fashioned the territory, mixed its soil, determined its products, and tempered its skies,' to the detriment of slavery. The Washington Daily Union chided northern anti-extensionists for demanding a 'double assurance' that the Nebraska territory would be free soil. 'Why not rely upon the guarantee for the exclusion of slavery furnished by the immutable laws of nature?' the editor pleaded. 136

Like its previous incarnations, this iteration of the climatic theory of slavery was based on a conception of slavery as an economic institution and slaveholders as rational actors in search of, above all else, greater profits. A North Carolina Whig argued that slavery cannot be profitable 'except upon the great staples of the South—tobacco, cotton, sugar, and rice.' As such, slavery flourished upon the fertile lowlands of the Lower South and had no prospect of taking root in the Nebraska territory. A Pennsylvania Democrat agreed that 'capital is always timid' and as such slaves would not be taken 'where the winters are long and the summers short' and where staple crops could not be cultivated, especially while there remained so much unoccupied fertile land in more congenial climates. 'The truth is,' he

¹³³ Quoted in: Rawley, *Race and Politics*, 40-1.

¹³⁴ Congressional Globe, 33rd Congress, 1st Session, 21 February 1854, 255.

¹³⁵ Ibid, Appendix, 8 May 1854, 624.

¹³⁶ 'The North and the South', Washington Daily Union, 18 February 1854, 3.

¹³⁷ Congressional Globe, 33rd Congress, 1st Session, Appendix, 14 February 1854, 149.

concluded, 'soil and climate have more to do with the extension of slavery than congressional action.' Robert J. Walker again threw his weight behind the climatic theory of slavery when he was appointed Governor of the Kansas Territory in 1857. In his inaugural address, he presented the slavery question as being already determined by 'the law of the thermometer' and the law of the 'isothermal line.' The average temperature, he argued, was often as low on the 'elevated plains' of Kansas as in New England, making the area 'unsuited to the tropical constitution of the negro race' and thus negating any chance of making slavery profitable, while 'millions of acres of cotton and sugar lands remain uncultivated.' The natural course,' wrote a popular sovereignty supporter privately to the Virginian Matthew Maury, 'is for Slave labour to be applied to those objects least fitted for the white man. Nothing that I can see will ever stop this tendency of the slaves to their concentration in the hottest & least healthy parts... whilst the white man betakes himself to other branches.' 140

Defenders of popular sovereignty reached into the past to demonstrate their case that slavery would be outlawed by the inhabitants of the territory if given the chance. They saw the emancipation of the slaves in the northern states as proof that natural laws and economic self-interest would drive the institution southwards. An Indiana Democrat professed the belief that 'New England to-day would have had as many slaves as South Carolina or Alabama has if cotton or rice grew there as readily and as profitably as at the South.' For all the northerners claimed to have sympathy for the slave, he asserted that it was 'cupidity, and not philanthropy, has dictated the course which the North has pursued in reference to this matter.' Douglas drew on the example of Iowa's constitution to prove that climate and productions played a determinative role in the choice of slavery or freedom. Its citizens, he claimed, 'considered the subject of free and slave institutions calmly [and] dispassionately,' concluding that 'it would be to the interest of her people in their climate, with their productions, to prohibit slavery.' In this reading, a form of popular sovereignty, rather than the Northwest Ordinance, was the decisive factor in securing Iowa for freedom. 142

Southern figures, of course, did not miss the opportunity to goad their northern counterparts about the futility of their 'false philanthropy.' It was no 'Titmouse Providence of Man,' that abolished slavery in the northern states, argued the future Virginia Governor and

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¹³⁸ Ibid, 28 February 1854, 247.

¹³⁹ Inaugural Address of Robert J. Walker, Governor of Kansas Territory (Lecompton, 1857), 16.

¹⁴⁰ R. Maury to Matthew Maury, 7 April 1861, Matthew Fontaine Maury Papers, Manuscripts Division, Library of Congress.

¹⁴¹ Congressional Globe, 33rd Congress, 1st Session, Appendix, 8 May 1854, 623.

¹⁴² Ibid, 31st Congress, 1st Session, Appendix, 13 March 1850, 370.

Confederate General Henry A. Wise, but rather 'one of God's mightiest ministers' who went by the name of 'King Jack Frost.' Yet southerners did not merely express the view that slavery was moving southwards through natural causes when it allowed them to criticise anti-slavery advocates; many expressed continuing concern that slavery's grip upon the Upper South was loosening. The *Jackson Mississippian* considered it 'common sense' that, such was the demand and superior soil of the Lower South, in the Upper South states the drain of slaves will be such that 'free labor will necessarily take the place of slave labor, and when it preponderates—as it soon must—they will become anti-slavery States.' 144 Speaking in 1850, the South Carolina Governor worried that 'one-half of Virginia is now almost as alien to us as Pennsylvania,' while 'Maryland is hopeless.' 145 The physician and defender of slavery Samuel A. Cartwright wrote in *De Bow's Review* that 'negro slavery, from natural laws... must ultimately be confined to that region of the country South, where, from the heat of the climate and the nature of cultivation, negro labor is more efficient, cheaper, and more to be relied upon than white labor.' 146

The physician Cartwright's presence in a major southern periodical also points to the everincreasing importance of racial science to the debate around slavery's future. As George M. Fredrickson has argued, politics and racial science only became more intertwined through the 1850s, with, for example, the pamphlet form of John Van Evrie's infamous *Negroes and Negro Slavery* containing on the cover an enthusiastic endorsement of Jefferson Davis. 147 The polygenist views outlined in the last section continued to receive positive press and important new spokespeople such as Van Evrie and Cartwright, ensuring continued exposure in periodicals and speeches. 'The negro' wrote Van Evrie in *De Bow's*, 'is as much a product of the tropics as the orange or the banana... and the instinct of his nature prompts, as well as the necessities of the Caucasian race continually urges, him onward to his original and final home.' A compendium volume of essays from different polygenist authors was published in 1854, edited by Josiah Nott and George Gliddon, under the title *Types of Mankind* and was favourably reviewed in several southern periodicals. 149 One reviewer particularly noted the international character of the polygenist wave, listing scientists from Britain, France,

¹⁴³ 'Letter of Henry A. Wise', Washington Daily Union, 13 September 1854, 2.

^{144 &#}x27;Common Sense', Jackson Mississippian, 28 January 1859, 2.

¹⁴⁵ Quoted in: Deyle, Carry Me Back, 86.

¹⁴⁶ Samuel A. Cartwright, 'How to Save the Republic, and the Position of the South in the Union', *De Bow's Review*, xi (1851), 194-5.

¹⁴⁷ Fredrickson, *Black Image*, 63-4.

¹⁴⁸ John H. Van Evrie, 'Slavery Extension', De Bow's Review, xv (1853), 6.

¹⁴⁹ Josiah C. Nott and George R. Gliddon, *Types of Mankind* (Philadelphia, 1854).

Belgium, and Germany among its figureheads on the European continent.¹⁵⁰ South Carolinian author Louisa S. McCord rejoiced at these developments, identifying the true value in scientific investigations as providing 'a defence of United States negro slavery and its entire exoneration.' Since 'science cannot be swayed by prejudice and outcry,' she wrote, what is needed is a 'broad exposition of fact! fact! fact! '151

Opponents of the Kansas-Nebraska Act were often just as vehement in their denial of environmental restrictions on slavery in Nebraska territory as its supporters were in defending the idea. The National Anti-Slavery Standard was scathing: 'Some of us remember that we went to school once and studied geography.' The author advised the reader to take an atlas and 'draw a pencil line from the Northwest corner of the State of Missouri due west to the Rocky Mountains. You have to the south of that line a portion of the Nebraska territory, all lying in the latitude of five slave States.'152 From this point of view, the proximity of Missouri, with its flourishing slaveholding districts directly east of the southern portion of the Nebraska territory, completely delegitimised the argument that climate and soil would prevent it taking root just across the border. A New York Congressman invoked the example of Texas annexation to warn his fellow northerners against being drawn in by pro-slavery trickery. He professed to have believed Robert Walker's safety valve thesis and voted accordingly, yet 'instead of a diminution of slavery North, as I predicted as taking place... the South are now pushing and driving us of the North into the narrowest possible bounds.' He had now disillusioned himself and had 'no doubt, if this bill passes, that slavery will go into this Territory of Kansas.'153

The popular sovereignty supporters' use of history also came under attack. In the *Appeal of the Independent Democrats*, drafted by anti-slavery radicals in January 1854, the authors denounced the Kansas-Nebraska bill in the strongest possible terms, claiming that 'language fails to express the sentiments of indignation and abhorrence which it inspires.' They emphasised the importance of past legislative acts such as the Northwest Ordinance and the Missouri Compromise, as opposed to natural causes, in stopping the spread of slavery, and dismissed the argument that the 1850 legislation superseded the Missouri Compromise as 'groundless.' The Vermont Whig George Perkins Marsh argued that the New England

¹⁵⁰ 'On the Unity of the Human Race', Southern Quarterly Review, x (1854), 275.

¹⁵¹ Louisa S. McCord, 'Slavery and Political Economy, Part 2', *De Bow's Review* (1856), 444-5.

^{152 &#}x27;Southern Nebraska', *National Anti-Slavery Standard*, 22 April 1854, 2.

¹⁵³ Congressional Globe, 33rd Congress, 1st Session, Appendix, 10 May 1854, 647.

¹⁵⁴ Salmon P. Chase et al., *Appeal of the Independent Democrats in Congress, to the People of the United States* (n.p., 1854), quotes from 5, 4.

states abolished slavery not out of economic self-interest, but instead because 'our fathers held it... to be contrary to the law of conscience and of God.' 155

The racial science that underlay the climatic theory of slavery was also contradicted by radical northerners during the debates surrounding the Kansas-Nebraska bill. The abolitionist minister Theodore Parker bemoaned the fact that Louis Agassiz, 'an able man, of large genius,' had become a tool of pro-slavery propaganda. Rather than 'a great man of science,' Agassiz had transformed into 'the *Swiss of Slavery*' as 'Southern journals rejoice' at his work. A New York Representative found all the evidence he needed to counter racial science in Canada, where escaped slaves were 'thriving; hearty, healthy, and breeding much faster than here. The idea that slaves were not suited and could not work in northern climates was judged by Horace Greeley to be 'all gammon.' Although he admitted that it is 'unquestionably true' that slaves 'may be worked to greater advantage in some sections of the country than in others,' he considered it 'equally certain that the business of *raising slaves* for the market may be carried on in a pretty high northern latitude.' 158

While northern anti-slavery radicals presented a largely united front in their opposition to the Kansas-Nebraska bill, a small number did so despite believing that slavery would not flourish in large portions of the territory. William Seward professed to 'feel quite sure that slavery at most can get nothing more than Kansas' with Nebraska managing to 'escape for the reason that its soil and climate are uncongenial with the staple of slave culture.' While there are other areas such as Cuba that could provide greater profits, Seward believed that 'it is reasonably to be hoped' that the more northerly sections of the country would remain open to free labour. The New York Evening Post attacked the 'desperate sophisms' of Douglas and his supporters, but admitted that, in the Nebraska territory, 'the South has no very well-assured expectation of succeeding' in planting slavery. Yet both Seward and the Evening Post realised that the stakes were greater than just these two states and that the Kansas-Nebraska Act would set a dangerous precedent enabling future expansion into more congenial climates. 'There still remains outside of the domains of the United States,' noted the Post, 'territories of almost incalculable extent, of a fruitful soil, with a tropical climate, naturally adapted to the productions of the great staples... upon which slave labor mainly

¹⁵⁵ Congressional Globe, 30th Congress, 1st Session, Appendix, 3 August 1848, 1074.

¹⁵⁶ 'Speech of Rev. Theodore Parker', *National Anti-Slavery Standard*, 27 May 1854, 2. Italics in original.

¹⁵⁷ Congressional Globe, 33rd Congress, 1st Session, Appendix, 8 May 1854, 604.

¹⁵⁸ Quoted in: 'Important Discovery', *National Anti-Slavery Standard*, 8 April 1854, 2. Italics in original.

¹⁵⁹ Congressional Globe, 33rd Congress, 1st Session, Appendix, 25 May 1854, 769.

subsists.' ¹⁶⁰ Seward agreed, arguing that 'Nebraska is not all that is to be saved and lost' in this debate. ¹⁶¹

Some radical southerners, too, emphasised that they were not fighting for the specific extension of slavery into the Nebraska territory, but rather the larger principle. The Georgian Senator Alexander Stephens wrote to a friend that the practical effect of the bill would be negligible but 'the moral effect of the victory on our side will have a permanent effect upon the public mind, whether any positive advantages accrue by way of the actual extension of slavery or not.'162 A Virginia Democrat told Congress that his views were 'very decided that Kansas affords but little inducement for the employment of this kind of labour, and Nebraska none at all.' He too noted the southward tendency of slavery, arguing that it would be 'absurd to attribute this result to any predominant sentiment of humanity or philanthropy,' but rather this should be put down to 'the greater attractions which the soil, climate, and productions of the more southern States hold out for that kind of labor.'163 A 'Lady of Georgia' posited in a De Bow's Review article argued similarly that 'the most natural termination' to the slavery question was 'that in time the tendency southward, already observable in the American negro, may collect the race on the borders of the Gulf of Mexico,' and from thence passing 'over the line to Mexico, in a population which seems to amalgamate readily with them.'164

The climatic theory of slavery, then, survived as an important theme in the political debate surrounding the Kansas-Nebraska Act. Battle was joined again between the coalition of predominantly moderate northern Democrats and the few remaining border-state Whigs, who supported Stephen Douglas in his argument that implementing the principle of popular sovereignty would secure the Nebraska territory for freedom. Drawing on the latest developments in racial science, as well as their interpretation of the causes behind slavery's demise in the northern states, these figures presented the institution as predominantly an economic system in thrall to environmental factors that regulated the soil and climate, and thus the profitability of their slave labour. No slaveholders would go to Kansas or Nebraska, they argued, while more fertile lands in the Lower South, and potentially Central America, beckoned. Radical northern anti-extensionists, emboldened and in greater numbers than ever

¹⁶⁰ 'The Object of the Non-Intervention Doctrine', New York Evening Post, 16 March 1854, 2.

¹⁶¹ 'Letter to the New York Meeting', in *The Works of William H. Seward*, ed. George E. Baker, 5 vols. (Boston, 1884), iv, 432.

¹⁶² Stephens to W. W. Burwell, 7 May 1854, in 'Correspondence of Toombs, Stephens, and Cobb', ed. Phillips, 344

¹⁶³ Congressional Globe, 33rd Congress, 1st Session, Appendix, 4 April 1854, 487-8.

¹⁶⁴ A Lady of Georgia, 'Southern Slavery and Its Assailants', *De Bow's Review*, xvi (1854), 58.

before, emphasised on the contrary that congressional action was, and always had been, essential to the restriction of slavery's extension. Environmental restrictions, in their view, could and would be overcome by the grasping cupidity of slaveholding expansionists.

Conclusion

The environmental imagination, then, was influential in the way the debates around slavery extension were framed and conducted. Despite the evident ways in which biological and mechanical innovations were transforming slaveholders' relationship with the natural world, enabling them to overcome previously impassable environmental obstacles, the idea that natural phenomena could be relied upon to determine slavery's future trajectory, while subject to increasingly loud opposition throughout this period, remained remarkably resilient and important. From the debates surrounding Texas annexation in the mid-1840s to the controversy over the Kansas-Nebraska Act in the mid-1850s, these views were an important part of the political debates over the future geographical reconfiguration of the peculiar institution. The climatic theory of slavery, articulated predominantly by moderate northern Democrats and border-state Whigs, presented the institution as a creature of warm climates and fertile soils that enable the large-scale growth of staple crops. Drawing on developments in the field of racial science, these figures also argued that the slaves themselves were peculiarly adapted to more tropical latitudes and would thus work more efficiently, while the pervasive belief in natural theology endowed these environmental factors with a potent providential legitimacy. For them, slavery was primarily an economic phenomenon, meaning the self-interest of slaveholders would draw them southwards to areas more congenial to both staple crops and black bodies.

More radical commentators from both sections contradicted these assertions. Many northern anti-extensionists countered that slavery survived in all latitudes around the world and that black labour was not restricted to certain geographical zones, emphasising the necessity of Congressional enactments to restricting slavery extension. Belligerent southern expansionists boasted of their ability to diversify into different industrial occupations such as mining when staple crop growth did not promise sufficient profits. Yet, even within these groups, the debate was often not whether black slave labour was better adapted to warmer climates, but whether the areas under consideration at that particular historical moment lay within these zones. Almost all agreed that Mississippi, Texas, or Cuba would be a more

profitable field for slave labour than Kansas or California, but that did not mean that the latter territories would be of no value whatsoever. In any case, for many that was beside the point. Slavery's defenders contended that they were fighting for more than just the extension of slavery per se, but also for the principle of the protection of property and equal access to the territories under the Constitution. While they may not be able to extract huge profits from Nebraska or New Mexico, they saw these debates as setting a precedent for future expansion into more tropical climates with abundant opportunities for political and economic gain. Anti-slavery activists emphasised the moral injustice of bondage everywhere, both in its effects on the slaves themselves and the non-slaveholding whites who were encumbered with the political injustice of the system. Yet, as we shall explore in more detail in the final chapter, while these figures deplored attempts to tie the future of slavery to supposedly irrevocable climatic laws, they were constrained within a similar limiting framework when they imagined the racial geography of a post-emancipation North America.

