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The Immune Response: Romanticism and the Radical Literary History of Smallpox Inoculation

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of  
Philosophy in English

by

Fuson Wang

2014



## Abstract of the Dissertation

The Immune Response: Romanticism and the Radical Literary History of Smallpox Inoculation

By

Fuson Wang

Doctor of Philosophy in English

University of California, Los Angeles, 2014

Professor Saree Makdisi and Professor Anne K. Mellor, Co-Chairs

My dissertation untangles the oxymoron of Romantic medicine. The literary history of inoculation, I contend, reveals that smallpox eradication was as much a triumph of the literary imagination as it was an achievement of Enlightenment science. Underlying this argument is the larger disciplinary question: who counts as a producer of scientific knowledge? My project uncovers a surprisingly *literary* history of medicine that includes poetry and imaginative fiction in the discovery, propagation, and implementation of Edward Jenner's controversial discovery of the smallpox vaccine in 1796. Our own anti-vaccination campaigns recapitulate many of these same controversies. Most famously, Dr. Andrew Wakefield's bogus 1998 study linking MMR to autism compelled thousands of parents to deny their children this important vaccine. These biopolitical issues have only intensified in the globalized twenty-first century, and the debates about the large-scale management of disease depend on our literary-historical memory of the first vaccine scares and our attention to the narratives of those who lived through the alternatives of disfigurement, disease, and death.

My approach places metaphor and medical reality in the balance. I track the uses of inoculation from its botanical origins, to controversies about safety, to its potential to manage global plague, and finally to its nineteenth-century contraction into clinical propaganda. The first section handles inoculation's early history via John Milton's concept of virtuous trial in *Comus*, *Areopagitica*, and *Paradise Lost*. While John Dryden and Lady Mary Wortley Montagu's smallpox poems employ metaphor as mere euphemism and concealment, Erasmus Darwin and William Blake begin to imagine Milton's tested virtue more explicitly as a kind of salubrious inoculation against the corruptions of disease. In my second section on Romantic-era poetry and prose, I argue that, for Blake, John Keats, and Mary Shelley, the metaphor of inoculation models both a revolutionary politics and a cosmopolitan ethics, materializing abstract theories of reform into a medically reproducible practice. I close with a third section on the Victorian endpoint of this radical discourse of inoculation and the consolidation of medical authority into the figure of the all-seeing detective in Arthur Conan Doyle's Sherlock Holmes stories. Inoculation's long historical reach and unassailable record for saving lives demand that we continue to recover and to scrutinize these medical, literary, and political origins.

The dissertation of Fuson Wang is approved.

Helen E. Deutsch

Margaret C. Jacob

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University of California, Los Angeles

2014

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### Publications

Wang, Fuson. "Cosmopolitanism and the Radical Politics of Exile in Charlotte Smith's *Desmond*." *Eighteenth-Century Fiction* 25.1 (2012): 37-59. Print.

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\_\_\_\_\_. "We Must Live Elsewhere: The Social Construction of Natural Immunity in Mary Shelley's *The Last Man*." *European Romantic Review* 22.2 (2011): 235-255. Print.

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## **Presentations**

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\_\_\_\_\_. "Edward Jenner: Romanticism, Radicalism, and Inoculation." Paper presented at the Pacific Coast Conference for British Studies, Claremont, CA, March 2010.

\_\_\_\_\_. "Fear ye a mortal's hand?": Eleanor Anne Porden and the Institutionalization of the Scientific Epic." Paper presented at the "Romantic Disorder" conference, London, UK, June 2009.

\_\_\_\_\_. "Romantic Affinities: The Institutionalization of the Scientific Epic." Paper presented at the North American Society for the Study of Romanticism conference, Durham, NC, May 2009.

\_\_\_\_\_. "Mary Shelley and the Plague." Paper presented at the "Romantic Science" conference, Cardiff, Wales, September 2008.

## **Introduction—Romanticism, Radicalism, and Inoculation**

### **Romanticism**

Recent scholarship has struggled to reconcile Romantic authors' ostensible aversion to science with their eager participation in scientific discourse. This dissertation follows this promising line of scholarship, but also asks the larger question that underlies the methodology itself: who counts as a producer of scientific knowledge? To begin answering this question, I take as my premise that those resistances to science are not fundamental incompatibilities. In the case of inoculation, for example, medical science and literature managed to work hand in hand. Even though historians of science tend to characterize the Romantic era as a minor bump on the road to the pioneering successes of Victorian science and technology, Edward Jenner's 1798 work on the cowpox vaccine remains one of the most significant—yet understudied—medical breakthroughs. By most accounts, Romantic medicine is at best a wholly literary meditation on the nature of life and death and at worst an embarrassing experimental culture. My approach challenges this grand narrative of nineteenth-century medical history that hastily suppresses perceived Romantic quackery to explain the sudden emergence of biopolitics and the birth of Michel Foucault's infamous clinic. Instead, I linger on the radically subversive story of inoculation to recover Jenner from critical obscurity and to articulate the lasting dependence of medical history on literature, and vice-versa.

Specifically, I argue that the metaphor of inoculation models both a revolutionary politics and a cosmopolitan ethics that materializes Romanticism's abstract theories of reform into a concrete, medically reproducible practice. In seeking an answer to that initial question about the origin of scientific knowledge, I depend on a surprisingly literary history of medicine that

includes poetry (Erasmus Darwin, William Blake, and John Keats) and imaginative fiction (Mary Shelley and Arthur Conan Doyle) in the discovery, propagation, and implementation of vaccination, one of history's most controversial medical practices. I track both literary and medical uses of inoculation from its botanical prehistory (inoculation as grafting), to its experimental anxieties (the vaccination controversy), to its dilation of scale (global plague and colonial disease), and finally to its mid-nineteenth-century contraction into clinical propaganda. Even today, anti-vaccination campaigns continue to stir up the same literary, medical, and political issues that troubled these eighteenth- and nineteenth-century authors. These issues have only intensified in the globalized twenty-first century, and the biopolitical debates about the large-scale management of disease depend on our historical memory of the first vaccine scares and our attention to the narratives of those who lived through the alternatives of disfigurement, disease, and death.

## **Radicalism**

Edmund Burke's *Reflections on the Revolution in France* (1790) and Mary Shelley's *The Last Man* (1826) provide convenient bookends to frame the political stakes of the inoculation metaphor. Burke's opening salvo equates inoculation with infection:

We wished at the period of the Revolution, and do now wish, to derive all we possess as an *inheritance from our forefathers*. Upon that body and stock of inheritance we have taken care not to inoculate any cyon [sic] alien to the nature of the original plant. All the reformation we have hitherto made, have proceeded upon the principle of reference to antiquity; and I hope, nay I am persuaded, that all those which possibly may be made hereafter will be carefully formed upon analogical precedent, authority, and example. (Burke 181)

Before the publication of Jenner's *An Inquiry into the Causes and Effects of the Variolæ Vaccinæ* (1798), "inoculate" largely preserved its etymological origin (*in-* meaning "in" and *oculus* meaning "eye" or "bud") in botanical nomenclature. Contemporary usage, however, does not

distinguish between Burke's inoculation and Jenner's vaccination; the words are now largely interchangeable, both referring to the controlled introduction of disease into a host body for the purpose of immunization. For this dissertation, I revisit period-specific definitions because the Romantic binary of inoculation and vaccination was a distinction with a profoundly ontological difference. I take vaccination to be a peculiar subset of inoculation that develops from Jenner's cross-species experimentation with cowpox matter whereas inoculation itself is a broad term that merely signifies the "engrafting" (Montagu, *Turkish Embassy Letters* 81) of some form of matter onto a biological substrate. Burke chooses the word "inoculate" to evoke a rhetoric of contamination that mobilizes a botanical metaphor against the taint of revolution upon a society of magisterial inheritance. Even Jenner himself begins his *Inquiry* with this uncomfortable sense of contamination: "The deviation of Man from the state in which he was originally placed by Nature seems to have proved to him a prolific source of Diseases" (1).

Decades later, though, Mary Shelley rewrites the conservative association of inoculation and contamination in *The Last Man* with the titular character's controlled exposure to plague via his diseased embrace of racial alterity:

I lowered my lamp, and saw a negro half clad, writhing under the agony of disease, while he held me with a convulsive grasp. With mixed horror and impatience I strove to disengage myself, and fell on the sufferer; he wound his naked festering arms round me, his face was close to mine, and his breath, death-laden, entered my vitals. For a moment I was overcome, my head was bowed by aching nausea; till, reflection returning, I sprung up, threw the wretch from me, and darting up the staircase, entered the chamber usually inhabited by my family. (M. W. Shelley, *The Last Man* 336–337)

These two instances of inoculation provide both an ideological and roughly chronological frame for my dissertation's examination of the Romantic nexus of medicine, disease, radical politics, and literature. The historical development of inoculation and vaccination—from Lady Mary Wortley Montagu's early eighteenth-century Turkish smallpox inoculation (variolation) to

Jenner's *fin-de-siècle* discovery of the cowpox vaccine—strongly informs the sociopolitical tenor of, for example, England's engagement with her expansive colonial network, the troubled domestic absorption of continental notions of reform and revolution, and the changing medical accounts of the human body. In this way, the material and metaphorical deployments of Romantic inoculation traverse several orders of scale, from the physician's locally embodied, anatomical gaze to the politician's global management of empire.

Despite the promising reach of such an epidemiological frame, most critics have downplayed the significance of Romantic disease and have privileged instead the period's heated vitality debates. At stake in those debates was the vital principle, the spark of life that animated dead matter into sentience. Radical materialists such as John Thelwall and William Lawrence rejected the vitalist position, exemplified by John Abernethy's theory (by way of the surgeon John Hunter) of a mysterious "invisible substance, *superadded* to the evident structure of muscles" (39). These spectacular debates and charismatic personalities have made the principles of life and death central to our discussions of Romantic science. For example, Sharon Ruston, in *Shelley and Vitality* (2005), has tracked the language of vitalism through Percy Shelley's poetic career, and Denise Gigante, in *Life: Organic Form and Romanticism* (2009), has meticulously documented the period's investment in locating the vital principle.<sup>1</sup> In James Robert Allard's *Romanticism, Medicine, and the Poet's Body* (2007), he flips the terms of the vitality debates in his discussion of Thomas Lovell Beddoes's fascination with death: "that essence lay in death...in the moment of *disjunction*, at the moment of death, when both our mortality and immortality are most called into question and most visibly apparent" (119). This polarized critical discourse of Romantic science—Gigante's investigation of the "excess of...electric life" (230) on the one hand and Allard's deathly "disjunction" on the other—excludes the crucial middle term of



disease, a category that, in many ways, proves even more theoretically intractable than either life or death. Though the Romantic theorizers of disease failed to reproduce the enthralling spectacle of the vitality debates, Hermione De Almeida insists that the period still engendered prolific and “unbounded speculation on the character and progress of disease” (139). On the continent, Schiller, Schelling, Schlegel, and Bichat all characterized disease as another vital principle—a precondition for organic life. British theories even started classifying diseases according to Linnaean taxonomies (William Cullen’s 1772 work *Nosology, or A Systematic Arrangement of Diseases by Classes, Orders, Genera, and Species*) and speculating about the body’s natural and perpetual state of disease (John Brown’s theory of “excitability”).<sup>2</sup>

Scholars have begun to correct the disparity between this Romantic fascination with disease and the critical silence about its literary manifestations. In addition to De Almeida and Allard’s work, Alan Bewell’s *Romanticism and Colonial Disease* (1999) has most famously opened up the discussion of Romantic disease by directing us to read it in its colonial context and understand its threateningly vast geographical reach—the “dangerous disease environments that colonial contact had brought into being” (*Colonial Disease* 12). The “medical metaphor” (Allard 64) also appears in the language of the revolutionary controversies of the 1790s: Burke and Mary Wollstonecraft, for example, famously use—at cross purposes—the medical discourse of disease and plague to diagnose the health of the body politic. Conservatives cast revolutionary ideas as a dangerous contagion from the continent while radicals turned aristocratic privilege and political despotism into distemper, plague, and even, in Wollstonecraft’s case, digestive trouble. The occupation of the medically-informed poet, then, has been described consistently as a healer of social ills, of Bewell’s colonial environments, of the diseased body politic. For example, De Almeida assigns Keats the “poetic task as a physician who would heal the sorrows of mankind”

(307), Christopher Moylan reads Thomas Lovell Beddoes's drama as "therapeutic theater" (181), Allard describes Thelwall's project to "'heal' the nation at the expense of his own political agenda" (74), Bewell unpacks the logic of Percy Shelley's social "cure [for disease-bearing environments]" (*Colonial Disease* 215) as a recovery of reason and nature, and Gigante focuses her discussion of vitality on "*Naturheilkraft* (healing power)" (38). In this language of healing, Romantic disease seems closer to Burke's disgust at the inoculated "cyon alien to the nature of the original plant" than to Mary Shelley's hopeful scene of the last man's cosmopolitan inoculation. My dissertation does not purport to contradict these powerful and influential "healer" narratives but to complicate the negative construction of Romantic disease with the relatively untouched history of inoculation and vaccination—an approach that can finally take account of, for example, Mary Shelley's "negro half clad" and absorb similarly radical eruptions into our frequently over-determined narratives of Romantic medicine.

One of the most powerful medical-historical narratives stems from Michel Foucault's famously imperious proclamation that marks the epistemic shift of *The Birth of the Clinic* (1963, trans. 1973): "The age of Bichat has arrived" (*Clinic* 122). We have digested, internalized, and even axiomatized Foucault's familiar and gripping story of medico-administrative coercion and the socially constructed biopolitical authority of the medical gaze. At the center of this narrative is Bichat's *Œuvres Chirurgicales de Desault* (1798-1799), an anatomical encyclopedia that inaugurates the conception of the modern surgeon and his oppressive gaze. My approach requires a willful suspension—even as we realize that such a suspension is ultimately impossible—of this Foucauldian history and the substitution of Jenner's 1798 text for Bichat's to reconfigure our identification of the history of medicine with the history of biopolitics. Foucault's seminal account has precluded most from tracking the literary and material history of inoculation because

of its hardy resistance to narratives of institutionalization and coercive power. Indeed, that history begins not with surgeons as institutional instruments but in the margins with Montagu's tentative construction of female medical authority and Jenner's humble origins in rural medicine. The Foucauldian history remains blind to the contributions of medical women, to amateur physicians, and to the rural poor, a blindness that proves especially debilitating in a period with no shortage of amateur speculation and working-class consciousness. Like Foucault, I take 1798 as my *annus mirabilis* but not because it trumpets the arrival of the "age of Bichat"; instead, I argue that the history of medicine—more precisely, the history of inoculation—must meet the history of Romantic literature, a convergence that I locate in the quiet publication of Jenner's work on the cowpox vaccine and the concurrent appearance of another celebration of margins, amateur speculation, the working class, and the rural poor: Wordsworth and Coleridge's radical poetic experiment in *Lyrical Ballads* (1798). I will come just short of proclaiming that the age of Jenner has arrived because such a noisy declaration would betray the modest origins of the quietly competing, yet equally compelling, history of Romantic inoculation.

Few have broached the subject of vaccination and Romantic literature perhaps because of Foucault's seemingly irresistible historical narrative. In an article that conspicuously and refreshingly eschews any reference to Foucault, Tim Fulford and Debbie Lee have initiated a productive conversation about Jenner that follows a biographical line from his roots as a rural physician, to his sycophantic bid for royal and aristocratic patronage, and finally to his crowning as a national and militaristic hero. They open with quite a Romantic picture of Jenner:

Jenner's *Inquiry* was beautiful in its simplicity. It was not rooted in visions of national and international conquest of disease, but in the bodies of those who worked in the English countryside. It was not about global politics but about rural health. It was not derived from scientific authorities but from the oral tradition of Gloucestershire villagers. (139)

This rustic “simplicity” must recall the poetic project of Wordsworth and Coleridge, and Fulford and Lee do not disappoint; they track a familiar Romantic path of conservative retrenchment through the rocky reception of *Lyrical Ballads*, reminding us along the way that both poets eventually abandoned the rural poor for aristocratic patronage and appeal. They claim that, like Wordsworth and Coleridge, “Jenner never won the hearts of Britain’s laboring classes—ironically enough since it was with rural laborers that he had begun” (162). That irony proves almost as irresistible as Foucault’s account of Bichat. It justifies their following of a conservative history, from Bloomfield, Southey, and Coleridge’s poetic propaganda campaign to publicize Jenner’s discovery, to Victorian vaccination protests, to the state-controlled institutionalization of vaccination in 1908. This history succeeds wonderfully in postponing the Foucauldian account of institutional power structures until the early twentieth century. Unlike Bichat’s surgical history, the history of inoculation remains stubbornly resistant to institutionalization, which opens up a radical space for liberatory Romantic deployments of medical discourse. In tracking the conservative—rather than radical—afterlives of Jenner, Fulford and Lee forfeit an opportunity to flesh out these important connections between radical Romantic literature and medicine.<sup>3</sup> My task, then, is to track not only the radical literary afterlives of Jenner, but also to develop a longer history of inoculation that starts with Montagu’s *Turkish Embassy Letters* (1716, published posthumously in 1763) and ends with the institutionalization of vaccination in 1908. To purge roughly two hundred years (1716-1908) of any epistemic shifts might seem naively perverse in a post-Foucauldian framework, but it serves to highlight the unique story of inoculation as both medical breakthrough and enduring radical Romantic trope.

Fulford and Lee ably illustrate the ontological “vaccination anxiety” (144–146) that followed Jenner’s slippage from mere inoculation to cross-species vaccination.<sup>4</sup> His outrageous

proposal that bovine matter was in some way compatible with—and even salutary for—the human body generated a vocal disgust that associated vaccination with bestiality and sexual perversity. Jenner’s revolutionary idea threatened both religious and secular notions of the human in its challenge to the Christian metaphor of an ordered great chain of being and to Linnaean classificatory systems. Criticism from both the religious orthodoxy and from prominent surgeons and scientists made it necessary for Jenner to embark upon a conservative campaign for legitimacy. This conservative damping of Jenner’s potentially radical and blasphemous rhetoric is a story that has been well-documented, but my project seeks to track instead its literary *amplification*; the troubled history from inoculation to vaccination extends much further than Jenner’s shrewd navigation of dangerous political waters. For example, Michael Specter’s recent book, *Denialism* (2009), exposes the enduring “irrational thought and frank denialism” (*Denialism: How Irrational Thinking Hinders Scientific Progress, Harms the Planet, and Threatens Our Lives* 6) of contemporary anti-vaccination campaigns. Even though it has saved millions of lives and completely eradicated several pernicious diseases like smallpox and Rinderpest (cattle plague), vaccination still serves as a convenient scapegoat for increased incidences of, to name just a few, diabetes, eczema, asthma, and, most notoriously in Andrew Wakefield’s now discredited 1998 study, autism.<sup>5</sup> The story of Jenner’s conservative retrenchment and subsequent elevation to national hero fails to explain the persistent radical kernel in this revolutionary medical breakthrough. My project recovers this radical story of inoculation and vaccination through several medico-literary instantiations.

However, my goal is not to document a comprehensive history of Western inoculation; such a project would be both impractical and counterproductive to my focus on Romantic literature. Especially for non-Romantic medicine, I will defer to an already large body of work in

the history of science and medicine. For Classical, medieval, and early-modern medicine, I rely primarily on De Almeida's work, Ian Maclean's *Logic, Signs and Nature* (2007), and Suzanne E. Hatty and James Hatty's *The Disordered Body* (1999). For the remainder of my account of inoculation, I use primary as well as secondary texts not only because of my interest in the reception of Jenner, but also because of Romantic medicine's critical slipperiness. Its awkward and frequently inconsistent resistances to systematic accounting frustrate both Foucauldian master narratives and teleological histories of scientific progress. James Gillray, the Regency period's most notorious caricaturist, gives us a striking visual representation of this complicated history of Romantic inoculation (figure 1). Jenner, seen cutting into the seated woman's arm, administers his miracle cure while the vaccinated patients on the right deal with some unexpected side effects. Jenner's stiff, supercilious figure provides a visual fulcrum that unevenly divides the image into smallpox victims on the left and sprouting bovine appendages on the right. Gillray's satire seems entirely legible. The visual weight of the right half overwhelms the left, and we quickly conclude that the grotesque side effects far outweigh the potential benefits of the cowpox vaccine. Fulford and Lee come precisely to that conclusion as they direct their focus to the "wild orgy of transformation": "The cartoon finds a graphic language to articulate widely-shared anxieties about the power of new science in the hands of an increasingly assertive medical profession" (144). Gillray surely criticizes the seemingly outlandish idea of vaccination (hence the cartoon's advertised connection to the Anti-Vaccine Society), but it also depicts a long queue of desperate smallpox sufferers in the vanishing horizon of the partially out-of-frame doorway, unbalancing the overtly negative critique with a solemn and positive plea for effective treatment. Mike Jay insists that Gillray's "point was not that vaccination was a quack remedy, a folly or a scam: it was rather that its acceptance into

mainstream medical practice did nothing to expunge the underlying grotesqueness of the proposition” (233). My project’s attention to the radical afterlives of Jenner must handle both halves of the image since I argue for radical—and frequently grotesque—uses of Romantic disease discourse, an approach that must balance disgust at the cross-species “orgy” on the right with the vast scale of human suffering on the left.

To paraphrase the narrator of Byron’s *Don Juan*, I want some heroes in this story of Romantic inoculation; this decidedly slippery history requires some authorial traction. More specifically, who gets to write the radical afterlives of Jenner? Answers seem to fall along disciplinary lines. Historians of science prefer to discuss “proper” scientists: Jan Golinski has historicized the public spectacle of Romantic science through a somewhat triumphalist account of Sir Humphry Davy’s rise to fame (188–235) while Lynn Hunt and Margaret Jacob have linked Davy’s bodily experimentation with nitrous oxide (laughing gas) to a culture of political radicalism (505). Literary critics tend to erect elaborate theoretical scaffolding around the ambiguous figure of the “poet-physician.” Though “proper” scientific authorities might seem ideal candidates to evaluate Jenner’s legacy, literary critics like Allard would turn to those authors who had both the medical training to understand the implications of Jenner’s discovery and the rhetorical wherewithal to express any possible literary complications. Allard even goes so far as to establish a twofold rubric for admittance into the category of “poet-physician”: 1) he must have spent an “extended term as a registered student at a recognized medical school” (12) and 2) he “must have explicitly addressed the interconnections between poetry and medicine” (13). The first criterion excludes Wordsworth, Coleridge, Blake, Mary and Percy Shelley, and Joanna Baillie while the second excludes Erasmus Darwin. This tactic narrows the list down to John Thelwall, John Keats, and Thomas Lovell Beddoes. My account strives to be more flexible.

I take into account the gendered construction of medical and scientific agency, particularly with Mary Shelley and Montagu. Also, I do not privilege the theorizer of medico-literary hybridity over the Darwinian model of un-self-conscious interdisciplinarity. Darwin's silence on his literary and medical hybridity is no cause for exclusion; even further, I suggest that that silence is precisely what qualifies him as a quintessentially Romantic voice. My approach does not depend upon a robust theorization of the "poet-physician"; such a study would indeed be worthwhile but also outside the scope of my argument about Romantic inoculation and disease. Instead, my project employs a less proscriptive mode of interdisciplinarity, an approach that can admit Jenner—a man who was both country bumpkin and scientific genius, clumsy poet and medical hero—into both the history of medicine and the Romantic literary canon.

Despite Jenner's extraordinary discovery, Romantic science—and Romantic medicine in particular—is still seen as somewhat of an embarrassment in the history of science because of its ostensible rejection of Enlightenment notions of progress and rationality. Because of this, De Almeida must begin her study of Romantic medicine and John Keats with a somber disclaimer: "The period of Romantic medicine has existed as a hiatus in the history of science" (3). It is strange that, in a work that seeks to reclaim Romantic medicine from critical obscurity, there is no mention of Jenner's *Inquiry*, a work that has saved more lives than almost any other scientific innovation in history. My project reintroduces Jenner into our discussions of Romantic literature and medicine through a literary history of inoculation and vaccination. Along the way, I resist both the familiar Romantic "healer" narrative and Foucault's medico-administrative thesis as long as possible to track the strange eruptions—celebratory, anxious, paranoid—of the literary deployments of disease discourse. My organization is roughly chronological with some notable exceptions since it would be overly schematic (and imprecise) to overlay a medical timeline from



inoculation to vaccination exactly on top of a Romantic literary history. I end with an evaluation of Victorian and contemporary legacies; specifically, I explain how the radical discourse of Romantic inoculation gets institutionalized while still preserving that radical kernel of Romantic potentiality inherent in Jenner's discovery. At this point, I reevaluate Foucault's medical history of epistemic shifts with some possible sites of continuous Romantic resistance. Indeed, our own contemporary relationship to vaccination remains almost as vexed as the centuries-old Gillray image. Whenever a new vaccine is introduced—most famously with H1N1—the public discourse predictably fixates on the same two concerns: the potential scarcity of the vaccine and the safety of its administration. These concerns precisely recapitulate the two halves of Gillray's portrayal of Jenner: we will clamor desperately for every last drop of vaccine even as we hysterically inflate its potential side effects. Even though vaccination has been institutionalized and largely legitimized, we still perceive something radically and ontologically dangerous in Jenner's two-hundred year-old idea. In substituting a medical and literary history of Romantic continuity for a history of epistemic shifts, I argue that the case study of inoculation proves that Romanticism is no zany "hiatus" from either the history of medicine or from literary history; rather, it is an emblem of an embodied, radical Romantic politics that survives its legacy of conservative revision.

The interdisciplinary trajectory of my argument is most clearly—though perhaps not most accurately—articulated first in its discrete disciplinary configurations. My dissertation tracks the historical path of "vaccination anxiety" from ideological containment, to eruptive surplus, to shaky equivocation, and finally to institutional legitimacy. In a Romantic-scientific language, I consider four related areas of medical discourse that repeat that historical trajectory with an empirical difference: botany, disease, plague, and death. My project's literary focus will

overlay, with some significant remainders, a parallel literary history that proceeds from a discussion of formal hybridity, to a poetics of bodily experimentation, to a rhetoric of cosmopolitan healing, and finally to the prosaic restriction of the illness narrative into the detective novel. In all these historical, scientific, and literary trajectories, radicalism persists as my managing term. My insistence on the radical dimensions of inoculation and vaccination is motivated by several potential payoffs. First, it rewrites the undeserved reputation of Romantic medicine by foregrounding the longevity of Jenner's radical idea. Second, it opens up a space in Foucault's restrictive history for non-institutional medical practices. Third, it explains the importance of literature (especially Romantic literature) in the history of inoculation beyond propaganda campaigns and conservative stories about patronage. Fourth, it resists the dominant readings of Romantic disease as colonial contagion by making disease a site for cosmopolitan reform and revolutionary healing rather than Orientalist fear and racist insularity. Fifth, it gives a continuous history, from smallpox to H1N1, of what Specter has called "denialism"—the contemporary reemergence of a medical practice that privileges the agency of patient narratives (no matter how irrational) over the authority of the medical gaze. With these motivations in mind, I organize my chapters according to these roughly parallel trajectories to recover a radical, literary history of inoculation.

### **Inoculation**

My first chapter considers inoculation apart from its subsequent specialization into vaccination via Jenner's 1798 treatise on cowpox. In temporarily bracketing the cross-species confusion of the Gillray image (although the idea of smallpox inoculation caused some anxiety of its own), I argue that literary uses of inoculation participated in a radical language of containment and manageable hybridity. The period's penchant for formal experimentation has

been a fixture of Romanticist scholarship since M.H. Abrams's seminal study of the greater Romantic lyric: a hybrid form that balances the lyric speaker's "fluent vernacular" with "formal speech," internal "understanding" with external "landscape" (527–528). More recently Jacqueline Labbe has intervened into discussions of the odd hybrid forms of *Lyrical Ballads* and Charlotte Smith's *Elegiac Sonnets* (1784). Labbe frames her argument about the two poetic collections with a suggestive genetic metaphor: "the forms that make up the *Lyrical Ballads* are reconceived as the natural offspring of those populating the *Elegiac Sonnets*: diversity as an inherited trait" (219). Even though Labbe eventually drops this metaphor, the language recalls quite strikingly the Romantic debate between radical "diversity" and Burkean inheritance with which I began. Even in those rare moments when Burke admits the possibility of revolution, he circumscribes it with "Nature" as a regulatory bulwark of tradition and inheritance: "the nature of the disease is to indicate the remedy to those whom Nature has qualified to administer in extremities this critical, ambiguous, bitter potion to a distempered state" (181). In his almost tautological doubling of "nature" and "Nature," Burke still clings onto a purely natural inheritance that administers the "bitter potion" of revolution to a diseased body politic. I differentiate this hierarchical mode of natural containment from the radical, hybrid strategy of Erasmus Darwin's *Botanic Garden* (1791). In particular, I argue that Darwin's poem participates in a radical dialectic of subversion and containment that hinges upon the material practice of inoculation.

Since the word has botanical origins, my study turns first to inoculation as that Burkean engrafting of a scion (a bud) onto a stock. Donald C. Goellnicht has documented botany's close connection to chemistry and medicine in his work on Keats's medical contexts (84–119), but few, if any, have tracked the literary and political uses of botanical inoculation as a material metaphor. Unlike with Burke's disgust at the engrafting of an alien scion onto the original plant, Darwin takes advantage of this metaphor's diverse possibilities in his hybrid verse forms. In his

preface to *The Loves of the Plants* (the second part of his long poem *The Botanic Garden*), Darwin frames his poetic undertaking with Linnaean taxonomy on the one hand and inoculated varieties on the other. He faithfully lists Linnaeus's twenty-four classes of plants but also provides a subtle caveat that reveals the extent of his own poetic and scientific intervention:

The Species are distinguished by the foliage of the plant; and the Varieties by any accidental circumstance of colour, taste, or odour; the seeds of these do not always produce plants similar to the parent; as in our numerous fruit trees and garden flowers; which are propagated by grafts or layers. ("The Botanic Garden" 284)

The critical take on Darwin's poem has focused on his gendered revision of Linnaeus and his description of the sex lives of plants through botanical representations of stereotyped women—the blushing virgin and the *femme fatale*, for example. Rather than the "Species" of the sexed parents, my approach to Darwin focuses on the "Varieties" of the "grafts or layers" that frequently differ from the parents in radical ways. Here is the locus of Darwin's radicalism, his attention to "the possibilities of a new age dawning" (Teute 319) in the French-revolutionary fervor of the 1790s. His botanical footnotes thus read as a kind of formal inoculation, a radical variegation of the parent narrative that both complicates and strengthens the political dimensions of the poems while still remaining containable within Linnaean taxonomy and compatible with the established authority of scientific consensus.

The second chapter develops the botanical metaphor via a poet that unfailingly challenges any notion of containment, whether radical or conservative. Blake's distaste for our "mind-forg'd manacles" ("London" 88) provides the limit case for this experiment with a disruptive poetics of botanical inoculation and a transitional moment that anticipates the ontological anxieties associated with vaccination. Blake juggles the same terms—botany, inoculation, radicalism—while introducing a volatile new one: infection. Blake's poems have none of the raucous satire of

the Gillray image, but they still convey a similar sense of ambivalence about proper treatment. Blake, an engraver for Darwin's popular poem, borrows the botanical figure of inoculation and works through this ambivalence with the radical sexual politics of Oothoon, his emblem of free love and inoculated health in *Visions of the Daughters of Albion* (1794). Oothoon's reclamation of her rape—"Sweetest the fruit that the worm feeds on"—gains its scientific cogency from the material example of Darwin's politically charged medico-botanical figure. As an antidote to Oothoon's misogynistic argument—that virginal rape is somehow desirable or productive of a kind of sweetness—Blake selectively cites two of the most famous female voices of the eighteenth century to justify Oothoon's troublesome vision of free love: Mary Wollstonecraft and Lady Mary Wortley Montagu. First, he invokes Wollstonecraft's view of marriage as slavery to authorize new forms of love, unshackled by the morality of human institutions. Second, he alludes to Montagu's sympathetic treatment of Turkish seraglios and her advocacy of smallpox inoculation, a trope that becomes his central medico-botanical image in his proposal for generative rape. Thus, in strikingly different ways, both Darwin and Blake structure their reconfigurations of normative sexual desire through the versatile and volatile figure of inoculation.

The publication of Jenner's theory made the radical kernel within the botanical concept of inoculation completely explicit. My third chapter considers the reception of the cowpox vaccine in medical, scientific, and literary circles. I briefly recount what Mike Jay has called the "unnatural experiments" of scientists such as Joseph Priestley, Thomas Beddoes, and Sir Humphry Davy and their influence upon a new mode of literary experimentation that goes beyond containable and "natural" hybridities.<sup>6</sup> After discussing the nosology/excitability divide in Romantic medicine and the era's democratic distribution of medical authority, a picture of

what I call Romantic disease discourse emerges. It is from this discourse that the strange experiment of vaccination becomes possible, and it is only from this unique medical practice, I argue, that John Keats's poems become entirely legible.

Keats himself is no stranger to the botanical metaphor. In the epigraph to his early poem *Sleep and Poetry* (1816), he rehashes the now almost hackneyed botanical allegory. It is perhaps no coincidence that the epigraph, which he inaccurately attributes to Geoffrey Chaucer's *The Floure and the Leafe*, contains the botanical poem's only mention of disease:

“As I lay in my bed slepe full unmete  
“Was unto me, but why that I ne might  
“Rest I ne wist, for there n'as erthly wight  
“[As I suppose] had more of hertis ese  
“Than I, for I n'ad sicknesse nor disese.” (“Sleep and Poetry” 58)

The language of disease—here figured as the *absence* of “sickness” and “disease”—reappears throughout Keats's poetry and prose, a fact that has not gone unnoticed among critics attuned to Keats's medical training. What *has* gone relatively unnoticed is the medical context of inoculation in the theory and practice of his pharmacological poetics. In particular, I focus on Keats's theorization of “negative capability”—“when man is capable of being in uncertainties, Mysteries, doubts, without any irritable reaching after fact & reason” (*Letters* 41–42). Anne K. Mellor has read this as a productive instance of “feminine Romanticism” (*Romanticism & Gender* 171), while Robert Gittings and Jon Mee point to the connection between Keats's theory of “effeminate” receptivity and “the more masculinist discourse of Hazlitt from which it was derived” (xxxix). In considering the medical contexts of this theory, I argue that these botanical poems emphasize the masculinist dimension of triumphant containment—the residual Hazlitt in Keats. Even though Keats's poems are roughly contemporaneous with the Gillray image, these poems resurrect the radical hybridity of Darwin's inoculated forms while suppressing the bestial

excess of Jenner's grotesque idea of vaccination. In this way, Keats manages to preserve the neat dialectic of subversion and containment through the metaphor of botanical inoculation. His radical politics rooted in a medical poetics—Keats as what Nicholas Roe has called the “pharmacopolitical poet” (*John Keats and the Culture of Dissent* 160)—achieves an ideological coherence that his later works will revise through his own troubled version of vaccination anxieties and a “feminine” evolution of his negative capability.

That scene of mysterious insomnia in *The Floure and the Leafe* continues to baffle Keats's later poetry. Vaccination had promised a life with neither “sickness nor disease,” but that “slepe full unmete” festers in Keats's psyche. As Roe has documented, by the time Keats began his studies in medicine, vaccination had become a routine procedure despite its residual whiff of unnatural revulsion:

His duties as apprentice would have given him an introduction to basic skills such as vaccination for smallpox, bleeding patients with a lancet or with leeches, dressing wounds, setting bones, pulling teeth, identifying the symptoms of illnesses, making up pills, ointments, poultices, laudanum, and other medicines.” (*Culture of Dissent* 167)

Through readings of the odes, *Hyperion*, and *The Fall of Hyperion*, I track Keats's exploration of the radical implications of those “basic skills” that he learned in medical school (he tries to explain the speaker's insomnia in the absence of disease). Through the metaphor of vaccination, I argue that Keats recovers the more familiar sense of negative capability as a kind of porous receptivity to otherness. Yet that idealization (mediated through the now unwieldy vaccination metaphor) also carries with it an awful sense of incommensurability between the radically receptive poet and an increasingly illegible world. Here, Keats's radical politics—his participation in what Roe calls a “culture of dissent”—reaches a volatile climax in the unresolved paradox of poetic idealization and worldly alienation. I conclude the chapter with the gradual

suppression of experimental anxieties after the publication of Jenner's findings on the cowpox virus. In my discussion of John Keats, I argue that the poet's famous disciplinary transition from medicine to poetry is strongly informed by his response to the era's conflictual medical culture. His letters—particularly his musings about the “Mansion of Many Apartments” and “Negative Capability”—articulate his access to what I call a Romantic disease discourse that emphasizes experiment, balks at pathology, and distributes medical authority across disciplinary boundaries. In *La Belle Dame Sans Merci* (1819), for example, I argue that he rewrites the famous collection of smallpox elegies, *Lachrymae Musarum* (1649), to dramatize humanity's medical, psychological, and literary progress, or what Keats called “the grand march of human intellect.” The knight's dream of the “faery's child” inoculates him against his “anguish moist and fever dew,” while the rose on his cheeks (a common trope for smallpox pustules dating back to Dryden's contribution in *Lachrymae Musarum* to early nineteenth-century vaccination propaganda) gradually fades away. Instead of elegizing the dead, Keats lingers on the knight's immunized life, “alone and palely loitering,” cured of disease but not of the dark melancholy of life. In the *Hyperion* poems (1819-20), Keats continues to imagine the end of disease through his striking juxtaposition of the ailing Titans against the continuing health of the new Apollonian guard, inoculated against the sting of death. I conclude the chapter with Keats's equivocal participation in the birth of biopolitics. In imagining immunity, Keats must concede, like many medical theorists of the era supposed, that life itself is a diseased condition, and that that particular disease perhaps may never be cured but merely legislated. If we are forced to live, forced into the knowledge and sorrow of life, then the management of that potentially unending existence must fall to the poets, not the physicians of Keats's early career.



Mary Shelley articulates a similar critique of science and medicine in *Frankenstein* (1818), a novel that both chastises the reach of the natural philosopher and indulges in what William Patrick Day calls the “gothic fantasy” (1) of grotesque experimentation. In my fourth chapter, I discuss Shelley’s reevaluation of Romantic disease discourse through *Frankenstein* and *The Last Man* (1826). The earlier novel is quite pessimistic about any potential strategies to contain Victor Frankenstein’s transgressive project within a redemptive ideal. Jonathan H. Grossman has drawn our attention to the “legal story” (62) of *Frankenstein* and Mellor has offered the “ideal of the loving family” (*Mary Shelley* 44), but neither law nor family can ultimately mitigate the tragic conclusion of the creature “lost in darkness and distance” (*Frankenstein* 156). As for Victor, Marilyn Butler turns to the vitalist debates between Lawrence and Abernethy (1814-1819), producing a persuasive reading of the mad scientist as a satirical Abernethy stand-in. Victor has also been read as a portrait of Percy Shelley’s Promethean ambition or Davy’s interventionist science.<sup>7</sup> My argument does not contest these associations; instead, it adds Jenner to this composite picture of Victor to complicate the possibilities of idealization in the novel. Victor’s transgression recapitulates early nineteenth-century disgust with Jenner’s cross-species proposal. His notorious sketch of his scientific method reads much like the cross-species orgy of the Gillray image: “I pursued nature to her hiding places. Who shall conceive the horrors of my secret toil, as I dabbled among the unhallowed damps of the grave, or tortured the living animal to animate the lifeless clay?” (*Frankenstein* 32). Victor’s vivisection—“tortured the living animal”—recalls the extent of Jenner’s cross-species experimentation: he not only worked with cows, but also with horses since he “believed that cowpox originated from an equine disease called ‘grease,’ which could be passed to cows by the hands of milkmen who had also tended infected horses” (Baxby). Shelley’s oblique allusion to

Jenner in *Frankenstein* and, as I argue later, her intentional elision of Jenner in the inoculation scene of *The Last Man*, serve to regulate the radical utopian impulses of both novels.

Shelley's later novel moves from local sentiment and gothic enclosure to a literary study of global plague. Bewell's treatment of colonial disease tracks a similar movement in the poetry of her then late husband Percy Shelley. Like De Almeida's study of Keats and medicine, though, Bewell's work eschews any mention of Jenner. According to this study, Percy Shelley's "attempt to go beyond a local understanding of disease" (*Colonial Disease* 241) to a global perspective of diseased environments and social amelioration participates in a social project of revolutionary healing and Godwinian perfectibility. Bewell has described Percy Shelley's inheritance of Godwin's doctrine of perfectibility as an ambitious claim "that human beings might attain perfect health" (*Colonial Disease* 206). Shelley's medical gaze, then, turns from the infected body to the colonial transmission of global plague, understanding "diseases and the physical surroundings that produce them entirely in social terms" (*Colonial Disease* 240). Mary Shelley's plague, however, is not "entirely" a social construction of bad human behavior; it is rather a carefully calculated disavowal of Jenner, the present absence that replaces gothic excess and bodily experimentation with an emphasis on both "social terms" and real medical healing.

In this way, *The Last Man* is much more materially attuned to the contemporaneous medical controversies about the circulation of plague and real medical treatments. Anne McWhir has documented Shelley's participation in eighteenth- and early-nineteenth century debates between contagionism (infection through bodily proximity) and anti-contagionism (infection through a miasmatic environment).<sup>8</sup> Cynthia Schoolar Williams even points out that Shelley's plague is not communicable across species.<sup>9</sup> Clearly, Shelley put a significant thought into the medical details of her apocalyptic plague; consequently, reading her disavowal of Jenner as

another blind substitution of global concerns for embodied politics proves especially damaging in the case of *The Last Man*. Verney's embrace of the "negro half clad" (the scene with which I began) remains a thorny site of critical contention: Mellor and Bewell, for example, insist on its inoculating possibilities while Peter Melville remains skeptical about its medical plausibility.<sup>10</sup> My reading accepts the scene as a moment of inoculation but with an additional emphasis on Shelley's suppression of post-Jenner vaccination anxiety in favor of the more malleable metaphor of inoculation. I argue that this late Romantic novel—a work that has been frequently read as a case of radical apostasy—preserves early radical Romantic politics in a sense of cosmopolitan possibility and a mildly skeptical account about the viability of Percy Shelley's utopian optimism. Plague represents the definitive test case for a redemptive disease discourse mediated by the post-Jennerian metaphor of inoculation.

That uncomfortable scene of cross-racial immunization where Lionel Verney, the eponymous last man after the plague has devastated the world, is forced to embrace and inhale the breath of a diseased "negro half clad" (*The Last Man* 336) strongly suggests the need for a Kantian ethics of necessary contamination and cosmopolitanism. Shelley's speculative revision of medical history proceeds along various lines of gender (the genderless cave explorers of the frame tale and the androgynous Evadne), race (the diseased "negro half clad"), and species (Verney's canine companion at the end of the novel). Each encounter with these fictionalized forms of alterity proves productive but ultimately falls short of the goal of large-scale immunity. In this way, the novel short circuits the historical path from variolation to vaccination; instead of imagining the end of disease as Keats does, Shelley bleakly imagines the end of humanity (the last man has no last woman to continue the species) due to the characters' stubborn reluctance to embrace the other in the novel's pivotal moments of cosmopolitan inoculation. However, Shelley

also hints at a cogent politics of possibility and articulates a mature evolution of the transformative agency of the Romantic imagination through her frame tale's strange narrative temporality. We are told that the story is just one possible arrangement of the cave's sibylline leaves, allowing for infinite recombination and retelling in this dire tale of annihilation. Apocalypse may yet be averted if only the last man's cosmopolitan encounter could be the ethical rule rather than the grotesque exception.

My fifth and final chapter marks the end of this strange Romantic disease discourse that produced such an unlikely discovery as vaccination. Arthur Conan Doyle's pairing of detective (Sherlock Holmes) and physician (Dr. John Watson) confirms that the late nineteenth-century physician no longer subsists as the Jennerian image of the experimental country doctor. He has abandoned the bedside for the clinic and taken on the mantle of the unerring pathologist. This coercively normative conception of illness begins to diverge from Darwin and Blake's radical reconfigurations of desire, Keats's medicated bodily experimentation, and Shelley's biopolitical history of cosmopolitanism. Recent work in medical humanities has struggled to revive this bedside narrative, but we need not manufacture it from scratch; we need only turn to the medico-literary experiment of Romanticism. This chapter locates this break from Romantic disease discourse and historicizes the contemporary legacies of medical, literary, social, and political vaccination anxieties.

Even now, vaccination still engenders significant controversy despite its institutional legitimization, which motivates this project's close focus on the *radical* history of inoculation, an approach that not only clarifies the subversive element that escapes the medical gaze but also makes clear the dependence of medical history on literature, and vice-versa. Here, Bewell's reminder that "Disease was both a metaphor and a sad reality" (*Colonial Disease* 4) is

particularly salient. Vaccination delays—and perhaps even forestalls—Foucault’s medical history because of the figurative and literal consequences of Jenner’s radical idea. My arguments reflect this effort to balance “metaphor” with “reality”; I track both literary and medical uses of inoculation from its botanical prehistory, to its experimental anxieties, to its dilation of scale, and finally to its contraction into biopolitics. The aim is to restore Jenner to medical and literary history while avoiding an overstatement of his centrality. In other words, my argument does not claim that literature was one way before Jenner and another way after Jenner; rather, it fills in the untold radical story of a medical practice that continues to challenge our notions about medicine, our readings of Romantic literature, and our material understanding of revolutionary politics.

## Notes

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<sup>1</sup> In particular, see Ruston’s discussion of *Prometheus Unbound* in the context of vitalism (102–131). Gigante makes an even larger claim that “Vitality was, to be sure, the mark, the distinguishing feature, of Romantic aesthetics” (4).

<sup>2</sup> Here, I refer to Cullen’s work on nosology where he sets out his grand purpose: “But as diseases, different in their nature, require not only different, but even contrary remedies, it is of the utmost consequence to the medical practitioner to be able, with certainty, to distinguish any disease from every other (Cullen, *Nosology* i). For a very different perspective on the medical practice, see Brown (81–98). For Continental contexts about vitality, materialism, and disease, see Elizabeth A. Williams’s treatment on the conflicting semiotics of the encyclopedic medicine of Diderot and Cullen and the pragmatic medicine of vitalist physicians in the treatment of smallpox (215–254).

<sup>3</sup> By radicalism, I invoke more than just the Wollstonecraft/Burke controversy of the 1790s. As I have documented, the “medical metaphor” (as Allard puts it) provided ammunition for both sides of that debate. I have narrowed the metaphor down to inoculation because of my implicit claim that it is *essentially* radical; that is, inoculation is not merely instrumental—rhetorical fodder for either side of the controversy—but a radical agent in itself. In this way, the metaphor participates in several senses of “radicalism”: 1) scientific, in its participation in a subversive experimental culture, 2) political, in its insistence on cosmopolitan possibilities, and 3) philosophical, in its ontological embrace of otherness.

<sup>4</sup> This anxiety has an even longer history. Even before Jenner, inoculation was seen as a terribly threatening procedure. See the discussion of eighteenth-century fears of smallpox inoculation in Felicity Nussbaum’s *The Limits of the Human* (109–134).

<sup>5</sup> See Wakefield (144) for the infamous article. Every author (except Wakefield himself) has retracted his or her contribution since the 1998 publication.

<sup>6</sup> Since my focus remains literary, I defer to biographers and historians of science for accounts of their radical (and frequently outrageous) theories and experiments. For Priestley’s experiments, see Robert E. Schofield’s wonderfully thorough biography (227–272). Mike Jay remains my authority for Beddoes, and Jan Golinski, Lynn Hunt, and Margaret Jacob’s work on Davy more than suffices to complete the scientific context for my literary argument.

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<sup>7</sup> For the connection between Victor and Percy, see chapter 5 of Christopher Small's *Mary Shelley's Frankenstein: Tracing the Myth* (100–121). For Victor's Davy-like interventionist science, see Mellor (*Mary Shelley* 89–114).

<sup>8</sup> McWhir's article makes a convincing case for Mary Shelley's anti-contagionism while offering a generous documentation about the era's heated debates about the circulation of plague (23–38).

<sup>9</sup> In Williams's discussion of Mary Shelley's construction of species boundaries, she makes the important observation that the plague is species specific (138–148).

<sup>10</sup> Bewell reads the scene as redemptive inoculation (*Colonial Disease* 296–314) whereas Peter Melville dismisses that moment's centrality in the sprawling novel (825–846).

## Chapter 1—Mutant Strains: Erasmus Darwin and the Botanical Origins of Inoculation

### The Architectures of Romantic Botany

Botany seems an unlikely starting point for a study of inoculation. Inoculation's philosophical, political, and literary registers, however, hinge on the figure's etymological origins in some of the most heated botanical controversies of the eighteenth century. The word itself derives from a particularly rich locus of botanical debate concerning plant grafts and their proper classification within various taxonomic schemes.<sup>1</sup> Since I argue for the inoculation metaphor's inherently transgressive, subversive, and radical potential, it will not do to just leave it as a historical accident of medical nomenclature that botany and vaccination should converge upon this single, convenient term. In the early eighteenth century, Linnaeus's seminal work on biological classification led to a comprehensive organizational scheme that purported to account for the entire *Systema Plantarum* with just twenty-four categories. Perhaps inevitably, such rigid structure raised doubts in the circles of natural philosophy, generating numerous exceptions to the botanical rule in the form of baffling mutations and grafts. It is this botanical origin of inoculation—as a vexing figure that troubles grand efforts to categorize and schematize—that becomes particularly salient when the botanical trope is adapted to the discussion of one of the most controversial and successful discoveries in the history of medicine.

Erasmus Darwin's epic poem, *The Loves of the Plants* (1789), makes just this kind of disruptive, literary intervention into the Linnaean debate. His project purports to delight and instruct through personified representations of Linnaeus's twenty-four botanical classes. In transposing botanical science to heroic couplet, Darwin begins to poke holes in that sense of Linnaean order, perhaps quite an accomplishment for someone like Darwin. A physician who dabbled in natural philosophy, botany, and poetry, he may appear the very image of a dilettante.

The more generous account, however, paints him a poet-physician, a jack-of-all-trades whose intelligence and genial nature gained him admission into some of the most impressive intellectual circles of his day. But a jack-of-all-trades is frequently a master of none. He tends to subsist as a minor figure in the history of medicine, in the history of science, and even in literary history. His eccentric genius is significantly overshadowed by the more canonical figures that follow him. Even Desmond King-Hele, Darwin's biographer and most ardent contemporary advocate, casts him as a sort of father figure to British Romantic poets, as if his only possible appeal is as a precursor to worthier poets like Wordsworth and Coleridge. Darwin's eclectic body of work explored the evolutionary ideas that paved the way for the theory of natural selection, but again he is overshadowed, this time by his more famous grandson Charles. His interdisciplinary approach, his strange formal experimentation, and his seemingly haphazard methodology have marked his literary and scientific legacy with an off-putting whiff of empty erudition and aimless dilettantism.

Yet recent scholarship seems eager to recuperate his reputation. We have learned about his close participation in the Lunar Society's often madcap adventures in scientific and technological invention, his cautiously radical and cosmopolitan politics, his honing of the scientific analogy, and his proto-feminist appropriation of botanical science.<sup>2</sup> His poetry's effortless meandering perhaps increasingly speaks to our concerns over the boundaries of knowledge and the dangers of insular notions of disciplinarity. Darwin begins my study of Romantic inoculation because such a project depends on the mutually constructive encounter between scientific discovery and literary representation, and this happens to be where Darwin shines. He does not merely popularize the Linnaean system; instead, Darwin boldly re-imagines botany via three architectural metaphors: the prison, the mansion, and the temple. In his motivating description of



his poem, Darwin proposes to expose the “animality” of the plant kingdom through his “art poetic”:

Whereas P. OVIDIUS NASO, a great Necromancer in the famous Court of AUGUSTUS CAESAR, did, by art poetic, transmute Men, Women, and even Gods and Goddesses, into Trees and Flowers; I have undertaken, by similar art, to restore some of them to their original animality, after having remained prisoners so long in their respective vegetable mansions.” (“The Botanic Garden” 289, emphasis mine)

The architectural trajectory moves from carceral confinement toward expansion and exploration, eschewing the simple strictures of botanical nomenclature. Throughout *The Loves of the Plants* and later in *The Temple of Nature* (1803), Darwin mediates this expansion with the trope of inoculation in both its botanical and medical senses. He lingers in botanical strangeness, in mutations and grafts, to draw connections with the two major medical developments of his time: smallpox inoculation (variolation) and cowpox inoculation (vaccination). The controversies surrounding both forms of inoculation allow Darwin to articulate his political vision of a cross-pollinating community of nature and a mutually beneficial ecology of belonging. His goal of botanical personification expands the scientific vocabulary to a more inclusive notion of the human body and its place in the natural world. Where does humanity call home—the prison, the mansion, or the temple? In finding his answer to this question, Darwin struggles to liberate botany from the silence of imprisoned flowers and manage the fragile economy of the vegetable mansion to finally locate his cosmopolitan utopia in the temple of nature.

### **The Prison-House of Botany**

Linnaeus’s famously ambitious motto—*Deus creavit, Linnaeus disposuit* (God created, Linnaeus organized)—led him to the formulation of a provocative nomenclature to understand the natural world through an increasingly secularized science.<sup>3</sup> From his modest, eleven-page

first edition of *Systema Naturae* (1735) to the sprawling three-thousand-page thirteenth edition (1767), Linnaeus worked tirelessly to contain animal, plant, and mineral within manageable categories. This meticulous organizational impulse hardly seems compatible with the stereotyped caricature of the Romantic poet, mired in gothic excess, unbounded variability, and intractable vision. Nevertheless, Erasmus Darwin, now a more or less (probably less) canonical representative of what we have come to call first-generation Romanticism, productively mined Linnaeus's scientific legacy of botanical classification for poetic inspiration. During the same tumultuous year that marked the beginning of the French Revolution, Darwin seemed oddly content merely to reproduce Linnaeus's botanical system in his epic poem *The Loves of the Plants* (1789). This concise first-generation Romantic account of the botanical metaphor belies the trope's much longer history. As David E. Shuttleton has noted in his study of smallpox poetry, seventeenth- and eighteenth-century poets were already invoking the "floral analogy" (200) to check stark reality with ameliorative metaphors that could, for example, transform pockmarks into roses. This chapter tracks the Romantic inheritances of this already robust medico-botanical lexicon and aligns Darwin's shifting figure of inoculation—as both botanical grafting and medical procedure—with the period's radical and revolutionary politics.

Such an alignment might seem odd at first since the prehistory of the metaphor often reads like a staunchly conservative tale of loyalty, nationalism, and patronage. Darwin's carceral metaphor relies precisely on this floral prehistory's restrictive boundaries. One of the earliest texts to connect smallpox and botany was Dryden's first published poem, "Upon the Death of Lord Hastings" (1649), an elegy for a schoolmate who had died of smallpox at the age of nineteen. Rather than shying away from the diseased body, Dryden's poem relies on a startling strategy of bodily exposure and metaphorical containment:

Was there no milder way but the small-pox,  
 The very filthiness of Pandora's box?  
 So many spots, like naeves on Venus' soil,  
 One jewel set off with so many a foil;  
 Blisters with pride swell'd, which through's flesh did sprout  
*Like rose-buds, stuck i' th' lily-skin about.*  
 Each little pimple had a tear in it,  
 To wail the fault its rising did commit:  
 Which, rebel-like, with its own lord at strife,  
 Thus made an insurrection 'gainst his life.  
 Or were these gems sent to adorn his skin,  
 The cabinet of a richer soul within?  
 No comet need foretell his change drew on,  
 Whose corpse might seem a constellation. (lines 53–66, emphasis mine)

The figural density of the passage does not escape Samuel Johnson's sharply critical eye, and he extends his well-known discussion of Cowley's overwrought "metaphysics" to include what he refers to dismissively as Dryden's puerile "school performance": "Lord Hastings died of the smallpox; and his poet has made of the pustules first rosebuds, and then gems; at last exalts them into stars" (Samuel Johnson 121). Dryden's sustained metaphorical sequence rewrites Hastings's untimely death and bodily disfiguration as a euphemistically idealized narrative of natural beauty ("rose-buds" and "lily-skin"), human artifice ("jewel" and "gems"), and finally heavenly reward ("comet" and "constellation"). His poetic strategy also smuggles in political subtext: the "little pimple" learns to regret the "insurrection" that causes both lord and subject to perish—an allusion to the recently beheaded Charles I and Oliver Cromwell's fledgling republican Commonwealth. It is no surprise then that Dryden's royalist poem was published in the collection *Lachrymae Musarum* along with several other occasional poems about Hastings's death. As Dryden's ill-advised pustular rebellion exemplifies, the collection was almost certainly a conspicuously political lamentation for the death of the king.<sup>4</sup> The poem achieves this political end by imagining the site of fatal infection as a hybrid body of "rose-buds" and "lily-skin" (the doubling of the floral metaphor as well as the mirrored hyphenation both underscore this line's

invocation of botanical hybridization), which firmly links the inoculated body to a project of conservative amelioration.<sup>5</sup>

Burke's botanical warning against contaminating English purity with the infection of French Revolutionary ideology—"inoculat[ing] any cyon alien to the nature of the original plant" (181)—reverses Dryden's positive figure of botanical inoculation while preserving its conservative tenor. Lady Mary Wortley Montagu's earlier popularization of variolation (in the 1720s) medicalized, embodied, and humanized the figure of botanical inoculation, and Burke's hierarchical argument in *Reflections* could not possibly condone the free circulation of biological matter that smallpox inoculation would require. Dryden's bodily idealization quickly turns into sociopolitical contamination in Burke's poetics of ontological containment. Despite this negative appropriation of the metaphor, as Shuttleton points out, "botanical analogies" still remained a "plank in the Jennerian counter-attack against charges that vaccination is unnatural" (200). For example, Robert Bloomfield's *Good Tidings* (1804), a long poem dedicated to the legitimization and popularization of Jenner's vaccine, recycles the same floral images that Dryden used more than 150 years before:

In ev'ry land, on beauty's lily arm,  
On infant softness, like a magic charm,  
Appear'd the gift that conquers as it goes;  
The dairy's boast, the simple, saving Rose! (123–126)

Here, the body is even more explicitly hybridized: the "lily arm" is injected with the "saving *Rose*" of the cowpox vaccine, a striking materialization of the earlier poem's "rose-buds, stuck i' th' lily-skin about." Dryden's euphemistic rose becomes Bloomfield's "saving *Rose*"; instead of merely dressing up the disease in a floral metaphor, the "gift" of vaccination actually advertises a material cure. The passage also indicates the well-documented conservative turn in vaccination history: despite the poem's promised radical relocation of medical expertise from the bustling

city to the “simple” country, it settles for an instrumentalized pastoral, a nationalistic and triumphal vision “conquer[ing] as it goes” and extracting propaganda out of syrupy images of country life.<sup>6</sup> In pursuing his conservative vision of public health, Bloomfield revives Dryden’s botanical metaphor from Burke’s injunction. However, this is a figural repetition with a significant medical difference: rather than figuratively healing a mourning nation that has just decapitated its monarch, Bloomfield’s metaphor truly promises to erase the bodily traumas of the smallpox victim.

Each of these three authors—Dryden, Burke, Bloomfield—argues for the persistence of a pastoralized *status quo*: Dryden’s royalist regret urges England to bring back her King, Burke’s idealized society of continued inheritance mobilizes the sublimity of hierarchical vision to quell enthusiastic stirrings of revolutionary leveling, and Bloomfield’s return to Edenic health peddles idyllic rustication to aristocratic appetites for the picturesque. Yet, as Johnson perceptively notes, Dryden’s politics were anything but stable: he later elegized Cromwell in his “Heroic Stanzas” (1658) only to turn around yet again to celebrate the restoration of Charles II in “Astraea Redux” (1660). Johnson accounts for these shifting politics by historicizing a nation of changing allegiances: “The reproach of inconstancy was, on this occasion, shared with such numbers, that it produced neither hatred nor disgrace; if he changed, he changed with the nation” (122). In Dryden’s case, as well as Burke’s and Bloomfield’s, the botanical metaphor strives to temper large-scale unrest and anxiety with a conservative disavowal of change. It purports to offer a metaphorical distraction that draws attention away from any radical stirrings, whether they be experiments in popular governance, agitated discussions about the rights of man, or controversial new medical procedures. But if botanical inoculation can so easily flip between the negativity of Burke’s “alien” contamination and the triumphalism of Bloomfield’s “saving” gift while

preserving a solidly conservative politics, then the metaphor threatens to become merely instrumental, a blank figure that merely absorbs the political.

My argument resists such instrumentalization. As the *material* histories of botanical inoculation, variolation, and vaccination push onto a purely *figurative* botanical discourse, those labyrinthine disavowals begin to look like reluctant affirmations of the very change that they meant to disavow, and the metaphor itself becomes increasingly volatile because of its refusal to enact its conservative script. Dryden, for example, unaware of the later, mid-eighteenth-century practice of smallpox inoculation, can happily use the figure of a hybridized plant to contain the bodily excess of the smallpox sufferer while Burke invokes the botanical metaphor only to reject it because of its potentially radical association with variolation, a medical practice packaged with a dangerously egalitarian corollary, a suggestion that biological matter—*diseased* biological matter, no less—was essentially interchangeable across those ostensibly sacrosanct and inherited boundaries of race, gender, and class. By the time Bloomfield writes *Good Tidings*, the accumulation of medical history begins to exceed political containment. Bloomfield, with the blessing of Jenner himself, wanted to capitalize on the historical success of the botanical metaphor by naming the poem “The Vaccine Rose,” but he eventually changed the title to *Good Tidings; or, News from the Farm*. Although critics have cited publisher issues to explain the name change, I would add a more literary rationale: in this medical and literary history from Dryden to Bloomfield, the *metaphoric* distance between medical tenor (variolation and vaccination) and botanical vehicle (hybridization through inoculation or grafting) began to collapse into an uneasy *metonymic* identity; the finalized title “News from the Farm” wisely substitutes a much safer pastoral *metaphor* (“the Farm”) for the increasingly freighted botanical *metonym* (“The Vaccine Rose”). Through the efforts of anti-vaccinationists, the figure ultimately

materialized into a grotesque proposal for species abomination and the conservative poetics of botanical euphemism became largely untenable. Indeed, John Birch, physician to William and Catherine Blake, strives to purge vaccination from his conservative vocabulary altogether: “we shall soon see what yet remains of popular opinion favourable to the cause of Vaccination, *vanish into thin air*...the speculatists in physic, like the speculatists in politics, will be brought back to the old standard of sober reason, and experience” (“Vaccination” 2). He makes explicit the connection between experimental medicine (“speculatists in physic”) and radical politics (“speculatists in politics”) and finally makes impossible Bloomfield’s—and any subsequent author’s—attempt to mediate vaccination through a conservative botanical poetics.

The eruptive discontinuities in this conservative history of the botanical metaphor motivate a radical reevaluation. Many critics have already taken up this task and have begun to uncover botany’s radical potential behind these conservative applications. For example, Alan Bewell has read the Romantic period’s surging interest in botany as a product of new cosmopolitan and globalized ideologies, and Richard Sha has suggested that botany provided Romantic authors the means to imagine perverse and liberatory sexualities.<sup>7</sup> My intervention in this already thick discussion around radicalized botany is threefold: 1) I accept that the figure of Romantic botany expresses a diverse range of radical utopian impulses: cosmopolitan purpose, sexual liberation, gender equality, and class leveling, 2) I nevertheless seek to integrate the neglected conservative prehistory (Dryden, Burke, Bloomfield, and Birch) that I have outlined to understand the nature of the metaphor itself, and 3) I reevaluate the contours of botanical radicalism through the specific examples of Darwin (in this chapter) and Blake (in the following chapter). This synthetic account of conservative and radical histories articulates a version of Romantic botany that includes the related material history of inoculation and vaccination.

Radicalism, mediated through this botanical metaphor, expresses considerable political ambivalence: it imagines a utopia of sexual freedom and egalitarian government, but it also seeks to circumscribe that vision with a constraining set of ethical bounds. Darwin (and especially, as I discuss in the following chapter, Blake) works to unveil the radical kernel hidden beneath conservative trappings: the latent sense of unnaturalness that Johnson identified in Dryden, Burke's frantic political tweaking of the metaphor in *Reflections*, Bloomfield's strategic name change, and Birch's ultimate abandonment of vaccination metaphors. Whereas Darwin's cautious radicalism works to preserve part of the metaphor's history of conservative concealment, Blake's plants plot to overwhelm their botanical categories. Despite Darwin's radical pedigree, his deployments of the botanical metaphor are certainly not without their conservative residues. Instead, he prefers a dual calculation that radicalizes botany while concealing the dangerous excess of botanical life, the surplus that always threatens to overwhelm sense, category, and understanding. Blake rejects such "mind-forged manacles" ("London" 8). His botanical poems unhinge desire, joy, and revolution from any kind of ethical hedging or Urizenic, botanical containment. In this way, he anticipates the Romantic disease discourse that I will fully define and discuss in the third chapter. With later authors, the metaphors of inoculation and vaccination, liberated from their botanical containment, expand on Blake's ideal of experimentation and variegation into a more cogent connection between radical politics and Romantic poetics.

This is not to say that Darwin is aesthetically timid or entirely naïve about his radical politics. But why would his radicalism need to be tempered in the first place? Part of the answer lies in the Romantic period's turbulent history of popular revolution, reactionary terror, and Napoleonic despotism. Darwin's political circumspection is an orchestrated response to a set of



political debates about radical reform and social responsibility. Burke's *Reflections* set the tone of this debate as well as its figural parameters. In other words, to invoke the botanical metaphor is also to invoke its conservative history, to legitimate Burke's voice in the Revolution Controversy, and to participate in a culture of polite conversation—as opposed to combative controversy—that selectively constrained the free generation of revolutionary ideas for the sake of harmonious discussion and exchange.<sup>8</sup> Botany's Linnaean origins encouraged slow, careful organization, lexical categorization, and the narrow production of scientific authority; its underlying literary history of conservatism fostered a similar sense of restriction in its privileging of polite conversation over eruptive controversy. In both cases, botany functions as containment, an expression of an Enlightenment ideal of rational discussion and the easy purchase of authority and truth through assiduously-regulated conversational friction. Nonetheless, Darwin still managed to find a radical—albeit circumscribed—voice within this figural framework. Blake, as I show in the second chapter, suspects that that Enlightenment reason and conversation are just as likely to produce oppressive authority as scientific truth. His reconfiguration of the botanical metaphor, then, allows us to enumerate at least two models of radical Romantic botany: the first hinges upon reaction and a contained, Linnaean radicalism whereas the second seeks to originate a new discourse, detached from botany's conservative literary history. This chapter lingers with the first while the next elaborates on the second via the Blakean break from botanical restriction.

This chapter also rests on the assumption that metaphors matter. Susan Sontag has claimed that metaphors of illness tend to divorce disease from medical reality, a dangerous consequence that leads to irrational rejections of treatment, blatant misinformation about modes of transmission, and general misunderstanding about the “real” nature of illness. In this account, metaphor is perilously out of place in the field of medicine. My argument resists this powerful

and influential rejection of metaphor in representing illness.<sup>9</sup> The literary and medical history of smallpox, from the representations of physical and emotional scars to vaccination's unprecedented triumph over the disease, must give us pause before casting off the significant role of metaphor in managing both mental and physical manifestations of disease. Shuttleton, for example, helpfully reminds us that smallpox was a disease that never exceeded representation. As early as the tenth century, the Arabian physician Muhammad ibn Zakariyā Rāzī (better known to the West as Rhazes) was already describing the disease through analogy: he claimed that smallpox pustules were external manifestations of fermented blood. Dryden was elegizing the pustular body of Lord Hastings and Montagu was popularizing smallpox inoculation in England with metaphors of sensibility.<sup>10</sup> In all these cases, metaphor functions as a productive and expressive outlet that effectively manages both the social perception and the medical reality of the disease. Nevertheless, representation could also turn into insensitive caricature as in the case of Gillray's outrageous image of cartoonish smallpox victims. Lennard J. Davis has warned about the nineteenth- and twentieth-century novel's unfortunate tendency to endorse social constructions of normalcy, as in his reading of Esther Summerson's miraculously vanishing smallpox scars in *Bleak House*.<sup>11</sup> Sontag's point gains traction in these cases, but it still does not obscure the positive role that metaphor has played in Romantic medicine and the crucial influence it had in the eventual disappearance of smallpox, a disease that still retains the vaunted distinction of being the only infectious human disease to have been eradicated by man.<sup>12</sup> This chapter presents a case study of what happens when an imaginative metaphor (botanical inoculation) meets a material disease (smallpox) all while insisting on a positive role for literary representation in the traumas of illness. Still, this does not materialize completely in this first chapter because of Darwin's political ambivalence and figurative hedging. In later chapters, I

track the development from the botanical metaphor to a Romantic disease discourse that has learned how metaphors create recognition for disease, aid its legibility, and even model a cure in the specific case of Jenner's vaccination. Darwin's radicalism, however, largely remains confined to the prison-house of botany, restrained by the botanical metaphor's literary prehistory, the figural parameters of Burkean politics, and the empirical categories of Linnaean taxonomy.