The Isothermalist Imperative: The Environmental Imagination and Republican Racial Politics during the Civil War

When Charles Sumner rose to address the Boston crowd on 6 October 1862, he was in triumphant mood. 'Thank God, that I live to enjoy this day,' he proclaimed, 'Thank God, that my eyes have not closed without seeing this great salvation!' The object of his delight was the Preliminary Emancipation Proclamation, signed a few weeks earlier by President Lincoln. On the surface, this speech appeared to have all the hallmarks of the familiarly fiery Sumner who became the figurehead of Radical Reconstruction's attempts to grant civil and voting rights to African Americans. However, a later passage of this speech also commands attention. Here he addresses the consequences of emancipation for the future racial geography of the North American continent, answering the accusation that freed slaves will 'overflow' into the northern states by arguing that 'the Africans would flow back instead of overflowing here. The South is their natural home, and there they will go when justice at last prevails.' Here Sumner advanced an argument also put forth by a very different kind of Republican. The conservative Philadelphia writer Sidney George Fisher reluctantly welcomed the Emancipation Proclamation as a war measure only, expressing throughout his Civil War diaries the desire that Sumner and other radicals' push for civil and voting rights for the freedmen be reined in.² In an ironic contrast to Sumner's famous abolitionist maxim, Fisher had written in 1860 that it was actually African Americans who were the 'mass of ignorance and barbarism.' Fisher claimed that the 'Negro race, in mind and character, is weak and imperfectly developed, belongs to a lower order of man.' Nevertheless, when the subject turned to the future home of African Americans post-emancipation, Fisher arrived at the same conclusion as Sumner: 'all influences favor the increase and ultimate ascendency of the black race in our extreme South.'3

The purpose of this chapter is not to equate the ideologies of Sumner and Fisher, the radical and conservative Republicans. To do so would elide the significant differences between these groups on questions of race and the future of the freedmen. It will contend, though, that these crucial debates took place within parameters defined by the pervasive linkage of climate and race, representative of an environmental imagination that situated human bodies and societies in dialogue with the natural world. Discussions around the future of African

¹ Charles Sumner, *Emancipation! Its Policy and Necessity* (n.p., 1862), 2, 17.

² Sidney George Fisher, *The Trial of the Constitution* (Philadelphia, 1862), 361-91.

³ Sidney George Fisher, *The Laws of Race, as Connected with Slavery* (Philadelphia, 1860), 56, 15, 27.

Americans post-emancipation, I will show, were circumscribed within a geographical framework that assigned African Americans to the hotter, more tropical areas of the American continent while retaining the temperate latitudes predominantly for the white race. As we have seen in previous chapters, these ideas were powerful in the southern defence of slavery and in moderate politicians' pleas for compromise over the slavery extension. Here I argue that such views far from disappeared with the resolution of the slavery question, but rather shaped the Republican conceptions of the future racial geography of the continent in a post-emancipation world.

Often framed with racist and paternalist preconceptions as 'what shall we do with the negroes,' the future of African Americans was the subject of significant controversy from the outset of the Civil War, but particularly as the conflict seemed to be turning in an emancipationist direction from early 1862 onwards. The urgency was precipitated in large part by the actions of slaves themselves, many of whom fled from their masters to the Union lines after the commencement of the war in what Steven Hahn has called 'the greatest slave rebellion in modern history.' With the First Confiscation Act of August 1861 and the Act Prohibiting the Return of Slaves of March 1862, Congress forbade handing escaped slaves back to their Confederate masters, leading to the erection of so-called contraband camps around important Union forts and raising pressing questions about how to handle the large number of escapees.

The slaves' actions highlighted the urgency of the 'negro question,' as it was often called, even to those who may have otherwise been eager to sidestep it. 'We can't avoid considering and dealing with this question if we would,' wrote the Illinois Senator Orville Hickman Browning to President Lincoln, 'there is no escaping it. We must meet it, and solve it.' The issue went beyond merely whether to abolish slavery or not, as by mid-1862 most Republicans agreed that action on that score was required to weaken the Confederacy. Long-time advocates of emancipation such as Horace Greeley stressed the necessity of planning for the future of the freedmen. 'So long as the Blacks remain politically under the feet of the Whites,' Greeley wrote to Treasury Secretary Salmon Chase, 'I cannot feel that our Anti-Slavery work is half done.' As a writer in a northern periodical noted in November 1862,

⁴ Steven Hahn, *The Political Worlds of Slavery and Freedom* (Cambridge, MA, 2009), chapter 2.

⁵ Browning to Lincoln, 30 April 1861, Abraham Lincoln Papers, Manuscript Division, Library of Congress.

⁶ Greeley to Chase, 19 October 1864, in *The Salmon P. Chase Papers*, ed. John Niven, 5 vols. (Kent, OH, 1993), iv, 435.

'abolition alone, touches merely the surface of the question. It lies far deeper, in the antagonism of race, and the laws of nature.'

Faced with these challenges, the dominant Republican response relied upon the doctrine of isothermalism. This held that African Americans were physiologically better suited to warmer climates and that, given the freedom to choose, they would prefer to live in the southern portions of the United States or in the more tropical latitudes of Central or South America. As a result, Republicans argued that after emancipation the freed slaves would remain in the southern states, while even the free blacks resident in Canada and the northern states would voluntarily move southwards. Slavery, in this line of reasoning, was the only factor preventing the natural racial geography from asserting itself, with blacks inhabiting more congenial warmer countries and Caucasians holding sway in more temperate zones. Emancipation would be a means to allow natural laws full play. Although isothermalism did not necessarily mean full racial separation, as relatively few argued that climatic factors excluded whites from living in the southern United States, there was certainly an emphasis on keeping African Americans in their place, referring not just to their social standing, but also to geographical position.8 In short, isothermalism was a belief in the power of environmental factors to determine the racial makeup of the United States and, indeed, the entire North American continent. This chapter will show that isothermalism was a core tenet of Civil War Republican racial ideology and informed some of the most advanced policy proposals for 'what to do with the negroes' in the post-emancipation era.

This argument sits uneasily with recent historiography analysing the Republicans and the Civil War. One influential interpretation portrays the election of 1860 and the emancipationist thrust of the Civil War as the triumphant culmination of a long tradition in anti-slavery politics. Another views the Civil War as a period of moral and ideological growth for Abraham Lincoln and his fellow Republicans, in which they abandoned their fealty to colonisation and other racially problematic solutions to the 'negro question' in

⁷ 'The Union II', Continental Monthly, ii (1862), 573-4.

⁸ Ira Berlin has argued in this vein that by the end of 1862 the Lincoln administration 'had decided that whatever the fate of the former slaves, it would be in the South.' 'The Wartime Genesis of Free Labor', in Ira Berlin et al. (eds.), Freedom: A Documentary History of Emancipation, Series I, Volume III: The Wartime Genesis of Free Labor: The Lower South (New York, 1991), 29.

⁹ See, for instance: James Oakes, Freedom National: The Destruction of Slavery in the United States, 1861-1865 (New York, 2013); James Oakes, The Scorpion's Sting: Antislavery and the Coming of the Civil War (New York, 2014); Manisha Sinha, The Slave's Cause: A History of Abolition (New Haven, 2016), chapter 14; Corey M. Brooks, Liberty Power: Antislavery Third Parties and the Transformation of American Politics (Chicago, 2016); Graham A. Peck, Making an Antislavery Nation: Lincoln, Douglas, and the Battle Over Freedom (Urbana, 2017). Earlier books on the same theme include: Dwight L. Dumond, The Antislavery Origins of the American Civil War (Ann Arbor, 1939); Richard H. Sewell, Ballots for Freedom: Antislavery Politics in the United States (New York, 1976).

favour of a cautious commitment to black civil and political rights within the United States. ¹⁰ I contend that viewing the debates about the post-emancipation future of African Americans through the lens of the environmental imagination provides a different way of framing the racial ideology of this period. Even if Republicans did view emancipation as a righteous goal and became relatively more racially progressive as a result of their wartime experiences, they remained wedded to the idea of what Ikuko Asaka has recently labelled 'tropical freedom,' holding that liberty for African Americans was a spatially limited phenomenon best enjoyed in hotter climates, either within or without the borders of the United States. ¹¹ This meant that, as Nicholas Guyatt has argued of an earlier period, many of the most 'enlightened' figures of the time advocated a form of racial segregation, born out of a genuine conviction that it 'was a benevolent and far-sighted measure that would allow non-white people to thrive.' ¹²

The work of the American Freedmen's Inquiry Commission (AFIC) will form the key case study of this chapter. Staffed by three strong supporters of emancipation and operating under the direction of the War Department, the AFIC was charged with investigating the status of the freed slaves in the southern states and proposing policies based on these experiences. While advocating relatively radical plans such as providing the freedmen with land and equipment as well as civil and legal rights, the commissioners also framed their reports with isothermalist reasoning. Like other Republicans, they believed that African Americans were not physiologically suited to the northern United States and that their future would play out in the warmer latitudes of the southern United States and potentially Central America. The AFIC investigations are particularly valuable as the commissioners gathered large amounts of testimony from various classes of persons, from high-ranking army officers to soldiers, from escaped slaves in Canada to freedmen teachers in the Union-occupied southern states to medical professionals in northern cities, enabling us to take stock of several different

¹⁰ Important entry points into this vast historiography include: James Oakes, *The Radical and the Republican: Frederick Douglass, Abraham Lincoln, and the Triumph of Antislavery Politics* (New York, 2007); George M. Fredrickson, *Big Enough to Be Inconsistent: Abraham Lincoln Confronts Slavery and Race* (Cambridge, MA, 2008); Eric Foner, *This Fiery Trial: Abraham Lincoln and American Slavery* (New York, 2010).

¹¹ Ikuko Asaka, *Tropical Freedom: Climate, Settler Colonialism, and Black Exclusion in the Age of Emancipation* (Durham, NC, 2017). For further coverage of this idea in relation to U.S. emancipation, see: V. Jacque Voegeli, *Free But Not Equal: The Midwest and the Negro during the Civil War* (Chicago, 1967), passim; George M. Fredrickson, *The Black Image in the White Mind: The Debate on Afro-American Character and Destiny, 1817-1914*, rept. ed. (Middletown, 1987 [1971]), chapters 4-6; Mark E. Neely Jr., 'Colonization and the Myth That Lincoln Prepared the People for Emancipation', in William A. Blair and Karen Fisher Younger (eds.), *Lincoln's Proclamation: Emancipation Reconsidered* (Chapel Hill, 2009), 45-74; Paul D. Escott, "What Shall We Do with the Negro?": Lincoln, White Racism, and Civil War America (Charlottesville, 2009), 50-60.

¹² Nicholas Guyatt, Bind Us Apart: How Enlightened Americans Invented Racial Segregation (New York, 2016), 7.

perspectives. The questions the commissioners asked often related, directly or indirectly, to the health and well-being of the freedmen and their capability of prospering in different environments.¹³

The proposals of the AFIC and other Republicans were formulated against the background of enduring anti-black prejudice in the northern states. Even those who believed the war against the Confederacy to be inherently a war against slavery continued to hold explicitly racist views. 'Our people hate the Negro with a perfect if not supreme hatred,' noted the Indiana Republican Congressman George W. Julian. 14 'The masses seem to think that we are oppressed only in the South,' declared an African-American abolitionist, but 'this is a mistake; we are oppressed everywhere in this slavery-cursed land.' Democratic opponents of emancipation sought to capitalise on this and stoke northern prejudice by depicting a mass emigration of freedmen to the northern states. One Congressman asked the 'men of the north' to consider the nightmarish post-emancipation future: 'How long would it be until this miserable population, like the frogs of Egypt, would be infesting your kitchens, squatting in your gates, and filling your almshouses?' he asked.¹⁶ Democrats sought to portray Republicans as advocates of racial amalgamation, most famously and audaciously with the hoax 'Miscegenation' pamphlet, supposedly authored by a Republican abolitionist but in fact fabricated as a political ploy by two Democratic newspapermen. 17 Although the pamphlet was revealed to be a hoax, the fact remains that, as the historian Joel H. Silbey has argued, these 'emotive symbols and code words touched a deep chord throughout the Democratic community.'18

Republicans evinced considerable concern about the impact of this Democratic goading on their popularity. The New York Republican Hamilton Fish worried that the 'laboring class' in northern cities is 'excited & apprehensive' because 'the idea has been industriously impressed upon them... that it is a part of the Emancipation policy of the Administration to bring the emancipated negroes from the South into the Northern States.' He urged the administration to give 'some authoritative assurance, that the policy & measures of the Government will not interfere with the labor & employment of the people of the Free

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¹³ The testimonies are housed in two repositories: American Freedmen's Inquiry Commission Records, Letters Received by the Adjutant General, 1861-1870, RG 94, rolls 199-201, National Archives, Washington D.C.; and American Freedmen's Inquiry Commission Records, Houghton Library, Harvard University.

¹⁴ George W. Julian, Speeches on Political Questions (New York, 1872), 127-8.

^{15 &#}x27;Speech of John S. Rock, Esq.', Liberator, 15 August 1862, 130.

¹⁶ Congressional Globe, 37th Congress, 2nd Session, 20 March 1862, 1301.

¹⁷ Elise Lemire, "Miscegenation": Making Race in America (Philadelphia, 2009), 115-41.

¹⁸ Joel H. Silbey, A Respectable Minority: The Democratic Party in the Civil War Era (New York, 1977), 28.

States.'¹⁹ For some, disabusing northerners of this notion was to be the crux of the whole conflict. The Kansas Republican Senator Samuel C. Pomeroy feared that 'nothing can save the President... nothing will restore this Union' unless Republicans could provide a convincing answer to the question of 'the destiny of the Colored Races on this Continent.'²⁰

The few historians who have discussed isothermalism have tended to foreground this political context. Referring to their strident opposition to slavery extension we studied in chapter four, Mark E. Neely Jr. has labelled Republicans' professions of isothermalism as the 'greatest reverse in principle in the history of the Republican Party to date.' George M. Fredrickson, similarly attributes the ubiquity of isothermalism to the fact that 'the raceclimate theory was ideal for th[e] purpose' of rebutting Democratic attacks on emancipation.²² On one level, the immediate demands of the political moment doubtless contributed to the Republican public embrace of isothermalism. It allowed them to directly counter Democratic fearmongering with an alternate vision of the future that would alleviate anxieties about racial cohabitation and labour competition. Yet it would be a mistake to simply ascribe Republican professions of faith in isothermalism to political exigency. This chapter will situate the Republicans' Civil War isothermalism as the latest iteration of a longer lineage of policies designed to facilitate the natural reorientation of racial geography, with blacks in warmer climates and whites in more temperate environs. Colonisation, for instance, which was for many Republicans the solution to the 'negro question' well into the Civil War, also relied on isothermalist logic. The employment of black soldiers during the conflict, one of the radicals' cornerstone policies, was also partly justified by their greater adaptation to the diseases and climate of the southern states. There is significant evidence, then, to suggest that isothermalism was a firm part of even radical Republican racial ideology.

Moreover, as with each of the previous chapters, isothermalism and the environmental imagination that underlay it did not emerge from a vacuum, but rather from a powerful combination of religious conviction and the latest scientific insight. Invocations of God's higher laws, revealed through the natural world, remained common in the debates surrounding the future of African Americans post-emancipation. The AFIC investigations, meanwhile, provide a concrete example of how certain aspects of racial science, associated

¹⁹ Fish to Salmon P. Chase, 18 July 1863, Salmon P. Chase Papers, Manuscript Division, Library of Congress.

²⁰ Pomercy to James P. Doelittle, 20 October 1863, James P. Doelittle Papers, Manuscript Division, Library

²⁰ Pomeroy to James R. Doolittle, 20 October 1863, James R. Doolittle Papers, Manuscript Division, Library of Congress.

²¹ Neely Jr., 'Colonization and the Myth', 65.

²² Fredrickson, *Black Image*, 160.

mostly with southern pro-slavery ideology, were harnessed by northerners when formulating their ideas about African Americans. The commissioners corresponded with the Harvard scientist Louis Agassiz, who had contributed to notable racial science publications throughout the 1850s, regarding his views on the future of the freedmen. His influence on the isothermalism in the AFIC reports, as we shall see, is clear.

As with their contestation of the racialised assumptions underlying the climatic theory of slavery, African Americans did not allow isothermalism to go unchallenged.²³ While the debate among white Republicans was predicated on the common understanding that freedom would facilitate natural racial separation, this assumption was strongly contested by African Americans, whether they identified themselves as Republicans or not. Agassiz's racial science was attacked by black editors and writers such as Frederick Douglass and James McCune Smith, while many of the fugitive slaves resident in Canada strongly refuted the claim that they were climatically unsuited to their adoptive home. So powerful was the isothermalist imperative and the ingrained racial prejudice that pervaded white northern society, however, that these views were summarily dismissed by the AFIC commissioners and other white Republicans.

While in many ways the Civil War presented clear evidence of man's ability to destroy and overwhelm landscapes and natural phenomena, then, this did not preclude contemporaries' ideological reliance on the power of the environment to answer questions of paramount importance to the future of the United States. The ruined city landscapes and churned fields of the war-torn states, alongside the central importance of railroads to the conflict, could only have reinforced the belief that technology had given Americans the power to dominate nature like never before. Yet the mid-nineteenth-century environmental imagination was complex; it was possible to simultaneously recognise the new-found abilities of mankind and also hold fast to the belief that environmental factors were inextricably linked with the destiny of human societies. These convictions framed the debate surrounding the future of African Americans after emancipation, shaping how Americans approached one of the most crucial political questions of their time. The isothermalist imperative was one of the few things that survived the Civil War unscathed.

²³ Black resistance to dominant racialised geographical narratives is stressed in: Asaka, *Tropical Freedom*.

²⁴ On the impact of the Civil War on the landscape, see especially: Lisa M. Brady, *War Upon the Land: Military Strategy and the Transformation of Southern Landscapes During the American Civil War* (Athens, GA, 2012); Megan Kate Nelson, *Ruin Nation: Destruction and the American Civil War* (Athens, GA, 2012).

The American Freedmen's Inquiry Commission and the 'Destiny' of African Americans

In a letter dated 16 March 1863, Secretary of War Edwin Stanton established the American Freedmen's Inquiry Commission (AFIC), ordering the commissioners to 'investigate the condition of the colored population' freed by the Emancipation Proclamation and to suggest measures that would 'best contribute to their protection and improvement, so that they may defend and support themselves.'25 The idea for such a commission had been discussed in radical Republican circles many months prior to Stanton's instructions. After a June 1862 visit to the Union-occupied southern states, the abolitionist James Miller McKim was convinced of the necessity of forming a government commission to investigate the condition and needs of the freed slaves. His proposal received a positive reception from radical Republican politicians such as Massachusetts Congressman Charles Sumner and Pennsylvania Representative Thaddeus Stevens.²⁶ Sumner then in turn corresponded with other radicals to ascertain their opinions on the propriety of forming the commission and their suggestions as to who should be entrusted with the task.²⁷ There was a consensus that the scope should be a broad one. Stanton proposed that 'the formula of appointment shall be so broad as to allow them to inquire into every thing past & present on Slavery,' while Massachusetts Governor John A. Andrew suggested that the commissioners investigate the 'whole history and workings of emancipation.'28

In keeping with these radical origins, the three chosen members of the AFIC were strong supporters of the Republicans' wartime emancipation policies. Of the three, the least publicly known figure was the New York lawyer James Morrison McKaye, who had served in the offices of future President Millard Fillmore in the mid-1840s, while also editing a Whig newspaper based in Buffalo.²⁹ During the early years of the Civil War, McKaye made his name as a vigorous defender of the Union and promoter of swift emancipation. In an

²⁵ Stanton to Robert Dale Owen, James McKaye, and Samuel G. Howe, 16 March 1863, in *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies* (Washington, 1891), series iii, volume iii, 73.

²⁶ James M. McPherson, *Struggle for Equality: The Abolitionists and the Negro in the Civil War and Reconstruction* (Princeton, 1964), 181-2.

²⁷ Sumner to Andrew, 28 December 1862, in *The Selected Letters of Charles Sumner*, ed. Beverley Wilson Palmer, 2 vols. (Boston, 1990), ii, 134-5. Historians have argued that Sumner was the true father of the AFIC: Matthew Furrow, 'Samuel Gridley Howe, the Black Population of Canada West, and the Racial Ideology of the "Blueprint for Radical Reconstruction", *Journal of American History*, xcvii (2010), 348; John G. Sproat, 'Blueprint for Radical Reconstruction', *Journal of Southern History*, xxiii (1957), 34-5.

²⁸ Sumner to Andrew, 28 December 1862, in *Letters of Sumner*, ed. Palmer, ii, 135.

²⁹ An incomplete autobiography can be found in James Morrison MacKaye Papers, Manuscripts Division, Library of Congress. McKaye/MacKaye appears to have used both spellings of his surname interchangeably, but his work with the AFIC bore the name McKaye, so this is the version I will use throughout.

1862 pamphlet, he warned northerners against the 'pernicious error' and 'monstrous delusion' of assuming that slavery would 'receive its death wound' in the course of the war without positive action on behalf of the Union government. Instead, he urged them to take proactive steps towards securing emancipation.³⁰ These actions earned him the endorsement of the abolitionist journalist Parke Godwin, who wrote that McKaye was 'decided, clear minded and plucky,' and as a result 'he could do his country and the cause good' as commissioner.³¹

The second commissioner and the AFIC's secretary Robert Dale Owen had a far less consistently radical record. The son of the Welsh socialist Robert Owen, he grew up on his father's utopian community before forging a far more mainstream presence as a Democratic politician in Indiana, winning election to Congress in 1842. During the Wilmot Proviso controversy, Owen invoked the ire of radical commentators by opposing any explicit restriction on slavery's extension, fearing that it would needlessly irritate southerners. As a free-state Congressman voting against the Proviso, the Liberator included his name in a black box entitled 'Betrayers of Freedom.' In February 1861, Owen made a final appeal for peace in a speech to the Indiana House of Representatives, but after the firing on Fort Sumter he recognised that 'the time for action has come.'33 Owen, like McKaye, became a consistent advocate of emancipation. 'The people are athirst for decisive action,' he wrote Treasury Secretary Salmon Chase, calling mid-1862 the 'golden opportunity' to proclaim freedom for the slaves.³⁴ Three of his letters, to Chase, Secretary of War Stanton, and President Lincoln, were widely reprinted in Republican newspapers and collected in pamphlet form.³⁵ Republicans rejoiced particularly at the fact that Owen still self-identified as a Democrat, holding him up as evidence that the manifest righteousness of emancipation could transcend party boundaries. ³⁶ 'Surely you may feel you have done knightly service in this whole war,' the abolitionist Wendell Phillips told the former 'Betrayer of Freedom.' 37

The final AFIC commissioner Samuel Gridley Howe had been deeply involved anti-slavery activism for decades before the Civil War. A Boston resident throughout most of his active life, Howe was enmeshed in the networks of radical activism that permeated the city. Always

³⁰ James McKaye, Of the Birth and Death of Nations: A Thought for the Crisis (New York, 1862), 26-7.

³¹ Godwin to Andrew, 29 January 1863, John A. Andrew Papers, Massachusetts Historical Society.

³² Richard William Leopold, Robert Dale Owen: A Biography (Cambridge, MA, 1940), 210, 247.

³³ Ouoted in: ibid, 343-5.

³⁴ Owen to Chase, 20 August 1862, Chase Papers.

³⁵ Robert Dale Owen, *The Policy of Emancipation: In Three Letters to the Secretary of War, the President of the United States, and the Secretary of the Treasury* (Philadelphia, 1863).

³⁶ See the editorials of the *New York Tribune* and the *New York Evening Post* in ibid, 9, 21, 33.

³⁷ Quoted in: Leopold, *Owen*, 364.

a close confident of Sumner, by 1846 Howe was considered by Edward Everett to be one of the leading Boston abolitionists.³⁸ Howe spent much energy in aid of anti-slavery causes throughout the 1850s. 'I have worked myself ill about Kansas,' he wrote of his attempts to secure the victory of free-state settlers.³⁹ He was also one of a number of Boston radicals who backed John Brown in his attempts to provoke a slave insurrection, providing Brown with a rifle and two pistols for his raid on Harper's Ferry. 40 Anti-slavery sentiment unsurprisingly determined Howe's response to secession and the outbreak of the Civil War. 'We have entered upon a struggle which ought not be allowed to end until the slave power is completely subjugated, and emancipation made certain,' Howe wrote Sumner upon hearing of the firing upon Fort Sumter. 41 Indeed, Howe expressed his displeasure with Lincoln's reluctance to proclaim emancipation on numerous occasions in the early months of the war. 'Why in the world does he not speak out...?' he asked exasperatedly. 'Simply because of his fatal habit of procrastinating: he puts off and puts off, the evil day of effort.'42 This lack of progress was a constant preoccupation throughout 1861 and 1862. Howe confided to a friend that 'I am so haunted by the idea that God is trying the earnestness of our antislavery professions & that we shall be found wanting... that I can hardly sleep.'43 He was one of the several radicals who pushed for an investigation into the status and capabilities of the slaves that ran to Union lines during the war. 'It seems to me that what we want now is a knowledge of the actual condition of the freedmen,' Howe wrote in September 1862, 'we must be able to present... as early as possible, a general and reliable coup d'oeil of the[ir] actual condition... We must collect facts and use them as ammunition.'44

All three commissioners, then, were convinced that emancipation was to be the goal of the war, while Howe and other radicals had long stressed the necessity of collating facts about the freedmen to inform policy-making about their future. The task was not to be an easy one. The AFIC was wading into uncharted waters since it would be the first federally sponsored institution to systematically interview former slaves. Even Edward L. Pierce, the man charged with overseeing the relatively independent freedmen on the South Carolina Sea Islands concluded that 'the slave is unknown to all, even to himself.' Large swathes of the

³⁸ Everett to A. H. Everett, 30 October 1846, Edward Everett Papers, Massachusetts Historical Society.

³⁹ Howe to Charles Sumner, 20 June and 27 July 1856, Howe Family Papers, Houghton Library, Harvard University.

⁴⁰ Harold Schwartz, Samuel Gridley Howe: Social Reformer, 1801-1876 (Cambridge, MA, 1956), 221-2.

⁴¹ Howe to Sumner, 16 April 1861, Howe Family Papers. Emphasis in original.

⁴² Howe to Francis William Bird, 5 March 1862, ibid.

⁴³ Howe to Henry W. Bellows, 26 February 1862, Henry W. Bellows Papers, Massachusetts Historical Society.

⁴⁴ Howe to Francis William Bird, 17 September 1862, Howe Family Papers. Emphasis in original.

⁴⁵ Edward L. Pierce, 'The Freedmen at Port Royal', Atlantic Monthly, xii (1863), 301.

southern states also remained largely unknown to many northern observers. A Philadelphia-based anti-slavery newspaper observed that 'to thousands of people in the North, the interior of the Southern States is as much a terra incognita as the interior of unexplored Africa,' and it is only the exigencies of 'the present cruel war' that was bringing them to light. He war, of course, also meant that the situation on the ground was rapidly changing as the commissioners were researching. In particular, escapees were thronging to the Union lines in ever-increasing numbers. 'Every day's tidal ebb and flows sends solemnly into our presence now the negro stranded on our shores by the war,' wrote a freedmen's teacher in January 1863.⁴⁷

To best navigate these complex ever-changing conditions and to maximise their resources, the commissioners split the research tasks. While all three visited Virginia, North Carolina, and the District of Columbia in April and May 1863, afterwards Owen returned to the AFIC office in New York City to begin research on the history of slavery and emancipation in the United States and the Caribbean. The product of this was the commission's *Preliminary Report* that was sent to Stanton on 30 June 1863. Meanwhile, McKaye visited the freedmen at Port Royal on the South Carolina Sea Islands and Howe journeyed northwards to Canada West to ascertain the condition of the ex-slaves who had settled there. All three commissioners then reunited and toured the western theatre of the war, visiting Kentucky, Tennessee, and Missouri in late autumn and early winter, before McKaye went on to conduct interviews in Louisiana in February 1864. Further testimony was collected through interviews at the New York office and via post. The result of this research was the commission's extensive *Final Report*, drafted in the main by Owen, which was communicated to Congress via Stanton on 22 June 1864. ⁴⁸

The two reports contained many tenets of radical Republican ideas about the freedmen and their future. For instance, the commissioners launched a vigorous defence of the basic humanity of the former slaves. The AFIC's research had combined to show 'that the African race, as found among us, lacks no essential aptitude for civilization.' Among the freedmen there were few beggars, in fact many owned a surprising amount of property and took a

 ⁴⁶ Philadelphia Dial quoted in: 'The Curiosities of Slavery', National Anti-Slavery Standard, 18 July 1863, 4.
 ⁴⁷ Lucy Chase to 'home-folks', 29 January 1863, in Dear Ones at Home: Letters from Contraband Camps, ed. Henry L. Swint (Nashville, 1966), 38.

⁴⁸ This schedule has been ascertained from the records of the interviews in AFIC Records, National Archives and AFIC Records, Houghton Library. Similar, if slightly different, timelines can be found in McPherson, *Struggle for Equality*, 183-5; Furrow, 'Racial Ideology', 349; and Oz Frankel, 'The Predicament of Racial Knowledge: Government Studies of the Freedmen during the U.S. Civil War', *Social Research*, lxx (2003), 52-3.

leading role in independently organising church affairs. The conduct of black soldiers, the reports emphasised, was further proof of this. As a result, the freedmen would not be 'any burden whatever on the government' but rather would quickly become 'useful member[s] in the great industrial family of nations.' While some of the freedmen may not yet fully live up to the standards expected of them, the commission was confident that this could be attributed to the lingering negative effects of their bondage: 'The vices chiefly apparent in these refugees are such as appertain to their former social condition.'⁴⁹

The reports' suggestions for how to secure freedmen's rights and reconstruct the southern states were guided by a firm belief in the power of the free market and free labour. While governmental measures to protect the freedmen were accepted in the short-term, the reports constantly emphasised that they should only be temporary in character. Permanent guardianship, the commissioners feared, might result in the reinstallation of slavery under another guise. Contraband camps, for example, should 'be regarded as places of reception and distribution only' and instead fleeing blacks should be 'disposed of... as military laborers or on plantations, or in other self-supporting situations.' In turn, they should only temporarily work on government-operated plantations and 'as soon as possible' be transferred to 'loyal and respectable' lessees who will hire them at fair wages or allow them their own plot of land. The apprenticeship system, the commissioners noted, had failed in the West Indies and as such the American former slaves should immediately be 'treated as any other free men' with no restrictions on their income or movements. 'The essential [thing],' the *Final Report* concluded, 'is that we secure to them the means of making their own way; that we give them, to use the familiar phrase, "a fair chance."'50

While reporting positively on the capacities of the freedmen, the reports evinced many common stereotypes about African Americans that permeated even radical circles. The historian George M. Fredrickson has argued that the AFIC's reports contained 'the most authoritative and complete presentation' of what he calls 'romantic racialism.' While most often 'benevolent in intent,' this doctrine nevertheless 'often revealed a mixture of cant, condescension, and sentimentality.' Indeed, the commission described 'the African race' as 'a knowing rather than a thinking race' that is 'genial, lively, docile [and] emotional'

⁴⁹ Report of the Secretary of War Communicating, in Compliance with a Resolution of the Senate of the 26th of May, a Copy of the Preliminary Report, and also of the Final Report of the American Freedmen's Inquiry Commission, Senate Ex. Doc. No. 53, 38th Congress, 1st Session, 2, 100-2, 99, 20, 3. Hereafter cited as AFIC Reports.

⁵⁰ Ibid, 13-14, 109-10.

⁵¹ Fredrickson, *Black Image*, 124-5.

rather than enterprising and as such 'it is not a race that will ever take a lead in the material improvement of the world.'⁵² During an interview, McKaye confessed himself to be 'concerned' and 'bothered' about the freedmen exercising political rights, as 'they are naturally a docile people, and very easily led,' which he feared would enable the rise of a 'new crop of demagogues' in the southern states.⁵³

The reports also went to significant lengths to reassure the people of the northern states that they would not be subject to an influx of freed blacks after emancipation, propounding the doctrine of isothermalism. The *Preliminary Report* noted that, according to the AFIC's research 'there is no disposition in these people to go North,' citing the wholesale rejection of the efforts of Brigadier General Rufus Saxton to offer them papers for this purpose. Foreign colonization was also out of the question, as 'they are equally averse to the idea of emigrating to Africa.' Their home, then, was to be the southern United States, not least because of the congenial environment of that region. 'The Southern climate suits him far better than ours,' reasoned the *Preliminary Report*. The only reason blacks have come north, to 'its winters of snow and ice' was because of the enticements of freedom. 'Let the South once offer the same attraction and the temptation of its genial climate' and, the commissioners predicted, 'a few years will probably see half the free negro population residing among us crossing Mason and Dixon's line.'⁵⁴

The *Final Report* contained an extended exposition of this isothermalist line of reasoning. The commissioners dismissed the idea that 'as soon as the negroes are freed they will swarm to the North' as 'based on an imaginary state of things.' The voluntary movement of peoples, they contended, was governed by 'thermal lines' and were the barrier of slavery removed and these allowed full play, the black population of the northern states would naturally be drawn down into the southern United States and perhaps eventually beyond into Central America. In an echo of the justification of the climatic theory of slavery, the *Final Report* then extensively cited numbers from recent censuses to show that the relative death rate became increasing skewed toward blacks in more northerly latitudes. In Providence, for instance, the death rate was calculated to be 1 per 27.06 members of the black population, as opposed to 1 in 46.25 for whites. In New Orleans, on the contrary, the ratios were 1 in 19.51 for 'coloreds' and 1 in 17.03 for whites.⁵⁵ The commissioners recognised that this

⁵² AFIC Reports, 106-7.

⁵³ Testimony of Charles A. Dana, AFIC Records, National Archives.

⁵⁴ AFIC Reports, 8.