### **Mansion of Twenty-Four Apartments**

In a note to *The Loves of the Plants*, the second part of his epic poem *The Botanic Garden*, Darwin takes a shot at Burke's rhetorical style while keeping strangely quiet about his conservative politics: "Some parts of Mr. Burke's eloquent orations become intricate and enervated by superfluity of poetic ornament; which quantity of ornament would have been agreeable in a poem, where much ornament is expected" ("The Botanic Garden" 327).<sup>13</sup> Instead of directly attacking Burke's adherence to inherited hierarchies, his ideological inconsistencies, or his logical faults, Darwin's complaint (the only explicit reference to Burke in the poem) seems to take exception solely to the incongruity of the rhetorician's formal extravagance. Darwin himself struggles to match medium to message, for a text on botanical classification is hardly a place "where much ornament is expected." A 1798 issue of *The Anti-Jacobin* capitalized on this potential moment of hypocrisy with "The Loves of the Triangles," a parody of Darwin's poem that poked fun at its formal strangeness, its overuse of personification, and its dangerous yet oblique references to Revolutionary politics.<sup>14</sup> If Burke deserved censure for the "superfluity of poetic ornament," then Darwin certainly could be held accountable for his own formal trespasses. However, his nuanced use of the botanical metaphor lends some substance to Darwin's claim, giving him some room to escape self-implication in his formal critique. Burke's metaphor of the inoculating "cyon" awkwardly relies on botanical hybridization to represent the

debilitating effects of foreign (French) influences on a genetically pure state of inherited health (England). In his “eloquent” rhetorical performance, Burke fails to link vehicle to tenor in a convincing metaphorical correspondence. Since plant grafting—the hybridization of different plants to propagate desirable traits—was a common practice with at least a centuries-old track record of success, Burke’s botanical contamination makes little scientific sense. As Darwin might put it, Burke’s rhetoric quickly deteriorates into pure “ornament” with only a minimal connection to the material world. Darwin’s own handling of the botanical metaphor relies instead on a ratio of imaginative ornament and scientific explanation. In his oft-cited advertisement to *The Botanic Garden*, Darwin makes this connection explicit:

The general design of the following sheets is to inlist Imagination under the banner of Science; and to lead her votaries from the looser analogies, which dress out the imagery of poetry, to the stricter ones which form the ratiocination of philosophy. While their particular design is to induce the ingenious to cultivate the knowledge of Botany, by introducing them to the vestibule of that delightful science, and recommending to their attention the immortal works of the celebrated Swedish Naturalist, LINNEUS. (“The Botanic Garden” 12)

Burke’s rhetorical dependence on “looser analogies” precludes his argument from achieving the “ratiocination of philosophy,” a charge that transforms Darwin’s formal critique into ideological confrontation. This call to a politically-minded interdisciplinarity nicely summarizes Darwin’s long and distinguished career as both poet and physician. His insistence on the meeting of “poetic ornament” with botanical science challenges and revises both the rhetorical form and the political content of Burke’s *Reflections*. In this way, Darwin confidently claims to demonstrate how botany *properly* manages Revolutionary politics.

Such an undertaking requires a certain level of scientific authority. Desmond King-Hele, Darwin’s most reverent biographer, argues that the Lichfield poet-physician did indeed merit such scientific currency: “No one since Darwin has bestridden so easily and effectively the fields

of science, poetry and medicine, and now that science has expanded so vastly it is safe to say that no one ever will again” (*Erasmus Darwin* 172). In addition to being one of the most popular poets of the 1790s, he was a prolific inventor, founder of the Lunar Society, a well-respected and dedicated physician, an innovator of industry, and a diligent Linnaean botanist. Among these incredibly varied achievements, his most enduring remains his early theorization of biological evolution, which his grandson Charles Darwin later developed empirically with his much more well-known observations on the finches of the Galapagos Islands. His contemporary legacy, though, tends to understate these significant contributions to both science and literature. In recent years, we have begun to recover from Darwin’s mysterious vanishing act from history, perhaps because of growing sympathy toward interdisciplinary studies or heightened interest in the history of Romantic science. Now, instead of being forced to see Darwin as a mere dilettante who dabbled in poetry only when he lost interest in science or medicine, we appreciate his easy and productive crossings of disciplinary borders. In this much more sympathetic reading, Darwin manages to write a coherent poem that simultaneously delights with “poetic ornament” and instructs with the scientific authority of “eloquent orations,” a balancing act that Burke mishandles with his bungled botanical metaphor. Instead of mobilizing botany as an empty figure that relentlessly pushes toward an independent political articulation, Darwin aims to connect botanical material with political metaphor to generate a convincing correspondence that takes the Linnaean project of botanical classification just as seriously as any program of radical politics or Revolutionary ideology. My argument reinforces this sense of Darwin’s equally ardent commitments to both science and politics with sustained attention to his use of the medico-botanical metaphor of inoculation to set his radical politics apart from the Burkean model of containment and contamination.

*The Loves of the Plants* is Darwin's most earnest attempt to achieve such a system of correspondence between botany and politics. The poem is based on Linnaeus's ordering of all plants into twenty-four classes, differentiated by "the number, situation, adhesion, or reciprocal proportion of the males [stamens] in each flower" ("The Botanic Garden" 284). Those twenty-four classes are further divided according to order, family, genus, species, and variety. Darwin even replicates Linnaeus's tendency to personify and sexualize the intimate lives of plants. In the preface, for example, he tasks himself with the lofty goal of transforming vegetable into animal and plant into person:

"Whereas P. OVIDIUS NASO, a great Necromancer in the famous Court of AUGUSTUS CAESAR, did, by art poetic, transmute Men, Women, and even Gods and Goddesses, into Trees and Flowers; I have undertaken, by similar art, to restore some of them to their original animality, after having remained *prisoners* so long in their respective *vegetable mansions*." ("The Botanic Garden" 289, emphasis mine)

Despite these scientific origins and faithful Linnaean echoes in Darwin's expansive project, the poem is no mere regurgitation of decades-old botanical knowledge. For those musty "vegetable mansions," he refers the reader elsewhere: first to Linnaeus's original works, "exactly and literally translated into English, by a Society at Lichfield, in four Volumes Octavo" and then to a translation "of Dr. ELMSGREEN, with the plates and references from the *Philosophia Botannica* of LINNAEUS" ("The Botanic Garden" 288). The poem is, in other words, no substitute for the primary sources of scientific knowledge. Instead of mere scientific recapitulation or poetic ornamentation, Darwin's goal is to liberate those botanical "prisoners" from scientific orthodoxy, to attract the reader to botany with delightful verse, to direct that interest to more serious studies, and to advocate a more speculative science that can more easily integrate the concepts of formal experimentation and imaginative conjecture with the rationalist and empirical observations of Enlightenment science. This convoluted plan, however, leaves him particularly vulnerable to

ungenerous critiques. In the simultaneous pursuit of science and poetry, for example, he runs the not insignificant risk of being bad at both. Linnaeus's modern biographer, Wilfrid Blunt, complained that Darwin "reduced Linnaeus's concept to charming absurdity" (248) while a cantankerous Coleridge put it much more bluntly: "I absolutely nauseate Darwin's poem."<sup>15</sup> Darwin's strange brand of speculative science and his wildly eccentric verse have drawn critical disdain from scientists, poets, literary critics, and historians alike. Nevertheless, a growing number of scholars seek to absolve Darwin of these scientific and literary sins and to recover him from undeserved obscurity. Darwin's floral metaphors, the literary construction of his radical politics, and his deliberate departures from Linnaeus's botanical script are far from the incoherent ramblings of a bored rural physician. Rather, his botanical project maps out the limits of Enlightenment science even as it insists on the radical potential within the confines of that rationalist discourse.

Since poetic form for Darwin is tantamount to a kind of political commitment, it might seem strange to express this radical potential through an epic in heroic couplets. If we were to ask for *the* literary form of radicalism, we would probably turn to subversive prosodic experiments like Milton's blank-verse epic, Wordsworth's lyrical ballad, or Whitman's free-verse autobiography. By the 1790s, the epic was almost certainly out of fashion, and the heroic couplet was hardly revolutionary. So what possible ideological work could Darwin squeeze out of such a stodgy form? The couplet *does* seem compatible with the goal of Enlightenment discussion; it presents the reader with rational discourse mediated by mnemonic opposition, metrical balance, and didactic clarity. Indeed, most critics have over-emphasized Darwin's Enlightenment credentials perhaps out of some suppressed embarrassment at the overall strangeness of the verse. Stuart Harris dubs *The Botanic Garden* an "Enlightenment epic,"

Donald Hassler dwells on Darwin's scientific accomplishments, and Jenny Uglow assiduously documents his close ties with the Scottish Enlightenment.<sup>16</sup> And in the passage above, the use of "vegetable mansions" to mean old forms of botanical classification recalls John Locke's earlier use of "our mansion" to describe the fixed embodiment of the self—the archetypal model of Enlightenment subjectivity.<sup>17</sup> Darwin's poem inherits this Lockean impulse to compartmentalize, contain, and classify according to finite, phenomenological categories. The preface of *Loves of the Plants* echoes Locke's *Essay Concerning Human Understanding* (1690) with its division of all botanical life into twenty-four categories according to "number, situation, adhesion, and reciprocal proportion of the males in each flower." The chiming couplet conveys this precarious yet perfect sense of balance, precision, and rationality—the universe reduced to finite and discrete "mansions" of metrical feet. Unlike Locke, though, Darwin troubles the luxury of the spatial metaphor as he liberates his botanical "prisoners" from "their respective vegetable mansions." For Darwin, Linnaean categories can be both mansions and prisons, a central paradox that motivates his poetic intervention into botanical science and his goal to recover nature's "original animality" from the threat of scientific complacency. Even as he clings to Enlightenment notions of rational discourse, Darwin still leaves ample room for literary revisions, categorical permutations, and biological variety.

The paradox of "prisoners" in "vegetable mansions" suggests that Darwin's couplet may belie some formal complexity beyond the musical endings of his pentameter lines. As J. Paul Hunter reminds us, the couplet's neatly oppositional binarism is an over-simplification, and he urges us to look past the its local binarism to the "binaries in the total text" (116) in order to downplay our anachronistic obsession with Hegelian syntheses. Indeed, Darwin's poem is not even merely couplets; he devotes the bulk of the text to developing an extensive critical



apparatus, including footnotes, illustrations, dialogues, digressions, and essays. The generic diversity swiftly moves the poem past even the ostensibly easy management of local binary form to a sprawling and chaotic global paratextuality. Between Cantos I and II of *Loves of the Plants*, for example, Darwin inserts a strange dialogue (Interlude I) between the Bookseller and the Poet on the differences between poetry and prose (“The Botanic Garden” 326–331). The Bookseller worries out loud to the Poet about the profitability of a botanical poem and complains, “Your verses, Mr. Botanist, consist of *pure description*; I hope there is *sense* in the notes” (“The Botanic Garden” 326), a playfully meta-fictional moment in which the Bookseller talks about the notes within the notes while the Poet muses about genre within a curious, generic blend of botanical verse with prosaic exposition. In drawing attention to the dialogue genre, Darwin also calls upon the form’s attendant political and philosophical discourse in the eighteenth century, which Hunter ably summarizes:

Perhaps it is something they [poets of the long eighteenth century] learned from the disastrous binary choices that public institutions and political structures tended to enforce, but the antithetical discourse of the period—in poetry and prose—repeatedly and systematically breaks down and redefines easy oppositions, which is one reason that the dialogue was so popular a form. That process of redefinition and refinement is almost a description of what philosophical discourse was in the post-Hobbesian moment, and it is virtually the program assumed by the Anglophone pentameter couplet. (116)

Not only does Darwin prefer dialogic forms (the couplet, the dialogue, the essay) but he also amplifies the irony of such a form—the manufacturing of “easy oppositions” only to subject them to a simultaneous “process of redefinition and refinement”—by proliferating his increasingly complicated paratextual apparatus. The poem’s hybrid form, then, stretches the parameters of Enlightenment discourse to its limit and prevents those Lockean “vegetable mansions” from degenerating into vegetable prisons.

Darwin makes sure to have this hybrid form come into contact with some hybrid botanical content. Specifically, he focuses on hybridized varieties, grafts, and layers instead of settling for more fixed Linnaean categories of order, genus, family, and species. In the preface, his botanical system is described as a series of nuptial pairings:

The illustrious author of the Sexual System of Botany, in his preface to his account of the Natural Orders, ingeniously imagines, that one plant of each Natural Order was created in the beginning; and that the intermarriages of these produced one plant of every Genus, or Family; and that the intermarriages of these Generic, or Family plants, produced all the Species: and, lastly, that the intermarriages of the *individuals* of the Species produced the *Varieties*. (“The Botanic Garden” 288, emphasis mine)

In typical Darwinian fashion, he personifies the propagation of plants as the “intermarriages of the individuals.” The word “individuals” recalls both Locke’s compartmentalized subjects and Linnaeus’s fixed botanical classifications, those Enlightenment “mansions” that conveniently order nature into discrete, manageable categories. Lockean subjectivity, in turn, introduces a volitional aspect into the long and mysterious process of botanical variegation, making room for human agency in the development of plant species (cultivation, selective breeding, grafting). In this sense, he works within the Enlightenment tradition’s deistic worldview, exemplified by Linnaeus’s motto, “*Deus creavit, Linnaeus disposuit*”; or, in Darwin’s variant formulation, God created the “Natural Order” while “individuals” continue to produce the future “Varieties” of that order through their increasingly mixed assemblages. “Varieties,” rather than “Natural Orders,” are the endpoint of Darwin’s botanical lineage; he gives them pride of place in both preface and poem. Unlike Linnaeus, who notoriously suppresses his uncertainty about the nature of varieties (genetic mutation was not yet part of botanical science’s vocabulary) in favor of fixed, unchanging categories, Darwin prefers to dwell on the unexplained (and unexplainable, at the time) complexities of botanical variegation. Yet this is not just a simple case of excessive

poetic license carelessly overrunning scientific precision. Darwin's departure from Linnaeus intervenes in a very real eighteenth-century scientific debate about the fixity of species. Remarkably, his discussions of botanical variegation (codified later by Gregor Mendel and his law of segregation) anticipate evolutionary theory without any recourse to genetic evidence. These metaphorical leaps (which he later developed into the elaborate evolutionary systems of *Zoonomia* and *The Temple of Nature*) made possible Charles Darwin's later empirical verification of his grandfather's conjectures.

The eighteenth-century debate about species variation in which Darwin's poem intervenes is perhaps most ably summarized by Bentley Glass, one of the twentieth century's most distinguished geneticists. According to his account, Linnaeus, in the *Systema Naturae* of 1735, originally "accepted the foregoing conception of the nature of species without troubling himself greatly about the problem of variation—a mere vexatious complication in the way of the great task of classification" (228). Later, when Linnaeus could no longer sustain his plausible deniability about the problem of botanical variation, he devised a new strategy of disavowal:

In the *Philosophia Botanica* of 1751 Linnaeus makes clear the basis of the distinction. Species were not only those entities created in the beginning, but individuals of a species 'multiply and produce, according to the laws of generation, forms always like themselves. This is why there are just so many species as there exist today diverse forms of structures.' Varieties, on the other hand, were simply 'plants of the same species modified by whatsoever occasional cause,' such as 'the climate, sun, warmth, the winds, etc.' They relate only to 'stature, color, taste, odor,' and upon the return of the plant to its original environment, they revert to type." (Glass 228).

As I have already documented, Darwin cites the *Philosophia Botanica* in his preface as the primary Linnaean reference of *Loves of the Plants*. In this later work, Linnaeus takes tentative steps to account for the "diverse forms of structures" in botanical life. Even as he begrudgingly acknowledges the incredible, observable variations within species, he still tries to explain them

away as just “occasional” traits incurred through some vaguely-defined environmental stimuli: “the climate, sun, warmth, the winds.” The implication is that the human hand has a negligible role in the proliferation of botanical varieties and that the diversity we observe in the botanical world is just a result of temporary and passive variation. Despite Darwin’s reverence for his botanical forbear, he realizes that Linnaeus’s scientific hand-waving is not much of an explanation, and he sets out to translate Linnaeus’s equivocation into a more metaphorical—and potentially more accurate—language.

Darwin was not the first to take Linnaeus to task for his unsatisfactory answer to the botanical problem of variation. Michel Adanson, a French naturalist who contributed to some significant and enduring revisions to Linnaeus’s botanical nomenclature, had similar qualms in his paper, “Examen de la question, si les espèces changent parmi les plantes; Nouvelles Expériences tentées à ce sujet” (1769). In this paper, he systematically refutes Linnaeus’s stubborn exclusion of varieties in his botanical system and puts forth a proto-evolutionary view of plant life. After experimenting with different forms of plant propagation for almost a decade, Adanson concluded that many of the varieties that Linnaeus lumped into different species designations were in fact mutant varieties. In successive generations, these mutants, which Adanson dubbed *monstres* (monsters), would begin to produce “normal” progeny, proving that they belonged to the same parent species.<sup>18</sup> Adanson expressed these results in a more colorful language: “these monstrosities and variations have a certain latitude, necessary without doubt for the equilibrium of things, after which they return into the harmonious order preestablished by the wisdom of the Creator” (quoted in Glass 231). Whereas Linnaeus refused to reconcile the “monstrosities” of the botanical world with God’s “harmonious order” in favor of a more comfortable notion of species fixity, Adanson brazenly suggested that such divine “equilibrium”

admits—and most likely even requires—variants, mutants, and even *monstres*. That provocative (and thoroughly unscientific by modern standards) word *monstres* must have caught Darwin’s ear during his botanical studies. His mansion/prison paradox recapitulates this botanical problem of variation as the grand enterprise of species classification (the mansion) threatens to shrink into a sense of inflexible normativity (the prison). Adanson’s *monstres* give Darwin a way to “have a certain latitude” without completely dismantling the “harmonious order” of species. He takes advantage of the Linnaeus-Adanson divide to expand the terms of that “certain latitude,” to explain the organization of botanical life without a slavish adherence to Enlightenment orthodoxy, and to amplify Adanson’s metaphorical *monstres* into fully fleshed-out botanical characters, teeming with vibrant life, sexual desire, and unpredictable psychologies. Adanson’s seemingly throwaway metaphor encounters the indeterminate realm of Darwin’s imaginative fiction, and—perhaps surprisingly given our modern prejudice that science works best without fanciful metaphors and pie-in-the-sky gestures toward the imagination—it actually starts to model something closer to what we would now consider the correct solution to Linnaeus’s problem of variation.<sup>19</sup>

Darwin’s treatment of the wild fig tree, for example, begins with almost indulgently poetic trappings—“Closed in an azure fig by fairy spells / Bosom’d in down, fair CAPRI-FICA dwells” (“The Botanic Garden” II.iv.429–430)—but comes with a meticulously-documented gloss about the variation, cultivation, and development of the plant. The verse itself is much more impatient. After the introductory couplet about “CAPRI-FICA,” the poem immediately turns to a rapid-fire series of four analogies: “So sleeps in silence the Curculio” (“The Botanic Garden” II.iv.431), “So the pleased Linnet, in the moss-wove nest, / Waked into life beneath its parent’s breast” (“The Botanic Garden” II.iv.435–436), “So with quick impulse through all

Nature's frame / Shoots the electric air its subtle flame" ("The Botanic Garden" II.iv.447–448), and "So turns the impatient needle to the pole, Tho' mountains rise between, and oceans roll" ("The Botanic Garden" II.iv.449–450). This descriptive chain of fig, weevil, bird, lightning, and compass (figure 2) attempts to explain caprifigation—"A process resorted to for ripening figs by means of the puncture of insects produced on the wild fig (*Caprificus*), or by puncturing them artificially"<sup>20</sup>—through imaginative analogies in the verse and the more literally descriptive essay in the footnote. In both cases, Darwin describes caprifigation as a type of beneficial inoculation, an enervating penetration that can nonetheless prove salubrious. The "Curculio," or weevil, is a parasite that feeds—with a long needle-like proboscis—on the kernels of immature nuts, preventing the tree from propagating its seed. The second analogy recasts penetrative inoculation as a type of birth while the third and fourth expand the figure toward the awful sublimity of atmospheric and geological phenomena. Caprifigation as inoculation wavers between the thematic registers of death (the curculio's parasitism on the nut tree) and birth (the linnet's piercing birth through the egg), of destruction (the lightning's noisy disturbance through "Nature's frame") and structure (the earth's fixed magnetic poles). The schizoid verse posits questions that it ultimately cannot answer by itself. Do the benefits of inoculation outweigh its risks? Is inoculation an unnatural act, an abomination, or outright blasphemy? Shall we select the curculio's parasitic proboscis or the linnet's liberating beak as the poem's representative take on the inoculating needle? The forking destruction of the lightning bolt or the invisible line of magnetic north that runs through mountain and ocean?

The eleven couplets about the wild fig are accompanied by a 486-word botanical essay that begins to answer these questions. At this point, Darwin's essay on the wild fig is worth reproducing in full:

*Capri-ficus*. l. 430. Wild fig. The fruit of the fig is not a seed-vessel, but a receptacle inclosing the flower within it. As these trees bear some male and others female flowers, immured on all sides by the fruit, the manner of their fecundation was very unintelligible, till Tournefort and Pontedera discovered, that a kind of gnat, produced in the male figs, carried the fecundating dust on its wings, (*Cynips Psenes* Syst. Nat. 919) and, penetrating the female fig, thus impregnated the flowers. For the evidence of this wonderful fact, see the word *Caprification*, in Milne's Botanical Dictionary. The figs of this country are all female, and their seeds not prolific; and, therefore, they can only be propagated by layers and suckers.

Monsieur de la Hire has shewn, in the *Memoir. de l'Academ. de Science*, that the summer figs of Paris, in Provence, Italy, and Malta, have all perfect stamina, and ripen not only their fruits, but their seed; from which seed other fig-trees are raised; but that the stamina of the autumnal figs are abortive, perhaps owing to the want of due warmth. Mr. Milne, in his Botanical Dictionary (art. *Caprification*), says, that the cultivated fig-trees have a few male flowers placed above the female within the same covering or receptacle; which, in warmer climates, perform their proper office, but in colder ones become abortive. And Linnaeus observes, that some figs have the navel of the receptacle open; which was one reason that induced him to remove this plant from the class *Clandestine Marriage* to the class *Polygamy*. *Lin. Spec. Plant.* ("The Botanic Garden" 407)

In the first paragraph, he restates the problem of variation in the context of the fig's unusual mode of fecundation: "a kind of gnat, produced in the male figs, carried the fecundating dust on its wings, and, penetrating the female fig, thus impregnated the flowers" ("The Botanic Garden" 407). The English fig tree, which has only female flowers, must then be a species variation that "can only be propagated by layers and suckers"; that is, only through human and insect caprification. The second paragraph documents different varieties created through human intervention in France, Italy, and Malta, ending with Darwin's dissatisfaction at his botanical mentor's explanation of this botanical diversity: "Linnaeus observes, that some figs have the navel of the receptacle open; which was one reason that induced him to remove this plant from the class *Clandestine Marriage* to the class *Polygamy*" ("The Botanic Garden" 407). Just as Adanson had done before, Darwin objects to Linnaeus's stubborn adherence to notions of species

fixity and offers his own “conjecture.” His concluding paragraph even borrows from Adanson’s monstrous language:

From all these circumstances I should conjecture that those female fig-flowers, which closed on all sides in the fruit or receptacle without any male ones, are *monsters*, which have been propagated for their fruit, like barberries, and grapes without seeds in them; and that the Caprification is either an ancient process of imaginary use, and blindly followed in some countries, or that it may contribute to ripen the fig by decreasing its vigour, like cutting off a circle of the bark from the branch of a pear-tree. (“The Botanic Garden” 408, emphasis mine)

Adding to his already unwieldy list of analogues, Darwin proceeds to make comparisons with barberries, seedless grapes, and pears. Each analogy brings caprification closer to the language of smallpox inoculation; the “cutting,” “prick[ing],” “punctur[ing],” and “wounding” of plants to ripen or sweeten fruit, along with the botanical etymology of the word inoculation, must be deliberate evocations of the proven medical procedure. Consequently, Darwin’s description of spinster fig flowers—“closed on all sides in the fruit or receptacle without any male ones”—as “monsters” incurs a triple meaning: (1) an uncharitable (and misogynistic) valence that invokes sensationalistic visual representations of smallpox victims as grotesque “monsters,” (2) a scientific classification derived from Adanson’s botanical mutants (*monstres*), and (3) a synthesis that reclaims “monsters” as smallpox victims inoculated against the diseases of the “normal.” Monstrosity—in both figurative and scientific senses of the word—produces sweeter fruit, stronger trees, easier propagation, and healthier bodies. The wavering verse begins to make more sense with the footnote’s diligent regulation of inoculation, that volatile medico-botanical figure that confounds and unsettles even as it preserves and enhances the fragile economy of botanical and human health.

This “economy of vegetation” is the poem’s central theme (and the title of the first volume). Animal, plant, and human interact with each other in an intricate network of what



Darwin calls “depredations” (what we would call the food chain). However, when he describes a family of poisonous plants—*Dictamnus*, *Mancinella*, *Urtica*, and *Lobelia* (figure 3)—he imagines a dangerous world apparently full of what Coleridge would call “motiveless malignity,” of venomous and nefarious plants that continuously pollute our air with toxin, gas, and disease:

Round the vex'd isles where fierce tornadoes roar,  
Or tropic breezes sooth the sultry shore;  
What time the eve her gauze pellucid spreads  
O'er the dim flowers, and veils the misty meads;  
Slow o'er the twilight sands or leafy walks,  
With gloomy dignity *DICTAMNA* stalks;  
In sulphurous eddies round the weird dame  
Plays the light gas, or kindles into flame.  
If rests the traveler his weary head,  
Grim *MANCINELLA* haunts the mossy bed,  
Brews her black hebenon, and, stealing near,  
Pours the curst venom in his tortured ear.—  
Wide o'er the mad'ning throng *URTICA* flings  
Her barbed shafts, and darts her poison'd stings.  
And fell *LOBELIA*'s suffocating breath  
Loads the dank pinion of the gale with death.  
—With fear and hate they blast the affrighted groves,  
Yet own with tender care their *kindred Loves!*— (“*The Botanic Garden*”  
II.iii.179–196)

The villainous “*DICTAMNA*” invades the mostly idyllic tropical climate of the first four lines with its “sulphurous eddies” of flammable gas, the ghostly “*MANCINELLA*” stealthily murders the unwary passerby with her Shakespearean venom, the bellicose “*URTICA*” fires her poisoned arrows upon “the mad'ning throng,” and the insidious “*LOBELIA*” resorts to merciless germ warfare. These “gloomy,” “grim,” and “fell” assassins seem to be the botanical world's unrepentant criminals, plants curiously excepted from nature's otherwise strictly regulated economy. Yet significantly, Darwin chooses to make no reference to Coleridge's Iago, preferring instead to cast *Mancinella* as Claudius, the repentant avuncular villain of *Hamlet*, and *Urtica* as

Falstaff, the genial fool of the Henry plays. Early on in *Hamlet*, the ghost of Hamlet's father narrates Claudius's plan to pour "the curst venom in his tortured ear": "Upon my secure hour thy uncle stole, / With juice of cursed hebenon in a vial" (*Hamlet* I.v.61–62), which Darwin echoes with Mancinella's "black hebenon." His subsequent reference to *Henry V* is less explicit. Falstaff's mostly beneficial influence on Prince Hal is described in botanical terms: "The strawberry grows underneath the nettle [Urtica] / And wholesome berries thrive and ripen best / Neighbour'd by fruit of baser quality" (*Henry V* I.i.62–64). With both Shakespearean references, the violent depredations of these poisonous plants move toward an uneasy symbiosis. Mancinella as Claudius recalls the redemptive potential in "the conscience of the King" (*Hamlet* II.ii.605) and Urtica as Falstaff reminds us of Prince Hal's debt to his formative debauchery. And the final couplet's portrayal of Lobelia as a fierce protector of her family succeeds in humanizing her "suffocating breath." Still, the quickness of the chiming couplet mostly obscures these quieter moments and leaves us with a lasting impression of these poisonous plants as brutal, mercenary, violent, and treacherous.

As in the case of the wild fig, Darwin relies on the explanatory footnotes to slow down the potentially misleading verse. His discussion of Dictamnus—the burning bush of the Old Testament—provides him an occasion for a lesson in the uses of essential oils as narcotics, analgesics, and restoratives. Of particular interest is his extended anecdote about turpentine, a resin from the pine tree now used mostly as an industrial solvent: "M. de Thosse" noted that "a small quantity of oil of turpentine" could destroy insect infestations and prevent future parasites from feeding on his trees, but when applied to a nectarine tree, the turpentine mixture "killed both the insect and the branches" ("The Botanic Garden" 363). The poisonous Mancinella fruit and the deadly Lobelia flower have similarly beneficial uses as emetics and perfumes. These

“vegetable secretions” (“The Botanic Garden” 363) frequently walk the fine line between debilitating poison and medical palliative, a point that Darwin attempts to make by placing *Urtica* (the nettle) in the same company as smallpox inoculation. In an analogy to inoculation procedures, Darwin pays close attention to both the quantity of poison and the method of exposure when he explains human interactions with the nettle:

*Urtica*. l. 191. Nettle. The sting has a bag at its base, and a perforation near its point, exactly like the stings of wasps and the teeth of adders. Hook, Microgr. p. 142. Is the fluid contained in this bag, and pressed through the perforation into the wound made by the point, a caustic essential oil, or a concentrated vegetable acid? The vegetable poisons, like the animal ones, produce more sudden and dangerous effects, when instilled into a wound, than when taken into the stomach; whence the families of Marfi and Psilli, in ancient Rome, sucked the poison, without injury, out of wounds made by vipers, and were supposed to be indued with supernatural powers for this purpose. By the experiments related by Beccaria, it appears, that four or five times the quantity, taken by the mouth, had about equal effects with that infused into a wound. (“The Botanic Garden” 363–364)

Just as M. de Thosse had discovered that turpentine can effectively destroy aphids without killing the tree, Darwin wishes to find unconventional and potentially dangerous ways to cure disease—through vomiting, purging, or intoxicating—without killing the patient. The wounding penetration of the stinging nettle, the wasp, and the adder can easily pass “without injury,” depending on the control of “quantity” and the circumstances of exposure. Those ostensibly “supernatural” healers of ancient Rome, for example, could orally extract poison “instilled into a wound” without succumbing to the fatal venom themselves. Here, Darwin follows through on his ambitious mission statement—“to enlist Imagination under the banner of Science”—with his Enlightenment-inspired drive to purge superstition and “supernatural powers” from science. The empirical demystification of Roman fantasy draws much of its force from the material example of smallpox inoculation, a proven example of infectious matter *safely* “instilled into a wound.”

Immunity no longer had to depend on “supernatural” explanation; instead it could rely on rational observations and quantifiable calculations.

The poem’s balancing act between verse and footnote, imagination and science, metaphor and material depends on the figure of inoculation in both its botanical and medical registers. With the case of caprifigation, Darwin confines the penetrative metaphor to the realm of plants and insects. With the poisonous plants, he begins to explore more adventurous inoculations of the *human* body. The association of *Urtica* with Falstaff, for example, introduces the idea that controlled exposure to the filth, disease, and poison of the tavern eventually leads Hal to be an effective king, immunizing his mortal body against the infection of the “fruit of baser quality.” In his notes, Darwin literalizes his reading of *Henry V* with the medical adaptation of poisons into balms: “These pungent or nauseous juices of vegetables have supplied the science of medicine with its principal materials” (“The Botanic Garden” 363). Just as Falstaff preaches excess to teach kingly moderation, poisonous plants like *Mancinella* serve as “purge, vomit, intoxicate, &c” to reestablish a healthful bodily economy. These cases demonstrate how the economy of vegetation frequently overgrows its vegetable mansions because of the incredibly unpredictable, messy, and even perverse interactions of the botanical world. Adanson’s *monstres* and Darwin’s “grafts and layers,” the hybrids and mutants of botanical science, then develop into even more tangled relationships—poisonous, salutary, parasitic, symbiotic—among plants, animals, and even human beings. Even though Darwin’s poem constantly threatens to break out of his spatial metaphor, it falls short of endorsing Burke’s catastrophic vision of botanical pollution from a “cyon alien to the nature of the original plant.” Darwin’s mansion must remain standing long enough to match Burke’s own botanical terms, but it must also not contract into the “prison” of Burke’s “body and stock of inheritance.” Since Burke analogically derives his political point

from a botanical one, Darwin's exposure of Burke's mistake about inoculation achieves its political gain by tightening the "looser analogies" of Burke's confused imagination into the "stricter ones which form the ratiocination of philosophy." This reliance on Enlightenment refutation clarifies Darwin's radical politics of containment. On the one hand, his radicalism insists on cultural contamination, cosmopolitan cross-pollination, and fluid dialogue while rejecting a stodgy Burkean society based on chivalric inheritance. On the other, he wants to prove that "alien" inoculation is not the terrible cultural pollution that Burke imagines in *Reflections*, which forces Darwin to contain all that potentially eruptive excess—monstrosity, bodily violation, and penetrative contamination—into a neat quasi-Linnaean system of botanical nomenclature to trap, collect, and organize the supposedly dangerous residues of radicalism into manageable categories and Lockean mansions. Darwin's radical politics have been notoriously hard to read because of this hedging: his famous speculations on evolution might indicate a radical belief in a kind of Godwinian perfectibility or perhaps his promiscuous plants can transform mixed botanical interactions into a Kantian history of cosmopolitanism.<sup>21</sup> The botanical metaphor provides some firmer insight into Darwin's speculative politics by emphasizing his desire for systematization and containment. His radical evolutionary theory is a system of organic progress that nonetheless requires meticulous mapping. Enlightenment "ratiocination" closely polices the cosmopolitan perversity of his medico-botanical world. In this way, Burke's botanical error stubbornly lingers as both organizing principle and limiting factor of Darwin's radical poem.