⁵⁵ The AFIC records contains extensive tables of statistics such as these: AFIC Records, Houghton Library, item 182.

could be taken as evidence for the beneficial effects of slavery and quickly argued that there was a higher proportion of supposedly 'weaker' mulattoes in the northern states. In any case, regardless of the 'purity of the black blood,' the commissioners asserted that 'a cold climate is, in all probability, as little suited to the pure black originally from the torrid zones of Africa as to the mulatto.' It is certain, the report concluded, that 'both as regards blacks and mulattoes, their mortality, as compared with whites, essentially depends upon climate.' ⁵⁶

The AFIC reports, then, relied upon evidence in the guise of scientific and precise statistics, but they also heavily cited more anecdotal interview testimony. The AFIC investigations are a particularly fruitful source of insight into the environmental imagination as they documented the thoughts of a wide range of interviewees about the linkages between climate, health, race, and the future of African Americans. While certainly influenced by their own preconceptions, the commissioners went to some lengths to incorporate the views of other observers. The National Archives in Washington D.C. holds records of one hundred interviews conducted in Union-occupied areas of the southern states. Questions most often concerned the social status of the freedmen, with the commonest queries including how they worked, how they interacted with each other and with whites, their family structure, and their disposition to emigrate either abroad or northwards. Most interviewees were white men of various military ranks, although some female freedmen's teachers and black soldiers such as Robert Smalls were included.⁵⁷ Yet more opinions were collated by sending out questionnaires to selected authority figures in northern towns and cities. Common recipients included lunatic asylum superintendents, jail managers, doctors, and mayors. One question asked whether the freedmen 'form strong local attachments, or are they disposed to emigrate?,' while another inquired specifically as to whether there was 'any disposition to migrate northwards?'58

On these points, the white respondents and interviewees spoke almost unanimously. 'Their attachments for persons and places are very great,' answered the white general of the First Alabama Colored Troops, 'they have almost no disposition at all in these parts to go North.' The reason for this, he concluded, was that 'as a general thing they all have a dread of the cold.' The superintendent for the freedmen in North Carolina echoed these sentiments. The African Americans under his care displayed 'not the slightest tendency' to migrate

⁵⁶ AFIC Reports, 102-5.

⁵⁷ AFIC Records, National Archives.

⁵⁸ These are housed in AFIC Records, Houghton Library. A copy of the questionnaire can be found in: D. R. Anthony to Howe, 30 August 1863, in this collection.

⁵⁹ J. M. Alexander to Howe, 1 September 1863, ibid.

northward, he reported to the commission, as 'the climate and country they have always known are preferred by them above any other.' The head of a freedmen's school in the District of Columbia was similarly emphatic. 'It is extremely difficult, almost impossible,' to induce them to migrate northwards, he informed the commission in an interview. 'In the case of general emancipation and entire security,' he continued, the blacks he interacted with 'would inclose to go further South.'

Industrialists based in the southern states also reacted unsurprisingly negatively to the prospect of losing black labour, which they judged particularly suited to the environment of the southern states. 'On average I can get, in this climate, 33 per cent more work out of them, than out of white laborers,' noted the superintendent of the Norfolk and Petersburgh Railroad, 'I can effect with contraband labor things which I would not undertake with white labor.' The Union general James S. Wadsworth concurred, cautioning that 'if we were to drive them off and export them, we should inflict the most terrible blow upon ourselves possible.' Instead, he recommended that the freedmen should remain in the southern states 'as laborers,' some owning their own plantations and others acting as 'peasant cultivators.' 63

Respondents based in northern cities expressed similar sentiments based on their perceptions of the free black communities in their areas. One correspondent professed to be in favour of colonising African Americans in Liberia if possible, but also recognised that 'the climate, soil and productions of this hemisphere being as congenial to their natures' as Africa's, it is 'quite certain' that 'a large per cent' would remain. They would, he stressed, 'within a state of freedom, croud [sic] south and not north.' He deduced this from the 'directions and indications' of Providence, who was the final arbiter of the locality of the races. ⁶⁴ Others expressed no sympathy with foreign colonisation at all. 'They should be colonized in our own country on American soil,' asserted a correspondent from Connecticut, expressing a preference that South Carolina, Alabama, Louisiana, and Texas be appropriated for this purpose. ⁶⁵ Lincoln's plan for colonisation was 'suicidal,' argued another, as 'the country cannot spare their productive industry.' While blacks may be 'eminently unfitted to develop the resources of a mild region of the country,' in warmer latitudes they are 'infinitely superior

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⁶⁰ Horace James to Owen, McKaye, and Howe, 1 April 1863, ibid.

⁶¹ Testimony of Daniel Breed, AFIC Records, National Archives.

⁶² Testimony of Major Wentz, ibid.

⁶³ Testimony of James S. Wadsworth, ibid.

⁶⁴ L. B. Cotes to Howe, 31 October 1863, AFIC Records, Houghton Library.

⁶⁵ J. S. Barnes to Howe, 28 September 1863, ibid. Another respondent similarly recommended 'setting apart a large tract of Southern territory for the freed people, supplying them with looms & implements.' L. F. Booth to Howe, 12 September 1863, ibid.

in the scale of being to an <u>Irishman</u>.'66 A northern church leader expressed this certainty of southward migration perhaps most strikingly. In a passage quoted favourably in the AFIC's *Final Report*, he asserted that 'if freedom is established in the United States, there will be one great black streak, reaching from here to the uttermost parts of the South.'67

Given that one of the focuses of the AFIC investigations was the relationship between climate, health, and race, the opinions of medical and scientific professionals were particularly sought after. In addition to contacting them directly, the commission took out adverts in publications such as the *Chicago Medical Journal* and the *Cincinnati Lancet* to solicit responses to the questionnaire. The commissioners also sent a letter to publishers asking for recommendations of books about ethnology and climatology, although precisely which books were suggested is not known. The responses of these supposed experts were quoted liberally in the AFIC reports to bolster the assertion that African Americans were out of place in the north and naturally belonged in the southern states. It hink our climate is rather severe for them & rather destructive to their constitutions, opined a Massachusetts doctor. In contrast, a New York medical professional asserted, from my observations in warmer climates even the feeblest blacks are far superior to the white born there. Only in the southern states, agreed another, does there appear a fair prospect of their being able to increase and keep up their numbers.

Samuel Gridley Howe and the Free Blacks of Canada West

In addition to these interviews and questionnaires, the isothermalist reasoning of the AFIC reports appear to have stemmed from commissioner Samuel Gridley Howe's research and preconceptions. In addition to contributing to the AFIC reports, Howe also separately published the results of his own investigations in Canada West, which he visited in September and early November 1863, in the form of a report entitled *The Refugees from Slavery*. The region had long occupied a contentious and somewhat anomalous place in American racial politics, providing a relatively safe haven for African Americans fleeing

⁶⁶ S. G. Hubbard to Howe, 9 October 1863, ibid. Emphasis in original.

⁶⁷ Testimony of Rev. Thomas Kinnard, 4 September 1863, AFIC Records, National Archives. Quoted in: *AFIC Reports*, 102.

⁶⁸ Dr. D. H. Spickler to Howe, ? October 1863; and Edward B. Stevens to Howe, 28 September 1863, both in AFIC Records, Houghton Library.

⁶⁹ J. B. Lippincott & Co to Owen, McKaye, and Howe, 7 November 1863, ibid.

⁷⁰ Dr. William G. Wheeler to Howe, 22 September 1863, ibid.

⁷¹ F. G. Shaw to Owen, McKaye, and Howe, 7 September 1863, ibid.

⁷² Dr. Bartlett to Owen, McKaye, and Howe, 25 November 1863, ibid.

slavery in the southern states and fugitive slave laws in the north. 'No section of the American Continent has been watched with so much interest, both by the oppressor, the oppressed, and the friends of freedom and civilization, as the Canadas,' wrote the black abolitionist William Wells Brown.⁷³

The preface of *Refugees from Slavery* made the case for the value of the Canadian example in deciding 'what shall be done with the negroes.' As in the AFIC reports, Howe painted a positive picture of the former slaves' capacity for improvement and 'civilization.' The very fact of their freedom, he argued, has improved their 'manners and morals,' causing many to gather property, form churches, and send their children to schools. He believed that similar progress could be expected when freedom was brought to the southern states, but to an even greater extent. In Canada they faced the apparently crippling disadvantage of a land 'bound in snow and ice' as opposed to their 'native home' in the land of 'milk and honey.' White discrimination in Canada was indeed an obstacle, but climate was the 'chiefest' issue, Howe argued. He perceived the African Americans resident in the northern United States and Canada to be in particular danger as they were predominantly mulattoes as opposed to pure blacks, the product of inter-racial relations. Mulattoes, according to Howe, 'are slightly built, narrow-chested, light-limbed, and do not abound in thews and sinews,' which particularly predisposed them to diseases incident to colder climates. As with the AFIC reports, Howe cited statistics showing the disparity in birth and death rates between the races. As a result of these physical disadvantages, Howe concluded that 'if free to choose their own dwellingplaces, the negroes would be surely drawn by thermal laws, from the Northern and Western States, and towards the tropics.'74

These statements ran counter to much of the evidence Howe gathered. While in Canada West, he collected testimony from ninety-eight persons, with contributions from fifty-five free blacks and forty whites.⁷⁵ As with the AFIC investigations, interviewees were interrogated about the social status of the former slaves, but great emphasis was also placed on their health and well-being, alongside whether they desired to return 'home' to the southern states. The occasional black voice would affirm white suspicions about their susceptibility to the cold. 'I think the climate is rather hard on our people, generally,' a

^{73 &#}x27;The Colored People of Canada', Pine and Palm, 7 September 1861, 2.

⁷⁴ Samuel Gridley Howe, *The Refugees from Slavery in Canada West* (Boston, 1864), iii-iv, 35, 48-54, 21, 23-4, 35-6. Howe appears to have noticed the links between climate, race, health, and demographics previously. In 1859, he wrote to Sumner from Havana, noting that 'the blacks greatly preponderate, and the balance is in favour of their increasing' as 'the climatic influences are better for them than for any of the other races.' Howe to Charles Sumner, 12 March 1859, Howe Family Papers.

⁷⁵ Three free blacks were interviewed twice.

shoemaker from Toronto told Howe, although he made sure to stress that this was a result of working outdoors more often than any ingrained racial difference. The vast majority of free black respondents, however, stressed their adaptability to cold climates and undercut claims of essential racial difference and inferiority. If find the climate agrees very well with our people... [we] are just as healthy as any body here,' asserted a black barber from Hamilton. Another interviewee cited an increase in weight from 170 to 241 pounds as evidence of the Canadian climate's geniality to his black body. Two respondents spoke of how their masters warned them against fleeing to Canada by stressing how cold and unsuited it would be to their constitutions. One was told that 'it was so cold here that when they were cutting grass, the ice was so thick on it that they couldn't get their scythes through,' and another was told that it was 'a very cold country that no one could live in but those brought up in it.' The latter concluded, however, that 'if any human being could live in a cold country, I could live there. I just considered that a man must clothe himself according to the weather.'

These interventions by Howe's black interviewees were representative of a longer tradition in black thought that countered the prevailing white narrative of their fitness to hotter climates. The fugitive experience in British North America, many black commentators urged, was proof of the absurdity of isothermalism. Mary Ann Shadd, a black abolitionist and journalist, cited in an 1852 pamphlet 'the varied experiences of colored persons in America... as settlers in the British colonies, (far north of the United States,) or in the West Indies,' as evidence of their ability to prosper in any climate. Almost a decade later, Shadd wrote to a fellow abolitionist in a letter reprinted in the black press of her frustration at 'all of the old, and worn out, and repudiated arguments, about the extinction of our race [in North America]—extinction from 20 persons in 1620, to 4,000,000 in 1861,' particularly regarding the 'incongeniality of climate.' The fact that there are 'no complaints about the climate's being too cold for colored people,' argued an author in the black newspaper *Voice of the*

⁷⁶ Testimony of F. G. Simpson, AFIC Records, National Archives. See also testimonies of Alfred Butler and Washington Thomas, ibid.

⁷⁷ Testimony of Josiah Cochran, ibid. Similarly see the testimonies of Mr. Foster, William Henry Gibson, and Thomas Smallwood, ibid.

⁷⁸ Testimony of John W. Sparks, ibid.

⁷⁹ Testimonies of J. W. Lindsay and George Ross, ibid.

⁸⁰ Asaka, Tropical Freedom.

⁸¹ Mary Ann Shadd, A Plea for Emigration; or Notes of Canada West in the Social and Political Aspect (Detroit, 1852), 37.

⁸² Mary Ann Shadd to Robert Hamilton, n.d., Weekly Anglo-African, 28 September 1861, 2.

Fugitive, 'affords the most striking proof that wherever a white man can live and prosper that a colored man can also, if he is given an equal chance.'83

In drafting his report, Howe simply did not take the evidence of black respondents, much less the voices of other black writers, seriously. Compared to the copious citation of white respondents, free black testimony was cited only for the purpose of summarily dismissing it. As Matthew Furrow argues, Howe 'preferred to rely on testimony confirming his existing preconceptions and rationalize away the answers by black residents with whom he disagreed.' In *Refugees from Slavery*, Howe recognised that 'if one should consider only the opinion and testimony of the people themselves, he would conclude that they bear the climate very well, and are as healthy and as prolific as the whites... Indeed, to hear them talk, one would suppose they were "to the arctic born." This 'bravado' he judged to be untrustworthy as the respondents were liable to judge too much based on their own situations, while 'the sick are out of sight, and the dead out of mind.' As if to clinch the argument, he proudly declared that 'the opinion of the most intelligent white persons is different.'

The 'intelligent white persons' that Howe valued the most were medical and scientific professionals, who were overwhelmingly pessimistic about the status of blacks in Canada. 'I do not believe the climate is altogether congenial with their health,' wrote one doctor, 'I do not think the colored community would flourish as much here as down in Kentucky and Maryland' due to their susceptibility to lung diseases. As a result, 'I don't believe that in ten years from this time, you will see a colored man in this country.' 86 In the Rockwood Lunatic Asylum in Kingston, its director noted, there was a 'remarkable mortality' of 10.5% among the black inmates versus 1.5% among whites. 'In any general scheme therefore,' he advised Howe, 'it would be important to consider the question of locality, and the ability of the African to bear cold so intense as that to which he is exposed here.' 87

The most substantive engagement with professional science was Howe's exchange of letters with the renowned Swiss-American scientist Louis Agassiz, who was installed in the post of Professor of Geology at Harvard in 1847. He was immediately accepted into the Boston community of politicians, businessmen, and other intellectuals. His appointment at Harvard

 $^{^{83}}$ 'Canada Lands', Voice of the Fugitive, 1 June 1851, 1.

⁸⁴ Furrow, 'Racial Ideology', 360.

⁸⁵ Howe, *Refugees*, 21, 36, 21-2.

⁸⁶ Testimony of Dr. A. T. Jones, AFIC Records, National Archives.

⁸⁷ John Litchfield Palmer to Howe, 20 February 1864, AFIC Records, Houghton Library.

was communicated by the Boston politician Edward Everett, who had previously invited Agassiz to stay at his house upon his arrival in Massachusetts. ⁸⁸ In the mid-1850s, Agassiz was a frequent attendee of the famous Saturday Club meetings of Boston intellectuals, whose members included Ralph Waldo Emerson and Charles Sumner. This also brought Howe into contact with Agassiz and the Swiss scientist occasionally dined with Howe and his wife. ⁸⁹ These interactions frequently related to Agassiz's professional specialism. If Boston's politicians and intellectuals had a scientific query, they turned to Agassiz for the answer. ⁹⁰ When, in the early 1860s, Agassiz was planning to set up a museum of natural history in Cambridge, he received the support of Sumner and the Massachusetts Governor John A. Andrew, who signed a bill in the legislature donating \$20,000 and invited Agassiz to give a promotional speech in the state House of Representatives. ⁹¹

Although Agassiz ingratiated himself with Boston's predominantly liberal and anti-slavery elite, and described himself as an opponent of slavery, his interventions in American racial science have been described by his biographer as having 'provided racial supremacists with primary arguments.'92 As described in chapter four, the 1840s and 50s witnessed the rising popularity of the polygenetic theory of human origin, with figures such as Josiah Nott arguing that different races were originally created in separate climatic zones and as such were irreconcilably different. Long an advocate of the theory that animals were separately created and different types belonged in different areas of the globe, Agassiz contributed an essay to the polygenetic compendium Types of Mankind, edited by Nott and George Gliddon, noting that it is 'not a little remarkable that the black orang occurs upon that continent which is inhabited by the black human race, whilst the brown ourang inhabits those parts of Asia over which the chocolate-colored Malays have been developed.'93 When challenged about this contribution to a pro-slavery publication by the Yale scientist James Dwight Dana, Agassiz defended Nott as 'a man after my heart, for whose private character I have the highest regard. He is a true man' whose detractors were 'bigots.'94 Privately Agassiz had years before confided to his mother that, upon seeing African-American slaves for this first

⁸⁸ Everett to Agassiz, 11 November 1846 and 28 September 1847, Everett Papers.

⁸⁹ Howe to Charles Sumner, 11 March and 19 March 1852, Howe Family Papers.

⁹⁰ See, for example: Agassiz to Everett, n.d., Everett Papers.

⁹¹ Sumner to Agassiz, 20 October 1863 in *Letters of Sumner*, ed. Palmer, ii, 199; Agassiz to Andrew, 2 March and 13 April 1861, Andrew Papers.

⁹² Edward Lurie, *Louis Agassiz: A Life in Science* (Chicago, 1960), 265.

⁹³ Josiah C. Nott and George R. Gliddon, *Types of Mankind* (Philadelphia, 1854), 75.

⁹⁴ Agassiz to Dana, n.d., Dana Family Papers, Sterling Memorial Library, Yale University. For further denunciation of Agassiz on this score, see: 'Advice to Black Youth', 3 February 1855, in *The Frederick Douglass Papers. Series One: Speeches, Debates, and Interviews*, ed. John W. Blassingame and John R. McKivigan, 4 vols. (New Haven, 1991), iii, 4.

time, 'the more pity I felt at the sight of this degraded and degenerate race, the more... impossible it becomes for me to repress the feeling that they are not of the same blood that we are.'95

While racial science is commonly related primarily to pro-slavery southern ideology, the example of Agassiz suggests that its northern dimensions should not be overlooked. Important tracts such as *Types of Mankind* were published in northern cities such as Philadelphia and New York. John Van Evrie, one of the most recognisable and virulent racial scientists, was a long-time New York resident and the reviews on the front of his most famous work *Negroes and Negro Slavery* included not just the expected pro-slavery voices of Jefferson Davis and *De Bow's Review*, but also northern figures such as the New York Senator Daniel Dickinson. ⁹⁶ The northern Democrat John O'Sullivan credited the work of racial scientists such as 'Agassiz... Nott, Van Errie [sic], and others' with changing his opinions on the slavery question. 'I now have no doubt,' he wrote to Stephen Douglas, that slavery 'is a better as well as more natural relation, for the Black race, than freedom side by side.' Even more disturbingly, the African-American writer Hosea Easton reported seeing 'cuts and placards descriptive of the negroe's [sic] deformity' in 'many of the popular book stores, in commercial towns and cities,' while 'the barrooms of the most popular public houses in the country, sometimes have their ceiling literally covered with them.' ⁹⁸

While, as we shall see, white racist science drew the ire of particularly black abolitionists, Agassiz continued to receive the friendship and admiration of important Republicans. Sumner, for example, remained a frequent correspondent of Agassiz and they dined together when the Massachusetts Senator returned from Washington. In the early discussions surrounding the formation of the AFIC, Agassiz was even proposed as one of the commissioners by the Secretary of War Stanton. It should come as no surprise, then, that Howe turned to Agassiz for guidance during the drafting of their reports. The more I consider the subject to be examined & reported, Howe confided to Agassiz in August 1863, the more I see that its proper treatment requires consideration of political, physiological &

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⁹⁵ Quoted in: Lurie, Agassiz, 257.

⁹⁶ John H. Van Evrie, Negroes and Negro "Slavery": The First an Inferior Race: The Latter Its Normal Condition (New York, 1861), inside cover.

⁹⁷ O'Sullivan to Douglas, 10 February 1854, Stephen A. Douglas Papers, Special Collections Research Center, University of Chicago Library. Thanks to Mark Power Smith for directing me to this letter.

⁹⁸ Hosea Easton, A Treatise on the Intellectual Character and Civil and Political Condition of the Colored People of the U. States (Boston, 1837), 41-2.

⁹⁹ See, for instance: Sumner to Agassiz, 10 October 1854 and 27 February 1862, Louis Agassiz Correspondence and Other Papers, Houghton Library, Harvard University.

¹⁰⁰ Charles Sumner to John Andrew, 28 December 1862, in *Letters of Sumner*, ed. Palmer, ii, 134-5.

ethnological principles, & the more I feel my own incompetency.' The crux of his concern was the future geographical distribution of African Americans. Were the 'inevitable natural tendencies' pointing towards 'the growth of a persistent black race in the Gulf & river States,' then Howe believed that 'we must not make bad worse by futile attempts to resist it.' On the other hand, if these same 'natural tendencies' foretold 'the diffusion, & final disappearance of the black race, then our policy should be modified accordingly.' 101

In his reply, Agassiz concurred that this was the question of 'primary importance.' On the question of persistence, he had no doubt: 'From whatever point of view you look upon these people, you must come to the conclusion, that, left to themselves, they will perpetuate their race ad infinitum where they are.' While Africa had been their point of origin, the fact that they had been resident long enough in the southern United States, combined with a climate 'particularly favourable to the maintenance and multiplication of the negro race,' made their continued residence there a certainty. 102 In contrast, Agassiz believed that in the northern states this race had only an 'artificial foothold, being chiefly represented by halfbreeds,' the derogatory term he used for people of both white and black parentage. The only factor maintaining this population in the north, he argued, was slaves fleeing their masters in the south, and if 'the oppression under which the colored population now groans' were removed, 'the current will at once be reversed; blacks and mulattoes of the North will seek the sunny South.' Agassiz did not forecast complete racial separation and suggested that whites could continue to inhabit the 'healthier' upland regions, but he nevertheless concluded that 'these States will sooner or later become Negro States with a comparatively small white population. This is inevitable; we might as soon expect to change the laws of nature as to avert this result.'103 Howe seemed to agree with Agassiz's prognostications. 'By utterly rooting out slavery,' he wrote by way of reply, 'and by that means alone, shall we... allow fair play to natural laws' which would cause 'the colored population to disappear from the Northern and Middle States.'104 He wrote to Sumner that the letters from Agassiz 'confirmed my beliefs' about the future geographical distribution of African Americans, specifically that 'by giving free play to natural laws we shall have an exodus southwards' which would constitute 'a

¹⁰¹ Howe to Agassiz, 3 August 1863, Agassiz Papers.

¹⁰² Agassiz to Howe, 9 August 1863, ibid.

¹⁰³ Agassiz to Howe, 11 August 1863, ibid. He warned Howe strongly against promoting racial amalgamation in an earlier letter: Agassiz to Howe, 10 August 1863, ibid. Howe quickly disclaimed any attempts to do so: Howe to Agassiz, 18 August 1863, ibid.

¹⁰⁴ Howe to Agassiz, 18 August 1863, ibid.

consummation devoutly to be wished for, notwithstanding some brilliant exceptions to a poor breed.'105

The AFIC reports and Howe's *Refugees from Slavery*, then, are examples of the prominent place isothermalism held in Civil War Republican ideas about African Americans and their future in the United States. The documents reflect the preconceptions of their authors, confirmed by the latest racial science, about the detrimental effects of cold climates on black bodies and, thus, the naturalness and inevitability of their southward migration after the barrier of slavery is removed by emancipation. But the interviews the commissioners conducted and the testimony they collected also provides insight into the views of broader sections of the American population. They reveal that isothermalism was a widely held doctrine among whites, while black figures attempted to push back against these preconceptions and assert their adaptability to different climates as a means to undercut claims of essential racial difference.

The Republican Embrace of Isothermalism

Historians have not come to a consensus regarding precisely how influential the AFIC's investigations and reports were in Republican policy-making for the post-emancipation United States. The Freedmen's Bureau, established by Congress in March 1865, certainly bore many of the hallmarks of the temporary protection recommended by the AFIC. During the debates surrounding the Bureau, James McPherson noted that Congressmen 'had copies of the report on hand at all times.' Thus, he considered it 'certain' that the work of the commission 'laid the foundations' for the Bureau. ¹⁰⁶ Similarly, John G. Sproat has labelled the report 'the blueprint for Radical Reconstruction. ¹⁰⁷ Other scholars are less sure of the commission's impact. Howe's biographer thought that his work was 'mostly in vain' and the report was 'quietly shelved and no notice of it was taken. ¹⁰⁸ Paul Escott has categorised the commissioners as some of the 'few' who 'spoke out for the desirability and necessity of racial change, but their voice often went unheard amid the din of battles and deaths. ¹⁰⁹

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¹⁰⁵ Howe to Sumner, 20 August 1863, Howe Family Papers.

¹⁰⁶ McPherson, *Struggle*, 186. Chandra Manning has more recently also drawn this direct link between the AFIC and the Bureau: *Troubled Refuge: Struggling for Freedom in the Civil War* (New York, 2016), 262. ¹⁰⁷ Sproat, 'Blueprint'.

¹⁰⁸ Schwartz, *Howe*, 267.

¹⁰⁹ Escott, What Shall We Do, 239.

The reality is probably somewhere in between these two interpretations. The Senate ordered three thousand copies of the commission's reports, but it is difficult to gauge with any precision how present their findings were, physically or ideologically, during congressional debates. Radical Republican Congressmen cited the reports to vindicate African-American 'manhood' and the 'loyalty' of black refugees. 110 One quoted the reports to support his argument that freedom would not lead to black 'corruption' so long as they remain in the 'glowing South,' with an environment that is 'genial to them, invites its own development and will insure that of this race. 111 Sumner called the commission's *Final Report* one of the most able contributions to this question that has ever appeared in this country or any other country. The radical Republican press played an arguably more important role in disseminating the AFIC's findings. Extended abstracts of both of the AFIC's reports and Howe's *Refugees from Slavery* were prominently featured and praised in stridently antislavery newspapers, with some evidence that these articles were widely reprinted in more unexpected publications. 113 Copies of the reports were also distributed through the personal networks of the commissioners and their allies. 114

Far more important for our purposes, however, is how far the commissioners' sentiments regarding the link between the environment and the future destiny of the freedmen were shared among Republican commentators. Several radical newspapers commented favourably on precisely these sections of the AFIC reports and *Refugees from Slavery*. The *Boston Evening Transcript* noted that Howe's conclusion about the incompatibility of blacks to the cold climate of Canada chimed with their own observations. ¹¹⁵ In its review of *Refugees from Slavery*, the *National Anti-Slavery Standard* reminded its readers to bear in mind that in Canada 'the negro's tropical blood is compelled to endure a rigorous climate.' A Massachusetts Republican newspaper cited the AFIC report to corroborate the idea that 'emancipation tends to separate rather than to unite the races, and that there is no danger of amalgamation as a result of the abolition of slavery.' As a result of the 'additional advantages

¹¹⁰ Congressional Globe, 38th Congress, 1st Session, 10 February 1864, 568; 38th Congress, 2nd Session, 16 January 1865, 286.

¹¹¹ Ibid, 38th Congress, 1st Session, 23 February 1864, 774.

¹¹² Ibid, 27 June 1864, 3286.

¹¹³ 'Condition of the Freedmen', *New York Evening Post*, 5 August 1863, 1; 'The Freedmen', *New York Tribune*, 6 August 1863, 2; 'The Freedmen', *Liberator*, 14 August 1863, 130; 'The Freedmen', *National Anti-Slavery Standard*, 15 August 1863, 1. For examples of wider circulation: 'Government of the Freedmen', *Washington Daily National Intelligencer*, 12 August 1863, 3; 'The Freedmen', *Weekly Miners' Journal* (Pottsville, PA), 15 August 1863, 1-2; 'Dr Howe's Report', *Sacramento Daily Union*, 21 March 1864, 5.

¹¹⁴ James McKaye to Wendell Phillips, 10 January 1864, Wendell Phillips Papers, Houghton Library, Harvard University.

^{115 &#}x27;The Refugees from Slavery', Boston Evening Transcript, 8 February 1864, 2.

¹¹⁶ 'Dr. Howe's Report', National Anti-Slavery Standard, 20 February 1864, 4.

which they will, or surely ought to have, of choosing the soil and climate most congenial to their nature, they will give no trouble upon this score, at least in the northern, western or middle states.'117

Republicans echoed these conclusions in the halls of Congress. A Pennsylvania Congressman denounced the 'low arguments' of Democrats who stoked fears of a black influx upon emancipation. 'The slightest knowledge of human nature rebukes this phantom,' as it was clear that African Americans 'will not exchange a genial climate, adapted to his constitution, where winter hardly chills the heat of summer, for a northern zone, where frost holds sway eight months of the twelve.'118 In the northern states, observed a Missouri Unionist, African Americans 'gradually decline, turn to a sickly hue, and become prey to consumption, while every person of observation will testify to the elastic character of the negro, who basks in the sunshine of his native region, perspiring to his heart's content.' He perceived that 'the hand of Providence is directing their course toward a more congenial region' in a 'steady current South.' Another Midwesterner pointed to the 'well-known laws of climate' which would ensure that, after emancipation, 'there will be no negroes north of the Potomac.' While in the northern states the black man 'is an exotic, cultivated like a domestic animal,' more tropical regions are his 'natural habitat' where his 'ultimate lot will be cast.'120 Others predicted a mass 'march to the sunny land of Dixie' and a 'kind of hegira southwards' after emancipation. 121 In his yearly message to Congress, Secretary of War Stanton noted that, should the slaves be emancipated and given occupations 'there will be neither occasion nor temptation to emigrate to a northern and less congenial climate. Judging by experience, no colored man will leave his home in the South.'122

Outside of Congress, Republicans of all stripes pressed home the same points. Some of the most radical newspapers and spokespeople held the view that environmental factors determined that the ultimate destiny of African Americans was to be outside the northern United States. 'Emancipation will bring no colored laborers to the North, but will drain a great many out of it!' exclaimed abolitionist Theodore Tilton in an article reprinted approvingly in William Lloyd Garrison's *Liberator*, arguing that the black man is 'fitted by his nature for tropical latitudes, and is as much out of place in our cold temperate zones, as

¹¹⁷ 'Freedom Prevents Amalgamation', Springfield Republican, 6 February 1864, 2.

¹¹⁸ Congressional Globe, 37th Congress, 2nd Session, 22 May 1862, 2301.

 ¹¹⁹ Ibid, 38th Congress, 2nd Session, Appendix, 20 February 1865, 73-4.
 ¹²⁰ Ibid, 38th Congress, 1st Session, 20 April 1864, 1769-70.
 ¹²¹ Ibid, 37th Congress, 2nd Session, 20 May 1862, 2243 and 2 April 1862, 1495.

¹²² Ibid, 37th Congress, 3rd Session, 2 December 1862, 32.

are oranges, plantains, or palm trees... A white bear in the Gulf of Mexico, and a black man in the Arctic regions, are about as equally misplaced.'123 The abolitionist Wendell Phillips advised those that feared a black influx to 'fasten him to the South by emancipation.' By making the southern states the black man's 'sunny native land, free and safe for him,... cart ropes will never drag him to this cold, granite Massachusetts.'124 Franklin Sanborn, the author of *Emancipation in the West Indies*, abolitionists' favoured account of the righteousness of British emancipation, asserted that the example of post-abolition immigration to the West Indies showed the truth of this opinion. 125 In his speech accepting the Republican nomination for Massachusetts Governor in October 1862, John Andrew predicted confidently that after emancipation 'the States which now hold slaves will beckon back to the shores of the Gulf, to their natural climate and its attractions, social and industrial, the poor refugees from Slavery now among us.'126

More moderate Republican voices speaking outside the radical New England heartlands were not less certain of the truth of these predictions. In a sermon in upstate New York, the Presbyterian leader Frederick Starr labelled fears of black mass migration to the northern states 'ridiculous and groundless' as the heat absorption of the skin of the black man 'tells us that he belongs in a warm climate, and without knowing the reason, obstacles removed, he gravitates to hot climates with even temperatures.'127 A Republican newspaper from western Pennsylvania argued that freedom was the only sure way to ensure the north remained free for white labourers. The 'habits and nature' of African Americans, asserted the editor, 'are such as to induce him to seek and cling to the tropical climate, and if the decree of emancipation should go forth, instead of the slaves coming north, we shall see hundreds and thousands of our free colored population wending their way to the warm and sunny climate of the South!'128 In Union-occupied Louisiana, a New Orleans-based publication perceived 'very little disposition to emigrate' among the freed blacks in that vicinity due to a climate they find 'agreeable and healthy' as well as 'a demand for their labor.'129 A Republican newspaper in the hotly contested border state of Missouri reassured its readers of the 'absurdity' of the suggestions of a black influx, seeing as 'the negro is at home in a tropical region,' while in the north he is 'by compulsion a sojourner, longing to

¹²³ New York Independent, reprinted in: 'The True Southern Laborers', Liberator, 24 October 1862, 170.

^{124 &#}x27;Washington and the West', ibid, 25 April 1862, 66.

¹²⁵ 'Emancipation in the West Indies', *Pine and Palm*, 27 March 1862, 2. On Sanborn's *Emancipation in the West Indies*, see: McPherson, *Struggle*, 185.

¹²⁶ 'Gov. Andrew Accepts the Gubernatorial Nomination', New York Times, 23 October 1862, 2.

¹²⁷ Frederick Starr, What Shall Be Done with the People of Color in the United States (Albany, 1862), 25.

^{128 &#}x27;White Labor Against Slave Labor', Washington (PA) Examiner, 9 October 1862, 2.

^{129 &#}x27;The Negroes and the Northern States', New Orleans Delta, 30 May 1862, 1.

return to the sunny South.' The writer predicted that nine-tenths of blacks in the north and Midwest would move southwards upon emancipation.¹³⁰

Many black abolitionist commentators pushed back against the white reliance upon isothermalism and particularly despised racist science. Frederick Douglass described the issue of the future of African Americans as 'a question with which climate and geography have but little to do—Experience, I think, has demonstrated beyond all reasonable doubts, that the black man's constitution as readily adapts itself—to one climate as another.' A black abolitionist newspaper argued that, as the crow is the 'type of all birds,' the black man is 'the type of all men, enjoying as good health and a mind as sound, if not more so... in cold as in warm climates.' An author in the *Weekly Anglo-African* reminded his readers that 'so far back as 1840, John C. Calhoun... incorporated in the census the frightful falsehood that all the inmates of the insane asylum in Massachusetts were black,' while 'Dr. Nott, of Mobile, invented a series of statistical tables,' many of which continue to influence the political debate 'many years after they were proven false.' 133

Yet, while the disdain towards scientific attempts to reinforce racial hierarchies was very widespread in the black community, it should also be noted that a smaller number of African Americans did speak out in support of the argument that environmental factors ensured that the ultimate destiny of their race would be outside of the northern United States. The *Toronto Globe* printed a letter from 'One of the Sons of Ham,' who argued against the assertion that emancipation would bring more blacks to Canada, concluding on the contrary that 'any one who asserts that the slaves will, when free, desert the places of their nativity in the sunny South, and come to this cold and inhospitable climate... must either be a fool or a knave.' ¹³⁴ In 1862, the African-American lecturer and novelist William Wells Brown told the American Anti-Slavery Society that, while he held 'to the right of the black man, whether liberated or not, to go where he pleases, to make himself a home in any part of the country he chooses,' he also did not believe they would 'flock to the free States.' He pointed to the free black population of the slave states as proof, asserting that they did not come north 'because they

¹³⁰ 'The Economy of Labor', *Daily Missouri Democrat*, 12 July 1862, 2. The name is misleading; this is a Republican newspaper.