### **The Temple of Nature**

In 1803, Darwin moves out of his mansion and into a temple. His last long poem, *The Temple of Nature*, loosens his preoccupation with radical containment by expanding his subject

well beyond botanical science. Most critics agree that it is the better poem, but perhaps it is less well-known because of its thematic unevenness. The comprehensive poem attempts to catalog all forms of life in the natural world, an expansive vision that challenges, and even unsettles, his assiduously-constructed botanical economy:

So erst the Sage with scientific truth  
In Grecian temples taught the attentive youth;  
With ceaseless change, how restless atoms pass,  
From life to life, a transmigrating mass;  
How the same organs, which to day compose  
The poisonous henbane, or the fragrant rose,  
May, with to morrow's sun, new forms compile,  
Frown in the Hero, in the Beauty smile.  
Whence drew the enlighten'd Sage, the moral plan,  
[That] man should ever be the friend of man;  
Should eye with tenderness all living forms,  
His brother-emmets, and his sister-worms. ("The Temple of Nature" IV.417–428)

The corresponding footnote explains this passage's allusion to Pythagoras's theory of the transmigration of souls through which Darwin envisions a natural world teeming with interpenetrative relations and interchangeable bodies. Here, he rewrites the mansion/prison paradox of the earlier poem as a new spatial metaphor that relocates "scientific truth" to "Grecian temples," which requires an awkward juxtaposition of the ever-expanding field of scientific knowledge with the ever-contracting dogma of religious orthodoxy.<sup>22</sup> His eponymous temple, though, is far from a prison. Unlike in *The Botanic Garden* where he worked to soften restrictive binaries—"to inlist Imagination under the banner of Science"—in *The Temple of Nature*, Darwin lets go of that disciplinary defensiveness to write a poem where science and poetry, fact and faith blend together almost effortlessly. This passage, for example, replaces Darwin's defensive posture with a positive vision of natural multiplicity; hybrid forms no longer depend on the inoculating penetration of one body into another because he imagines instead an embodied unity of "all living forms" slowly evolving in a majestic, "transmigrating mass." Now,

when he speaks of poisonous plants (“henbane,” or in the earlier Shakespearean version, “hebenon”) and botanical perfumes (“the fragrant rose”), he forgoes the tentative hedging and loudly celebrates how these plants “May, with to morrow’s sun, new forms compile.” He consolidates all grafts, layers, hybrids, mutants, and *monstres* into one inclusive and evolving community of “brother-emmets” and “sister-worms.” This concluding cosmopolitan vision of radical intermixing transcends its containment into Linnaean systems, Lockean mansions, and Burkean hierarchies because he has expanded his spatial metaphor to one that more readily admits faith, speculation, and uncertainty.<sup>23</sup>

However, even though *The Temple of Nature* frees Darwin’s nascent evolutionary theory from the Enlightenment urge to catalog, classify, and contain, his treatment of smallpox retains a lingering skepticism. By the time that he finished the poem, Jenner had already published his *Inquiry* and the cowpox vaccination had already begun making its rounds among smallpox victims. In his first explicit mention of smallpox, he discusses the mechanism of immunization in a lengthy analogy to what he calls the “Approach of Age”:

On the contrary, many animal motions by perpetual repetition are performed with less energy; as those who live near a waterfall, or a smith’s forge, after a time, cease to hear them. And in those infectious diseases which are attended with fever, as the small-pox and measles, violent motions of the system are excited, which at length cease, and cannot again be produced by application of the same stimulating material; as when those are inoculated for the small-pox, who have before undergone that malady. Hence the repetition, which occasions animal actions for a time to be performed with greater energy, occasions them at length to become feeble, or to cease entirely. (“The Temple of Nature” Note VII, Section III)

Here, he rehearses the Romantic-era notion of life and human volition as a temporary irritation of dead matter. Just as the inoculated smallpox sufferer becomes immune to subsequent infection, the “perpetual repetition” of “animal motions” causes a kind of accommodative attrition which eventually leads to old age and death. He deftly eschews Jenner’s word “vaccine,” explaining

that those who have already contracted the disease do not undergo stimulating “animal motions” when “inoculated *for* the small-pox.” That “for” (a simple substitution of “with” would quickly clarify his point as a reference to variolation) strategically obscures his position on the heated contemporaneous debates about vaccine safety. In a poem ostensibly about how all organisms of the natural world exist together in a “transmigrating mass,” this evasiveness, perhaps even squeamishness, about cross-species inoculation appears quite jarring. Still, he makes explicit the teasing references to smallpox in *Loves of the Plants* and suggests a provocative proximity between the human to the “animal,” which begins to articulate a kind of radical materialism—a potentially blasphemous reduction of human life to mere animal biology—that would influence the thought of later Romantic poets. Even though his scientific notes about smallpox are significantly more cautious than his exuberant verse, they nevertheless demonstrate a willingness to suspend the Linnaean project in favor of a more speculative inquiry into animal vitality and evolutionary biology.

The second mention of smallpox more clearly expresses this speculative methodology’s explosive force. The eighth note goes on at length about human reproduction, employing, in typical Darwinian fashion, an explanatory analogy to convey his point:

There is one curious circumstance of animal life analogous in some degree to this wonderful power of reproduction; which is seen in the propagation of some contagious diseases. Thus one grain of variolous matter; inserted by inoculation, shall in about seven days stimulate the system into unnatural action; which in about seven days more produces ten thousand times the quantity of a similar material thrown out on the skin in pustules! (“The Temple of Nature” Note VIII, Section IV)

This striking connection between human reproduction and viral propagation further unsettles Darwin’s earlier classificatory project, for if human and animal lives are indeed “analogous in some degree” to the lives of “contagious diseases,” then Linnaeus’s vision of an ordered universe



sounds more and more like a pipe dream. In this passage, Darwin replaces his erstwhile evasiveness and squeamishness about such natural disorder with utter excitement. He marvels at the “unnatural action” of the smallpox virus (“variolous matter”), even punctuating his gleeful observation with an exclamation about the speedy appearance of “pustules” on the skin. This is the eruptive limit of Darwin’s willingness to indulge his speculation. In 1794, between the publications of *The Botanic Garden* and *The Temple of Nature*, Darwin soberly attempted to pin down disease into well-defined empirical categories with his long prose piece *Zoonomia*, a largely unsuccessful stab at Linnaean preservation that nonetheless resulted in the eventual turn toward his impossibly ambitious final poem. In this way, Darwin struggles with the Cullen-Brown divide in medicine, whether to participate in Cullen’s obsession with nosological classification (*Zoonomia*) or to subscribe to Brown’s more loosely-defined theory of excitability (*The Temple of Nature*). With the benefit of hindsight, we can conclude, perhaps unexpectedly, that the *Temple of Nature* and its enduring (yet highly conjectural) evolutionary insights were far more successful than the awkward (and mostly wrong) nosological precision of *Zoonomia*.<sup>24</sup> The temple affords Darwin a bit more room to explore the myriad implications of the inoculation metaphor without having to slot his ideas into Linnaean categories. The above passage’s reference to inoculation, for example, not only deviates from Burke’s fear-mongering about cultural contamination, but also from Darwin’s own handling of inoculation in *Loves of the Plants*; rather than the incredibly evasive dance around the actual object of representation (figure 2), he bluntly literalizes his botanical metaphor with “one grain of variolous matter,” “inserted by inoculation.” In this poem, Darwin decides that inoculation is neither corruptive contamination (Burke) nor a kind of forceful penetration that results in a potentially monstrous hybridity (*Loves*

*of the Plants*). Instead, it settles into a gentler metaphor of cosmopolitan unity, of new forms continuously compiling, of a transmigrating mass of natural evolution.

With such an account of Darwinian inoculation, we can better answer the question about his radical politics and how his various literary endeavors express those slippery ideological commitments. His lingering faithfulness to Enlightenment closure strives to contain the more eruptive corollaries of inoculation—contamination, violation, abomination—into a safe, Linnaean systematization. Also, since Darwin relies on a literary and scientific reaction to a long, conservative history of botanical inoculation to achieve the cosmopolitan conclusion of *The Temple of Nature*, he accumulates the Burkean terms of conservative circumspection and hierarchical deference in his political rhetoric. His desire to preserve the magisterial economy of nature, though, simultaneously tracks a decidedly radical evolution toward the concluding vision of “brother-emmets” and “sister-worms,” modeling a cosmopolitan end in which we have already shed our need for nomenclature and restrictive hierarchies. However, he purchases his abrupt, cosmopolitan vision with the strategic occlusion of revolutionary work and of the sometimes violent interpenetrations (figured as inoculations) of national interests and ideologies. Frantz Fanon, for example, accuses cosmopolitanism of such a weak ideology:

The characteristic, virtually endemic weakness of the underdeveloped countries' national consciousness is not only the consequence of the colonized subject's mutilation by the colonial regime. It can also be attributed to the apathy of the national bourgeoisie, its mediocrity, and its deeply cosmopolitan mentality. (98)

In this account, the decolonized subject falls into the trap of merely reproducing the colonizer's regime because of this weak “cosmopolitan” (here, the word is synonymous with a kind of naïve universalism) “national consciousness.” Darwin's handling of the inoculation metaphor—the dizzyingly circuitous figure of *Loves of the Plants* and the quiet yet exciting taboo of *Temple of Nature*—reflects his somewhat weak political commitment to his cosmopolitan conclusion. By

relying on Linnaean containment, idealistic universalism, and a noncommittal stance on the vaccination debate, Darwin silences eruptive moments with Enlightenment guilt, a strategy that dreams of a cosmopolitan end without first imagining the revolutionary means. In a telling letter to Jenner, for example, Darwin predicts an idyllic future of smallpox eradication armed only with speculation and hearsay:

Your discovery of preventing the dreadful havoc made among mankind by the small-pox, by introducing into the system so mild a disease as the vaccine inoculation produces, may in time eradicate the small-pox from all civilized countries, and this especially: as by the testimony of innumerable instances the vaccine disease is so favourable to young children, that in a little time it may occur that the christening and vaccination of children may always be performed on the same day. (quoted in Baron 541)

His work takes the sting out of the inoculating needle and sacrifices material precision for a more comfortable and ordered universe. His politics lean toward the radical and the cosmopolitan but fall just short of revolutionary because he has no stomach for the convulsive, lived experience of revolution, a hang-up strikingly conveyed by his tentative Linnaean treatment of botanical and medical inoculation. Yet Darwin's work succeeds in recovering the radical potential of the inoculation metaphor from its conservative origins. His failure to temper the volatile figure exposes some of the stubbornly intractable residues of revolution that escapes even the most steadfast Enlightenment empiricism.

## Notes

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<sup>1</sup> The OED's first definition of "inoculate" is "To set or insert (an 'eye', bud, or scion) in a plant for propagation; to subject (a plant) to the operation of budding; to propagate by inoculation; to bud (one plant) *into, on, or upon* (another). It gives as an example Dryden's translation of Virgil's *Georgics*: "Various are the ways to change the state of Plants, to Bud, to Graff, t' Inoculate." See "Inoculate." Def. 1. *Oxford English Dictionary Online*, Oxford University Press, n.d. Web. 28 June 2013.

<sup>2</sup> These are just a few recent approaches to Darwin's eccentric verse. Jenny Uglow has written a very thorough and entertaining account of Darwin's participation in the innovative society of "lunar men" that included Matthew Boulton, James Watt, Josiah Wedgwood, among others (3–14). Alan Bewell teaches us about his cosmopolitan

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conception of nature (“Cosmopolitan Nature” 19–48). Devin Griffiths takes apart his analogical rhetoric (645–665). And Julia List intervenes in the discussion of female sexuality in Darwin’s botanical world (199–218).

<sup>3</sup> For more a more detailed biographical account of Linnaeus, see Wilfrid Blunt’s account of the man’s genius in *Linnaeus: The Compleat Naturalist*. In a 2002 reprinting of this magisterial 1971 biography, William Stearn sums up, by way of introduction, Linnaeus’s contribution to the systematization of biology: “These two remarkable works, the *Systema Plantarum* (1753) and *Systema Naturae* (10<sup>th</sup> edition, 1758), which gave binomial names to all the organisms then known, fully justify Linnaeus being regarded by the Swedes as a great national hero” (8).

<sup>4</sup> For the collection as a “covert attempt to mourn the death of Charles I,” see Clarke (113). For more about the poem’s connection to royalist causes, see Loxley (196–201).

<sup>5</sup> It is important to note here that Dryden had access to the inoculating metaphor even before smallpox had been connected to inoculation. As I will continue to argue throughout, this is no mere coincidence but a material connection between literature and medicine and a striking example of a literary precedent to a medical cure.

<sup>6</sup> For more about the poem’s conservative bid for patronage and the politicization of vaccination in the early nineteenth century, see Fulford and Lee (139–165) and Shuttleton (182–205).

<sup>7</sup> See Bewell (“Cosmopolitan Nature” 19–48) and Sha (16–50).

<sup>8</sup> See Jon Mee’s robust theorization of conversation as both polite exchange and Samuel Johnson’s model of “talking for victory” (quoted in 84) in his *Conversable Worlds* (2011).

<sup>9</sup> Sontag polemically describes “metaphoric thinking” as “punitive or sentimental fantasies concocted about that situation [of illness]” (3).

<sup>10</sup> In a famous letter, Montagu writes “A propos of distempers I am going to tell you a thing that I am sure will make you wish yourself here. The smallpox, so fatal and so general amongst us, is here entirely harmless, by the invention of grafting, which is the term they give it” (*Turkish Embassy Letters* 81).

<sup>11</sup> Davis complains that Esther’s “scars are made virtually to disappear through the agency of love” (41). Her disease, though, may not even be smallpox. For a convincing diagnosis of Esther’s erysipelas, see West (30–34).

<sup>12</sup> The smallpox vaccine’s conception, implementation, and popularization relied heavily upon what Sontag calls “metaphoric thinking.” Jenner’s inquiry, for example, employs literary analogy as its primary mode of investigation, conjecturing elaborate correspondences among horses, cows, and humans. Afterwards, the campaign for vaccination’s legitimacy remained largely a literary battle with Bloomfield’s poem *Good Tidings* leading the metaphorical charge. The World Health Organization finally declared smallpox eradicated in 1980. In 2011, the United Nations also declared the global eradication of Rinderpest (cattle plague), the only other infectious disease to share the fate of smallpox.

<sup>13</sup> References to the prose sections will be cited parenthetically by the image number of the facsimile copy from *Eighteenth Century Collections Online*. References to the verse will be cited by volume, canto, and line number. Volume I refers to *The Economy of Vegetation* and Volume II refers to *The Loves of the Plants*.

<sup>14</sup> In the April 16, 1798 issue, the editor includes this didactic poem by the fictitious Mr. Higgins. In a direct parody of Darwin’s language, Higgins claims to “enlist the IMAGINATION under the banners of GEOMETRY” (“The Loves of the Triangles” 111).

<sup>15</sup> Despite being rather harsh about Darwin’s ornate style, Coleridge admitted that Darwin was “the first *literary* character in Europe, and the most original-minded man.” For the full discussion, see his letter in Coleridge (216, 305).

<sup>16</sup> See Stuart Harris’s short treatment on form in which he claims Darwin’s epic poems are first and foremost Enlightenment “philosophical discourses” (1). In describing Darwin’s excitement about Enlightenment progress, Donald M. Hassler argues that the poet insisted that “the only human thing to do is to give up the old illusions about an anthropocentric universe” (91). And Jenny Uglow associates Darwin closely with the principles of the Scottish Enlightenment (26–34).

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<sup>17</sup> Locke's phrase appears several times in his *Essay Concerning Human Understanding* (1690). Each time, the phrase stands in for a kind of classificatory containment. For example, he uses "our mansion" to refer to a divinely ordained ontology, carefully regulated sensation, and a perfectly ordered cosmos. For these instances see Locke (45,87, 120, 302, 555, 665).

<sup>18</sup> For the purposes of this botanical argument, two plants belong to the same species if and only if they are able to produce non-sterile progeny.

<sup>19</sup> That correct solution would use Mendel's law of segregation to explain the probabilistic phenotypical expression of a plant's genotype. It would also depend on an explanation of genetic mutation as a mechanism of evolutionary development.

<sup>20</sup> See "Caprification." Def. 1. *Oxford English Dictionary Online*, Oxford University Press, n.d. Web. 13 July 2013.

<sup>21</sup> For a few representative radical and Revolutionary readings of Darwin's poem, see Teute (319–345), Kelley (193–203), and Bewell ("Cosmopolitan Nature" 19–48). For a more politically skeptical perspective, see List (199–218). Overall, the history of Darwin scholarship has proven that his politics remain difficult to pin down.

<sup>22</sup> Even though Darwin's temple represents a somewhat awkward juncture of science and religion, the Romantic divide between empirical knowledge and religious faith should not be overstated. It was not until the publication of Charles Darwin's *On the Origin of Species* (1859) and Thomas Henry Huxley's famous advocacy of evolution did these divisions crystallize into near incompatibilities.

<sup>23</sup> For a clearer picture of Darwin's relationship to the discourse of cosmopolitanism, see Bewell ("Cosmopolitan Nature" 19–48). I defer a precise account of cosmopolitanism until my fourth chapter on Mary Shelley. For the purposes of this chapter, I use the word to mean merely a striving for identity in difference.

<sup>24</sup> For an extremely thorough account of Darwin's work in *Zoonomia*, see King-Hele (*Doctor of Revolution* 234–263).

## Chapter 2—Trial By Caprification: William Blake and the Science of Violence

### Darwin and Blake

After the publication of the wildly successful *Loves of the Plants* in 1789, Darwin impatiently sought a suitable engraver for *The Economy of Vegetation* (which became the first volume of *The Botanic Garden* even though it was written later in 1791). Part of that project was a long and idiosyncratic digression about the Portland Vase, a notoriously indecipherable Roman artifact from the first century.<sup>1</sup> In a letter from the radical publisher Joseph Johnson, Darwin learned of some prickly copyright issues: “It is not the expense of *purchasing* Bartolozzi’s plates that is any object; they *cannot be copied* without Hamilton’s consent, being protected by act of parliament.” After Sir William Hamilton purchased the vase in 1778, he commissioned the artist G.B. Cipriani to draw it for the engraver Francesco Bartolozzi. Since Hamilton ran into some financial troubles with the vase, obtaining consent would undoubtedly have proven a costly enterprise. Instead, Johnson proposed another solution: “Blake is certainly capable of making an exact copy of the vase, I believe more so than Mr. B[artolozzi], if the vase were lent him for that purpose” (*Letters* 386). Since Blake had already begun work on some engravings for *The Economy of Vegetation* with his colleague Henry Fuseli, Johnson thought him an appropriate (and relatively cheap) choice to work on the engraving of the Portland Vase. This is the much-recounted story of how Blake came into contact with Darwin’s body of work and of how Blake gained his peculiar employment as a copier (engraver) of a copy (painting) of a copy (Wedgwood replica of the Portland Vase).

His task, to create “an exact copy of the vase,” recalls those moments of Enlightenment precision in Darwin’s poem. Blake’s relationship to Enlightenment thought, though, is significantly more hostile than Darwin’s. Canonical Enlightenment figures such as Francis

Bacon, John Locke, and Isaac Newton are frequent targets in Blake's critiques of hegemonic systems. And in one of his most famous statements on the subject, this anti-Enlightenment rancor erupts into an angry analogy: "SCIENCE is the tree of DEATH / ART is the tree of LIFE" ("Laocoön" 403). So, it is not surprising that Blake scholars are eager to locate a falling out between Blake, prophet against the relentless industrialization of science, and Darwin, proselytizer of scientific progress and invention.<sup>2</sup> The fire at the Albion Flour Mill in 1791 could provide that concrete instance where the fracture between Blakean protest and Darwinian scientism becomes visible. The factory's ruthlessly efficient machinery was designed by Darwin's fellow Lunar Society members Matthew Boulton and James Watt.<sup>3</sup> Whereas Darwin lamented the destruction of the latest industrial marvel, Blake celebrated the damage done to the Industrial Revolution's "dark Satanic Mills" ("Milton" 295). In *Jerusalem* (1804-1820), he invokes the incident at the Albion Mill with almost the same language as in his Laocoön annotation:

Then left the Sons of Urizen the plow & harrow, the loom  
 The hammer & the chisel, & the rule & compasses; from London fleeing  
 They forgd the sword on Cheviot, the chariot of war & the battle-ax,  
 The trumpet fitted to mortal battle, & the flute of summer in Annandale  
*And all the Arts of Life they changd into the Arts of Death in Albion* ("Jerusalem"  
 362, emphasis mine)

In both the Laocoön image and in *Jerusalem*, life and death correspond respectively to art and science, suggesting a straightforward opposition between Blake's utopian poetics and Darwin's Enlightenment propaganda. The *Jerusalem* passage, however, is more nuanced than this ideological polarity. The instruments of science, industry, progress, and the factory—the plow, the loom, the hammer, the chisel, the rule, the compass—are not intrinsically associated with "death"; instead of the easy equation between science and death in the Laocoön image, Blake insists that these instruments "*changd* into the Arts of Death." In this case, just as the trumpet

and the flute cannot be held accountable for Scottish warmongering in Annandale, Boulton and Watt's inventions need not represent the unequivocal evils of industrial society but merely the *potential* for corruption.

Given this crucial Blakean nuance and the fact that there still exists no explicit evidence of Blake's disenchantment with Darwin or vice versa, some skepticism is in order. Matthew Green has gone even further to suggest an affinity between Blake and the Midlands Enlightenment, which further problematizes any readings that immediately axiomatize the Blake-Darwin split:

This approach, which risks reducing comparative reading to the search for Darwinian imagery in a Blakean corpus that is fundamentally hostile to Darwin and to the Midlands Enlightenment more generally, depends upon the representation of Darwin as the purveyor of a dehumanising and totalising scientific logic and of Blake as a straightforward opponent of empiricism and technological progress. In opposition to such representations, however, it is possible to identify in both Blake and Darwin a valorisation of intellectual heterogeneity that welcomes strife and dissension as indispensable to both the increase of knowledge and the progress of democracy. (205)

Part of this chapter's argument about Blake handles this unresolved debate about the Blake-Darwin relationship by clarifying it through a discussion of Blake's metaphorical uses of medical and botanical inoculation. Whereas Darwin abruptly imagines, as I have already argued, a cosmopolitan *end* through a quiet tabling of the vaccination controversy, Blake dwells on the medico-botanical metaphor to represent the chaotic *means* of revolutionary possibilities. Both use the metaphor of inoculation to deal with messy issues of "intellectual heterogeneity" and of "strife and dissension," but Darwin's instinct is to contain them into tractable categories while Blake allows the figure to proliferate freely across classificatory boundaries. Neither is Darwin "dehumanizing and totalizing" nor is Blake a "straightforward opponent" of Enlightenment science; instead, they both capitalize on a scientific metaphor (inoculation) to model their unique



engagements with radical politics. While Darwin's trajectory from botanical grafting, to metaphorical inoculations, and finally to his cosmopolitan, "transmigrating mass" of biological life in *Temple of Nature* largely excludes the middle terms of inoculation and revolution, Blake employs moments of strange botanical hybridization and human-animal monstrosities to emphasize the various penetrations and violations of his mythico-political histories. I track this alternative trajectory of inoculation, from botanical grafting to animal hybridization, to (1) show Blake's sustained engagement with the medical controversies of variolation and vaccination, (2) to better explain the literary, philosophical, and scientific relationship between Blake and Darwin, and (3) to demonstrate what a more explicit language of inoculation does to radical politics. The figure of inoculation is a commonplace in both Darwin and Blake's radicalism, but whereas the former handles it tentatively to jump to his cosmopolitan end, the latter dwells on the figure in all its botanical richness, its animal amplification, and its violently penetrative implications to model a revolutionary politics that begins to take into account the necessary convulsions of radical reform.

Blake's associations with two physicians—Darwin and John Birch—ensured that he was well-informed about both botanical and medical matters. William and Catherine Blake were acquainted with Birch as early as 1801 (*Letters* 65). The most widely-discussed contact between the Blakes and their physician—Birch's miraculous electrical cure of Catherine's chronic rheumatism—would have to wait until October 23, 1804 when Blake, in a letter to William Hayley, rejoices at his wife's convalescence: "Electricity is the wonderful cause; the swelling of her legs and knees is entirely reduced" (*Letters* 136). This well-documented story about Birch's "Electrical Magic" (*Letters* 140) has already begun to inform some promising readings of Blake's poems and shed light on his relationship to Romantic medicine (Sha 216–217; Schott

2114–2116). However, what remains untouched is Birch’s medical pamphlet *Serious Reasons for Uniformly Objecting to the Practice of Vaccination* which he wrote in the same month (October of 1804, published in 1806) that Blake wrote of Catherine’s recovery from her rheumatic pain. In this modest, but forcefully-argued, seventy-four page condemnation of the practice of vaccination, Birch adamantly refuses to “give up *Experience for Experiment*” and concludes quite definitively “THAT WHAT HAS BEEN CALLED THE COW POX IS NOT A PRESERVATIVE AGAINST THE NATURAL SMALL POX” (“Vaccination” 73–74). In this particularly hypocritical moment, he wags his finger at faddish pneumatic (nitrous oxide) cures of venereal diseases to prove his point about the ridiculousness of vaccination without even mentioning his own endorsement (just a few years before) of equally faddish electroshock therapies to remove “Female Obstructions” (“Considerations” ii), his uniquely awkward term for irregular menstrual cycles.<sup>4</sup> Blake’s excitement about Catherine’s “wonderful” electrical therapy and his personal association with John Birch show that he kept quite informed about the latest developments in medicine, which must have included the highly controversial transition from variolation to vaccination in the early nineteenth century. Birch’s inconsistent turn from experimental medicine would prove to be a disappointment to Blake’s increasing interest in radical science. Despite his early endorsement of Birch’s “Electrical Magic,” Blake’s work suggests that he resisted Birch’s trajectory from transgressive “Experiment” to conservative “Experience,” from radical medical trials to a slavish adherence to rational precedents and scientific method. In this way, I argue that Blake emerges as an unexpected advocate of both variolation and vaccination. His work diverges from both his medical mentors, Darwin and Birch, in its consistent refusal to equivocate about or disavow the pressing issue of vaccination. Neither Darwin’s Enlightenment strategy of containment nor Birch’s sudden medical apostasy

can fully capture Blake's botanical, medical, and literary deployments of the inoculation metaphor to articulate his political and philosophical views.

### **Blakean Botany and Miltonic Trial**

In one of the iconic botanical images of Darwin's *Loves of the Plants* (figure 4), each of Linnaeus's twenty-four categories of flowers is illustrated with detailed examples, neatly cordoned off from each other with rectilinear frames and displayed with the scientific precision of perfect containment. One can imagine how Blake's aesthetic motto—"Art can never exist without Naked Beauty displayed / No Secresy in Art" ("Laocoön" 403)—encountered this claustrophobic image: as the uncompromising artist of "Naked Beauty" prepared his work on *The Economy of Vegetation*, the "Secresy" of Darwin's Linnaean art must have made a stifling impression. Blake's word "Secresy" derives etymologically from the Latin *sēcernēre*, meaning to separate or divide off, so his proclamation of "No Secresy in Art" surely renders these visual separations and divisions of Darwin's poem utterly unthinkable in Blake's own botanical work.<sup>5</sup> The poems that I consider in this chapter—*The Book of Thel* (1789), *Visions of the Daughters of Albion* (1793), and "The Sick Rose" (1794)—typify this reaction to botany's coercive visual culture. In the botanical images of these three poems (figure 5), the flowers have broken out of their frames, forming sprawling, organic borders of tendrils, leaves, and thorns. Strange human images emerge from the flowers in seemingly random proportions. There is indeed "No Secresy" in this "Art"; instead, through the dynamically interpenetrative textual and visual botanical representations of these three poems, Blake begins to shape a protean political allegory that radically rewrites a moral tale of virtuous chastity—Milton's *Comus* (1634)—into a long, narrative sequence that depends on the proliferating, sexualized image of botanical (and later medical) inoculation.

That *Thel* references and even rewrites Milton's early masque is already a well-established critical commonplace. S. Foster Damon has even presented this influential interpretation as unerring fact in his *Blake Dictionary*: "*The Book of Thel* is best understood as a rewriting of Milton's *Comus*...Blake tells the same story, but in biological terms, not moral ones" (52). Many have followed up on this thread, but these critics tend to underestimate the extent of Blake's radical rethinking of *Comus*.<sup>6</sup> In 1801, under the commission of Reverend Joseph Thomas, Blake began work on a set of eight illustrations from Milton's play. Fourteen years later, under the patronage of his friend Thomas Butts, Blake revised those same eight scenes with significant visual and thematic variations. In this misleadingly punctuated history, Blake references *Comus* only three times in twenty-six years (the publication of *Thel* in 1789, his *Comus* illustrations in 1801, and the revised illustrations in 1815), an unusually discontinuous history for an artist who consistently regarded Milton as his visionary muse. Already responsible for one of the most famous (mis)readings of Milton—his adulatory proclamation that the poet of *Paradise Lost* (1667) was "of the Devils party without knowing it" ("Marriage" Plate 6)—Blake also continuously thought about similarly misshaping *Comus* and *Areopagitica* into his ideological mold.<sup>7</sup> *Thel*'s (and later Oothoon's and the sick Rose's) insistence on purity depends not only upon Milton's Puritanical discourse of chastity, virginity, and virtue, but also on the temperamental botanical figure of inoculation. With this embedded discourse in Blake's revisionist arsenal, he grounds Miltonic typology with a material example instead of obediently relying on Providence or Right Reason. More specifically, Blake brazenly reinvents the Lady's constantly assailed virtue as a type of beneficial inoculation. Milton himself recapitulates this theme of virtuous trial throughout his career: (1) in *Comus*, the Lady's elder brother insists, "this I hold firm; / Virtue may be assail'd but never hurt, / Surpris'd by unjust force but not enthrall'd"

(“Comus” 103), (2) in *Areopagitica*, Milton’s prose defense of free speech, he argues, “I cannot praise a fugitive and cloistered virtue, unexercised and unbreathed, that never sallies out and sees her adversary, but slinks out of the race where that immortal garland is to be run for, not without dust and heat” (“Areopagitica” 728), and (3) in *Paradise Lost*, Eve uses a similar argument to convince Adam to divide their Edenic labors: “And what is Faith, Love, Virtue unassay’d / Alone, without exterior help sustain’d?” (“Paradise Lost” 386). Virtue unexercised, unbreathed, and unassayed is anathema to both Milton and Blake, but whereas the former holds to an unyielding faith in the organizing power of Godly rectitude, the latter argues from the medico-botanical example of immunity to tell a much more subversive and volatile story.

The character of Thel has been read as a virgin of mindless, retreating purity—of Milton’s “fugitive and cloistered virtue”—who finally refuses the poem’s Darwinian aphorism, “Everything that lives / Lives not alone, nor for itself” (“Thel” Plate 3; 26–27).<sup>8</sup> At the end of the poem, the persistent and inquisitive youngest daughter of Mne Seraphim ultimately rejects the world of horrible experience and returns to her angelic family of divine innocence: “The Virgin started from her seat, & with a shriek / Fled back unhinderd till she came into the vales of Har” (“Thel” Plate 6; 19–20). The ambiguity of these last two lines—Thel’s fearful “shriek” could just as well be a “shriek” of judicious defiance—leaves the world of experience outside the vales of Har; its dark influence, while menacingly visible across the “eternal gates” (“Thel” Plate 6; 1), need not irrevocably contaminate Thel’s divine virtue (Mellor, *Blake’s Human Form Divine* 20–39). In this case, Thel is far from a victim of Milton’s cautionary tale about “cloistered virtue”; she has braved the considerable trial of “dust and heat,” and, like the virtuous Lady of *Comus*, returns to her family stronger and wiser. The Darwinian title plate (figure 5, left) illustrates this endorsement of Thel’s return to her life in the perfect “economy of vegetation” through an

exuberant visualization of botanical life. The brittle arch of the weeping willow, gently constricted by coiling tendrils, suggests both beginning and end in its simultaneous evocation of frontispiece and gravestone. From the blossoms of the pasque flower (*Anemone pulsatilla*), emerge two joyous human figures, alluding to Darwin's observation about the same flower in *Loves of the Plants*: "There is a wonderful conformity between the vegetation of some plants, and the arrival of certain birds of passage. Linnaeus observes, that the wood anemone [the pasque flower] blows in Sweden on the arrival of the swallow; and the marsh mary-gold, *Caltha*, when the cuckoo sings" ("The Botanic Garden" 316–317). The entwined willow, the blooming pasque flowers, the erupting human figures, and the circling swallows that populate the plate all exist in this "wonderful conformity," which is ultimately the divine reward of Thel's virtuous choice. An unopened flower bud even leans seductively toward her to invite her to participate in this magnificent spectacle of idyllic nature, completing the robust Darwinian personification of Thel's botanical world.

This early poem introduces the "worm of the silent valley" ("Thel" Plate 3; 29), a central figure in Blake's extended visual-poetic meditation on the inoculation metaphor that reappears in crucial moments of both *Visions of the Daughters of Albion* and "The Sick Rose."<sup>9</sup> Still apprehensive of her fading life, Thel complains to the Cloud that she will "only live to be at death the food of worms" ("Thel" Plate 3; 23). Thel's subsequent encounter with the infant worm quickly corrects her mistaken, morbid image of the ostensibly nefarious parasite:

Then Thel astonish'd view'd the Worm upon its dewy bed:  
"Art thou a Worm? image of weakness, art thou but a Worm?  
I see thee like an infant wrapped in the Lilly's leaf.  
Ah weep not, little voice, thou canst not speak, but thou can weep.  
Is this a worm? I see thee lay helpless & naked, weeping,  
And none to answer, none to cherish thee with mother's smiles." ("Thel" Plate 4;  
1–6)

Like the paradoxical title page, the worm evokes both beginning and end in its “helpless” infancy and its morbid predation on decaying flesh. In *Thel*’s persistently interrogative mode, she asks in her disbelieving prejudice, “Is this a worm?,” to which the motherly Clod of Clay responds with a gentle version of Darwin’s cosmopolitan vision: that even the “meanest thing” (“*Thel*” Plate 4; 11)—Blake’s Worm and Clod of Clay or Darwin’s “brother-emmets” and “sister-worms”—participates in nature’s complex cycle of life and death. In this sense, the worm signifies the precise materialization of Milton’s morality tale; it provides *Thel* a glimpse of death, decay, and corruption without compromising her innocent virtue. It is the perfect potion of life and death, of fortified virtue and heroic trial.