¹³¹ Douglass to Salmon P. Chase, 30 May 1850, Chase Papers.

¹³² n.t., *Provincial Freeman*, 29 July 1854, 4.

¹³³ 'The Lie Statistical', Weekly Anglo-African, 2 February 1861, 1.

¹³⁴ Quoted in: 'The Emancipation Question', *Liberator*, 31 October 1862, 173.

were unwilling to leave the congenial climate of the sunny South for the snowy hills of the rugged North.' 135

While the sources cited so far have been predominantly public speeches and newspaper articles, the personal correspondence of important Republican figures evinces that these sentiments were not falsified for public consumption, but also for many the product of personal conviction. Salmon Chase wrote that while 'not myself afraid of the negroes,' he knew 'a great many honest men' who believe 'that they are not to be permitted to reside permanently in the northern states.' For his part, Chase concurred that 'if left free to choose most of them will prefer warmer climes to ours. Let therefore the South be opened to negro emigration by emancipation along the gulf and it is easy to see that the blacks of the north will slide southward and leave behind them no question to guarrel about so far as they are concerned.'136 The New York lawyer John Bigelow wrote to a friend that 'the slaves cannot come north' and the administration would be 'mad' to encourage them to do so because of the 'great scarcity of labor in the South.' A correspondent of the influential moderate Maine Republican William Pitt Fessenden also counselled the administration to 'let the South have black labor, but not the labor of slaves.' The Illinois Republican Orville Hickman Browning, a close confidant of President Lincoln, expressed similar sentiments when counselling the President about future policy towards African Americans. 'There is one thing, and one thing only that we can do,' Browning wrote early in the Civil War, and that is to 'give up the cotton states to them. Let them have the soil upon which they were born—the climate which is congenial, the agriculture to which they are adapted, and which they understand.'139

The isothermalist principles articulated in the AFIC reports and Howe's *Refugees from Slavery*, then, were echoed by other Republican spokespeople in Congressional debates, public speeches, newspaper columns, and private correspondence. Although many African-American commentators resented such a close linkage of climate and racial destiny in this way, a smaller number expressed similar views about the importance of environmental factors in determining the future racial geography of the American continent. It may

¹³⁵ 'Twenty-Ninth Annual Meeting of the American Anti-Slavery Society', *National Anti-Slavery Standard*, 10 May 1862, 2.

¹³⁶ Chase to Benjamin F. Butler, 31 July 1862, Benjamin F. Butler Papers, Manuscripts Division, Library of Congress.

¹³⁷ Bigelow to 'my dear Bowen', 6 October 1862, John Bigelow Papers, Rare Books and Manuscripts Division, New York Public Library.

¹³⁸ D. Wilder Jr. to Fessenden, 6 January 1862, William Pitt Fessenden Correspondence, New York Historical Society.

¹³⁹ Browning to Lincoln, 30 April 1861, Lincoln Papers.

legitimately be argued that some of these Republican statements stemmed in part from a desire to combat Democratic fearmongering about a potential influx of blacks to the northern states after emancipation, although the presence of similar views in private correspondence among friends and colleagues, as well as the scientific underpinnings of their theories, counsels against this interpretation. Furthermore, as the next section will demonstrate, it is possible to situate these views in a longer lineage of policies formulated around isothermalism that would attempt to facilitate the natural reorientation of racial geography.

The Afterlives of Colonisationism in the Civil War Era

The historian Mark E. Neely Jr. has argued that Civil War Republicans' embrace of isothermalism to explain the future of the freedmen represents the 'greatest reverse in principle in the history of the Republican Party to date.' He cites the repeated insistence of Republicans during the debates on slavery extension into Kansas and Nebraska that environmental factors alone would not stop slaveholders from taking chattels into more northerly latitudes. The prevalent argument that the freedmen would be naturally repelled from migrating to the northern states after emancipation is thus, for Neely Jr., a complete about-face from their earlier position. When viewed in another light, however, comprehending other common Republican answers to the question 'what shall be done with the negroes,' specifically the long-standing policy of colonisation, this apparent inconsistency seems less pronounced. By taking a longer-term view, isothermalism appears less as an aberration and more as the logical culmination of Republican racial policy.

It should first be noted that Republican proponents of isothermalism stressed the importance of emancipation to the fulfilment of these natural laws. During the debates surrounding slavery extension, the question revolved around forced migration of an enslaved people, as opposed to the freedom of movement and choice of labour that emancipation would provide. In fact, Civil War-era Republicans emphasised that only a continuance of slavery would force black people northwards, fleeing for their freedom. 'The blacks that go North are the slaves, not the free,' the radical Republican Thaddeus Stevens pointed out, 'if there were no slavery in the South, the north would soon be drained of her African population, seeking a climate more agreeable to their constitutions.' ¹⁴¹ A Connecticut newspaper agreed, asking

¹⁴⁰ Neely Jr., 'Colonization and the Myth', 65. For more on the environmental dimension of the slavery extension debates, see chapter four of this dissertation.

¹⁴¹ Congressional Globe, ³7th Congress, 2nd Session, 22 January 1862, 441.

rhetorically, 'from what does the negro flee? From abolitionists? Certainly not, but from slavery. You cannot force the negro to the cold climate of the North by any other appeal than that of his hatred of slavery.' A correspondent of the *Cincinnati Commercial* advised the administration to give full play to 'the invariable laws of the universe,' that is 'the negro's natural desire for a warm climate,' by abolishing the restrictive influence of slavery. 143

Thus, many believed that freedom would allow these laws to take effect, while slavery was the only thing preventing the natural racial order from asserting itself. Colonisation, too, was aimed primarily at free blacks and pitched as promoting the fulfilment of natural laws, allowing colonisationists to posit that this policy would lead to a better life for the transplanted African Americans. As Andrew E. Murray notes, colonisation 'held out the millennial vision of a regenerated Negro race... and of transforming the African continent into an earthly Eden.' Nicholas Guyatt has also described colonisation as 'a life raft for liberal whites, who were caught between the unambiguous promises of 1776 and the practical difficulties of creating a mixed-race republic.' Advocates of colonisation, this recent scholarship shows, were not pro-slavery apologists, but flawed anti-slavery advocates who saw colonisation as a means to racial improvement and redemption.

The earliest colonisation advocates believed that Africa, their original 'home,' would be the saviour of the black race. One of the founding documents of the American colonisation movement, Robert Finley's 1816 *Thoughts on the Colonization of Free Blacks*, argued that 'the friends of man will strive in vain to raise them to a proper level while they remain among us.' Should they be removed to Africa, however, to 'some climate genial with their color and constitutions, and in some fruitful soil; their contracted minds will then expand, and their natures rise.' The American Colonization Society was confident in the success of their enterprise for precisely these reasons. 'Can it be believed that the descendants of Africa will not return to the home of their fathers?' they asked rhetorically. 'The fierce sun, which scorches the complexion and withers the strength of the white man, preserves to the children of Africa the inheritance of their fathers.' Liberian colonisation continued to have important advocates well into the 1850s. In an 1853 speech, Edward Everett warned white

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¹⁴² 'The War Against the Black Man', *Hartford Daily Courant*, 9 August 1862, 2.

¹⁴³ Quoted in: 'Emancipation in Kentucky', *Philadelphia Age*, 2 May 1865, 2.

¹⁴⁴ Quoted in: Beverly C. Tomek, *Colonization and Its Discontents: Emancipation, Emigration, and Antislavery in Antebellum Pennsylvania* (Philadelphia, 2011), 100.

¹⁴⁵ Guyatt, Bind Us Apart, 10.

¹⁴⁶ Quoted in: 'Thoughts on the Colonization of Free Blacks', *African Repository*, ix (1834), 334.

¹⁴⁷ The Third Annual Report of the Society for Colonizing the Free People of Color in the United States (Washington, 1820), 24.

philanthropists hoping to 'redeem' Africa that 'this is not your vocation. You may direct the way, you may survey the coast, you may point your finger, make hasty expeditions into the interior; but you must leave it to others to go and abide there.' African diseases, he noted, affect whites far more than blacks. As such, it was the 'descendants of the torrid clime, children of the burning vertical sun... the descendants who were torn from the land' who must pick up the mantle. 148

By the mid- to late-1850s, however, the focus of many colonisation supporters had turned to less far-flung shores. Concerned partially about the impracticality of large-scale transportation across the Atlantic, Central America became the object of colonisationists' most concerted efforts. Frank P. Blair Jr., a Missouri Republican and member of an extremely influential political family, stressed that the failure of Liberia 'to relieve us of the load' did not mean the failure of the colonisation enterprise. 149 'There is a vast difference,' Blair asserted, 'between the idea of being colonized on our own continent, under our own flag, and being buried in Africa. It is the difference between life and death, home and banishment.' The climatic reasoning, though, survived the change of location intact. Blair argued that Central America's 'skies and earth, air and water, proclaim the promised land, nay, the paradise of the negro.' He proposed that the 'unnatural connection' between blacks and whites in northern latitudes be severed and they 'give to each [race] the climate which the Creator has adapted the nature of each. '151 Blair received the support of other Republican lawmakers, even the radical Gerrit Smith, who predicted that blacks 'will at no very distant day congregate in our western equatorial regions, say within fifteen or twenty degrees of the equator.'152

While colonisation had been favoured by many prominent politicians throughout the antebellum period, it was not until the Civil War that it became official government policy. The District of Columbia emancipation bill, passed 16 April 1862, included a colonisation provision worth \$100,000 while a further \$500,000 was appropriated under the Second

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¹⁴⁸ Edward Everett, 'The Colonization of Africa', 18 January 1853, in *Orations and Speeches on Various Occasions*, 3 vols. (Boston, 1879), iii, 177-8.

¹⁴⁹ Congressional Globe, 35th Congress, 1st Session, 14 January 1858, 294.

¹⁵⁰ Quoted in: William E. Smith, *The Francis Preston Blair Family in Politics*, 2 vols. (New York, 1933), ii, 136. Lincoln's Attorney General Edward Bates agreed: 'Africa is distant, and presents so many obstacles to rapid settlement that we cannot indulge the hope of draining off in that direction the growing numbers of out free black population. The tropical regions of America, I think, offer a far better prospect for both us and them.' Entry for 17 March 1860, in *The Diary of Edward Bates 1859-66*, ed. Howard K. Beale (Washington, 1933), 113.

¹⁵¹ Frank P. Blair, Jr., Colonization and Commerce: An Address Before the Young Men's Mercantile Library Association of Cincinnati, Ohio, November 29, 1859 (n.p., 1859), 3, 8.

¹⁵² Smith to Blair, 13 April 1858, in Frank P. Blair, Jr., *The Destiny of the Races on this Continent: An Address Delivered before the Mercantile Library Association, Boston, Massachusetts* (Washington, 1859), 32.

Confiscation Act of July 1862 'for the transportation, colonization, and settlement... beyond the limits of the United States, of such persons of the African race, made free by this act.' ¹⁵³ Even the Preliminary Emancipation Proclamation, although not the final version, provided that 'the effort to colonize persons of African descent... will be continued.' ¹⁵⁴ The Lincoln administration organised colonies on Ile a Vache, near Haiti, and entered into a contract to erect a colony on the Isthmus of Panama. ¹⁵⁵ Lincoln famously declared in his Second Annual Message to Congress that 'I cannot make it better known than it already is, that I strongly favor colonization.' ¹⁵⁶ The House Select Committee on Emancipation asserted that colonisation is 'the only mode' in which the 'obstacle' of a free black population in the north may be removed. 'A home, therefore, must be sought for the African beyond our own limits and in those warmer regions to which his constitution is better adapted than to our own climate, and which doubtless the Almighty intended the colored races should inhabit and cultivate.' ¹⁵⁷

Congressmen supporting the administration's colonisation policies adhered to the same isothermalist reasoning that had been employed by colonisations in the preceding decades. Wisconsin Republican Congressman James R. Doolittle advised his fellow lawmakers to 'study the laws of nature—those higher laws, which God, the Almighty, has stamped upon this earth, and stamped upon us.' According to Doolittle's interpretation of these laws, 'in the temperate zone, the Caucasian race has always been dominant, and always will be. In the torrid zone the colored man dominates, and will forever.' As such, he proposed a 'generous homestead policy for both races' on the American continent, with land for free white men in temperate latitudes, and space for free blacks in more tropical environs. More radical voices such as Ohio's Benjamin Wade advocated a similar geographical separation. 'Let them go into the tropics,' Wade declared, 'there, I understand, are vast tracts of the most fertile and inviting land, in a climate perfectly congenial to that class of men.' A correspondent of President Lincoln pointed out that African Americans must be forever

¹⁵³ 'District of Columbia Emancipation Bill' in *The Statutes at Large, Treaties, and Proclamations of the United States of America*, ed. George B. Sanger, 17 vols. (Boston, 1863), xii, 376, 592.

¹⁵⁴ 'Preliminary Emancipation Proclamation', 22 September 1862, in *The Collected Works of Abraham Lincoln*, ed. Roy P. Basler, 7 vols. (New Brunswick, 1953), v, 434.

¹⁵⁵ Two scholars have recently shown that the Lincoln administration's interest in colonisation did not end with emancipation, as others had previously argued: Phillip W. Magness and Sebastian N. Page, *Colonization after Emancipation: Lincoln and the Movement for Black Resettlement* (Columbia, MO, 2011).

¹⁵⁶ 'Annual Message to Congress', 1 December 1862, in Collected Works of Lincoln, ed. Basler, v, 534.

¹⁵⁷ Report of the Select Committee on Emancipation and Colonization, House Report No. 148, 37th Congress, 2nd Session (Washington, 1862), 16.

¹⁵⁸ Congressional Globe, 36th Congress, 1st Session, 10 April 1860, 1629.

¹⁵⁹ Ibid, 37th Congress, 2nd Session, Appendix, 19 March 1862, 83.

¹⁶⁰ Ibid, 36th Congress, 1st Session, Appendix, 7 March 1860, 155.

degraded in the temperate regions of the United States, while 'in his native climate, the negro is in many respects superior to the white man & only needs the influence of education to raise him to an equality in the social sphere.' In a speech to the Pennsylvania Colonization Society, a Princeton theology professor opined that a 'special providence... fixes the place of each people of the face of the earth, the bounds of their habitation.' Such was the poor state of African Americans in the northern United States and Canada, he concluded, no objective observer 'can help but surmise, that the God of nature has another destination in store for the development of his constitutional energies.' 162

This is not to suggest that the Lincoln administration's colonisation policies went unchallenged. Many radical and black voices despaired at the persistent failure on behalf of policymakers to imagine African Americans as part of a prosperous and peaceful United States. 'How much better would be a manly protest against prejudice against color!—and a wise effort to give freedmen homes in America!' exclaimed Salmon Chase after hearing that Lincoln had reaffirmed his commitment to the policy. 163 Other opponents of colonisation remarked upon the folly of sending away a workforce adapted to the environment of the southern United States. The New York Times wrote that deporting black labourers would be as to ask southerners 'to burn their harvest, to bury their treasures, to sow their fertile fields with salt... The thought is unspeakably absurd.' 164 Sending away the black workforce would be as to 'cut off our noses,' asserted *Harper's Weekly*, as without them 'the Southern States are paralyzed... The negroes are the laboring population. They are native to the soil and climate,' and should thus be given wages and honest jobs where they are currently located. 165 African-American field hands, wrote the American Baptist, 'are as necessary for the Southern cane and cotton-fields as the stalwart progeny of Europe is for the colder climate of the North.'166

Yet forms of colonisation and providing homes in America for the freedmen were not necessarily exclusive in the Civil War era. Several prominent Republican figures proffered schemes of internal colonisation which would allot African Americans portions of land in the southern states for their exclusive occupation and ownership.¹⁶⁷ The Republican free-

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¹⁶¹ Buel Conklin to Abraham Lincoln, 1 December 1863, Lincoln Papers.

¹⁶² Rev. Alexander T. McGill D. D., *The Hand of God with the Black Race: A Discourse Delivered before the Pennsylvania Colonization Society* (Philadelphia, 1862), 10.

¹⁶³ Journal entry for 15 August 1862, in *Chase Papers*, ed. Niven, i, 362.

¹⁶⁴ 'The Problem Solved', New York Times, 24 October 1862, 2.

^{165 &#}x27;Letting Alone', Harper's Weekly, 29 July 1865, 466.

¹⁶⁶ Quoted in: 'What Shall Be Done with Them', Liberator, 29 November 1861, 189.

¹⁶⁷ Nicholas Guyatt, "An Impossible Idea?": The Curious Career of Internal Colonization', *Journal of the Civil War Era*, iv (2014), 234-63.

labour entrepreneur Eli Thayer gave lectures and wrote to newspaper editors in late 1862 and early 1863 to publicise his scheme of colonising African Americans in Florida, both as a bulwark against the Confederacy and as a way to secure their future prosperity. 'Negroes would go there from the Northern and Border States by choice,' Thayer predicted in a lecture at the Cooper Institute in New York City, 'because they would find labor remunerated and a more genial climate.' The Indiana Congressman and some-time Union general James Henry Lane proposed Texas as an internal colonisation destination in early 1864. 169 Lane's plan gained the endorsement of the Committee on Territories because, they believed, African Americans could only be safe from the 'grasping cupidity of the white man' when 'the climate becomes his ally and his bulwark. When he has reached that point of latitude, he may become the ruler and lawmaker, the lord of the soil. '170 Versions of internal colonisation continued to be propagated as late as 1865, for example by the Ohio Republican Jacob Dolson Cox, who recommended setting aside much of the south-eastern states for the purpose of black resettlement. 171

These proposals trod the line between the induced migration of African Americans to more congenial climes and the insistence that blacks belonged in the southern United States and deserved homes there. As such, they gained the support of voices who had previously denounced foreign colonisation schemes. 'Why is colonization necessary?' asked a writer for the Atlantic Monthly in October 1862, when there is a 'belt of territory' along the Gulf of Mexico seemingly designed for African-American habitation: 'Has not Nature designed a black fringe for this coast? Has not the importation of the negro been designed by Providence to reclaim this coast, and to give his progeny permanent and appropriate homes?' The New York Tribune made a similar point. While abolitionists rightly 'look with disfavour upon schemes of colonization,' a May 1862 article read, nevertheless a 'separation of the White and Black races in our country is desirable, and will prove advantageous to both.' In the United States, the author argued, there is plenty of space for such a separation to take place and he proposed that 'Florida, or Western Texas, or both, be conceded to the Blacks,' where they are 'acclimated—they understand the work required of

¹⁶⁸ 'Colonization of Florida', New York Times, 7 February 1863, 2. Thayer claimed to have the endorsement of 4 members of the cabinet for this scheme: 'Interesting Statements', New York Times, 25 January 1863, 2.

¹⁶⁹ Congressional Globe, 37th Congress, 2nd Session, 16 February 1864, 673-4.

¹⁷⁰ House Committee on Territories, *Report to accompany bill S. No. 45*, 38th Congress, 1st Session, 4 February 1864, 1. If White House insider Lucius E. Chittenden is to be believed, Lincoln was giving serious thought to a scheme to 'remove the whole colored race in the slave states to Texas' in late 1862; Recollections of President Lincoln and His Administration (New York, 1891), 336-40.

¹⁷¹ Guyatt, 'Impossible', especially 234-5, 244-56; Wilbert H. Ahern, 'The Cox Plan of Reconstruction: A Case Study in Ideology and Race Relations', Civil War History, xvi (1970), 293-308.

¹⁷² E. H. Derby, 'Resources of the South', *Atlantic Monthly*, x (1862), 508-9.

them, and can be made to do anything in reason for moderate pay.' ¹⁷³ As a result of their adaptation to the southern environment, the *New York Times*' Washington correspondent Daniel Goodloe predicted that the southern states would become 'the Eldorado of the negro,' should an internal colonisation scheme facilitate such a happy outcome. ¹⁷⁴

Even some black voices expressed a greater willingness to form a colony of the soil occupied by a large number of African Americans as opposed to being colonised abroad. At the outset of the Civil War, Frederick Douglass's newspaper reprinted an article from a New York publication forecasting that secession would open 'a captivating prospect' for southern blacks. The war and its demand for white soldiers, the author wrote, will reveal that the blacks are 'the true masters' in the southern states with 'a climate suited to their wants.' As such, the region would eventually become a 'negro confederacy' and 'the Utopia and paradise of negroes throughout the world.' Douglass himself expressed strong support for Eli Thayer's Florida colonisation scheme as 'the true solution' to relieve African Americans caught 'between two fires' of slavery in the south and white prejudice in the northern states. 'The climate and the soil of Florida are favourable to a people struggling to retain their freedom,' Douglass asserted, and as such allotting it to the freedmen would 'carry Canada down to the gulf slave States, and the slaves of Georgia and Carolina would pour into it as into a new land of Canaan. '176 Later in the conflict, when Union general William T. Sherman met with a delegation of Savannah's black church leaders in January 1865, the majority of the group expressed a preference 'to live by ourselves, for there is a prejudice against us in the South that will take years to get over.'177

Internal colonisation did not meet with universal support, of course, and the proposals never came to fruition. A policy that met with the entire approval of radical Republicans, though, was the employment of African-American contrabands as soldiers in the Union army and navy. Pushed by radical, particularly black, voices since the outset of the war, in July 1862 Congress eventually passed the Militia Act that would allow the enlistment and participation of African Americans as soldiers and war labourers for the first time in the United States

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¹⁷³ 'Black Colonization', New York Tribune, 2 May 1862, 6. Italics in original.

¹⁷⁴ Daniel R. Goodloe, *Emancipation and War* (n.p., [1861]), 5. For further examples see: *Congressional Globe*, 37th Congress, 2nd Session, 31 January 1862, 596; Joseph Henry Allen, 'Africans in America', *Christian Examiner*, lxxiii (1862), 110-2; Fisher, *The Laws of Race*, 26-9.

¹⁷⁵ Rochester Express, quoted in: 'A Negro Confederacy', Douglass's Monthly, ii (1861), 17.

¹⁷⁶ 'What Shall Be Done with the Freed Slaves?', ibid, v (1862), 740. Directly below this article was another criticising schemes for the colonisation of blacks in Central America.

¹⁷⁷ 'Newspaper Account of a Meeting between Black Religious Leaders and Union Military Authorities', 12 January 1865, in *Wartime Genesis: Lower South*, ed. Berlin et al., 335.

since the War of Independence.¹⁷⁸ While Democrats and some more conservative Republicans worried about the aptitude and reliability of black soldiers, advocates of the measure countered that, among other things, the policy made sense as African Americans were suited to the climate of the southern states, where much of the fighting was taking place. For white northern soldiers, the southern landscape held the danger of not just hostile enemy forces but also 'unhealthy' climatic conditions, they emphasised. 'This war is waged by us in a region full of mountains, valleys, ravines, precipices, streams, roads, with which we are very imperfectly acquainted,' Salmon Chase worried, in addition to 'a climate noxious to unaccustomed Union soldiers.' The New York politician Preston King noted similarly that northern whites have to brave 'the deadly bullet and the more fatal climate' in order to suppress the rebellion. ¹⁸⁰

The answer, many urged, was to use troops who were physiologically suited to combat the region's environmental challenges. Thaddeus Stevens argued that the Union could not 'conquer the South' while exposing white northern soldiers to these conditions. In parts of South Carolina in the summer, he asserted, 'if you put a white man to stand sentinel there for a single night, it is certain death to him.' Instead he urged the use of black soldiers, 'men whose peculiar constitutions will bear the climate,' at these dangerous posts. 181 The Secretary of War Stanton agreed, advising Lincoln that 'every soldier of African descent, without danger to himself relieves a white soldier from imminent danger of sickness and death.'182 Another correspondent of the President recommended forming black regiments 'first because the Negro element in this State will more readily bear the climate of the South than white Soldiers.'183 Reports from on the ground in the south that circulated in the northern press backed up these assertions. The Quartermaster General Montgomery C. Meigs wrote from Harrison's Landing of the sterling service provided by black labourers in unloading stores from transport ships, noting particularly that they bore 'fatigue and exposure in that unhealthy climate much longer than the white soldiers and laborers, who soon broke down alongside of them.' 184 An officer in the Maine Fourteenth regiment wrote that, after viewing first-hand the work of black soldiers in their vicinity, 'it is conceded by

¹⁷⁸ 'Militia Act', in Statutes at Large, ed. Sanger, xii, 589-92.

¹⁷⁹ Chase to William Cullen Bryant, 4 August 1862, in *Papers of Chase*, ed. Niven, iii, 244.

¹⁸⁰ King to James R. Doolittle, 25 September 1862, James R. Doolittle Papers, Rare Books and Manuscripts Division, New York Public Library.

¹⁸¹ Congressional Globe, 37th Congress, 2nd Session, 5 July 1862, 3126.

¹⁸² Stanton to Lincoln, 8 February 1864, Lincoln Papers.

¹⁸³ William Sprague to Abraham Lincoln, 9 September 1862, ibid.

¹⁸⁴ 'The Negroes in the South', *Daily Missouri Democrat*, 27 January 1863, 2.

almost every one, that man for man they would in this climate be much the superiors of the whites, both on account of their endurance and superior knowledge of the country.' 185

When widening our perspective, then, it is possible to identify a long-standing commitment to isothermalism in Republican policies towards African Americans. Arguments for colonisation in the 1850s and into the Civil War, as well as justifications for the employment of black soldiers in the fight against the Confederacy, included the idea that black people were physiologically better adapted to warmer latitudes. The Civil War commitment to isothermalism, this suggests, should not be considered 'the greatest reverse in principle in the history of the Republican Party to date,' but can instead be situated as the latest in a series of proposals that relied on this close linkage of climate and race, leading to the formulation of policies that would facilitate the achievement of the 'natural' racial geography.

Conclusion

While chapter four on slavery extension demonstrated that, in the 1840s and 50s, moderate politicians and commentators formulated a climatic theory of slavery to explain the future of the institution, here it has been shown that more radical figures also expressed similar views when seeking to understand the future of African Americans in the United States and on the North American continent more broadly. Unlike the moderates, though, Republicans argued that the only way to allow natural laws to take effect would be to abolish slavery, which they saw as the sole barrier preventing each race from inhabiting the climate most suited to their physiology and condition, with whites in temperate latitudes and blacks in the warmer environs of the southern United States or Central America. Should the institution be abolished, Republicans argued, African Americans 'unnaturally' resident in the northern United States and Canada would inevitably move southwards, rather than migrate en masse northwards as Democrats forecasted.

These isothermalist views were omnipresent in Republican discussions about the future of African Americans during the Civil War. Countless speeches and newspaper articles expressed similar views about the importance of the role of environmental factors in determining the future configuration of the races on the American continent. The American Freedmen's Inquiry Commission provides a particularly useful example, as not only did the commissioners include a textbook example of isothermalism in their reports, but in the

¹⁸⁵ 'The View of Our Southwestern Soldiers', Salem Register, 9 October 1862, 2.

course of their research they gathered testimony from a multitude of different voices in the northern states, Canada, and the Union-occupied southern states. This offers a window onto the views of a variety of figures at different levels of society, from army officers to freedmen's teachers to escaped slaves, and gives ground for the assertion that the linkage of climate to racial destiny was more than just the preserve of the upper echelons of the Republican Party. The AFIC also relied on elements of racial science in drawing these conclusions, corresponding with medical professionals and, most notably, the Harvard Professor Louis Agassiz. Although the commissioners offered a vigorous defence of the common humanity of different races, they nevertheless accepted the conclusion that each race was better adapted to different climates and would, all being equal, seek habitation within them.

Furthermore, Civil War Republicans' embrace of isothermalism should not be seen as a complete aberration in the development of their racial ideology, but rather it can be situated in a longer lineage of policies they advocated to deal with the 'negro question.' While not all, and probably not most, Republicans in the Civil War advocated complete racial separation, believing African Americans had the right to homes in the United States if they wanted them, there are nevertheless striking parallels with colonisation. The advocates of this latter policy had long argued that the congenial climates of initially Africa, then later Central America, would ensure a more favourable development path for African Americans. Both colonisations and Civil War Republican isothermalists, therefore, presented their solution as more in-keeping with natural laws than the supposedly artificial arrangement that then held sway.

Conclusion

On 14 September 1869, huge crowds took to the streets across the nation to celebrate the hundredth anniversary of the birth of Alexander von Humboldt. The entire front page of the following day's *New York Times* was devoted to detailing the extensive celebrations in that city, including 'a grand procession,' a banquet, and the unveiling of a bust near Scholars' Gate in Central Park honouring the German polymath, all enjoyed by an 'immense throng' made up of 'all classes of citizens.' Other cities witnessed similar festivities. The *San Francisco Chronicle* reported on the closing event of a week-long series of celebrations, at which 'an immense concourse of people' gathered in City Gardens, forming 'by far the largest number ever assembled there.' In Chicago numerous events were held, led by the city's significant German-American population but attended in large numbers by other members of the community, attesting to the fact that, in the words of the *Chicago Tribune*, 'there is no part of the world in which his name is not honourably known.' Crowds reached an estimated 15,000 in Syracuse, 10,000 in Pittsburgh, and 6 to 8,000 in Cleveland, while even cities south of the Mason-Dixon line such as Charleston and Richmond made their own contributions, seemingly undeterred by Humboldt's outspoken anti-slavery convictions.

In the sixty-five years between Humboldt's only visit to the United States and the centennial of his birth in 1869, the nation had grown exponentially in both territory and population, suffered through a bloody and destructive Civil War, and set about undertaking a wide-ranging transformation of a society and an economy founded upon the institution of slavery. If Humboldt could have been present at the centennial festivities, he may barely have recognised the nation he had left behind in 1804. Yet the appeal of his life and work endured throughout this turbulent period. A Romantic, an explorer, and a scientist, Humboldt remained a source of fascination for Americans. At the centennial, a who's who of American intellectual life queued up to pay tribute to the great man, explaining at length the ways he had influenced them. Scientific luminaries such as Louis Agassiz reminisced about their formative encounters with Humboldt, joining leading figures from the world of American jurisprudence like Francis Lieber, who gave the keynote address at the New York City festivities, and literary giants such as Ralph Waldo Emerson in offering their eulogies.

¹ 'Humboldt', New York Times, 15 September 1869, 1.

² 'The Humboldt Celebration', San Francisco Chronicle, 21 September 1869, 3.

³ 'Humboldt Festival', *Chicago Tribune*, 14 September 1869, 4.

⁴ These statistics and more information about the centennial festivities can be gleaned from: Sandra Nichols,

^{&#}x27;Why Was Humboldt Forgotten in the United States?', Geographical Review, xcvi (2006), 401-5.

Yet the scale and scope of the centennial celebrations, alongside the numerous reports of the diversity of their participants, suggest that Humboldt's influence stretched beyond these relatively rarefied professions, speaking to public knowledge of his life, his theories, and his importance. The broad print culture that permeated the lives of mid-nineteenth-century Americans ensured that Humboldt's ideas and theories reached a wide audience. It is highly improbable that everyone who attended the centennial celebrations had read Humboldt's works, but much more conceivable that they had encountered him through the ubiquitous invocation of his name in all aspects of public life or through the avalanche of reviews that his works garnered in newspapers and periodicals, many of which effectively amounted to extensive paraphrasing or direct quotation from choice sections of his writings.

A central thread running through each of the foregoing chapters is the impact of Humboldt and his ideas on the environmental imagination of mid-nineteenth-century Americans. Humboldt's concept of Zusammenhang was a formative influence on how Americans conceptualised their relationship with the natural world. Contrary to the historiographical consensus that holds that Americans felt increasingly alienated from nature, my research suggests that it was rather a consciousness of the interconnections and interdependence between humans and the natural world that was the defining characteristic of the environmental imagination in this period. The health and physical capabilities of human bodies were believed to be inextricably tied to the natural world that surrounded them, highlighted most vividly in the experiences of western settlers in their new locales in chapter two and the pervasive racialised conceptions of bodily adaptation in chapters four and five. The characters and abilities of the societies that these bodies formed were in turn also considered to be the product of interaction with the natural world, resulting in the widely held belief in the geographical march of history outlined in chapter one and the conviction of the adaptation of different regions to various economic pursuits highlighted in chapter three.

The foundational building blocks of this environmental imagination were the widespread awareness and acceptance of new scientific insights and the long-standing, pervasive belief in natural theology. From the 'New Geography' in chapter one, Humboldtian science in chapter two, self-consciously scientific political economic analysis in chapter three, to the racial science in chapters four and five, the guiding thrust of mid-nineteenth-century scientific investigation of the physical environment was to establish not how man was abstracted from nature, but rather the ways in which the natural world interacted with human societies in a mutually constitutive manner. Humans held power over the physical

environment, but were also being shaped by it in ways beyond their control. These insights dovetailed with the widespread belief in natural theology, the conviction that through observation of the physical world one could discern the presence of God and his divine plan. As a result, environmental phenomena such as topography and climate were endowed with significant moral power, resulting in the terms God and nature frequently being used almost interchangeably. What we might now consider different definitions of nature were thus blurred: what was natural in the sense of being part of the physical environment was also seen as natural in the sense of being morally and inherently correct. The key to understanding the past, present, and future of the United States, many believed, lay in providentialist readings of the natural world.

The environmental imagination outlined here, then, clearly does not conform to the dominant historiographical narrative that the mid-nineteenth century was a period in which Americans felt increasingly alienated from the natural world. Yet it would be equally mistaken to view the constant references to the interconnections and interdependence between humans and nature as a precursor of modern-day ecological consciousness. The works of scientists like Humboldt may, as Andrea Wulf has recently argued, contain the seeds of present-day environmentalism, in that they show awareness that human actions may have detrimental effects on natural ecosystems.⁵ Yet the vast majority of Americans who shared Humboldt's conviction that they existed interdependently with the natural world did not draw the same conclusions. They were aware of their increasing power over the natural world and recognised that they remained subject to significant environmental influences, but they could not conceive that human actions could have such destructive consequences. So powerful was the providential impulse underlying the environmental imagination that even new technologies that were destroying the natural environment were subsumed within and viewed as integral to a beneficent divine schema. Consciousness of the interdependence of man and nature did not lead to a rejection of what we may now consider exploitative environmental practices but rather served to reinforce them as natural and providentially ordained. In chapters one and two, for instance, we have seen how railroads and telegraphs were understood by many Americans to be extensions of the American continent's natural facility for maintaining a harmonious, united, and prosperous nation. In chapter three, trade policies that relied upon steamboats and increasingly sophisticated resource extraction methods were reified as the entirely natural building blocks of economic development.