### **Violence and Forgiveness**

What changes, though, when “experience” leaves the comfortable realm of mediated metaphor and arrives at an embodied site of literal assault? The viscerally embodied violence of *Visions of the Daughters of Albion*, for example, weighs blanket forgiveness against the visual sublimity of physical violation (figure 6). When Blake claims, “The lamb misused breeds public strife / And yet forgives the butcher’s knife” (“*Auguries*” object 14), does he intend to forgive all violence unconditionally? This couplet from “*Auguries of Innocence*” (1803) reveals an “attractive, popular Blake” who mixes “unsparing social insight” with the promise of “hope and healing” through a transformative imagination that resolves Heaven-raging and Hell-shuddering paradoxes with aphoristic consolation (Eaves, Essick, and Viscomi).<sup>10</sup> But is this sacral forgiveness also an implicit forgetting? Here, Blake tackles the problem of violence not with the ringing aphorisms of “*Auguries*” or the unsullied virtue of *Thel*, but with the fleshly immediacy of human bodies. Oothoon, the poem’s protagonist and ardent advocate of free love, relies on a Darwin’s botanical metaphor to make her sexual point: “Sweetest the fruit that the worm feeds

on” (“Visions” Plate 6; 17). She argues against her lover Theotormon that her rape by his rival Bromion does not necessarily mark her with base impurity or fallen desire; rather, she argues that the experience of the sexual act actually makes her more desirable. Notably, Blake arrives at similar images at least two other times. In his earlier illuminated work in *The Marriage of Heaven and Hell*, he likens the priest’s curse on “fairest joys” to “the catterpillar choos[ing] the fairest leaves to lay her eggs on” (“Marriage” Plate 9; 16), and in the design of “The Sick Rose” (1794), a parasitic vermicular form attaches itself to one of the largest leaves of the eponymous rose (figure 7). In other words, the “catterpillar” identifies the fairest leaf to feed on, the worm the sweetest fruit. This straightforward interpretation has informed most readings of Oothoon: just as the parasite’s voracious interest attests to the botanical value of the host, so too does Bromion’s rape of Oothoon confirm her sexual desirability.<sup>11</sup>

The material contexts of Oothoon’s argument, however, distinguish it from both the parasitic images of *Marriage* and “The Sick Rose” and the hopeful paradoxes of “Auguries.” As several studies of Blake have shown, Blake’s intuitive grasp of Romantic-era science shaped his poetic production, so his nod to botanical science deserves greater attention.<sup>12</sup> When Mark Lussier speaks of Blake and science, he sees double: a poet who famously thundered against Newtonian mechanics and Lockean epistemology but also an amateur scientist who eagerly anticipated the advent of quantum physics.<sup>13</sup> Oothoon’s argument concerning violence and forgiveness depends on our understanding of this second Blake who can appropriate, for example, the language of Newtonian calculus— “limit” and “fluxions”—to his own visionary ends. With these scientific contexts in mind, Oothoon’s argument becomes quite different. Whereas the “catterpillar” actively consumes both the “fairest leaves” and the largest leaf of the sick rose, Oothoon deftly flips the image’s negativity in her grammatical inversion of subject and



predicate, imbuing the sweetest fruit with the provocative agency of a grammatical subject while relegating the feeding worm to a dependent clause: “Sweetest the fruit that the worm feeds on.” The deliberately awkward syntax makes possible a reading that does not immediately take the worm as mere parasite. Blake avoids the much more fluidly idiomatic construction, “The worm feeds on the sweetest fruit.” In this conventional rewriting, the meaning is clear enough: the worm identifies the “sweetest fruit” and *then* begins to feed. Oothoon’s stranger formulation suggests a more ambiguous temporality. In my reading of *Visions*, I press on this crucial ambiguity to differentiate Oothoon’s botanical argument from those of *Marriage* and “The Sick Rose.” By uncovering the poem’s literary, botanical, and medical contexts, I argue that the metaphor has less to do with the discerning taste of a foul parasite than with a kind of symbiotic causality. Specifically, Blake’s metaphor invokes the botanical process of caprifigation, the fig tree’s strange method of propagation that relies on the fig wasp’s symbiotic predation. In this material reading, the worm’s predation *engenders* the sweetness of the fruit in a kind of beneficial, botanical violation, making Oothoon’s advocacy of free love infinitely more troubling. Through this invocation of botanical science, Blake struggles to imagine the exact form of forgiveness, its material conditions, its scientific plausibility, and its moral implications. I offer three preconditions for Blake’s argument—Milton’s *Comus*, Darwin’s *The Loves of the Plants*, and Lady Mary Wortley Montagu’s *Turkish Embassy Letters* (first published posthumously in 1763)—not to apologize via contextualization for a violent and potentially misogynistic argument, but to begin to recover the medico-botanical, material texture of a frequently nebulous Blakean poetics and to understand better the underestimated scope of Blake’s radical and controversial reconfigurations of biological, sexual desire.

*Visions* begins where *Thel* ends. It even follows the exact sequence of Darwin's analogy about the "wonderful conformity" of nature: just as *Thel* borrowed Darwin's observation about the concurrence of the blooming pasque flower and the "arrival of the swallow," *Visions* links the "marsh mary-gold, *Caltha*" with the singing cuckoo (figure 5, center). But whereas *Thel* merely observes the pasque flowers from a distance, Oothoon, the female protagonist of *Visions*, happily submits to the urging of the marigold/nymph in an intimate encounter:

For the soft soul of America, Oothoon wanderd in woe,  
Along the vales of Leutha seeking flowers to comfort her;  
And thus she spoke to the bright Marygold of Leutha's vale

Art thou a flower! art thou a nymph! I see thee now a flower;  
Now a nymph! I dare not pluck thee from thy dewy bed!

The Golden nymph replied; pluck thou my flower Oothoon the mild  
Another flower shall spring, because the soul of sweet delight  
Can never pass away. she ceas'd & closd her golden shrine.

Then Oothoon pluck'd the flower saying, I pluck thee from thy bed  
Sweet flower. and put thee here to glow between my breasts  
And thus I turn my face to where my whole soul seeks. ("Visions" Plate 4; 3–10)

If not for the replacement of the vales of Har with the vales of Leutha and the substitution of Oothoon's exclamation ("Art thou a flower!") for *Thel*'s characteristic interrogative, these lines would hardly be out of place in the earlier poem. Like *Thel*, Oothoon lives happily in a world of constant regeneration—"the soul of sweet delight / Can never pass away"—and the perfectly symmetrical cycles of life and death. The clothed *Thel* from the title plate who eagerly awaits the opening of the pasque flower bud becomes the nude Oothoon who, in the argument plate, hastens her lips toward the desirous nymph while clutching the "Sweet flower" to her chest in a mildly sexual scene of botanical copulation. The "worm of the silent valley" reappears as Darwin's agent of caprifigation in Oothoon's paradoxical argument about sexual experience: "sweetest the fruit that the worm feeds on" ("Visions" Plate 6; 17). Here, she exports the innocent image of the

worm in *Thel* to the cruel world of experience in a forceful attempt to regenerate the decaying lives of repressed desire and enforced modesty. Blake offers this charged image of inoculation (via caprification) as his solution to the problems of experience. Through this medico-botanical analogy, he argues that virginal rape frees women from the bitterly repressive strictures of female modesty and introduces them to the “sweetest,” liberated experience, unshackled from both Bromion’s (her rapist) unitary law and Theotormon’s (her rejecting lover) Enlightenment epistemology. Repressed heterosexual desire becomes the epidemic disease of this poem, and Blake’s unlikely cure is Oothoon’s botanical version of Lady Mary Wortley Montagu’s famous Turkish inoculation, which the increasingly sickly Theotormon nevertheless rejects.

This organizing image of caprification as beneficial rape emerges in Oothoon’s paradoxical discourse of purity:

I call with holy voice! kings of the sounding air,  
Rend away this defiled bosom that I may reflect  
The image of Theotormon on my *pure* transparent breast.

The Eagles at her call descend & rend their bleeding prey;  
Theotormon severely smiles. her soul reflects the smile;  
As the *clear* spring mudded with feet of beasts grows *pure* & smiles. (“Visions”  
Plate 5; 14–19, emphasis mine)

Despite the misrecognition of this strange purity from both her lover Theotormon and her defiler Bromion, she persists in the inoculating language of Milton’s tried virtue: her “defiled bosom” becomes the “pure transparent breast” and the “clear spring mudded with feet of beasts grows pure.” Through this Promethean scene of purifying sacrifice, Oothoon brings the illuminating fire of violation to those who cower in the darkness of their secret desire. Her “transparent breast” and “clear spring” reflect not only the “image of Theotormon,” but also the aggressive, “mudded” image of Bromion’s violation. Oothoon successfully distills Theotormon’s sadistic smile into the “clear spring” of her purified reflection. Thus, from the very beginning of her

plaintive testimony, Oothoon's argument hinges upon the paradoxical logic of inoculation: the purification of Theotormon's sickly severity through the terrifying contamination of Oothoon's bloody violation.

Taking a Darwinian tack, Oothoon attempts to soften this paradox by sorting through some "looser analogies" about animal instinct—the chicken's fear of the hawk, the bee's hive mind, the meekness of the camel—to naturalize her twisted logic until she arrives at the "stricter [analogies] which form the ratiocination of philosophy": her reference to caprification. The worm of *Thel* returns in this poem with "the secrets of the grave" ("Visions" Plate 6; 10) and the pivotal analogy of Oothoon's counterintuitive "philosophy":

Silent I hover all the night, and all day could be silent,  
If Theotormon once would turn his loved eyes upon me;  
How can I be defild when I reflect thy image pure?  
*Sweetest the fruit that the worm feeds on & the soul preyed on by woe*  
The new wash'd lamb ting'd with the village smoke & the bright swan  
By the red earth of our immortal river: I bathe my wings,  
And I am white and pure to hover round Theotormons breast. ("Visions" Plate 6;  
14–20, emphasis mine)

Armed with material evidence borrowed from Darwin's literary and botanical investigations, Oothoon reinvigorates her argument about her "image pure." Just as the worm-caprified fruit, the smoke-tinged lamb, and the clay-stained swan emerge sweeter, whiter, and purer, so too does Oothoon's sexual contamination and violation better prepare her for "happy copulation" ("Visions" Plate 10; 1) with Theotormon. Purely metaphorical readings of this passage miscalculate this chain of causation: "The worm's assault *confirms* the sweetness of the fruit; the tinge of smoke *dramatizes* the whiteness of the lamb; and... Oothoon's degrading experience of sex *asserts* the holiness of her love" (Cox 113, emphasis mine). Caprification, however, transports Oothoon's argument to the botanical realm of natural law; consequently, the image of the worm is not merely Cox's "looser" correlation—confirmation, dramatization, assertion—but

rather “stricter” *causation*: the fruit’s sweetness is not merely an independent property confirmed by the worm’s interest but a necessary *product* of the process of caprification. These material precedents of Oothoon’s rape insist on a return to this natural causality, to an instinctive love now blunted by the social construction of polite society. Thus, “the thoughts of man, that have been hid of old” (“Visions” Plate 6; 13) must eventually reemerge from their ancient hiding places to re-contextualize Bromion’s rape in the mitigating terms of caprification, of a fortifying botanical inoculation that erases from the sexually-victimized body any potential of corruption from “hypocrite modesty” (“Visions” Plate 9; 16) or strained decorum. Oothoon thus successfully appends botanical evidence to the theme of virtuous trial, transforming the Miltonic, literary appeal of *Thel* into Oothoon’s Darwinian, scientific analysis.

Darwin’s description of the wild fig tree and its unusual method of propagation entered Blake’s metaphorical repertoire through their brief but formative collaboration on *The Botanic Garden*. In an explanatory note to the fig tree, Darwin speculates:

Plumbs and pears punctured by some insect ripen sooner, and the part round the puncture is sweeter. Is not the honey-dew produced by the puncture of insects? Will not wounding the branch of a pear-tree, which is too vigorous, prevent the blossoms from falling off; as from some fig-trees the fruit is said to fall off unless they are wounded by caprification? (“The Botanic Garden” 408)

Darwin takes several stabs at an explanation for caprification: “A process resorted to for ripening figs by means of the puncture of insects produced on the wild fig (*Caprificus*), or by puncturing them artificially” (OED). The fig and the fig wasp participate in a unique symbiotic relationship in which the wasp pollinates the edible fig while the inedible caprifig provides the wasps convenient receptacles for their eggs.<sup>14</sup> Darwin, however, prefers to indulge in circuitous analogy rather than straightforward botanical explication. Recall that he imagines caprification as a type of beneficial inoculation (a botanical word for plant grafting long before it was a medical term

for the now generalized practice of vaccination) that punctures and wounds to produce the sweetness of various fruits. This insistently repeated language of puncturing and wounding represents caprification as an enervating and preserving penetration, a strikingly paradoxical account that nonetheless achieves a kind of perverse cogency from its careful references to both botanical and medical science (at this time Montagu had already popularized smallpox inoculation, or variolation, in England). Consequently, Blake's rewriting of Darwin's assertion that "the part round the puncture is sweeter" as "Sweetest the fruit that the worm feeds on" is not merely a throwaway line that blankly reconfirms the inherent holiness of Oothoon's sexuality; instead, it affords her increasingly misogynistic argument about generative violation some persuasive, medico-botanical evidence.

For Blake, mere Miltonic trial would prove rather quaint in the political tumult of the 1790s. Both the Lady's test in *Comus* and Thel's final defiance ultimately circumvent the problem of the fallen woman. The brothers rescue the Lady from the lecherous Comus, and the question of violation never contaminates Milton's discourse of virtue. Later, eighteenth-century literature would begin to deal with the figure of the fallen woman according to a conventional pattern of what Roxanne Eberle has described as an "irremediable descent into first vice and then death" (29). After Lovelace rapes Clarissa, for example, "the fallen woman cannot imagine an alternate narrative script for her continued existence" (Eberle 29). Just as Jacobin novels such as Mary Hays's *The Victim of Prejudice* (1799) began to imagine this "alternate narrative script," Blake was similarly exploring the lived experiences of alternative human sexuality. Milton, however, always seems uneasy about the sexual dimensions of virtuous trial. After all, he deliberately deforms his own argument in *Areopagitica* into the seductive strains of the villainous Comus and the anti-heroic Satan. Blake does away with this sense of discomfort and

boldly rewrites the traditional plot of the fallen woman in explicitly embodied terms. Unlike the Jacobin novels that chart the fallen woman's "return to respectable society" (Eberle 95), though, Blake suggests reforming "respectable society" itself with Oothoon's reclamation of virginal rape as an expression of free love.

## **Two Marys**

This anti-feminist rhetoric has produced a long critical history of confusion. Oothoon's problematic mimicry of patriarchal language, her resistance to Urizenic law, her tentatively abolitionist agenda, and her attack on global capitalism fluctuate with such inconsistency as to resist ideological coherence. Consequently, her character has generated a curiously bifurcated history of criticism. On the one hand, feminist critics have rightly taken Blake to task for his sexist, sadomasochistic fantasies of masculinist domination. On the other hand, Marxist critics have focused on the poem's triumphant denunciation of the language of commerce, particularly that of the slave trade.<sup>15</sup> However, the poem's sense of simultaneity resists such dualistic parsing. Those "kings of the sounding air" are at once slave owners and avian rapists; the scene represents both the punishment of a disobedient slave and the rape of an already defiled woman. Toward the end of the poem, the lamentation, "Then is Oothoon a whore indeed! and all the virgin joys / Of life are harlots: and Theotormon is a sick mans dream / And Oothoon is the crafty slave of selfish holiness" ("Visions" Plate 9; 18–20), finally makes impossible such bifurcated readings; the poem's protagonist is both "whore" and "crafty slave," a doubly-object category that requires a more mixed account.

Perhaps anticipating an outraged reaction to his potentially anti-feminist rhetoric, Blake has Oothoon engage with two of the most learned literary women of the eighteenth century. First, he invokes the historic Mansfield judgment of 1772 and its relationship to the feminist

politics of Mary Wollstonecraft. In the famous British court case, Lord Mansfield ruled that James Somerset, a black slave in America who had escaped from his master in England, was indeed a free man, a landmark ruling that made slavery illegal in England. Somerset's lawyer made his case by comparing slavery to marriage, a strictly legal institution that had no claim to universal rights or laws (Mellor, "Blake and Wollstonecraft" 345–370). Wollstonecraft capitalized on this analogy to link abolitionist and feminist causes: since marriage, like slavery, was a contractual arrangement of embodied property, taking a wife became tantamount to enslavement. Just a few years before the publication of *Visions*, Blake came into contact with this nexus of ideas through his illustrations for Wollstonecraft's *Original Stories from Real Life* (1791), a collection of didactic tales about female rationality, proper education, and the ideal woman, liberated from the essentializing logic of slavery. Oothoon is not exactly Wollstonecraft's coolly rational and compassionate woman; she advocates instead a polygamous free love in a passage that has proven to be one of the most contentious moments in the poem:

But silken nets and traps of adamant will Oothoon spread,  
And catch for thee girls of mild silver, or of furious gold;  
I'll lie beside thee on a bank & view their wanton play  
In lovely copulation bliss on bliss with Theotormon:  
Red as the rosy morning, lustful as the first born beam,  
Oothoon shall view his dear delight, nor e'er with jealous cloud  
Come in the heaven of generous love; nor selfish blightings bring. ("Visions"  
Plate 10; 23–28)

Here, Oothoon proposes to populate Theotormon's harem with various "girls of mild silver, or of furious gold." Her solution, "happy happy Love! free as the mountain wind" ("Visions" Plate 10; 16), abolishes the contractual slavery of marriage in favor of ritualized virginal rape. In other words, her argument about the sweetness of caprifig fruit threatens to reproduce, as Anne K. Mellor puts it, a heterosexual "male fantasy" of liberated sexuality ("Blake's Portrayal of Women" 148–155). If Blake's own views exactly coincide with Oothoon's speech, then *Visions*



becomes an anti-feminist poem that unabashedly locates its advocacy of free love on the sacrificed body of Oothoon.

Whereas the influences of Milton, Darwin, and Wollstonecraft on Blake have been adequately documented, the crucial presence of Lady Mary Wortley Montagu—his response to the Wollstonecraftian concept of female rationality—has escaped critical scrutiny. Blake’s debt to Montagu’s Turkish travels and her pioneering endorsement of variolation can be seen in at least two instances. First, Blake adds to his botanical reference an explicitly medical valence by alluding to Montagu’s contracting smallpox before her famous journey to Turkey, which occasioned her wistful poetic scene of lost innocence in her “Town Eclogues: Saturday; the Small-pox” (1716):

Would pitying Heav’n restore my wonted mien,  
Ye still might move unthought of and unseen:  
But oh, how vain, how wretched is the boast  
Of beauty faded, and of empire lost!  
What now is left but, weeping, to deplore  
My beauty fled, and empire now no more! (“Saturday. The Small-Pox” 59–64)

Flavia, Montagu’s poetic alter-ego, then calls upon Galen, the father of western medicine, and Machaon, the famed physician of the Trojan War, to cure her of her disfiguring and isolating disease. Like Oothoon, Flavia’s marked body leaves her ostracized from an oppressively heteronormative, polite society that judges women by their physical beauty. Second, Oothoon’s much-discussed offer to collect girls for Theotormon’s harem of “lovely copulation” owes a significant debt to Montagu’s detailed descriptions of seraglios in her *Turkish Embassy Letters* (1763), published widely in several languages after her death. Since Blake’s friend Henry Fuseli had worked on the German translation of the letters, Blake would have been familiar with Montagu’s sympathetic accounts of exotic veiled women and those members of the Sultan’s harem whom she described provocatively as “the only *free* people in the [Ottoman] empire”

(*Turkish Embassy Letters* 72, emphasis mine). Oothoon's version of "free" love, then, is not merely a "male fantasy" of unfettered polygamy, but simultaneously an *Oriental* fantasy filtered through early feminist politics. Blake's representation of Oothoon challenges what he perceived as Wollstonecraft's rational, sexless woman with his reading of Montagu's Turkish ideal of liberated, female sexuality. In these extremely selective (and hence distorting) citations of Wollstonecraft and Montagu, Blake boldly imagines Oothoon as an embodied site of sexual *and* medical experimentation, the "soft soul of America" ready to endure the painful inoculations of revolution.

The poem's argumentative structure thus becomes, in part, a fictionalized condensation of the century-long debate over variolation. As historians of medicine have documented, this debate galvanized vociferous opposition from both the pulpit and the medical establishment. Theotormon, though, takes a more philosophical tack when he expresses his disdain for Oothoon's medico-botanical experiment. He begins with his version of Book II of Locke's *Essay Concerning Human Understanding* (1690) in his niggling and joyless litany of epistemological questions: "Tell me what is the night or day to one oerflowd with woe? / Tell me what is a thought? & of what substance is it made? / Tell me what is a joy? & in what gardens do joys grow?" ("Visions" Plate 6; 22–24). Locke defines "substance" somewhat recursively as a useful fiction that aggregates our ideas of substances: "not imagining how these simple *Ideas* can subsist by themselves, we accustom our selves, to suppose some *Substratum*, wherein they do subsist, and from which they do result, which therefore we call *Substance*" (II.xiii, §1.13–16). Later, he admits that this definition is necessarily vague:

because we cannot conceive, how [sensible Qualities] should subsist alone, nor one in another, we suppose them existing in, and supported by some common subject; *which Support we denote by the name Substance*, though it be certain, we

have no clear, or distinct *Idea* of that *thing* we suppose a Support. (II.xxiii, §4.19–23)

Theotormon, though, futilely requires this “clear, or distinct *Idea* of that *thing*” and dully reduces human experience to empirically-verifiable sense data. He imagines the solution for his “woe” as a ruthlessly rationalistic uncovering of the sensible qualities and ideas of “thought” and “substance.” Instead of experiencing joys as joy, he seeks containment within some unspecified “gardens,” or in some version of Locke’s fictitious “substance” that conveniently aggregates sensible qualities into the discrete idea of a “thing.”

Instead of finding a Boethian consolation of philosophy or a resolution to his doubts, he poses yet more questions about the nature of his increasingly medicalized woe: “If thou returnest to the present moment of affliction / Wilt thou bring comforts on thy wings, and dews and honey and balm; / Or poison from the desert wilds, from the eyes of the envier?” (“Visions” Plate 7; 9–11). Here, Theotormon’s medical rhetoric hastily divides itself into a false dilemma. His parsing of the solution into the mutually exclusive qualities of cure (“dews and honey and balm”) and “poison,” willfully ignores, for example, Darwin’s famous discussion in *Loves of the Plants* of poisonous flowers—Dictamnus (the burning bush), Mancinella (the little apple of death), Urtica (the stinging nettle), and Lobelia (the pukeweed)—where he argues assiduously for an interdependent ecology of predation and symbiosis, of “poison” and “balm” (“The Botanic Garden” 362–364). In this way, Theotormon’s Lockean impasse not only misunderstands Oothoon’s caprification and Darwin’s pharmacological botany, but also the inoculating logic of Montagu’s variolation. The “comforts” that Theotormon desperately seeks need not arrive triumphantly on “wings” of “dews and honey and balm”; Darwin’s plants, Oothoon’s “Sweetest” fruit, and Montagu’s variolation offer the stubbornly unhearing Theotormon some much stranger comforts: the contaminating yet curative balms of poison, violation, and inoculated disease.

Later, Bromion's "infinite microscope" ("Visions" Plate 7; 16) strategically misunderstands Oothoon's argument concerning caprifid fruit and variolous matter:

Thou knowest that the ancient trees seen by thine eyes have fruit;  
But knowest thou that trees and fruits flourish upon the earth  
To gratify sense unknown? trees, beasts, and birds unknown:  
Unknown, not unperceivd, spread in the infinite microscope,  
In places yet unvisited by the voyager, and in worlds  
Over another kind of seas, and in atmospheres unknown? ("Visions" Plate 7; 13–18)

Bromion's intense dissatisfaction with known quantities—the fruit of "ancient trees seen by thine eyes"—and his preference for, and fetishistic repetition of, the exotic "unknown" typify the slave owner's imperialist rhetoric. His world teems with the anticipation of the "unknown," the "unperceivd," and the "unvisited," a linguistic negativity that works hard to build positive momentum toward knowledge, enlightenment, and colonization. The caprifid "trees and fruit" right in front of his eyes are hardly enough. His conquering wanderlust must stake a claim on the New World's undiscovered lands to gratify his increasingly ravenous senses, to make known the unknown, and to make visible the invisible with his "infinite microscope" and Newtonian law.<sup>16</sup> In Bromion's reductive monism, all experience inevitably boils down to "one law for both the lion and the ox" ("Visions" Plate 7; 22). Whereas Theotormon rejected Oothoon's caprifidification because of the distraction of his philosophical circumlocution, Bromion's objection emerges from a relentless drive to satiate his wandering eye. Each infinitesimal particle of the natural world awaits entry into Bromion's expanding empirical catalog. He remains shackled to the strict, Linnaean taxonomies of botanical classification and a rigidly scientific method that ultimately fails to grasp both the mixed ontology of caprifidification and the paradoxical logic of inoculation.

Oothoon's concluding rebuttal deals with both Theotormon's misapprehension of identity and Bromion's blindness to difference. While Theotormon brutally atomizes "thought" and "substance" to ever finer, heterogeneous conceptual particles, Bromion's microscopic eye furiously aggregates them into one, universal law. After waiting "silent all the day, and all the night" ("Visions" Plate 7; 25)—surely a sufficient interval to allow for a thoughtful response far beyond immediate, unthinking anger—Oothoon articulates her paradoxical thesis to relieve the ideological tension: "How can one joy absorb another? are not *different* joys / Holy, eternal, infinite! and *each* joy is a Love?" ("Visions" Plate 8; 5–6, emphasis mine).<sup>17</sup> She offers both the unitizing Bromion "different" joys that resist mutual annihilation and the particularizing Theotormon the promise of universal "Love." The long, final speech of the poem that follows unpacks this dense paradox through a final recapitulation of her caprification argument and her successful cure for both Bromion and Theotormon's diseased logic. To do this, she defines two models of "free" love: (1) Bromion's depraved cycle of generational rape and (2) her own idealized offer to institutionalize virginal rape in the accumulating contexts of virtuous trial (Milton), caprification (Darwin), and inoculation (Montagu). In the end, Oothoon's medico-botanical metaphor reconciles Theotormon's philosophical construction of abstract difference with Bromion's hardheaded insistence on coercive identity.

She first targets Bromion's argument with a list of incongruous images (a counselor ape and a schoolmaster dog) to stir up trouble for his "one law for both the lion and the ox." Bromion's unitizing logic constructs a deterministic "wheel of false desire" in which his rape of Oothoon and his Newtonian penetration of the natural world initiate an unending cycle of diseased generation. In tracing this dysfunctional family tree, Oothoon finds herself

...bound to hold a rod  
Over her shrinking shoulders all the day; & and all the night

To turn the wheel of false desire: and longings that wake her womb  
To the abhorred birth of cherubs in the human form  
That live a pestilence & die a meteor & are no more.  
Till the child dwell with one he hates, and do the deed he loaths  
And the impure scourge force his seed into its unripe birth  
E'er yet his eyelids can behold the arrows of the day. ("Visions" Plate 8; 21–28)

The birth of Oothoon's bastard son with Bromion would represent a claustrophobic confinement of divinity to the limitations of a single "human form." As a result, the son will "live a pestilence & die a meteor"; his life will be nothing but infectious disease and his death will produce yet another vector of miasmatic contagion (here, "meteor" merely signifies any general atmospheric or meteorological phenomenon). He shall rape another and start the vicious cycle anew as "the impure scourge" eventually "force[s] his seed into its unripe birth." This aggressively ironic return of Oothoon's discourse of purity ("impure scourge") and of her caprifried fruit ("unripe birth") underscores the disastrous results of Bromion's failure to comprehend the complex nature of her healthful caprifrication. Oothoon's suggestive parody of Bromion's own negative language—his "unknown," "unperceived," and "unvisited" are snidely rewritten as "impure" and "unripe"—tracks this tragic history, from the idyllic health of Thel's vales of Har to the perpetual disease of Bromion's "wheel of false desire." Oothoon's ever-insistent solution remains the caprifrying worm of the "Sweetest" fruit:

Does not the *worm* erect a pillar in the mouldering church yard?  
And a palace of eternity in the jaws of the hungry grave  
Over his porch these words are written. Take thy bliss O Man!  
And *sweet* shall be thy taste & *sweet* thy infant joys renew! ("Visions" Plates 8–9;  
37, 1–3, emphasis mine)

Here, Oothoon imagines optimistically that the worm's redoubled sweetness substitutes for Bromion's cycle of violation an eternal monument of mortal bliss.

Her subsequent counterargument against Theotormon again invokes both sickness and cure in its inoculating logic. Theotormon's disease remains his adamant adherence to the ideal of

“hypocrite modesty” and his persistent need to name each thing as Other until differentiation ultimately becomes alienation. His refusal to listen to Oothoon’s lament highlights the conservative tenor of Enlightenment medicine, unable to accept an “Oriental” technique brought to England by a woman outside the medical profession. As a result, images of sickness plague the brooding Theotormon while Oothoon continues in her unrecognized health: the jealous lover is associated with a “*sickly* charnel-house” (“Visions” Plate 5; 36), he becomes “a *sick* mans dream” (“Visions” Plate 9; 19), and “his eyes *sicken* at the fruit that hangs before his sight” (“Visions” Plate 10; 20). He becomes chronically ill despite the sweet cure of the caprifried fruit that “hangs before his sight,” and his prophylactic refusal of Oothoon does nothing to prevent his eventual infection. The stanza following Oothoon’s Turkish proposition (her positive reclamation of Bromion’s “wheel of false desire”) recapitulates her solution with a desperately exclamatory force:

Does the sun walk, in glorious raiment, on the secret floor  
 Where the cold miser spreads his gold; or does the bright cloud drop  
 On his stone threshold? Does his eye behold the beam that brings  
 Expansion to the eye of pity; or will he bind himself  
 Beside the ox to thy hard furrow? Does not that mild beam blot  
 The bat, the owl, the glowing tiger, and the king of night?  
 The sea-fowl takes the wintry blast for a cov’ring to her limbs,  
 And the wild snake the pestilence to adorn him with gems and gold;  
 And trees, and birds, and beasts, and men behold their eternal joy.  
 Arise, you little glancing wings, and sing your infant joy!  
 Arise, and drink your bliss, for everything that lives is holy! (“Visions” Plates 10–  
 11; 30, 1–10)

Oothoon organizes her last speech into three grammatical modes. She begins with a version of Thel’s interrogative structure that hovers uncertainly between the repressive secrecy of the “cold miser” and the joyous expansion of the sun’s “mild beam.” Her declarative second mode invokes the caprifried rhetoric of paradox yet again with the sea-fowl’s freezing winter cloak and the wild snake’s bejeweled “pestilence.” Blake’s “pestilence to adorn him with gems and gold” may even

be a direct allusion to Dryden's "gems sent to adorn his skin," that strangely decorative metaphor for his late friend Lord Hastings's smallpox pustules. In the end, she arrives at an exclamatory imperative—the anaphoric "Arise"—that celebrates a return to the "infant joy" of Leutha's vale and the Darwinian utopia of bats, owls, tigers, sea-fowls, snakes, trees, birds, beasts, and men in perfect communion. However, even if Oothoon's exhortation reminds us of Darwin's idyllic and cosmopolitan conclusion in *The Temple of Nature*, it still fails to convince her ever-obdurate lover: "Thus every morning wails Oothoon; but Theotormon sits / Upon the margin'd ocean conversing with shadows dire" ("Visions" Plate 11; 11–12), and the daughters of Albion can only "hear her woes, and echo back her sighs" ("Visions" Plate 11; 13). Theotormon's unhearing chauvinism and the attenuating echo chamber of Oothoon's lament challenge this stanza's triumphal trajectory, from the interrogative frame of the problem, to the declarative caprifying solution, and finally to the exclamatory end.<sup>18</sup> The real-life history of smallpox inoculation met similar resistance despite its proven results, and Oothoon's selective ventriloquism of Montagu points out how the unflagging conservatism of medical orthodoxy could frequently mistake Birch's medical "experience" for wisdom.

Ultimately, Oothoon is neither Theotormon's discrete, Lockean "substance" nor an "unknown" quantity to be classified into Bromion's one law. Her admittedly repugnant solution of caprification or inoculation—virginal rape as virtuous trial—nevertheless comes with a rigorously scientific gloss: it carefully measures, as Darwin might put it, the precise dosage of M. de Thosse's turpentine to rid the nectarine tree of infestation without killing the tree itself. The poem's alternative solutions of generational violence and vengeful abstinence both miscalculate the solution at opposite extremes, leading to Bromion's wholly-infected "wheel of false desire" and Theotormon's sterile, "hypocrite modesty." Thus, Blake's well-established aversion toward



science is not the usual Keatsian complaint that science “unweave[s] a rainbow” (“Lamia” II.237), or that a slavish adherence to scientism is bad for *literary* business. Instead, he levels a much more damaging charge against his Enlightenment bugbears: he mobilizes botanical and medical research to conclude that Bacon, Newton, and Locke—his favorite straw men of natural philosophy—are actually not even very good *scientists*. Instead of a naïvely literary backlash against a monolithic science, Blake shapes an informed medico-botanical corrective to empirical method, one that can acknowledge, understand, and implement radical techniques like variolation to the benefit of mankind. Bromion’s Newtonian denial of ontological difference and Theotormon’s Lockean reliance on philosophical hedging cannot hope to understand Oothoon’s medico-literary perspective and her advocacy of variolation. Blake would later cast Catherine as his real-life Oothoon, as a successful test case for Birch’s radical electroshock therapy. His genuine excitement at his wife’s rheumatism cure—“Electricity is the wonderful cause”—underscores his disappointment at the conservative medical establishment’s inability to embrace new, effective (as Blake saw it) medical treatments. It is this context of medical and sexual radicalism that should inform readings of Oothoon’s argument. The metaphor of caprification and variolation as rape stages a fertile encounter between innocence and experience, between virginal woman and desiring man, between English purity and Oriental disease, in order to articulate that dearly-purchased yet joyous moment of universal health that punctuates Oothoon’s final speech: “everything that lives is holy!” (“Visions” Plate 11; 10).