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⁵ Andrea Wulf, The Invention of Nature: Alexander von Humboldt's New World (New York, 2015).

The gendered language and assumptions that pervade the sources under consideration here illustrate how many American men made sense of what is, to a twenty-first-century audience, a counter-intuitive proposition. By conceiving of and portraying nature in a variety of essentially feminine roles, of nurturer, supplier of wisdom, and object of sexual domination, these figures transposed the 'natural' gender hierarchies that structured their society onto their relationship with the land. When American nationalists, in chapter one, and expansionists, in chapters two and three, invoked a bountiful feminised nature bearing forth her fruits for the enterprising men of the temperate zone to capitalise upon, they both drew upon and reinforced the gendered power structures that characterised the social organisation of the mid-nineteenth-century United States. What were thus violent, extractive, and exploitative practices were subsumed under the same natural order that justified the subjugated social state of the inherently 'inferior' gender. The environmental imagination, then, served only to entrench detrimental environmental practices, ensuring that what in hindsight was clearly the destruction of nature appeared to contemporaries to be entirely correct, moral, and, above all, natural.

The later nineteenth century saw a shift away from the Humboldtian conception of the harmonious relationship between humans and nature and towards a Darwinian perspective that emphasised conflict and competition. While *On the Origin of Species* also highlighted the ways in which different elements of nature were interconnected with one another, Darwin's arguments surrounding natural selection and Herbert Spencer's related articulation of 'survival of the fittest' struck a discordant chord with those reliant upon Humboldt's Romantic visions supplemented by a belief in Providence's beneficent guiding hand. This period also witnessed the emergence of a more specialised study of the natural world marked by a splintering into numerous subfields that defied the staggering scope of Humboldt's approach. While Humboldt and his followers focused on synthesising vast amounts of disparate information, the constantly expanding knowledge base forced late-nineteenth-century scientists to take a less holistic perspective and follow their own divergent paths. While mid-nineteenth-century scholars, as this dissertation has shown, blurred the boundaries between the natural and the human sciences, the later period was characterised by their separation from one another, causing the integrative approach to fall out of fashion. 6

⁶ On these points, see: Randall Fuller, *The Book that Changed America: How Darwin's Theory of Evolution Ignited a Nation* (New York, 2017); Nichols, 'Why was Humboldt Forgotten?', 405-8; Aaron Sachs, *The Humboldt Current: Nineteenth-Century Exploration and the Roots of American Environmentalism* (New York, 2007), 2, 236-42.

Yet the fact that the environmental imagination I have outlined here was eclipsed in later decades should not obscure its importance to the course of mid-nineteenth-century American history. In fact, as this dissertation has demonstrated, the ways in which Americans conceptualised their relationship with the natural world profoundly influenced how they conceived, processed, and debated the crucial political decisions that defined this turbulent period. The significance of this cluster of ideas, attitudes, and assumptions, I have argued, lay not in its power to *cause* the changes of that period in any direct sense, but instead the ways in which it conditioned how Americans approached the problems that faced them. As an important feature of the political culture of the mid-nineteenth-century United States, it served to, in different contexts, shape, limit, or expand the political vision of Americans in this period. By more fully understanding the environmental imagination and its importance, then, we can better comprehend the basis on which Americans made the decisions that they did, enabling a reassessment of some of the most important concepts and categories that animated American politics and society in these crucial decades.

Firstly, juxtaposing the environmental imagination with the political history of the midnineteenth century can aid our understanding of how Americans imagined, constructed, and negotiated their identities on various, sometimes competing, scales. In the context of a youthful and internally divided United States struggling to assert its legitimacy as a sovereign entity on the world stage, the environmental imagination provided a crucial language and set of reference points through which Americans could enact themselves as a people and as a nation. As demonstrated in chapter one, the United States' 'imagined community' was formulated and sustained by the construction of categories of environmental 'norms' and 'others,' which became powerful tools for projecting and contesting identities and loyalties. The contrasts, vividly and prominently displayed in the works of the popular Swiss-American scientist Arnold Guyot, between tropical climates and more temperate latitudes were reflected in American nationalists' attempts to assert their superiority over continental 'others,' most notably Mexico and other Latin American nations. Hotter climates were widely assumed to lead to stunted intellectual and physical growth, while temperate locales were believed to spur their inhabitants on to become paramount examples of human development. Operating within these parameters, nationalists fashioned the United States as the quintessential temperate nation, with its status as the standard bearer of civilisation assured by the irrevocable laws of nature.

Yet, while these climatic contrasts were important tools in the construction of American national identity, they were also adopted to undermine the fashioning of a united nation. The

coming of the Civil War, I suggested in chapter one, can be productively viewed as the internalisation of strikingly similar environmental divisions along sectional lines, pitting the northern and the southern states against one another. Northerners adopted the mantle of temperateness to construct their section as the environmental norm, juxtaposed against the othered, tropicalised space of the South. Their Southern counterparts, meanwhile, in the later antebellum period increasingly fashioned the environment of their section as a positive good, endowed with a range of climates and a profusion of natural productions that secure its future as a prosperous, independent nation. While in nationalist renderings this climatic diversity was a strength of the nation, fostering closer ties between North and South, as the Civil War approached the supposedly natural supremacy of one section over the other became a more prominent feature of political debates and commentaries, crystallising into the construction of distinct sectional identities that divided, rather than united, the states.

Studying the environmental imagination can also provide productive insights into the ways these fluctuating identities interacted with another central concept in mid-nineteenth-century politics: expansion. More specifically, it can help us more fully understand how Americans came to terms with rapid growth of their nation in the mid-nineteenth century. While Manifest Destiny has justifiably formed a crucial reference point for historians when seeking to understand American attitudes towards territorial expansion in this period, chapter two argued instead for the utility of the environmental imagination in combining the significant rhetorical potency of ideological constructions like Manifest Destiny with the profound practical concerns that accompanied the acquisition and settlement of new territories. As such, the environmental imagination played a crucial role in reconciling the competing currents of confidence and anxiety that pervaded the political discussions surrounding expansionist measures. Ecstatic providentialist readings of the geography and topography of the American continent by western frontier booster, politician, and public speaker William Gilpin served to soothe widespread concerns about the formlessness of the new configuration of the United States. The providentialist geography of southern oceanographer Matthew Fontaine Maury placated slaveholding fears that emancipation and the subsequent racial strife would undermine the southern societal order. Medical research by western doctors such as Daniel Drake, meanwhile, affirmed the widely held connection between the health of human bodies and the salubriousness of the environment surrounding them, advising on which regions would be most conducive to the well-being of settlers. Taken together, these three case studies show how ideas, speculative or otherwise, about the environment of the American continent naturalised territorial expansion in ways that the rhetoric of Manifest Destiny alone could not, providing a more satisfactory explanation of how Americans conceptualised and came to terms with their nation's role as an expansive territorial power.

When the focus shifts from the United States' territorial enlargement to its economic engagement with the wider world, the environmental imagination continues to provide a productive lens through which to reassess our understanding of American ideas about expansion. In reconstructing mid-nineteenth-century political economic debates through this lens, chapter three emphasised the shared assumptions that underlay both sides of the argument between free trade and protectionism. Both stressed above all that trade policy should be consonant with the natural laws that regulated economic processes, as evidenced in the distribution of natural products throughout different areas of the globe, as well as the geographical proximity of certain regions. Political economic debates, rather, surrounded what these natural laws were and what they demonstrated to be the most prudent course, spawning multiple competing interpretations. Free traders read the broad distribution of valuable natural products throughout the globe as a divine injunction that the United States should be active in furthering trading relations with foreign nations, portraying protectionist measures as unnecessary aberrations on the beneficent natural order. Their opponents, meanwhile, often accepted that free trade may eventually be the most natural economic system but added the heavy caveat that the sort of cosmopolitan political relationships it would require simply did not exist in the mid-nineteenth century. The natural course of economic prosperity, protectionists stressed, required passing through a protectionist stage in order to allow for such a cosmopolitan ethos to develop. This ensured that what Friedrich List called the 'natural system of political economy' in the mid-nineteenth century must take into account the presence of national interests and thus seek to raise as many products as possible within the home market, where providence had placed sufficient resources for the nation to prosper independently.

Identities and expansion were conceptual categories of central importance to midnineteenth-century politics and society, but of even greater consequence were questions surrounding race. The second section of this dissertation demonstrated that juxtaposing the environmental imagination and the racial ideology of mid-nineteenth-century Americans sheds new light on how Americans approached the critical issues of the future of slavery and the post-emancipation racial geography of the North American continent. Viewing these debates through this prism showcases the crucial fact that these discussions took place within a limiting framework, imposed by the environmental imagination, that inexorably bound the capacities of the different races of man to environmental and especially climatic conditions. As a result, it was widely accepted that the white and black races each had their own 'natural' home, in temperate and tropical latitudes respectively, an irrevocable fact that must be respected in the process of policy-making.

Recognising the importance of these views to the slavery extension debates brings into focus the significance of the climatic theory of slavery, which held that allowing the natural laws of climate and environmental productions to decide the slavery question was the only prudent course of action. Where slavery could be profitable, this theory ran, it should and would take root, while if it proved itself to be an inferior economic system, it would disappear peacefully. Attempts to legislate for or against the incursion of the peculiar institution into new territories, adherents to the climatic theory of slavery charged, was to agitate politics in a deeply harmful manner in the service of either unnecessarily affirming or blasphemously contravening nature's laws. More radical figures, both pro- and antislavery, conceived of the issue differently. For them, slavery was a moral, not just an economic question, one for which natural phenomena such as climate or soil fertility could not be the final arbiter. Even here, though, the climatic theory of slavery retained some potency. Even the most belligerent southerners, as we saw in chapter two with Matthew Maury, spoke with more enthusiasm about the bountiful slaveholding empire in the fertile tropics, while some of the most vocal anti-slavery figures admitted the impossibility of white labour in hotter climates. While the 'natural limits' thesis of twentieth-century revisionist historians has been rightly discredited by more recent scholarship as a historical explanation for the coming of the Civil War, then, we should be wary of neglecting the ways in which the environmental imagination did, in fact, endow the idea that nature determined the future trajectory of slavery with significant *contemporary* potency, shaping the course of these crucial debates.

The limitations on the racial ideology of mid-nineteenth-century Americans imposed by the environmental imagination is evidenced further by an examination of Civil War-era Republican debates surrounding the future of African Americans after emancipation. While many black figures both publicly and privately protested the absurdity of attempts to link their future to any climatic dictate, even relatively progressive white figures remained bound by the strict linkage of climate and race. Taking the work of the American Freedmen's Inquiry Commission as a case study, chapter five showed that a broad range of Civil War Republican politicians and their supporters adhered to the doctrine of isothermalism, which held that blacks were naturally more suited to the hotter climates of the American tropics

and that, upon emancipation, they would of their own volition gravitate toward their natural home. Rather than emerging for the first time in the 1860s, isothermalist Civil War Republican policies were just the latest in a longer line of measures aimed at facilitating the natural racial geography, most notably the long-standing commitment to colonising free blacks in Africa or Central America. Republicans' inability to break out of this limiting racial framework meant they could not conceive of the realistic racial configuration that would involve blacks continuing to live in the northern states, where many of them had been born and spent for their entire lives, rather than migrating en masse to more southerly latitudes.

The environmental imagination, then, did not have a straightforward effect on midnineteenth-century politics. It did not serve to either wholly expand or wholly limit the political vision, but had different effects depending on the question under consideration. As chapter two showed, the conviction that the destiny of the United States was inscribed upon the geography and topography of the American continent served to legitimise for many the nation's expansion across space, placating profound fears about the consequences this may have for the American society they knew so well. The belief in the natural proficiency of the southern states also emboldened some secessionists, as demonstrated in chapter one, while the construction of their section as an environmental 'norm' as opposed to the southern 'other' strengthened many northerners' convictions that slavery was holding back the nation's natural development path. Yet when shifting the focus to issues of slavery and race, the limitations imposed by the environmental imagination come into sharper focus. Moderates on the slavery extension question argued that nature should be allowed to take its course and that positive government intervention would be an unnecessary and damaging catalyst for sectional strife. Even radical Republicans, while convinced of slavery's moral evil, at least as it affected white men, nevertheless adhered to many of the same structural biases, which prevented them from thinking expansively about the crucial problem of the distribution of the races after emancipation.

Taken as a whole, then, this dissertation has demonstrated that bringing the environmental imagination into conversation with the familiar narratives of mid-nineteenth-century American politics can both effect a reassessment of how Americans thought about their relationship to the natural world and reveal much about the course of U.S. history in this crucial period. The pervasive awareness of the interdependence of man and the natural world, rather than their alienation from it, resonated throughout the political culture of this period, shaping what mid-nineteenth-century Americans thought was possible, expedient,

and morally correct. The environmental imagination, in short, helps explain how and why mid-nineteenth-century Americans shaped their world in the ways that they did.

While this dissertation has identified a period with a coherent and significantly influential environmental imagination, the mid-nineteenth-century United States is by no means the only context in which such an investigation can be productively undertaken. Detailed reflection upon the insights provided by juxtaposing the environmental imagination with the overlapping questions and problems faced by other historical actors is beyond the scope of this dissertation, but it bears repeating that the environmental imagination is a protean concept defined by its portability. Throughout history, disparate groups of people from different societies and geographical locales have formulated ideas, consciously or unconsciously, about their relationship to the natural world. While the content of their environmental imaginations has doubtlessly varied in many highly significant respects, it stands to reason that these clusters of attitudes and assumptions must necessarily have influenced the way historical actors from every period have thought about and approached crucial issues that have profoundly shaped their societies. Understanding the environmental imagination to have been a formative influence on the outlook of these different groups, as I suggest it was for mid-nineteenth-century Americans, thus opens up abundant avenues for future research and comparative study.

The present-day debates surrounding climate change demonstrate the continuing resonance and potency of the environmental imagination. While I have argued that we should be wary about drawing a direct line from the mid-nineteenth-century environmental imagination to the ideas that dominate our present moment, the capacity of the environmental imagination to expand or limit the political vision and scope for action remains evident. Environmentalist politicians and commentators are increasingly sounding the alarm about the consequences of human-induced climate change. Their ecological environmental imagination leads them to call for far-reaching socio-economic transformations to prevent environmental catastrophe. Yet others, most notably the President of the United States and his allies, operate based an environmental imagination that leaves no space for human agency of this sort. Their invocations of a 'higher authority' that, they argue, should be left to control such matters is reminiscent of those who argued that 'the laws of nature and nature's God' should be left to run their course and determine the outcome of defining mid-nineteenth-century political debates. Now, as then, this variation on the environmental imagination restricts the scope for action, resulting in an abdication of responsibility that could have devastating implications for the future of humanity.

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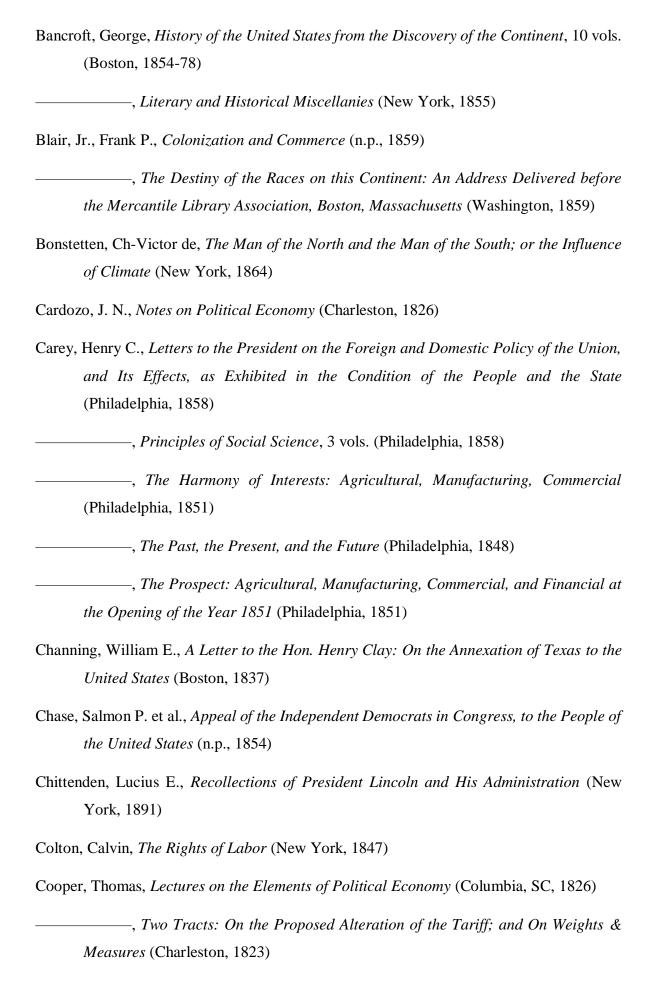
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