Blake takes great pains to justify Oothoon’s proposition through these various layers of literary, botanical, medical, and feminist contexts. Whereas Darwin skips over the inoculating means toward his cosmopolitan end, the indeterminacy of Blake’s poem suspends the “drink your bliss” resolution, ending instead on the somber note of Theotormon’s continued refusal of

Oothoon and the renewed sighs of the daughters of Albion. This indeterminacy suggests that Blake's voice never exactly coincides with Oothoon's, and her plan to collect sexual partners for Theotormon is not meant to be an ideal solution but rather a disturbingly redemptive moment of caprifying experiment that merely delays the congealing conservatism of political, medical, and literary systems. Dennis M. Welch suggests that we miss the point when we ask whether or not Oothoon's voice as a female slave succeeds in resisting her double oppression. Instead, he argues that the goal of the poem is "to present a strenuous voice of resistance against tyranny even if that voice may not succeed" (108); in other words, Blake's ideological stakes lie not in the utopian construction of a fully-realized (and consequently hegemonic) radicalism, but in continuous resistance and revolution, guided by the central figures of caprification and liberatory rape.<sup>19</sup> This indeterminacy, though, also threatens to become political and ethical irresponsibility. Mellor notes that if Blake "urges the reader to imagine an alternative to the slavery of modesty other than free love, the poem does not suggest what that alternative could be. As the creator of this poem and its designs, Blake must take responsibility for what the work does not say as well as for what it does say" ("Blake and Wollstonecraft" 368). What Blake "does not say" in the poem is exactly what Darwin *does* attempt to say in his brief treatment of the inoculation metaphor; that is, he hastily constructs a naïve immunity-through-community that would transform Oothoon's plucked marigold and her unanswered prayer for "eternal joy" into a crystallized, cosmopolitan ideal. Blake's hesitation, however, is less a political blind spot than deliberate ideology; in his ponderous dwelling on revolution, resistance, and inoculation, he chooses to piece together his radicalism in the negative space of Theotormon's silence, in that arresting moment of perilous potentiality. Oothoon's inoculation models the continuous construction and destruction of the boundaries of self and other, of male and female, of human

and non-human in order to reproduce, within the realm of sexual politics, the already proven botanical and medical successes of caprification and variolation. Even though Blake's medico-botanical metaphor is perhaps no less misogynistic, these various contexts might make it a bit less irresponsible. In this way, Blake reveals inoculation's true radical tenor, and its erstwhile ameliorative function, in the botanical work of Dryden, Burke, Bloomfield, and to a lesser extent Darwin, quickly becomes untenable.

### **The Sick Rose**

Since neither Bromion nor Theotormon accepts Oothoon's inoculation, Blake illustrates the results of this refusal in his short medico-botanical meditation on disease, "The Sick Rose," reproduced here in full:

O Rose, thou art sick!  
The invisible worm,  
That flies in the night,  
In the howling storm,  
Has found out thy bed  
Of crimson joy;  
And his dark secret love  
Does thy life destroy. ("The Sick Rose" 1–8)

The "contrary states" of innocence and experience are here in full display: the rose's bright "crimson" contrasts with the worm's invisibility and darkness, the rooted plant with the flying parasite, and blushing "joy" with "dark secret love." Unlike Oothoon's caprification in Leutha's vale, the encounter between innocence and experience can now only be destructive, and that "dark secret love" engenders full-blown disease rather than purifying immunity. Theotormon's rejection of medical knowledge has made inoculation impossible; the art of variolation is lost, which Blake underscores in this poem's mournful visual representation of a botched inoculation (figure 7). From the slumping rose emerges that repeated visual motif—the amorous couple from

the pasque flower in *Thel* and the nymph from the marigold in *Visions*—but instead of joyous intercourse with the botanical world, a menacing worm lashes out to rein in the escaping female figure while the vermicular forms on the stem collapse in postures of lament.

The parasitic figure at the top left references that earlier analogy from Blake's *The Marriage of Heaven and Hell*—"As the catterpillar chooses the fairest leaves to lay her eggs on, so the priest lays his curse on the fairest joys" ("Marriage" Plate 9; 16)—to reiterate visually the worm's "invisible" invasion of the Rose's "bed / Of crimson joy" with its "dark secret love," desire infected by oppressive sexual guilt and priestly curses. In a dark parody of the floral images of *Thel* and *Visions*, the design of "The Sick Rose" refuses the Darwinian personification of botanical life; the worm—formerly the helpless infant of *Thel* and the sweetening agent of caprification in *Visions*—now restrains the very "life" of the rose into its "secret," Urizenic system of oppressive love. Inoculation no longer functions in this world of hardened experience. In "The Clod and the Pebble," for example, the Clod feebly echoes the inoculating image of *Visions*, "Trodden with the cattle's feet" ("Clod" 6), but instead of Oothoon's paradoxical "clear spring, muddied with the feet of beasts," the Pebble counters stridently with its infected definition of love: "To bind another to its delight, / Joys in another's loss of ease" ("Clod" 10–11). The Clod can only imagine making "a heaven in hell's despair" ("Clod" 4) and the Pebble a "hell in heaven's despite" ("Clod" 12); those moments of cosmopolitan intercourse now rely exclusively on an oppressive rhetoric of subordination rather than the radical language of inoculation. The worm, having progressed from its silent infancy (*Thel*), to its vocal participation in the economy of nature (*Visions*), and finally to a savage predator and destroyer of joy ("The Sick Rose"), is now fully responsible for the sickness of the rose. In suppressing the Darwinian ending in favor of radical potentiality, Blake must also imagine the possible failures of

revolution. Theotormon's rejection of Oothoon's inoculation brings an incurable sickness upon the botanical world; whereas Darwin's flowers personified joyous intercourse, Blake represents a "dark secret love" slowly consumed by sickness.

This is not to say that Blake finally abandons the metaphor entirely since his work resides in potential outcomes rather than final states. Due to the unique production process of his illuminated work, no single copy looks exactly like another, differing in "states, proofs, prints before letters, size and types of paper, and so on" (Viscomi 169). Indeed, Blake did not always make visible the "invisible worm" of "The Sick Rose," and the female figure's expression remains tantalizingly ambiguous, leaving the inoculation question uncomfortably open-ended. His treatment of the *Comus* illustrations also exemplifies this revisionist impulse: the multimedia rewriting of the story begins with *Thel*, *Visions*, and "The Sick Rose" and ends with his 1815 version of "Comus with His Revellers," his visual interpretation of Milton's scene of bacchanalian debauchery:

Soon as the Potion works, their human count'nance,  
Th' express resemblance of the gods, is chang'd  
Into some brutish form of Wolf, or Bear,  
Or Ounce, or Tiger, Hog, or bearded Goat ("Comus" 68–71)

In the image, Blake celebrates the assailed virtue of the Lady with exuberant animal-human hybrids who dance joyously above the seated figure of the Lady. Of note is that Blake retains both "Hog" and "Wolf" (the two figures on the left) from the 1801 image (figure 8, left), but in the 1815 version (figure 8, right), he replaces the "Ounce" (a lynx) with a strategically distorted version of a "bearded Goat." The fourteen years that separate the two versions of "Comus with His Revellers" saw both Gillray's trenchant visual satire about the side effects of vaccination (figure 1) and Birch's medical pamphlet that strenuously objected to the new inoculating practice. Blake's "bearded Goat" is almost certainly not a goat but a bull-like figure in the same

posture as one of Gillray's horned vaccination patients, further linking Blake's project to the ongoing debate about vaccination safety and efficacy. Unlike Gillray's caricature and Birch's pamphlet, though, Blake's *Comus* image revels in the effects of the transformative "Potion." And instead of Milton's chaste moralizing, Blake lingers on the trying of virtue rather than virtue itself, drawing attention to Comus's drunken revelry while visually subordinating the Lady's stalwart decorum. Birch's turn from the radically experimental medicine of his early career must have disappointed Blake's long *Comus*-driven inoculation narrative, a disappointment that he registers in this celebratory, visual reclamation of Gillray's iconic bovine hybrids. In this way, Blake materializes Milton's more tentative argument in *Comus*, *Areopagitica*, and *Paradise Lost* about virtue into the medico-botanical metaphor of inoculation: he argues that "cloistered virtue" is nothing more than unthinking piety, and insists that innocent virtue must encounter the trial of experience—even if it leads to disastrous results such as Oothoon's rejection by Theotormon or the Rose's sickness—to inoculate the surprisingly porous body against the threatening infection of "Secresy," of Linnaean boundaries, and of the repressive systematization of an increasingly conservative medical science.<sup>20</sup>

In tracing the multiplying contexts of this single metaphor, I have suggested that Blakean imagery perhaps deserves a bit more patience. In recovering this scientific Blake, we might risk the loss of a sense of mythopoetic reverie, that famously iconoclastic, meandering, and freeing vision of love, holiness, and liberation. That Oothoon's argument may depend much less on the vatic vision of the daughters of Albion and more on exhaustive botanical and medical research does little to curtail the poet's stunningly prophetic reach. For example, contemporary debates about vaccination have echoed the medical controversies of *Visions* with eerie fidelity. Andrew Wakefield's infamous 1998 article in *The Lancet*, in which he alleged a link between MMR

vaccination and autism, was apparently evidence enough for thousands of Theotormons to refuse the inoculating needle. Despite the study's flimsy evidence and questionable methodology, vaccination rates in the developed world plummeted, causing several outbreaks of otherwise preventable measles cases. So fragile is our relationship with the idea of inoculation that we accept any excuse to validate that creeping sense of discomfort and to tip the scale toward vaccine refusal. Blake offers Oothoon's solution not as a crystallized and fully-endorsed ideal, but as a radical approach that, like Montagu's Turkish medicine and the MMR vaccine, brutally assaults our squeamishness, that viscerally ingrained sense of discomfort. With positive precedents in both nature (botanical caprification) and medicine (vaccination), Blake orchestrates this odd variation on the familiar Miltonic theme of uncomfortable trial: Oothoon's repugnant proposal to "collect" girls for Theotormon's harem is not merely Milton's abstractly metaphorical virtue that "sallies out and sees her adversary" but a virtue that boldly registers trial in a localized, embodied violation that deliberately galvanizes discomfort, squeamishness, and outrage against diseased complacency. The material legibility of Blake's botanical line, then, does not exchange a visionary poetics for "the same dull round" ("Natural Religion" 3) of empirical experience; rather, it strategically materializes radical ideology into a transgressively experimental practice. Thus, when Blake concludes in "There is No Natural Religion" (1788) that "If it were not for the Poetic or Prophetic character, the Philosophic & Experimental would soon be at the ratio of all things & stand still" ("Natural Religion" 3), he does not simply suggest that experiment should entirely give way to poetry. Theotormon's Lockean philosophy and Bromion's Newtonian experiment remain in continuous conversation with Oothoon's plaintive poetry and the prophetic daughters of Albion, suggesting instead a strikingly dynamic interplay between rational material and imaginative metaphor. In the end, Oothoon's medico-botanical

metaphor—a painstakingly calculated “ratio” of Miltonic theology, Darwinian botany, and experimental medicine—does not “stand still.”

Blake’s botanical metaphor finally undoes Linnaean organization in order to amplify Darwinian personification into a revolutionary, if frighteningly anti-feminist, politics of embodiment. His attention to the actual, embodied process of inoculation rather than Darwin’s Enlightenment timidity toward the inoculated body valorizes radical transgression in its potential to reshape both world and body. This brand of shaky cosmopolitanism, then, relies not on Darwin’s hand-waving solution to the problem of revolution but on a sustained engagement with the particular units of the cosmopolitan encounter between self and other. The inoculation metaphor models revolutionary praxis with such fidelity that it must ultimately exceed its conservative, Burkean containment. As an inherently cosmopolitan metaphor that persistently erodes the coercive boundaries of body and state, inoculation provides both Darwin and Blake a figure from which to imagine that elusive Pythagorean ideal of the “transmigrating mass,” an organic vision of variously interpenetrating life that entirely transcends the hierarchical logic of both Linnaean categories and Burkean purity. However, this Blakean liberation of the inoculation metaphor also encourages a kind of experimental aggression in its problematic eagerness to rip apart bodies in the name of radical progress. After all, Oothoon’s inoculation is purchased at a terrible cost: Bromion’s violent rape, the vultures’ purifying feast, and her outrageous offer to expand the practice of caprifying violation. Later Romantic authors—specifically John Keats and Mary Shelley—would have to find unique ways to deal with this troubling radical legacy of the inoculation metaphor, a problem that Darwin was ultimately too squeamish to anticipate and Blake too eager to perceive.



## Notes

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<sup>1</sup> For a discussion of Darwin's interpretation of and involvement in Josiah Wedgwood's reproduction of the Portland Vase, see Brooks (149–156).

<sup>2</sup> There are several readings of Blake that attempt to pit him against Darwin's Enlightenment commitments. King-Hele, for example, says that "Blake was drawn towards Darwin in the 1790s, but later developed what could be called a distaste ... produced mainly by Darwin's evangelism for science and technology: the burning of the Albion Mill pleased Blake and dismayed Darwin" ("Darwinians" 116).

<sup>3</sup> For Darwin's participation in the Lunar Society and his extensive network of industrialists, scientists, and inventors, I continue to use Jenny Uglow's book *Lunar Men* as a reference.

<sup>4</sup> For a wonderfully-detailed account of these pneumatic cures, see Mike Jay's *Atmosphere of Heaven* (2009). Jay's biographical emphasis on the physician Thomas Beddoes allows him to explore the inner workings of scientific organizations like the Pneumatic Institution and Erasmus Darwin's Lunar Society. According to Jay, Beddoes held up Darwin as the "closest and certainly the most successful model of the career he had in mind" (46).

<sup>5</sup> See "Secret." Etymology. *Oxford English Dictionary Online*, Oxford University Press, n.d. Web. 6 July 2013.

<sup>6</sup> For a representative study that connect *Thel* with *Comus*, see Levitt (72–83).

<sup>7</sup> Citations of Blake's poems will be made parenthetically in the text, and, when available, I will cite with the plate number and line number.

<sup>8</sup> See Northrop Frye's foundational (1947) but largely outdated reading of the poem as "the failure to make it" (232).

<sup>9</sup> For an extremely focused study of the Romantic figure of the worm, see Janelle Schwartz's *Worm Work: Recasting Romanticism* (2012). See particularly chapters two and four on Darwin and Blake respectively (27–70, 113–148).

<sup>10</sup> All citations of "Auguries" come from the Morgan Library and Museum copy of *The Pickering Manuscript* available online from the *Blake Archive*. The commentary is from the website's introduction to *The Pickering Manuscript*. See especially Blake's introductory paradoxes: "A robin redbreast in a cage / Puts all heaven in a rage. / A dove-house filled with doves and pigeons / Shudders hell through all its regions" ("Auguries" objects 13–14). "Auguries" can be fit into Morton Paley's influential division of Blake's career into early and late. Here, Blake ostensibly has moved beyond "the liberation of energy through the interplay of contraries" (Paley, *Energy* 10) and toward a more mature, transformative "imagination."

<sup>11</sup> Michael Ferber, for example, remains unconvinced of the viability of Oothoon's paradoxical argument: "Oothoon's exuberant defense of unique individuality may have carried her too far" (81). He concludes that "Blake means to do justice to the real difficulties, but he does not relax his demand for forgiveness and self-sacrifice, even on behalf of Satan" (82). I suggest that Blake's strange botanical metaphor gets closer to doing "justice to the real difficulties" than Ferber allows.

<sup>12</sup> Donald Ault's explanation of Blake's scientific imagery in his *Visionary Physics: Blake's Response to Newton* (1976) remains foundational in any discussion of Blake and science (24–56). Stuart Peterfreund has continued to mine Blake's reading of Newton to develop a larger cultural sense of the poet's counter-Enlightenment critique (38–57). Neither Ault nor Peterfreund casts Newton as purely villainous, though. Instead, both rightly assume that "Blake's assimilation of 'scientific imagery,' involves both critical and positive functions" (Ault 52). These "positive functions" of science have been explored more recently by Mark Lussier's description of Blake's anticipation of quantum physics and Richard Sha's reading of Blake in the scientific context of sexual perversity (Lussier, "Scientific Objects" 120–122; Sha 183–240).

<sup>13</sup> Lussier has provided an extremely helpful and comprehensive historical background on the subject of Blake and science ("Blake and Science Studies" 186–213) in which he documents how the opening lines of Blake's "Auguries" became the unlikely rallying cry of the new science.

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<sup>14</sup> For a more detailed explanation of this strange method of fecundation, see the introductory paragraphs of Kislev, Hartmann, and Bar-Yosef (1372).

<sup>15</sup> In the seminal work on Blake's anti-imperialist ideology, *Blake: Prophet Against Empire* (1954), David Erdman reads *Visions* as "a dramatized treatise on the related questions of moral, economic, and sexual freedom and an indictment of the 'mistaken Demon' whose code separates bodies from souls and reduces women and children, nations and lands, to possessions" (228). More recently, Saree Makdisi's book *William Blake and the Impossible History of the 1790s* (2003) has argued similarly that Oothoon strives against that reduction of "women and children...to possessions," or in Makdisi's more specific formulation, the "reduction into a single subjective selfhood" (96) produced by institutionalized slavery and patriarchal constructions of female sexuality.

<sup>16</sup> Donald Ault's *Visionary Physics* and Stuart Peterfreund's *William Blake in a Newtonian World* have already meticulously documented Blake's informed reception of Newton's *Opticks* and the *Principia*.

<sup>17</sup> Oothoon's careful response recalls the role of "Female Philosophers" in the radical debates of the 1790s. Blake's evocation (and even endorsement) of Wollstonecraft and Montagu in Oothoon's rhetoric reinforces the rise of a "public political role for women with international ambitions." For a thorough historicizing of this emergent agency, see Craciun (27–59).

<sup>18</sup> The futility of Oothoon's caprifying solution continues into Blake's later work. Her character briefly reappears in *Europe* (1794), chastised by her mother Enitharmon for giving up "womans secrecy" ("Europe" Plate 14; 22). And in the "Africa" section of *The Song of Los* (1795), Jesus deigns to hear Oothoon's complaint but accepts only the "Gospel from the wretched Theotormon" ("Los" Plate 3; 22). In these works, Oothoon's story is subjugated to Blake's increasing interest in Biblical typology, a trajectory that is ably handled elsewhere (Tannenbaum 154, 188). This essay, however, focuses primarily on the material, embodied argument of *Visions* that has frequently escaped critical notice.

<sup>19</sup> Saree Makdisi helpfully distinguishes Blake's more subversive radicalism from the "hegemonic" radicalism of Thomas Paine and Mary Wollstonecraft. It is from this agile and contingent call for socioeconomic "levelling" rather than the hegemonic, "liberal-radical position" that we should situate the politics of Oothoon's call for sexual liberation (Makdisi 16–77).

<sup>20</sup> It is worth noting that Blake makes an earlier attempt to articulate this argument in *The Marriage of Heaven and Hell* (1790) but without the much more troubling issue of sexual violence in *Visions* (1793). In a famous account of his unique etching process, Blake describes "printing in the infernal method, by corrosives, which in Hell are salutary and medicinal, melting apparent surfaces away, and displaying the infinite which was hid" ("Marriage" Plate 14). Just as Oothoon's rape is meant to unlock the chains of virginal modesty, these "corrosives" melt obscuring surfaces away (the hymen in Oothoon's case) to reveal the "infinite which was hid." Both images gain scientific traction from the medical logic of inoculation in which the corrosive, the violent, and the diseased paradoxically prove "salutary and medicinal."

### Chapter 3—Unacknowledged Physicians: John Keats and the End of Disease

#### Beyond Consumption

John Keats's brief medical career continues to resist a definitively biographical accounting despite an extraordinarily well-mined trove of archival material.<sup>1</sup> Instead, several explanations remain in critical conflict, depending largely on the biographer's variable interest in Romantic medicine. All have in common, though, some form of abrupt substitution—poetry for medicine—that either has the newly-anointed poet writing with some residual medical influence or just abandoning rigidly medical pursuits altogether to achieve a more aesthetic, luxurious, and sensual poetics. This chapter recovers a more medical Keats than either of these accounts allow, not, as one might expect, by rifling anew through the seemingly inexhaustible medical archive surrounding Keats, but by working to develop a sensitive, medico-literary perspective on his later poetic output, specifically in his letters, *La Belle Dame Sans Merci* (1819-1820), and the *Hyperion* (1818-1821) poems.

The most voluble of these biographical controversies must be that dramatic moment of disciplinary schism when Keats triumphantly declares, in an act of haughty rebellion against his stuffy guardian Richard Abbey, his bold intention to leave medicine for poetry. Questions of Keats's mental and physical investment in medicine continue to polarize his biographers. Did he merely skate by in medical school while dreaming longingly of his true poetic calling? In his transition from promising professional to penniless poet (1815-1817), did he already begin neglecting his immediate medical duties? My reading of Keats does not claim to resolve these lingering questions of medical biography; instead, I focus on the later, more reflective Keats who writes wistfully about the scope and caliber of his intellectual progress:

Were I to study physic or rather Medicine again,—I feel it would not make the least difference in my Poetry; when the Mind is in its infancy a Bias is in reality a Bias, but when we have acquired more strength, a Bias becomes no Bias. Every department of knowledge we see excellent and calculated towards a great whole. I am so convinced of this, that I am glad at not having given away my medical Books, which I shall again look over to keep alive the little I know thitherwards. (*Letters* 86–87)

In this well-known May 3, 1818 letter to John Reynolds, he eloquently sympathizes with his friend's struggle to balance literary and legal careers. Even though Keats had written just a few years earlier about his intense dissatisfaction with the medical profession, here he looks back at his education with mature, levelheaded deliberation. The petulant "Bias" of his infant mind has given way to the "great whole" of comprehensive knowledge, suggesting that his early break from medicine was far from unequivocal apostasy. Thus, to understand Keats's volatile relation to Romantic medicine, this chapter turns away from the young, rebellious medical student of Guy's Hospital and toward the tubercular, unbiased poet of *La Belle Dame Sans Merci*, *Hyperion* (begun in late autumn 1818 and abandoned in April 1819), and *The Fall of Hyperion* (begun late 1819 and worked on intermittently until his death in 1821), the final fragments of that "great whole" of Keats's brief yet prolific medico-literary production.

Donald Goellnicht has already begun to read the *Hyperion* poems productively within this medical frame: "although they are not concerned with medical themes in a strict or narrow sense, they do deal with the broad subject of a healthy or balanced life—a concept Keats developed from his medical training—both for the society and for the poet, and so deserve close analysis within the general context of Keats's medical knowledge" (212–213). Along the way in this "close analysis," he constructs a useful binary that begins to explain Keats's treatment of the medical metaphor. He argues that "states of health and disease often symbolize the imagination in periods of productivity and stagnation respectively" (172) and that "Keats realizes that, in

order to become the poet-physician of society, he must first heal his own spirit of its violent vacillations between depression and fevered poetic trances” (212). Here, illness and health, neatly aligned with paralyzing depression and poetic activity respectively, divide the bodily condition into discrete “vacillations” between diseased and healthy states. Yet as Hermione de Almeida astutely points out, these two states were far from coherent for both Keats and his medical contemporaries: “Romantic medicine functioned upon the very energizing ambiguity that underlay all treatments, whether physiological or mental, specifically medical or largely philosophical” (138). Competing theories of health and disease abounded, and that “energizing ambiguity” eventually spilled across both disciplinary and national borders. In Scotland, John Brown tentatively theorized a continuum of health and disease according to various levels of nervous excitability while his teacher William Cullen sought to differentiate and classify disease with Linnaean precision; on the continent, Novalis and Schelling were toying with the idea of health as a perpetual state of disease and even of disease as a primary precondition for life. The healthful deliberation that Keats sought, then, is not merely a fevered poetic trance that undergoes any kind of straightforward curing or healing; Keats could not have seen disease as simply a discrete exception to health. It is instead a condition inseparable from the very idea of the healthy body.

De Almeida, among other chroniclers of Romantic medicine, have significantly expanded our understanding of Romantic-era conceptualizations of disease, slowly moving that contested category away from the perils of negative definition: that disease is merely the absence of health. There remains, however, an important missing term in this argument. Just as the diseased body was, in a sense, already healthy, the Romantic concept of health deliberately maintained a selective access to disease. My account of Keats and his relationship to the concept of

vaccination fills out this deconstruction of health and disease by emphasizing a carefully infected aspect of Romantic health.<sup>2</sup> With this more complete picture, the most challenging scenes of the *Hyperion* poems—Apollo’s dying into life and those fevered encounters with Mnemosyne and Moneta—are re-situated within their proper medico-literary context. The concluding Apollonian pains in *Hyperion* and the poet-dreamer’s nauseating encounter with divinity in *The Fall of Hyperion*, then, cannot be fully healed via conventional medicine but only with the help of the new preventive medicine exemplified by vaccination, the highly controversial practice that changed the very concept of health itself.

Edward Jenner’s innovative and effective treatment of smallpox, a key Romantic-era discovery, has not deterred most studies of Romantic medicine from focusing exclusively on two diseases that notoriously eluded treatment: consumption and cancer. With Keats, this pathological bias is understandable. After all, he lost both a mother and a brother to consumption before ultimately succumbing to the disease himself in 1821. However, the medical failures of the time—cancer and consumption were almost tantamount to death sentences—should not entirely shape our opinion of Romantic medicine. The extraordinary and enduring success of vaccination forces us at least to reevaluate an era of medical practice that has been frequently dismissed as an embarrassment in the history of science. In Keats’s time, cancer and consumption represented common wasting diseases that unfortunately outpaced the progress of medical science; the acute illness of smallpox, however, spurred the positive movement toward a new paradigm of preventive medicine. As the example of vaccination strongly suggests, Romantic medicine thrived in this new paradigm’s reliance on “half-knowledge” (*Letters* 42), as Keats might have put it. Its experimental and loosely-structured methodology could handle dramatic epistemic shifts on the fly. Irritable states, nervous flare-ups, and other sparsely-defined

symptoms that resisted the clinical diagnosis and precise definition expected of modern medical practice were nevertheless treated successfully under this system of medical care. Unable to change with the times, the old Saturn of the *Hyperion* poems instead suffers from an enervating obsolescence, figured as an incurable wasting disease: “His old right hand lay nerveless, listless, dead, / Unsceptred; and his realmless eyes were closed” (“Hyperion” I.18–19; “The Fall” I.323–324). The Titan’s already “dead” hands and “realmless eyes” contrast starkly with the regenerative vitality in the concluding vision of Apollo, god of both the new poetry and the new medicine, who spectacularly “die[s] into life” (“The Fall” III.130), inaugurating a new “Celestial” (“Hyperion” III.136) era of divine poetic inspiration and health.

Here, Keats envisions two competing medical practices: the old one that has failed to treat the Titans’ degenerative diseases (cancer and consumption) and the new one that successfully produces an immunized community of fledgling gods, inoculated against the sting of death and the disfigurement of disease. The focus on the former has blocked our access to the idealism of the latter vision of perpetual health through the tightly controlled management of disease. The new gods’ deathly inoculation—their dying into life—completes Keats’s comprehensive poetic catalog of disease: his work dwells not only in the untreatable and unaccountable—cancer, consumption, melancholy—but also in the unprecedented medical success of smallpox treatment and the curative violence of inoculation. He ends the poem with a movement toward more radical, effective care under the stewardship of the new gods. Through these medical tropes of his later poetry, Keats never really abandons medicine. Rather, he follows a uniquely literary route toward what he considers to be the more effective medical practice, one that deliberately lingers in the multifarious experimentalism of vaccination rather than pushing toward an increasingly professionalized and institutionalized medical practice. To

argue this larger point, this chapter manages several smaller ones: (1) it demonstrates Keats's access to medical knowledge (specifically the question of vitality) in his epistolary prose, (2) it defines the literary, Romantic disease discourse of the early nineteenth century to situate Keats's medico-literary perspective, (3) it explains the fraught encounter between physician and patient in *La Belle Dame Sans Merci* and the deathless worlds of the *Hyperion* poems, and (4) it tracks the enduring political ramifications of this medical metaphor to show how Keats unexpectedly contributes to the birth of biopolitics.

### **Vital Letters**

Keats's letters often feature effortless forays into ongoing medical discussions about the material organization of the human body. A primary concern in this impressive collection of epistolary correspondence is the proper stewardship of bodily architecture and the potential existence of a vital principle within the complex configurations of biological matter. For those in search of this elusive principle, William Harvey's watershed account of the systemic circulation of blood, through which the body regulates its "vital Spirits" (13), proved irresistibly suggestive. This vital principle—the fluid, current, or force that promised to expose life to the living—had acquired a provocative anatomical vocabulary that would fuel decades of bitter controversy.<sup>3</sup> A richly-documented history has grown up around these nineteenth-century vitality debates, but here it suffices to measure their intellectual impact on Keats's medico-literary output. To do this, several studies have enlisted his poetry—the "sixty-two" poetic images of "the life of blood" (De Almeida 90) or the excess of life in *Lamia* (Gigante 208–246), for example—but few have read the letters themselves as serious interventions into the vitality debate. Three letters in particular stand out in this respect: (1) the negative capability letter (December 1817) tentatively locates the



vital principle within a “Penetralium of Mystery” of which we can only hope for “half-knowledge,” (2) the “Mansion of Many Apartments” letter (May 1818) insists on further exploring the vital depths and branching complexities of human cognition, and (3) his February-May 1819 letter exchanges red blood for red wine in his medical meditation on the pharmacology of Claret. With his literary participation in the medico-philosophical debate, Keats maintains a continuous interest in medical theory and practice that goes far beyond an obsessive preoccupation with wasting diseases. Rather, he finds his own equivocal answer to vitality question that abandons fruitless Enlightenment inquiry for a more pragmatic focus on bodily health and proper medical care.

Keats’s letter on perhaps his most famous turn of phrase— “*Negative Capability*, that is when man is capable of being in uncertainties, Mysteries, doubts, without any irritable reaching after fact & reason (*Letters* 41–42)—attempts to express a philosophical concept through an anatomical metaphor. Instead of borrowing Wordsworth’s “burden of mystery” (his famous phrase from “Tintern Abbey”) to describe the noumenal locus of truth, Keats concocts, in his uniquely mangled Latin, his own medical phrase: “the Penetralium of mystery” (*Letters* 42). As Bate has documented, Keats was no mere dabbler in Latin, so the singular back-formation of the plural *penetralia*, meaning “the innermost parts or recesses of a building” (OED), suggests deliberate distortion (the correct singular is *penetratale*).<sup>4</sup> The architectural metaphor anticipates the “Mansion of Many Apartments,” but instead of that moody, sprawling design, he condenses the image into an inner sanctum, a central point from which his blueprint expands in exciting, unexpected, and mostly unknowable ways. The vital principle contracts with this centralizing metaphor, and the strange back-formation emphasizes singularity even at the expense of grammatical Latin. Keats imagines this centrality from which all worthwhile human knowledge

derives, from which singular inspiration and individual creativity flourish. In this early version of his poetic ideal, the negatively capable poet manages to extract from this “Penetralium of Mystery” the half-knowledge that fills out the whole of human engagement with the noumenal world.

Keats’s airiest epistemological reveries often find medical ground, and this “Penetralium of Mystery” does not disappoint. In the early eighteenth century, Thomas Fuller became quite famous for publishing hundreds of medical recipes for public consumption in his *Pharmacopœia Extemporanea*. In the following excerpt from a 1761 English translation of the original Latin, he describes his “trusty” treatment for early-stage consumption, “A Lohoch with Myrrh,” with the disarmingly conversational tone of a home cook:

Take Myrrh well powder’d 2 Drams; Saffron half a Scruple; Nutmeg half a Dram; Honey 2 Ounces; mix. This trusty Thoracic has the Privilege to be readily admitted (the Blood introducing it) into the inmost Penetralia of the Lungs, there to dissolve thick impacted Matter, deterge the Canals and Vesicles, dissipate Tubercles, heal Excoriations and little Breaches, imbue the whole Body of the Lungs with Balsam, impart Tone and Strength to its Fibres. In short, it’s truly a most desirable and gallant Medicine for such a Consumption as is not yet gone beyond its first Stage. (274)

Jon Mee’s note to Keats’s Latin phrase acknowledges its strangeness but nevertheless casually dismisses its import: “*Penetralium*: as several editors and critics have pointed out, there is no such word in Latin. Keats means something like ‘penetrating insights’” (*Letters* 383). During his constant care of consumptive relatives or his residency at Guy’s Hospital, Keats may have come across Fuller’s home remedy and his description of the “Penetralia of the Lungs,” his phrase for the alveoli, or the grape-like sacs of the lung tissue responsible for oxygenating carbon-dioxide-rich blood. This concoction, according to Fuller, reaches into the “inmost” recesses of the lungs to dissolve, deterge, dissipate, heal, imbue, and impart—a surprising range of agency that suggests ample human access into the heart of an embodied mystery. Keats’s “Penetralium,”

then, becomes not just “something like ‘penetrating insights,’” but a medical intervention that locates inspiration in the body of the negatively capable poet, in the negative space of the alveolar sac, ready to breathe life and energizing creativity into depleted blood. This “most desirable and gallant Medicine” grants a tantalizing peek at this “inmost” mystery without any of the “Pain, Sickness, and oppression” (*Letters* 89–90) of the later “Mansion” letter.

According to this younger Keats, self-containing mystery and self-sufficient inspiration is enough. The older Keats would demand much more. The “Mansion” letter’s interdisciplinary integration of poetry and medicine and its inter-textual literature review of poetic masters deliberately disperse knowledge across space, time, and discipline rather than localizing it in a singular, accessible unity. It is no coincidence, then, that this is the same letter in which he writes wistfully about the possibility of returning to medicine, of finding a painless way to integrate his two passions. He finds a solution to his disciplinary dilemma in a medically-informed extension of the Lockean and Darwinian metaphor of the “mansion,” newly renovated with the addition of “Many Apartments” (*Letters* 89).<sup>5</sup> He compares human life and what he calls the “grand march of intellect” (*Letters* 90) to a three-stage embodied, architectural exploration. Through the first door lies “the thoughtless chamber” (*Letters* 89)—a version of Locke’s *tabula rasa*—in which the mind passively receives the various sense-experiences of the world without the burden of thought. The second is the “Chamber of Maiden-Thought” (*Letters* 89) where “we become intoxicated with the light and the atmosphere, we see nothing but pleasant wonders, and think of delaying there for ever in delight” (*Letters* 89). However, neither is ignorance bliss nor knowledge exactly sorrow for Keats; rather, the third door both chides us against the blankness of maiden-thought and warns us of a knowable world “full of Misery and Heratbreak [*sic*], Pain, Sickness and oppression” (*Letters* 89–90). This door leads to dark passages, occluding mist, and

Wordsworth's "burden of mystery." Wordsworth, who in Keats's linear account of literary history surpasses Milton, bravely explores these dim chambers to "make discoveries, and shed a light in them" (*Letters* 90). Such arduous work, he argues, belongs to the poets of his generation who sharpen their "vision into the heart and nature of Man" (*Letters* 89). He erects a new philosophical edifice that has progressed beyond Locke's claustrophobic metaphor of the architectural self. Like Darwin, Keats worries that the confining figure of the "mansion" inevitably bottlenecks the great progress of human knowledge. Instead, Keats's optimistic epistemology sees the "general and gregarious advance of intellect" (*Letters* 90) as linear expansion rather than as Locke's asymptotic limit. The spatial metaphor grows to capture all of human experience; that darkness needs to be tamed, and Keats's metaphor attempts, though humbly and haltingly, to reclaim a small fragment of that space from human blindness.

This anatomical trajectory from lung (the "Penetralium of Mystery") to brain (the "Mansion of Many Apartments") plots Keats's evolving relationship to a simultaneously evolving institution of medicine. In the pulmonary metaphor, the "wise passiveness" (Wordsworth, "Expostulation and Reply" 24) of the negatively capable poet converts, with near-perfect efficiency, inspiration into creative production. This sense of imaginative mastery is not simply the residual voice of Hazlitt in Keats's poetics as many have suggested, but also the lingering influence of his rigid training in pathology and anatomy.<sup>6</sup> The rise of pathology, as medical anthropologists like Georges Canguilhem and Michel Foucault have ably documented, depends precisely on this efficient absorption of bodily data into the authoritative diagnosis. Just as pathology had claimed to read the body with reassuring legibility, so does the negatively capable poet perfectly inhabit the wonders of the world—all while filtering out extraneous data, fact, and reason—with the picture-perfect fidelity of a "fine verisimilitude" (*Letters* 42). With

the refined neurological metaphor, however, pathology begins to falter for Keats. He exchanges Wordsworth's "wise passiveness" for the considerably more excitable body of "Tintern Abbey." The speaker of Wordsworth's lyric poem shakily idealizes about the "burden of mystery" with the material vocabulary of an anatomist only to end with a more spiritual conception of the body's relationship to the soul:

Until, the breath of this corporeal frame  
And even the motion of our human blood  
Almost suspended, we are laid asleep  
In body, and become a living soul. ("Tintern Abbey" 44–47)

The allusion to William Harvey's seventeenth-century account of blood circulation lends medical substance to Wordsworth's turbulent and emotional representation of subjectivity. The speaker's near death and his body's functional suspension paradoxically grant a surprising and generous access to "the life of things" ("Tintern Abbey" 50), to the "living soul" of the temporarily suspended corpse. The body ceases to be the coolly capable force of pulmonary inspiration; rather it becomes a tangle of neurological distress, excitable impulses, and unquantifiable sense data that the lyric speaker strains to interpret.

Just about a year later, he writes in a more lighthearted tone about these embodied "apartments" in a letter that significantly clarifies the medical, anatomical, and pharmacological dimensions of the previous letter's philosophical point:

For really [Claret] is so fine—it fills the mouth one's mouth with a gushing freshness—then goes down cool and feverless—then you do not feel it quarelling with your liver—no it is rather a Peace maker and lies as quiet as it did in the grape—then it is as fragrant as the Queen Bee; and the more ethereal Part of it mounts into the brain, not assaulting the cerebral apartments like a bully in a bad house looking for his trul and hurrying from door to door bouncing against the waist-coat; but rather walks like Aladin about his own enchanted palace so gently that you do not feel his step. (*Letters* 201)

Here, those epistemological “Apartments” from the previous letter materialize dramatically into the “cerebral apartments” of the brain. William Lawrence, in his controversial vitality lectures, uses similar language to refute what he called the “immaterial principle,” or the idea that human sentience, volition, and cognition all emerge from something external to the material parts, from a mysterious superadded force that escapes mechanical explanation. In his characteristic, politically-charged tone, he pokes fun at this so-called vitalist position: “Physiologists have been much perplexed to find out a common centre in the nervous system, in which all sensations may meet, and from which all acts of volition may emanate; *a central apartment* for the superintendant of the human *panopticon*; or in its imposing Latin name, a *sensorium commune*” (*Letters* 81, first emphasis mine). Keats’s metaphor of the “Mansion of Many Apartments” also rejects this central, “*sensorium commune*” that ostensibly governs all sensation and volition. In a striking parallel to Darwin’s argument in *The Loves of the Plants*, the expansive architecture of the mansion threatens to shrink into the panoptic prison. Relaxing his insistence on a singular experience of “the Penetralium of Mystery,” Keats deliberately pluralizes “cerebral apartments” and avoids the frightening centralization of coercive power in Jeremy Bentham’s utilitarian vision of the Panopticon. Keats’s materialism, like Lawrence’s, insists on anatomical plurality, a neurological explanation of systemic cognition rather than a centralized “immaterial principle” that somehow breathes inspiration into the human mind. Each connection in the brain fires precisely to achieve the perfect thoughtfulness, and Keats’s glass of Claret provides exactly that material stimulation needed to energize the mind’s creative process. No divine spark animates life; rather, a mindfulness of the body’s architectural organization governs Keats’s concept of health. His medical and literary interest, then, lies squarely within the pragmatics of health

care—the human, rather than divine, management of the body—not in vitalism’s fruitless speculation on the principle of life.

Keats’s pharmacological experiment, then, must also warn against overdose and its consequences: fever, hepatic discomfort, and even brain damage. When the apartment doors are forced opened too quickly, the mind explores the mansion’s dark passages with a heavy heart, burdened by noise, distraction, and paralyzing illness. Instead of a straightforward assault on the “cerebral apartments,” Keats prefers the inoculating logic of carefully controlled, mind-altering substances to settle down into a cool, “feverless” health. That potential fever recalls the darkness of his mansion’s third door which leads to an apartment of world-weary knowledge and overwhelming sensation. The implicit trope of vaccination functions as the “Peace maker” of the body; the controlled infection, intoxication, and the charged interface of interior psychology with external stimulus successfully calms frayed nerves. Notably, he invokes a popular fable from the *Arabian Nights’ Entertainments* to figure the otherness of infection. Here, Keats relates the management of the healthy body to cautious interracial contact, invoking the same model of Orientalized medicine that Montagu exploited in her advocacy of Turkish variolation.<sup>7</sup> In the popular story, an African magician relocates Aladdin’s “enchanted palace” from China to Africa. Aladdin’s task, then, is to travel to Africa, quietly sneaking around the palace, colluding with his captive princess, reclaiming the wish-granting genie, and purging the palace of its nefarious new owner. He arrives in the occupied palace cleverly disguised as an inconspicuous commoner; with gentle step, he passes through unnoticed and successfully reclaims the purloined palace. Keats fashions this tale into a fable of health: just as Aladdin infiltrates the palace while avoiding any outright “quarelling” with the magician, so too does the Claret imperceptibly immunize the body against acute illness. This is not to say that Keats explicitly alludes to vaccination here. Instead,

the passage reflects Keats's ready access to a new preventive paradigm of healing while also expressing a simultaneous hesitation about its potential dangers: the side effects of overdose, inebriation, and loss of creative agency. Whereas Montagu turned to Turkey for the science of variolation, Keats turns to China and Africa for magical consolation to allay his worries about new medical territory. Despite lingering qualms, Keats would put his poetic faith in an immunized pantheon of new gods under the leadership of upstart Apollo, benefactor of the new poetry and avatar of the new medicine.

These three Keatses—the consumptive yet negatively capable poet (December 1817), the mansion-dwelling explorer (May 1818), and the medicating oenophile (February-May 1819)—all strive to represent a selective access to medical knowledge and end up with a profound ambivalence about the condition of the healthy body. Romantic medicine's failures with consumption and cancer coupled with its success in productively challenging Lockean models of the human mind and body (vaccination) not only point to this divided mind, but also to a deeply conflictual medical culture that struggled with the idea of proper care. Keats nonetheless remains optimistic. Even when faced with unanswerable questions about the vital principle and the prospect of incurable disease, he turns to Fuller's *Pharmacopoèia* for medical and poetic inspiration and to Claret for thoughtful revitalization. And even when the "Mansion" letter confirms that medicine might not always be so "desirable and gallant," Keats integrates medical and poetic knowledge to open up the branching pathways of sensory experience to remain receptive to experimental treatment. In this way, Keats breaks away from more conventional Enlightenment-era lines of inquiry. Instead of dwelling on the question of vitality, for example, he turns his attention to the pragmatics of health care. Consequently, his concern lies less in the motivating question of the vitality debates—what is life?—and more in the diligent maintenance



of physical and psychological health. The letters' varied interest in anatomy, neurology, and pharmacology breathes life into the uninspired character and eases the overburdened mind rather than attempting to pin down an abstract philosophical principle. His equivocal answer to the vitality question, then, urges us to reconsider a medical orthodoxy increasingly in danger of abandoning the immediate needs of the patient for the dubious production of pathological and philosophical authority.

Keats's earlier metaphor draws from this compelling anatomical and pathological authority whereas the neurological metaphor begins to invoke a very different kind of medicine in its diagnostic uncertainty and its disavowal of the standardized nomenclature of pathology. Western medicine, as myriad accounts have already confirmed, eventually gravitated toward the former. That the vaccination controversy led to government propaganda, compulsion, and finally the biopolitical condition known as pathology should not, however, obscure the destabilizing nature of Keats's tarrying with medical uncertainty via the vaccination controversy. Through the figure of inoculation, Keats reimagines this bifurcation in the history of medicine—what I will refer to as Romantic disease discourse—through a meticulously developed notion of experiment (what Hermione de Almeida describes as his relation to the *pharmakon*), his firmly anti-pathological refusal to diagnose illness in both his poetry and prose, and his generous distribution of medical authority across disciplinary boundaries. He left behind an increasingly institutionalized medicine not because of some vague romantic impulse toward poetic retirement, but because he sought a means to resist an increasingly professional and institutional state of medicine that systematically ruled out the unsystematic methods of Romantic medicine in favor of diagnostic expedience and Malthusian statistics.

## Romantic Disease Discourse

Historians of Enlightenment medicine fixate on the failures of Romantic medicine to arrive at a coherent and robust picture of the new professionalism. Vaccination is excerpted from its literary and historical context as a miraculous discovery that somehow transcended its counter-Enlightenment milieu. Roy Porter, a medical historian who often suggests that vaccination was an Enlightenment triumph that succeeded despite the era's backwards culture of medical quackery, complicates his own argument through a more generous acknowledgement of what he (somewhat dismissively) calls the "folk" medicine of Gloucestershire milkmaids. In his analysis of Jenner, he concedes that "elite medicine clearly had much to learn from folk tradition" (40) while still relying on an unfairly rigid binary that pits "elite" professionalism against "folk" healing. Indeed, the case of vaccination had already enlarged "folk tradition" into a proper discourse. The mild derision of Porter's phrase belies the productive work of Romantic medicine and obscures vaccination's participation in a larger medical debate about radical experiment, appropriate care, and medical authority. Rewriting this marginalized "folk tradition" as a Romantic disease discourse not only forces us to take more seriously a medical culture that produced one of the most significant epistemic breaks in the history of medicine, but it also grants us access—via Keats's medico-literary meditations—to the vital literary dimension of Romantic disease management.

This Romantic disease discourse was shaped by the turbulent history of smallpox and its various treatments. The introduction of variolation to England stirred up a century of medical, religious, and philosophical controversy whereas the advent of the cowpox vaccine was met with a more immediate, visceral, and concentrated resistance that lasted only a few decades. Gillray's visual caricature of Edward Jenner (figure 1) typified the outraged hysterics of this conservative

reaction: the country doctor had overreached his station, and his contaminating participation in both the working-class scene of infection on the left and the base, farcical suffering on the right ironically undercuts his portrait's supercilious air of aristocratic professionalism (the standing figure in the center). The grand potential of smallpox eradication did little to assuage prejudicial doubts about a miracle cure gleaned from lowly milkmaid lore. Jenner's medical credentials, impressive as they were, failed to pass muster for a British public alternately terrified by the possibility of infection and scandalized by the shameful impropriety of the proposed cross-species cure. Despite his prestigious medical training under John Hunter, probably the most famous surgeon of the day, Jenner's later decision to return to his native Gloucestershire to practice rural medicine (a move that biographers have attributed to the inherent indolence that shadowed his genius) left him particularly vulnerable to his critics' unfounded accusations of amateurish speculation. However, he eventually abandoned his reputation as a competent country doctor as the vaccination controversies swiftly transformed him into a national health advocate. Later, through propaganda campaigns and obsequious bids for aristocratic patronage, Jenner became the national hero that we now know, the man whose portrait adorns London's National Portrait Gallery right alongside the canonical figures of the Romantic age. This triumphal story, however, fails to explain those explosive and stubborn resistances to vaccination that persist to this day. Compulsory vaccination remains one of the best arguments for biopower (Foucault's menacing word for the institutional regulation of human bodies) but also one of its most successful and vocal counterarguments. In this way, vaccination induces the opposite poles of biopolitics: on the one hand, it has given rise to a paranoid hermeneutics of the body, and on the other, it signals the emergence and legitimation of a potentially coercive biopower.<sup>8</sup> There are two stories to tell here, but literary, political, and philosophical accounts have mostly turned

their attention toward the latter. Romantic medicine, however, is much more than this brief eruption of radical experimentalism quickly contained by vaccination's abrupt and unprecedented success in bringing about biopolitical compulsion.

To tell this other story of vaccination, one must first understand its *anti*-vaccinationist origins. The most outrageous and loudest reactions against Jenner's idea have understandably drawn the greatest scrutiny. These anti-vaccinationist voices included Dr. B. Moseley's warnings about a humanity tainted by beastly diseases, Dr. William Rowley's gruesome image of the ox-faced boy, and Dr. Squirrel's reports about vaccination-related injuries and deaths.<sup>9</sup> In an 1856 issue of his *Household Words*, Charles Dickens cites an unnamed "surgeon" (Moseley) as a leader of the anti-vaccinationist charge:

"Can any person," wrote one surgeon, in a book several times reprinted, "Can any person say what may be the consequences of introducing a *bestial* humour in the human frame, after a long lapse of years? Who knows, besides, what ideas may rise in the course of time, from a *brutal* fever having exacted its incongruous impressions on the brain? Who knows, also, but that the human character may undergo strange mutations from quadrupedan sympathy, and that some modern Pasiphaë may rival the fables of old." (Dickens 10, quoting Moseley)

Moral indignation, irrational disgust, and fanciful allusions to mythical bestiality govern Moseley's indignant appeal to medical caution. Dickens capitalizes on this loose logic to poke fun at the anti-vaccinationists "who have no right to be remembered with the wise" (10) and to explain the intense controversy that the medical discovery had to endure. Under all the sensationalistic rhetoric, though, is a close interrogation of and reaction to the radically experimental culture of Romantic-era medicine. Moseley argues, as did many medical practitioners of the era, for an increasing professionalization of medicine that need not resort to strange bestial cures and untested decoctions.

The anti-vaccination movement had, of course, more sober advocates who emphasized this institutional dimension of the complaint. Alfred Russel Wallace, the eminent naturalist whose evolutionary theories eventually pushed Charles Darwin to publish his seminal *Origin of Species* (1859), inserted a long essay titled “Vaccination a Delusion—Its Penal Enforcement a Crime” (213–323) into his retrospective collection *The Wonderful Century: Its Successes and Its Failures* (1898). Beyond his own citation of Moseley, he musters up a much more scientific analysis that concludes—with “a statistical, and therefore a mathematical certainty” (vii)—that not only is vaccination no protection against smallpox, but also that its compulsory enforcement will “rank as the greatest and most pernicious failure of the [nineteenth] century” (vi). In both Dickens’s pro-vaccination satire of Moseley and Wallace’s anti-vaccination editorial, these Victorian authors base their appeals upon a superior sense of rationality, professionalism, empiricism, and “mathematical certainty.” This trajectory typifies the Enlightenment narrative of the history of medicine: the undisciplined experimentalism of early scientific trials had finally been honed into a proper method, largely free from error, quackery, and sensationalistic grandstanding.

This Enlightenment story arrives in various forms. From a cultural anthropological perspective, Foucault has argued that

clinical experience sees a new space opening up before it: the tangible space of the body, which at the same time is that opaque mass in which secrets, invisible lesions, and the very mystery of origins lie hidden. The medicine of symptoms will gradually recede, until it finally disappears before the medicine of organs, sites, causes, before a clinic wholly ordered in accordance with pathological anatomy. The age of Bichat has arrived. (*Clinic* 122)

He traces a sudden retreat from readings of surface symptoms to a continuous medical gaze that penetrates into the “very mystery of origins,” an approach not unlike the abstractly philosophical discussions of the vital principle in the early nineteenth century. Pathology takes over with its

efficient linkages of cause and effect, of disease and cure. Bichat's work on the era's most detailed anatomical textbook, *Oeuvres Chirurgicales* (1798), provides Foucault with his exemplar for an age that had abandoned the subjective diagnoses of bedside medicine for the ostensibly more objective pathology of clinical medicine. The irrational, ambitious, amorphous and largely unsuccessful diagnoses of early experimental medicine had been supplanted by the constant vigilance of a discursively constructed rationalism that hinges upon the rigid definitions of a closely policed system of medical signs. Enlightenment medicine, then, arrives at the "age of Bichat" precisely when pathology claims to have purged medical practice of both its erroneous diagnoses and its inefficient prognoses.

From a medical-historical perspective, Roy Porter even stakes the very idea of modernity in this epistemic shift when he triumphantly announces that "Modern times dawned with the nineteenth century" (304). Instead of dwelling on the disruptions of medical failures—unlike the extraordinary Enlightenment innovations in physics and chemistry, the medical research of the period yielded significantly fewer success stories—Porter immediately conscripts the discovery of vaccination into a smooth narrative of Enlightenment improvement that ends with the institutional "awakening to the view that health promotion was integral to a well-run state" (277). Failures, though, need not lead us inexorably to the knotty "paradox of Enlightenment medical science—great expectations, disappointing results" (248). Indeed, recent historians of science have cogently theorized the value of error and failure in some of humanity's greatest scientific discoveries.<sup>10</sup> Porter, though, pushes swiftly through to nineteenth-century standards of medical care; by then, he claims that "[Medicine] gained standing for being scientific, and ambitious medical men pressed to learn its procedures and speak its slogans" (305), a Foucauldian end but with a decidedly positive historical spin. Moseley's questioning frame,

despite its entertaining hysterics, signaled the emergence of a new medical science that valued this kind of scrutiny, skepticism, and professional certainty over the novelty of mere experiment. Enlightenment medicine, then, ends with a Victorian discourse of sanitation, proscriptive ethics, and efficient treatment. These trumpeting pronouncements about the “age of Bichat” or the dawn of “Modern times” portray medicine blazing a singular path toward the birth of biopolitics and the “well-run state.” Even though Enlightenment-era medical experiments failed to match the spectacular successes of other disciplines, it would surely be hasty to ignore them entirely. Romantic-era disruptions in this narrative, including the challenging case of vaccination, offer positive alternatives to both Foucault’s account of the medical gaze and Porter’s selective reading of medicine’s Enlightenment triumph.<sup>11</sup>

If vaccination cannot be excerpted without violence from its historical context and neatly folded into the history of Enlightenment medicine, then some additional Romantic-era perspectives on medicine are sorely needed. John Birch, Blake’s physician and the early advocate of experimental electrical cures for menstrual issues who later recanted with an endorsement of experience over experiment, laments this state of Romantic-era medicine: “We live in a capricious age; an age that is fond of believing paradoxes, and of grasping at novelty. And this alone might account for the wonderful avidity with which the experiment [vaccination] was adopted” (Birch, “Vaccination” 34). He associates the age with capriciousness, paradox, novelty, avidity, and experiment and longs instead for method, logic, and experience in medical practice. Even though Birch perhaps purchases his point with a certain flair for hyperbole, his assessment is not an altogether inaccurate picture of this Romantic “age” of medicine. This is precisely the problematic age that Enlightenment accounts of medicine either gloss over or miss entirely. So what is this elusive “age” to which Birch alludes? And why do we hasten past this

story and toward the more familiar narratives of, for example, Jenner's elevation to the status of national hero, the consolidation of medical ethics, or the crystallization of an increasingly pathological medicine? To better define Birch's "age" is, then, also to recover the historical and literary contexts that led to vaccination's discovery as well as Keats's medico-literary meditations. Birch's staunch anti-vaccinationist advocacy depends on measured response and a largely rational appeal for medical oversight and experimental caution. Thus, instead of casting the vaccination debate as mad scientists arguing against even madder anti-intellectual reactionaries balking at real medical progress, I argue that Romantic medicine is something far less glamorous. It is neither Birch's derogatory assessment of an irresponsibly "capricious age" nor Porter's dramatic dawn of "Modern times" in the history of medicine; instead, it is a deeply conflictual medical culture that productively pits science against skepticism, resolved into a careful ecology of experimental theory and ethical practice.

Romantic medicine, then, entails much more than a brief layover to the Enlightenment triumph of pathology. An alternative history that lingers with the success of vaccination without hastily moving on to the triumphal story of compulsion opens up a useful bifurcation in the history of medicine that softens Foucault's dire history of biopolitics. First, is the well-worn path of professionalization that conflates Jenner's discovery with the advent of compulsion, of the construction of a medicalized national identity against the infectious other, and the institutionalization of medical experience over radical experiment. The second path is a more generous and sustained Romantic disease discourse that prefers to dwell in continuous experiment, to explore the medical and political implications of abnormality and monstrosity, and to distribute medical authority beyond professional physicians. As I have suggested, Keats did not simply abandon medicine for poetry when he left the institutional confines of Guy's



Hospital; his decision to pursue poetry was instead a calculated move to preserve this Romantic disease discourse even as the discipline of medicine was hurtling toward professional practice and rigid method. To pursue poetry, then, was less a disciplinary break for Keats and more a conscious decision to practice a different kind of medicine, one that could potentially replicate the proven success of vaccination. This *literary* persistence of a *medical* practice is precisely the missing term in most historical accounts of Enlightenment medicine. Porter abruptly writes it off to announce the dawn of modern times and Foucault glosses over it to caution us about the age of Bichat. Birch, however, had attributed his contemporaries' medical attitudes to a legitimate and often disruptive Romantic "age" of medicine. Rather than constructing another medical history of quick disciplinary formations, I take Birch at his word and flesh out this literary age of medicine both to understand better Keats's seemingly abrupt conversion from professional medicine to poetry and to fill in a conspicuous gap in Enlightenment history.

Keats's place in this Romantic disease discourse remains central. His later *literary* production is well-equipped to answer pressing *medical* questions about both his brief career as well as what Birch had dubbed the "capricious age" of medicine. This literary dimension of Romantic-era medical practice is perhaps most aptly captured in those anatomical metaphors of the letters. Recall that in revising his concept of negative capability into the more expansive architectural conceit of the mansion, he exchanges the dangerously unfiltered passivity of pulmonary inspiration for the selective processing of his "teeming brain" ("When I Have Fears" 2).<sup>12</sup> The brain supplants the lungs as Keats's anatomical site of literary creativity, moving from a kind of idealistic permeability to information overload, from the singular absorption of the creative poet to the desultory struggle of mental progress. As Alan Richardson rightly insists in his study of Romantic neuroscience, Keats's best work is "as much scientific as poetic" (124),

and his working out of this anatomical metaphor is certainly no exception. The later Keats realizes beyond his medical formulation of “negative capability” that poetry can and should be the better medicine; it revitalizes the poetic body beyond insular anatomical categories and toward a broader medical hermeneutics that acknowledges the real difficulties in symptomatic interpretation and the possibility of human progress beyond mere pathological knowledge.

This construct of a disease “discourse” arises from Foucault’s influential discussion of medicine in *Birth of the Clinic*, and I choose this word deliberately to capitalize on its currency in the history of medicine. Foucault famously defines the birth of the clinic as the ostensible closing off of medicine to the niggling semantics of discourse:

The clinic—constantly praised for its empiricism, the modesty of its attention, and the care with which it silently lets things surface to the observing gaze without disturbing them with discourse—owes its real importance to the fact that it is a reorganization in depth, not only of medical discourse, but of the very possibility of a discourse about disease. (*Clinic* xix)

Of note here is that Foucault does not entirely foreclose the post-clinical “possibility of discourse about disease.” He carefully reworks the more lucid claim of his mentor Canguilhem, that the normalization in clinical pathology represents a “really naïve dream of regularity in the absence of rule” (Canguilhem 241). In other words, pathology authors its discursive norm despite the carefully buried denial of the very discourse that produced it. Foucault’s clinic, his metonym for medical pathology, succeeds in foreclosing a “discourse about disease” only insofar as it reorganizes “in depth” the *visibility* of its discursiveness. In effect, then, the “observing gaze” of modern medicine is only minimally perturbed by those destabilizing questions of subjective discourse. An investigation of Romantic-era medicine serves to historicize this birth of the clinic while also offering a challenge to Foucault’s implicit fatalism about the coercive, discourseless

discourse of the clinic. Modern medicine's ostensible immunity to discourse need not, and indeed should not, preclude a Romantic discourse of immunity.

Keats's work exemplifies three defining aspects of Romantic disease discourse. The first pertains to the era's peculiar culture of experiment. For example, the physician Thomas Beddoes and his oft-lampooned Pneumatic Institute brazenly applied nitrous oxide (laughing gas) to various unrelated ailments, James Graham advertised the amazing health benefits of electromagnetic beds, and Jenner found his unlikely cure for smallpox in the udder of a cow. This experimental culture led to both blatant quackery and medical breakthrough. Yet the history of medicine has been quick to forget about the latter while almost exclusively focusing its attention on the often hilarious consequences of the former.<sup>13</sup> Even though the contemporary medical discourse of immunity and prevention has its roots in this boldly experimental method, Romantic medicine's experimental transgression and its unusually high tolerance for methodological error have rendered it particularly vulnerable to bioethical criticism. Surprisingly, though, this period also managed to produce two of the foundational texts of bioethics: from a literary perspective, Mary Shelley's *Frankenstein* (1818) helped to model an ethic of care to regulate the excesses of an overreaching science, and from a medical perspective, Thomas Percival's *Medical Ethics* (1803) pioneered efforts to codify professional conduct in medical practice. Paul Youngquist provides a useful historical account of what happens to the conception of the body given this volatile balancing act between normativizing ethics and transgressive experiment: he argues that "monstrosity" (the non-normative body) simultaneously constructs and resists "the social project of proper embodiment in liberal society" (xxix). In other words, it constructs the regulatory notion of a "normal" body while offering, at the same time, transformative possibilities in the abnormal and the experimental. The medical discourse of

eugenic purity and bodily defense had not yet begun to crystallize; instead, Romantic medicine made do with this dual sense of monstrosity and a remarkably porous disease discourse that could admit tweaking, error, correction, invasion, and contamination, all while carefully preventing medical practice from falling into an experimental free-for-all.

Such an agile and experimental medical practice naturally resists strict categorizations, for to name a disease is to mark, with potentially coercive precision, the border between the normal and the pathological. The second important aspect of Romantic disease discourse is its refusal to classify abnormality. In the eighteenth century, nosology (the study of disease classification) had just begun to take up Linnaeus's famous challenge to organize the world. Standardized nomenclature, however, had to wait until the ICD. One can situate Romantic medicine chronologically and ideologically in the middle of this medical history: whereas William Cullen devoted long medical tracts to classify diseases according to increasingly specific categories of order, genus, and species, his apostate protégé, John Brown, was touting a novel theory of "excitability" which provided a serious challenge to nosological classifications. He explained diseases qualitatively as types of irritability and excitation: on the one hand, disease is caused by "too great excitement," but, on the other, "*Life is a forced state*; if the exciting powers are withdrawn, death ensues as certainly as when the excitability is gone" (82). Cullen's strict taxonomy of disease and Brown's deliberate blurring of those same categories managed to coexist (albeit uneasily) during the Romantic period. And despite Cullen's drive to pathologize, the body largely remained a loose amalgam of affective drives, psychology, vital force, organs, and pathways rather than a localized network of discrete organic parts. In short, disease was a hotly disputed category, and any attempt at classification faced serious challenges. As I will discuss later, the diagnostic evasiveness of Keats's poems point to this medical culture

of conflictual nomenclature. All this is not to say that Romantic medicine floundered hopelessly in lexical disarray. Rather, disease existed as more than just a normative exception to health. Health was not the absence of disease; as Nicholas Jewson puts it, “Pathology was speculative, systemic and monistic” (228), and health remained a largely amorphous conceit. Despite (or perhaps because of) this willful suspension of definitional precision, Romantic medicine gave rise to some of the most important landmarks in the history of medicine, from the theoretical innovation of Brown’s revolutionary medical paradigm of excitability to the practical research into Jenner’s disease-eradicating procedure.

George Grinnell has even gone so far as to dub Romantic medicine “the age of hypochondria” because of these contested notions of health and disease and the heated narrative negotiations between patient and physician.<sup>14</sup> The third and final aspect of Romantic disease discourse that I wish to discuss is this interface between amateur and professional, layperson and expert, patient and physician. Foucault and Jewson have both provided convincing accounts of the Romantic period’s complicated reconfigurations of medical authority. In both histories, the “Bedside Medicine” of the late eighteenth century gets replaced by the “Hospital Medicine” (or in Foucault’s language the “clinic”) of the early nineteenth.<sup>15</sup> They agree on a marked movement away from patients’ experiential reports to physicians’ professional opinions, but whereas Jewson seems content to adopt a triumphalist stance of Enlightenment progress from the speculation, dispute, and weak disciplinary boundaries of Bedside Medicine to the definitional precision and clinical observation of Hospital Medicine (and later, “Laboratory Medicine”), Foucault remains skeptical about this consolidation of clinical power. This Foucauldian skepticism proves helpful in explaining the Romantic examples of Keats and Jenner. Keats’s poetry demonstrates Romantic literature’s easy and productive access to the cutting edge of

contemporaneous medical debates. Besides the vaccination issues already discussed, Keats also intervenes more famously in medical controversies about consumption, fever, and the general nature of contagion. Keats certainly does not lack medical sophistication, and his medico-literary interventions stand comfortably alongside the ostensibly more legitimate accounts of medical practitioners. And Jenner's case certainly shows that Jewson's picture of a medical science in "cosmological" disarray does not necessarily preclude methodical research, innovation, and discovery.

### **The End of Disease**

My analysis of Keats's medico-literary output and its relationship to this Romantic disease discourse begins with one of his most well-known poems, *La Belle Dame Sans Merci*. The poem's brevity and tight narrative structure have made it a perennial favorite of the literature classroom, albeit much to the dismay of perceptive students of Keats. The poem's divergent critical responses quickly betray these deceptive trappings of easy legibility. As soon as one decides that the poem is a quest romance, for example, the poem's inconclusiveness frustrates proper generic accounting. As soon as one ascribes feminist agency to the belle dame's subjugation of her pining paramours, the nested narratives of male desire begin to assert their revisionist power. It is a ballad that paradoxically depends on the quirks of the written word, a lovesick knight's journey that ends in neither consummated love nor tragic death. The two extant versions of the poem introduce even more complications. What, for example, is the difference between "knight-at-arms" and "wretched wight"? How does the stanzas' sequencing determine the meaning of the narrator's ambiguous recollection of the belle dame's amorous speech: "And sure in language strange..." ("Belle Dame" 27)? Critics have paid especially close attention to

that word “sure”: it signifies either the knight’s uneasy reassurance of his fading memory or his confidence in its retelling (Simpson 16–20). Alternatively, it might not even be about the knight at all. Andrew Bennett, for example, reads it as the belle dame’s certainty in her proclamation of love (114). The poem’s structure is at once multiple and spare, its presentation polished and extemporaneous, and its theme celebratory and mournful.

To clarify some of these challenging issues, I begin with the interlocutor’s diagnostic question: “O WHAT can ail thee, knight-at-arms” (“Belle Dame” 1)?<sup>16</sup> Foucault distinguishes between two versions of this question, separated by an epistemic shift in his history of clinical medicine:

This new structure is indicated...by the minute but decisive change, whereby the question: “What is the matter with you?”, with which the eighteenth-century dialogue between doctor and patient began..., was replaced by that other question: “Where does it hurt?”, in which we recognize the operation of the clinic and the principle of its entire discourse. (*Clinic* xxi)

The clinical question (“Where does it hurt?”) pragmatically reorganizes disease into pathological cause and observable effect whereas the older formulation (“What is the matter with you?”) encourages a discursive notion of health and disease constructed at the agile interface of doctor and patient. The clinician chooses to close off access to that dialogue and imperiously maps disease onto the symptomatic body. The “principle of [the clinic’s] entire discourse,” then, is the apparent short-circuiting of the possibility of discourse itself and the subsequent erection of a monolithic medical archive from which illness can be easily isolated from local (“Where”) rather than global (“What”) cues.

Keats’s interlocutor similarly bypasses the patient’s narrative. After asking, “O WHAT can ail thee, knight-at-arms, / Alone and palely loitering?” (“Belle Dame” 1–2) he turns his attention to possible environmental factors instead of waiting for an answer: “The sedge has

wither'd from the lake, / And no birds sing" ("Belle Dame" 3–4). The second stanza continues this pattern with minimal variation: "O what can ail thee, knight-at-arms, / So haggard and so woe-begone? / The squirrel's granary is full, / And the harvest's done" ("Belle Dame" 5–8). In both cases, autumn has ended (the squirrel and the farmer have both made the appropriate preparations for a lifeless winter) and winter begun (the sedge has died off and the birds have migrated south). As Bewell has demonstrated in his *Romanticism and Colonial Disease*, early nineteenth-century epidemiology was well aware of the close relationship between climate and disease, and the interlocutor's diagnosis swiftly accesses that body of medical knowledge even without recourse to the particularities of the patient's narrative. Since winter had proven a historically reliable ward against the spread of disease, the knight's apparently symptomatic body unsettles this medical archive.<sup>17</sup> Stymied by this seemingly inexplicable symptomology, the interlocutor dully recapitulates pathology, relying only on the rote empiricism of an institutional medical education.

As several critics have surmised, he concludes his investigation with a particularly florid diagnosis of consumption.<sup>18</sup> The "lily" ("Belle Dame" 9) and the "fading rose" ("Belle Dame" 11) ostensibly represent respectively the knight's pallid complexion and his wasting health, both classic symptoms of the tubercular patient. What has been overlooked, however, is the interlocutor's subtle reference to pharmacological botany. His strange diagnostic construction, "fever dew" ("Belle Dame" 10), embeds a floral pun on the feverfew, a flower that, according to the *materia medica* of the time, acts as "tonic, stomachic, resolvent, and emmenagogue [a menstrual stimulant]" (Woodville 74). William Woodville, physician and author of the well-known textbook *Medical Botany* (1810), goes on to say that "[Feverfew] has been given successfully as a vermifuge, and for the cure of intermittents; but its use is most celebrated in



female disorders, especially in hysteria” (74). The knight’s consumptive symptoms serve to satisfy an urge to link the poem with Keats’s own struggles with disease, but the hysteria diagnosis much more accurately captures the two speakers’ conversational dynamic. The well-worn consumptive reading of the poem largely derives its evidence from biographical contexts: since Keats wrote the poem after losing his brother Tom to consumption, the pale knight must surely be suffering from the same disease. The hysterical reading of the poem, however, resists that quick conflation of life and art and insists that biography meet textual evidence.

William Cullen, that eminent British physician of the eighteenth century, struggled to classify the affliction known as hysteria (Cullen, “Hysteria” 153–158). The best he could do was to correlate the disease tentatively with nymphomania (*hysteria libidinosa*) while lamenting the difficulty in diagnosing such an amorphous disorder. Curiously, though, he also associates hysteria with widowhood, making the disease simultaneously a signifier of biological excess (the “plethoric habits” of nymphomaniacs) and sexual deprivation (“barren” wives left without a sexual partner). In a succinct summary of this oft-contradictory attitude toward hysteria, Rachel P. Maines concludes that “It is at...the beginning of the nineteenth century...that the nosological and etiological framework of hysteria become both confused and confusing” (34). Whether it manifested as libidinal overindulgence or pathological chastity, hysteria existed as some sort of “plethoric state” ostensibly caused by either menstruation or a vaguely-defined “turgescence of blood in the uterus” (Cullen, “Hysteria” 157). Pooling fluids and unbounded surges of sexual energy insidiously supplanted feminine sensibility with “robust and masculine constitutions” (Cullen, “Hysteria” 155). Unlike consumption, then, hysteria was far from a wasting away of life but rather, as Denise Gigante might put it, a “monstrous surplus of the real” (237), or a dangerous excess of vital force that disrupts essential biological function. In other words, the

knight is not dying as the consumptive reading presupposes, but his disease still lies just beyond conventional medical reckoning.

Even so, the confident interlocutor arrives at an authoritative answer that sets the knight on a carefully-charted path from diagnosis to treatment. This masculine diagnosis of a hysterical patient recalls a long history of feminizing Keats and the consumptive poet in general. Keats himself often participates in literary cross-dressing, which Margaret Homans unpacks as a “masculine appropriation of the feminine” (344). Anne K. Mellor similarly takes Keats to task for his treatment of the silenced belle dame (*Romanticism & Gender* 184) or, in Karen Swann’s more extreme formulation, for the knight’s “harassing the muse” with his decidedly biased retelling of the encounter (81–92). And more recently, Susan Wolfson has generously summarized Keats’s rich and varied afterlife in relation to Victorian and contemporary notions of gender identity (205–284). In all these accounts, Keats only becomes open to femininity after anxiously reclaiming some tenable semblance of masculinity. In the specific case of *La Belle Dame*, for example, he identifies with the hysterical knight only because he simultaneously claims membership in an exclusive male club of lovelorn kings, princes and warriors (“Belle Dame” 37–38) and because he frames the poem’s action within the androcentric genre of the quest romance. Furthermore, Cullen helpfully reminds us that Romantic-era hysteria did not just affect women: “These affections have been supposed peculiar to the female sex; and indeed they most commonly appear in females: but they sometimes, though, rarely, attack also the male sex; never, however, that I have observed, in the same exquisite degree” (“Hysteria” 154). This strategy safely instrumentalizes femininity to convey the central concepts of Keats’s poetics—negative capability, wise passiveness, and receptivity—as the feminine potential for creative (re)production. This gendered reading of Keats is now commonplace. My hysterical reading of

*La Belle Dame*, though, suggests that this richly-documented Keatsian femininity also extends to a privileging of disease and disorder over cure and pathology, a negative capability that can also inhabit a diseased body that utterly baffles the medical lexicon. The knight's lingering on disease and disorder pits chaotic discourse against the interlocutor's clinical diagnosis. Even though this Foucauldian interlocutor efficiently communicates both disease and remedy within a claustrophobically compact pun—"fever dew"/feverfew—the feminized knight productively persists in the uncertainties and doubts of his affliction without any irritable reaching after pathological diagnosis.

The interlocutor's introductory speech relies on the relatively closed form of the tripartite syllogism. The first stanza's premise announces winter's arrival (the withered sedge and songless birds), and the second describes autumn's end (both squirrel and farmer have concluded their seasonal labors). The third deduces from these environmental premises three possible conclusions, each attached to a floral medical trope: consumption ("a lily on thy brow"), hysteria ("anguish moist and fever dew") and smallpox ("on thy cheeks a fading rose"). The feverish lily's connection to consumption has been ably handled elsewhere, and I have already discussed the poem's hysterical context. For the interlocutor's third diagnosis, I rely on David Shuttelton's book *Smallpox and the Literary Imagination* (2007) in which he meticulously traces the literary history of smallpox's rosy poetics, from Dryden's image of smallpox pustules as "Rose-buds, stuck i' th' Lilly-skin about" in the late seventeenth century to Robert Bloomfield's redemptive "vaccine rose" in the early nineteenth. The interlocutor's syllogistic calculation can fathom only this finite set of possibilities, relying heavily on a floral history of smallpox and the botanical repertoire of nineteenth-century pharmacology.<sup>19</sup> His medical gaze fixes on the legible, local

symptoms of the brow, the skin, and the cheeks, finally directing the knight to answer the clinical question, “Where does it hurt?”

The knight, though, much prefers the older discourse of “What is the matter with you?” and deliberately eschews the clinical precision of the interlocutor’s question in the narrative of his transformative encounter with the belle dame. When he finally deigns to acknowledge the original line of questioning, it is only to echo ironically the obtuseness of the initial diagnosis of “anguish moist and fever dew”: “She found me roots of relish sweet, / And honey wild, and manna dew” (“Belle Dame” 25–26). Feverfew can hardly compare to “manna dew,” and the belle dame’s remedies prove infinitely sweeter. Here, the belle dame comes into her role as a competing physician who bases her diagnosis not merely on unilateral access to a monolithic medical archive but rather on a mutually-constructed illness narrative. This sense of mutuality looms heavily across Keats’s revisions of the poem. In polishing the manuscript into the published 1820 *Indicator* version, Keats worked hard to balance the distribution of agency in the encounter. Stanzas V and VI of the manuscript version, for example, describes a courtship culminating in a passionate encounter:

I made a garland for her head,  
And bracelets too, and fragrant zone;  
She look’d at me as she did love,  
And made sweet moan.

I set her on my pacing steed,  
And nothing else saw all day long,  
For sidelong would she bend, and sing  
A fairy’s song. (“Belle Dame” 17–24)

In the revised poem, Keats reverses the order of these stanzas, exchanging a scene of amorous courtship for one of forceful seduction. And later, when he rewrites “there she lulled me asleep” as “there we slumber’d on the moss” (“Belle Dame” 33), he transforms the knightly victimhood

of the earlier version into a pastoral portrait of mutual love. The manuscript presents a much more consistent narrative—the belle dame is indeed *sans merci* when she hastily declares her love, casts her soporific spell, and finally abandons the knight—while the *Indicator* version adds an odd counter-narrative in which the knight becomes an aggressive paramour who successfully seduces a beautiful woman before getting his comeuppance. The poem, then, is an experiment in varying levels of exchange and intercourse. The interest of the poem ostensibly lies in its volatile characterizations of agency that play with the binaries of the seducer and the seduced, the narrator and the narrated, the victimizer and the victim. The opening encounter between the interlocutor and the knight, though, never erupts in such uncertainty and hence is largely ignored or merely dismissed as a convenient framing device for the poem's main narrative. I contend, however, that the disjunction between the interlocutor and the knight that precludes discourse and mutual understanding functions as an important medical foil to the Romantic disease discourse of the knight's tale.

As I have suggested, Keats presents two competing medical systems in *La Belle Dame*: the first depends on precise pathology, anatomical containment, diagnostic efficiency, and institutional knowledge whereas the second remains tied to pharmacological experiment, volatile discourse, and the illness narrative. Even though early nineteenth-century medicine struggled to work through this epistemic shift, the knight seems to have his mind firmly made up. When the interlocutor asks the clinical question that cannot be disturbed by discourse, for example, the knight perversely provides a discursive answer and even pokes a little fun at the obtuse diagnosis. He mimes the interlocutor's tripartite structure in a mock-syllogistic explanation that recapitulates the first stanza with a deeply ironic difference:

And this is why I sojourn here,  
Alone and palely loitering,

Though the sedge is wither'd from the lake,  
And no birds sing. ("Belle Dame" 45–48)

He taunts the interlocutor's dependence on easy causal linkages with his enticing phrase "And this is why," a connective statement that purports to offer medical cause for symptomatic effect. Yet the interlocutor's telling silence at the end suggests another failure to comprehend. This mutual misunderstanding arises from a disease discourse that continues to resist the Foucauldian birth of the clinic. More specifically, the knight's perspective dramatizes those three properties of Romantic disease discourse discussed previously. First, the belle dame's experimental "manna dew" captures the negative image of the interlocutor's ingrained medical training and his institutional parsing of disease into syllogism and binary. The phrase "fever dew" condenses both problem (hysteria) and solution (feverfew) into the same clinical breath whereas the manna dew's soporific effect generously opens up the pharmacological discourse. Second, while the knight draws attention to the amorphous definitions of hysteria, the interlocutor anxiously tries to pin down a disease that notoriously frustrated nosological classification. Third, the poem ultimately refuses to assign unilateral medical authority. In a sense, all three characters fail to treat the illness: the interlocutor's diagnoses get him nowhere, the belle dame eventually abandons her patient, and the knight ends up aimlessly roaming the land still ailing and palely loitering. The belle dame, however, is certainly an improvement from the ineffectual clinician. The sense of mutuality in her medical discourse stands in stark contrast to the interlocutor's emergent professionalized, institutionalized, and pathologized medicine that seeks to neutralize any perceived threat of discourse. Dissatisfied with the advent of this new medical paradigm, Keats does not, however, merely retreat into poetry as many critics have implied in their accounts of his abrupt career change. Instead, I have been suggesting that he continuously re-

energizes his advocacy of a different kind of medicine, of a Romantic disease discourse that could produce results like smallpox vaccination without the clinic's institutional trappings.

With the promise of vaccination, Romantic disease discourse had brought the end of disease within Keats's sight. The knight is not dying; rather, he has survived beyond the thrill of the quest romance and persists in a life among ruins. The withered sedge and the songless sky chastise the knight's rote repetition of enduring life. The belle dame's "manna dew" has inoculated him against bodily ailment, and the "fading rose"—a symptom that the interlocutor misreads as deathly pallor—signifies the gradual return of bodily health through a conventional floral trope that figures the healing of smallpox pustules as withering rosebuds. This disjunction between the knight and his interlocutor underscores Keats's frustration with the direction of clinical medicine. The knight has become healthy beyond the clinician's reckoning. He could hardly understand, for example, the similar description of Moneta's face in *The Fall of Hyperion*:

Not pin'd by human sorrows, but bright blanch'd  
By an immortal sickness which kills not;  
It works a constant change, which happy death  
Can put no end to; deathwards progressing  
To no death was that visage, it had pass'd  
The lily and the snow ("The Fall" l.257–262)

The "lily" reprises its role to describe Moneta's deathless fever, an oxymoronic diagnosis that necessarily eludes the interlocutor's method. The clinical archive surely has no account for an illness "deathwards progressing / To no death," so it comes to the poet-physician to untangle the paradox. In *La Belle Dame*, this proves no easy task. Abandoned by the immortal "fairy's child," the knight is left to "sojourn" without purpose, unable to die, to ascend to heaven, or to fulfill the parameters of the typical quest romance. Instead of love or death, comedy or tragedy, he finds himself halfway between, in the sparse vignette of barely persisting life among the seasonal corpses of the natural scene. Keats's poetic experiment here is to reinvigorate the elegiac genre

in the wake of a medical discovery that threatened to make it obsolete by materializing John Donne's pious prophecy: "Death, thou shalt die!" (14). The poems of *Lachrymae Musarum*, for example, invoke the nine muses to elevate the smallpox-ridden corpse of Lord Hastings into the preserving realm of art. The muse of *La Belle Dame* has no such corpse to elegize. Keats's elegiac mode does not presuppose death but instead depicts the perpetual, fevered existence of life. He imagines that in a world where medicine has finally triumphed, we must slowly learn how to mourn the living.

Apollo, god of both medicine and poetry, seems an ideal candidate to realize this interdisciplinary goal. In *Hyperion*, Keats introduces this divine figure at the end of his poetic fragment as the old gods give way to the new:

Soon wild commotions shook him and made flush  
All the immortal fairness of his limbs;  
Most like the struggle at the gate of death;  
Or liker still to one who should take leave  
Of pale immortal death, and with a pang  
As hot as death's is chill, with fierce convulse  
Die into life: so young Apollo anguish'd:  
His very hair, his golden tresses famed,  
Kept undulation round his eager neck.  
During the pain Mnemosyne upheld  
Her arms as one who prophesied.—At length  
Apollo shriek'd;—and lo! from all his limbs  
Celestial... ("Hyperion" III.134–136)

Here, Keats offers a scaled-up version of the knight's preserving encounter with the belle dame. Under the watchful eye of Mnemosyne, mother of the nine muses, Apollo dies his "immortal death" into painful life just as the knight is forcibly woken from fevered dream into lifeless life. Even though the narrative components receive some significant upgrades—the knight is recast as an emergent god and the belle dame becomes a Titanic original—Keats still refuses a satisfying solution to the problem of elegy. He concludes the poem with a frustrating ellipsis that precludes



such thematic closure. We are left wondering about Apollo's pained immortality, about a life without the chastising sting of death. The problem remains open-ended because a story of Titans and fledgling gods has no easily accessible human content beyond the almost tautological word "Celestial." Marjorie Levinson describes *Hyperion* as a "dependent fragment" because it is "an episode or exercise in the poet's career" (50) in which completion depends on a relationship to a larger canon. However, the fragment's completion not only depends on the later revision in *The Fall of Hyperion* but also on the biopolitical themes of *La Belle Dame*. Through these variations on a common theme, Keats suggests that we require access to human, medical material rather than abstract "Miltonic inversions" or some noumenal realm of divinity.<sup>20</sup> In other words, instead of scaling up, Keats decides to scale down, and he does just that in the poet-speaker's encounter with Moneta in *The Fall*.

In this revision, the poet-speaker stands in for the similarly shrieking Apollo at the end of *Hyperion*: "I shriek'd; and the sharp anguish of my shriek / Stung my own ears" ("The Fall" I.26–27). Apollo's sublime divinity is rewritten in the later poem as a self-reflexive "I." And instead of Apollo's dying into life, Moneta tells the poet-speaker of *The Fall*: "Thou hast felt / What 'tis to *die and live* again before / Thy fated hour" ("The Fall" I.141–143, emphasis mine). The almost total erasure of Apollo from the narrative brings the poet-speaker of *The Fall* much closer to the figure of the knight in *La Belle Dame*. Moneta, though, proves more unambiguously sympathetic than the ballad's merciless female character. She acts as a paradoxical teacher that guides the dreamer away from guidance, a warning voice that tells the dreamer, in a dream, how to dream: "seek no wonder but the human face; / No music but a happy-noted voice" ("The Fall" I.163–164). Those knights who cloister themselves in nostalgic speculation and idle want forget the "wonder" and "music" of the human world. For this, Moneta at once criticizes and admires

her enraptured listener—"Thou art a dreaming thing; / A fever of thyself" ("The Fall" I.168–169)—and ends up commanding him to "think of the earth" ("The Fall" I.169) as if he could, "Bearing more woe than all his sins deserve" ("The Fall" I.176), learn to take on the entirety of human suffering. She exhorts him to look beyond debilitating abstraction and solipsistic depression toward the primary medico-literary task of the poet: to heal Titanic loss and to "pour out a balm upon the world" ("The Fall" I.201).

Part of this burden requires that the poet-speaker decipher Moneta's face and "Part the veils" ("The Fall" I.256) that obscure her immortal visage. He fixates first on the visual field. The description teems with ocular phrases—"blanch'd," "visage," "planetary eyes," "benignant light,"—and yet, the language of the eye almost immediately begins to compete with an embedded vocabulary of the mouth and the brain, sites of internalization rather than externalization:

So at the view of sad Moneta's brow,  
I ached to see what things the hollow brain  
Behind enwombed: what high tragedy  
In the dark secret chambers of her skull  
Was acting, that could give so dread a stress  
To her cold lips... ("The Fall" I.275–280)

The "view" of Moneta's face appears inadequate and the sexualized language of penetration—"enwombed," "cold lips," "dark secret chambers"—overreaches toward "high tragedy" and surgical discovery. Rather than giving in to these high Miltonic themes as he did in the earlier *Hyperion*, however, his volatile desire stagnates at the level of "I ached to see" and culminates "with act adorant at [Moneta's] feet" ("The Fall" I.283). Still prostrated, the dreamer asks of this "pale Omega of a wither'd race" ("The Fall" I.288):

'Let me behold, according as thou said'st,  
What in thy brain so ferments to and fro.'—  
No sooner had this conjuration pass'd

My devout lips, than side by side we stood,  
(Like a stunt bramble by a solemn pine) (“The Fall” I.289–293)

The passage from “the view of Moneta’s brow” to “her cold lips” is mirrored in the dreamer from “Let me behold” to “My devout lips,” tracing a parallel shift from eye to mouth, from the violent image of shining through Moneta’s “dark secret chambers” to a more egalitarian model of conversation. By the end, the strictly hierarchical image of prostration softens into the democratizing image of the two figures “side by side.”

Hierarchical language persists in the parenthetical comparison of the speaker’s “stunt bramble” to Moneta’s “solemn pine,” suggesting that the next section of the poem, lifted directly from the beginning of *Hyperion*, are less the words of a Miltonic soothsayer and more a feeble version of an epic tale. Even though we hear this distortion and this “pain of feebleness” (“The Fall” I.429) through the repeated moans of the poet-speaker (“The Fall” I.412–429), he has seen “what things the hollow brain / Behind enwombed” and finds himself in a privileged position of a son (“stunt bramble”) to Moneta’s mother (“solemn pine”) rather than a mortal slave to her untouchable divinity. Moneta, roughly the Roman equivalent of Mnemosyne, becomes not only a mother to the nine muses but also to the human poet. In exchanging the sexual encounter of *La Belle Dame* for this (grand)mothering relationship, Keats tentatively moves away from the distracting questions of hierarchy and violation. The two extant versions of *La Belle Dame*, as I have noted previously, struggle with the sequencing of seduction (“I made a garland for her head”) and abduction (“I set her on my pacing steed”) while leaving the problem of authority open-ended and even, as the critical literature bears out, endlessly debatable. The poet-speaker of *The Fall* eschews these questions by turning away from the temptation of violation, of what Keats famously called Wordsworth’s “egotistical sublime,” and instead “enjoys” both “light and shade” without the eager intrusion of “self.” Rather than assuming the role of the professional

surgeon who brazenly explores the “dark secret chambers” of Moneta’s skull, the poet-speaker relies on a Romantic disease discourse that values imaginative experiment, diagnostic flexibility, and democratic conversation without the immediate assumption of arrogant authority or pathological certainty. He stands “side by side” with Moneta in the undertaking of the hard task of poetry and finally offers a solution to the pressing biopolitical problem of elegy. When faced with the prospect of endless life, Keats insists that we must turn to compassion, receptivity, and reciprocity, in a new medico-literary discourse that prioritizes life over mere subsistence. Instead of elegizing the dead, Keats lingers on the state of immunized life, “alone and palely loitering,” cured of disease but not of the dark melancholy of life itself. In imagining immunity, Keats must concede, like many medical theorists of the era supposed, that life itself is the diseased condition, and that that particular disease perhaps may never be cured but merely legislated. If we are forced to live, forced into the knowledge and sorrow of life, then the management of that potentially unending existence must fall to the poets, not the career physicians that Keats abandoned at Guy’s Hospital. For Keats, Romantic disease discourse becomes not just a medical episteme, but a poetic project to manage a brave new world of biopolitical existence.

### **Romantic Biopolitics**

Keats’s epistolary answer to the vitality question, his discursive approach to disease, and his medico-poetic thought experiment in *La Belle Dame* and the *Hyperion* poems all anticipate contemporary problems in biopolitics and the increasingly vocal debates about institutional power over human life. According to the political philosopher Giorgio Agamben, the central issue of this discussion is what happens when “bare life”—his phrase for pure biology divorced from its social construction—comes within the purview of state power. Foucault’s influential statement of the problem depends on a discontinuous archaeological shift from politics to

biopolitics: “For millennia, man remained what he was for Aristotle: a living animal with the additional capacity for political existence; modern man is an animal whose politics places his existence as a living being into question” (*History of Sexuality* 143). In *Homo Sacer*, Agamben refines this contested condition of life by exploring its complementary Greek etymologies: “*zoē*...expressed the simple fact of living common to all living beings (animals, men, or gods), and *bios*...indicated the form or way of living proper to an individual or a group” (1). Unlike Foucault’s dramatic and discontinuous archaeology, Agamben’s account insists that *zoē* has always intruded upon the sphere of *bios* and that politics has always already been biopolitics. In either case, the early nineteenth-century program of compulsory vaccination offers a very fertile proving ground for questions concerning biopower’s reach into the management of bare life. Keats’s imagining of the end of disease through vaccination’s unprecedented success, therefore, marks a nascent moment of biopolitical thought in which the diseased body exceeds its embodiment and becomes a problem of the state. His proposed solution—that poets become the unacknowledged physicians of the world—informs several modern biopolitical interventions in, for example, narrative medicine, medical humanities, and disability studies.

The contemporary formulation of the problem involves an interdisciplinary effort to articulate a non-degenerate biopolitics. Foucault’s conception of biopower remains cautiously value-neutral, but Agamben’s more pragmatic approach attempts to imagine a “new politics” that can “construct the link between *zoē* and *bios*.” He goes on to define the “new politics” against the old: “Bare life remains included in politics in the form of the exception, that is, as something that is included solely through an exclusion” (11). His clarifying example of Karen Ann Quinlan, a coma patient who died in 1985 after an almost decade-long persistent vegetative state, relates this paradoxical topology of inclusion and exclusion to the definition of life itself: “Karen

Quinlan's body had, in fact, entered a zone of indetermination in which the words 'life' and 'death' had lost their meaning, and which, at least in this sense, is not unlike the space of exception inhabited by bare life" (164).<sup>21</sup> Thus, the state must intervene within this "zone of indetermination"; advances in medical technology have made it abundantly clear that modern life can no longer subsist as mere biology. Keats's medically-inflected description of Moneta's visage—"deathwards progressing / To no death"—anticipates both the Quinlan case and this ostensibly contemporary biopolitical insight by over 150 years. For Keats's medico-literary mind, the human condition was never simply a discrete binary of life and death readily parsed into anatomical certainties. While Foucault and Agamben remain vague about the shape of this "new politics," imagining it only in the negative (it is *not* about the outworn "state of exception"), Keats turns to a more *positive* solution in poetry. His reliance on a literary Romantic disease discourse begins to do the work of mapping out the contours of the good biopolitical life. Rather than Agamben's "new politics," Keats places his faith in a new *poetics* that finally articulates the missing link between bare life and its political governance.

Locating this new poetics first requires some careful historical backtracking from the contemporary moment back to its origin in the Keatsian notion of Romantic immunity. Modern biopolitical debates begin at the turn of the twentieth century with the first global effort to catalogue disease. The International System of Nomenclature of Diseases and Causes of Death—now abbreviated ICD-1 (1900)—sought to reduce human morbidity and mortality to an efficient list of discrete, accessible categories. Later, this ambitious effort expanded to include mental disorders in the first Diagnostic and Statistical Manual of Mental Disorders, now abbreviated DSM-I (1952). While diagnostic expedience has been strongly correlated with declining mortality rates, these statistical manuals are not without their critics.<sup>22</sup> Perhaps the most well-

known of these controversies was the DSM's inclusion of homosexuality. Varying formulations of the homosexual "diagnosis" stubbornly persisted until as late as 1986, when activist criticism and pioneering research on sexuality finally overwhelmed ingrained prejudices. Pathology had become a potential site of coercive normalization, a danger that did not escape the notice of a growing number of social historians of medicine. Canguilhem and Foucault, for example, both worked to expose pathology's social construction and to subvert its claim to scientific authority.<sup>23</sup> The nascent field of disability studies has continued further along these theoretical lines, undoing normative pathologies to reveal new ways to think about impairment and illness without recourse to essentialized and stigmatized models of disability. Yet there is still significant work to be done. In the attempts to reverse prejudicial exclusions, to recognize the costs of normativity, and to uncover the sociopolitical underpinnings of medical science, these studies have understandably depended on caustic reaction to produce their theories of the abnormal. Though Canguilhem and Foucault have been invaluable in exposing the structures of medical power, their conclusions remain quite bleak and their recommendations conspicuously sparse. Similarly, disability studies continues to struggle with dismantling pathology while often tabling the ultimate goal of social recognition. Romantic-era medicine and literature sidesteps this reactionary mode and begins the work of modeling a positive discourse of disease, disability, and abnormality through the Romantic trope of immunity.

The towering historical roadblocks of the ICD and the DSM were yet unknown in the Romantic period. Medical practitioners of the period resisted the easy absorption of the abnormal body into an organizing gaze of institutionalized medicine because they did not yet rely on rigidly constructed borders between the normal and the pathological.<sup>24</sup> Romantic medicine and literature depend instead on a porous disease discourse, squaring quite nicely with recent

theorizations of disability that seek to problematize the medical impulse to rehabilitate the “defective” body. Foucault anticipates these ideas about disability in his pairing of the quarantined leper with the circulating plague victim. The plague victim receives immunity (both in the juridico-political and medical senses of the word) from ostracism and is brought into the medical lexicon while the leper remains a lost cause, a hopelessly incompatible residue.<sup>25</sup> Post-Foucauldian debates about these strangely selective immunities would benefit from some historicizing about immunity’s Romantic origins, not in the leprous paradigm of quarantine or a quasi-eugenic purge of disease, but in that plague victim’s carefully regulated contamination of and participation in an inoculated social system.<sup>26</sup> Despite the promise of this Romantic frame to immunize the abnormal body against social stigma, disability studies has mostly directed its attention to the eighteenth-century, the Victorian era and post-ICD medicine while skipping over the Romantic period. A better understanding of Romantic medicine would work to fill in this gap in the history of disability and to repair the strained relationship between disability studies and a past that has frequently been labeled as categorically ableist. Romantic disease discourse makes a positive historical antecedent available to contemporary disability studies while materializing theory into social and historical practice.

The specific case of smallpox offers a brief but useful glimpse into the particularities of Romantic disease management. In connecting immunity and contamination (Jenner’s smallpox vaccination, after all, was an act of cross-species infection), abstractly philosophical theorizations of immunity achieve a more material ground through engagement with medical history. Without mentioning Jenner’s remarkable medical breakthrough, for example, Roberto Esposito posits an “immunization paradigm” that reads the history of biopolitics as a *negative* history of eugenics, or what he calls—in a deathly opposition to the *bios* of the more familiar



term—“thanatopolitics.”<sup>27</sup> He surveys contemporary philosophy and finds that immunity is almost always associated (at least implicitly) with a sense of sterility that purges “community” and the “extraindividual” from the immunized subject.<sup>28</sup> His call for a *positive* (contaminated or inoculated rather than eugenically purified) biopolitics, however, notably lacks recourse to medical reality. The tendency is to work through biopolitical notions of immunity as a causeless effect; immunity is the abstract goal, but there is no material cause to ground this frequently intractable metaphor.

Within this nexus of disability, medicine, and literature, representation assumes a significant role in figuring the traumas and stigmas of disease. Susan Sontag’s outright rejection of metaphor in representing illness glosses over some telling examples from literary and medical history.<sup>29</sup> If we begin to move away from the degenerate cases of Gillray’s raucous satire and Dickens’s exploitive representation of Esther Summerson toward a Romantic disease discourse, we can start to develop a productive vocabulary of disability and to rethink assumptions about the abnormal. One possible way to do this (a method I have intentionally avoided with my discussion of Keats) is to discuss the uniquely privileged status of the consumptive poet in the Romantic period. Sontag has touched on this in her disapproving literary history of tuberculosis. In a more sympathetic account, Clark Lawlor has identified consumption with poetic agency in Percy Shelley’s *Alastor*: “Shelley’s vision of the poet would therefore seem to be tragic: the sensitive poet is unable to survive his own burning desire. Only those lacking in sensibility can live long in the world” (147). In this case, however, Romantic disease discourse threatens to become no more than a naïvely metaphorical appropriation of tuberculosis to aestheticize and idealize the consumptive and “sensitive poet.” Although the case of consumption threatens to reduce *Romantic* disability to *romanticized* disability, literary representation and medical reality

need not always be at odds. Romantic-era literature and medicine had other ways of imagining physical difference that could avoid both hegemonic normativizing and naïve idealization. Romantic disease discourse deployed both literary and medical perspectives to mutual benefit. Only recently, in the nascent field of narrative medicine, have we begun to take this kind of interdisciplinarity seriously. Rita Charon, for example, begins her book on narrative medicine with an instructive anecdote that pits an unfeeling physician (herself) against the suppressed narrative of a suffering patient, a telling picture of the state of contemporary medicine and an urgent call to action.<sup>30</sup> Yet we need not manufacture a theory of narrative medicine from thin air.<sup>31</sup> Romantic literature and medicine understood the value of the patient narrative in psychological healing, in disease interpretation, and even in research into new treatments and cures.

The three aspects of Romantic disease discourse—open-minded experiment, flexible definition, and distributed authority—not only speak to the concerns of narrative medicine, but also to recent work on disability theory. Those who study disability are justifiably suspicious of two discursive formations that occasionally reinforce ableist representations of impairment: biopolitics and literature. A historicizing turn toward Romantic-era literature begins to repair that disjunction and suggests a more sympathetic account that takes “immunity”—the endpoint of biopolitics—as more than just another oppressive metaphor for “normal.” Romantic medicine’s willingness to experiment, to suspend judgment on the abnormal, and to include a broad range of interdisciplinary perspectives all work to redefine immunity in more generous terms. Immunity comes from inoculation, in both the medical and metaphorical senses of the word, and Romantic disease discourse models a contaminated biopolitics that rejects the concept of a coercive and

purifying bodily defense against disease. In his concluding discussion of immunity, Ed Cohen wistfully fixates on this latter conception as a missed opportunity:

When in the early 1880s Élie Metchnikoff characterizes a form of organismic activity as “defense,” he gives the term “immunity” its modern biomedical valence. Imagine what might have happened if he had not been so focused on...the dynamics of aggression and response...He might then have described the dynamics through which complex organisms systematically mediate their relations with the others with whom they must concur by using immunity’s etymological opposite, “community”...How might we have organized our care for the ill and our systems of healing...if we imagined that our ability to respond to corporeal challenge engages our ability *to commune* with others?...A silly thought experiment perhaps. Nevertheless, it does suggest that there may be more to immunity than we currently know, or are indeed even capable of knowing, so long as we remain infected by the biopolitical perspectives that it defensively defines as the apotheosis of the modern body. (281)

The binary of immunity and community is especially valuable in framing the “systems of healing” that I have been describing. Cohen’s “thought experiment,” though, need not be “silly” because Romantic disease discourse already offers some firm historical precedent for his wishful thinking. Indeed, Romantic medicine *required* a sense of biopolitical community to authorize its experimental mode, its nosological looseness, and its radical inclusiveness. Disability studies would benefit from relaxing its resistance against biopolitics because Romantic medicine’s conflation of immunity and community offers a valuable lived experience of communal disability in which the abnormal did not always immediately deteriorate into the pathological. Similarly, when we are tempted to take literature to task for its creation and perpetuation of ableist representations, we should also recall the case of Romantic literature and its role in formulating these disability issues. It is quite telling that Cohen, Sontag, and Davis all turn to Victorian literature to shape their charges against literature’s complicity in normative pathologies. Romantic literature and medicine confirm Cohen’s hunch that “there may be more to immunity than we currently know.”

By the middle of the nineteenth century, though, the efforts of Romantic-era authors and physicians to organize a system of healing, care, and community had begun to unravel, and the more familiar post-Foucauldian narratives of Victorian medicine—institutionalization, disease classification, professionalization—had begun to replace the radical experiments of Romantic medicine. In this case, Sontag and Davis’s complaints start to make sense: disability and illness converge with coercive pathology while health becomes more fully institutionalized, more carefully policed, and more meticulously defined against the non-normative. Within such a Victorian medical frame, biopolitics and literature can indeed seem like dead ends. This is the dominant literary frame that has survived into contemporary discussions of disability and narrative medicine. Romanticism frequently gets short shrift in medical histories because of its awkward disruption of Enlightenment genealogies, but it can offer a potent historical reconfiguration that grounds both disability theory and narrative medicine with at least two positive precedents. First, its stubborn resistance to pathology may bring us yet another step closer to a just theory of disability. Second, its democratic inclusion of multiple perspectives—medical, literary, lay—should motivate narrative medicine’s push to place disciplines into productive conversation. We have lost this Romantic history, and we have been working diligently ever since to recover it from scratch: Esposito and Cohen’s search for a kind of immunity in community, disability theory’s goal to find a place for the non-normative, and narrative medicine’s work to forge a medico-literary language could all benefit from looking backward at the model of Romantic disease discourse. Our focus on the Victorian case has obscured literature’s role in representing illness and has blocked our access to a more generous biopolitical theory of immunity. The case of Keats and Romantic medicine instead reminds us that social justice and even medical efficacy are sometimes the casualties of contemporary

medicine's brutal efficiency. This is not to discount the enormous gains we have made in the field, but modern medicine may be wise to reconsider brushing off Romantic medicine as a zany hiatus in the relentless drive toward Enlightenment progress. Instead, we should look more closely at a medico-literary culture that could produce both vaccination, one of the most important and enduring discoveries in the history of medicine, and the effortlessly unbiased and interdisciplinary poetry of John Keats.

## Notes

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<sup>1</sup> For contemporary accounts of Keats's medical career in some of the most comprehensive and stunningly-detailed biographies, see Bate (23–83), Barnard (*John Keats* 1–14), and Motion (45–48). Hermione de Almeida even dedicates a full-length study on the relationship between Keats and medicine. And for a concise summary of the most hotly-disputed biographical aspects of Keats's medical training, see Barnard ("The Busy Time" 199–218).

<sup>2</sup> Derrida's notion of non-binary logic is useful here, an idea that he articulates through the medical metaphor of Plato's *pharmakon*. He argues that "dissemination sets up a pharmacy in which it is no longer possible to count by ones, by twos, or by threes; in which everything starts with the dyad. The dual opposition (remedy/poison...) organizes a conflictual, hierarchically structured field which can neither be reduced to unity, nor dialectically sublated or internalized into a third term" (20). His example "remedy" and "poison" finds its biological proof in the success of vaccination in which smallpox functions as a regulator of both health and disease.

<sup>3</sup> I yield to the already robust treatments of the vitality debates. For a representative study, see Sharon Ruston's *Shelley and Vitality* (2005), particularly the first chapter on Abernethy and Lawrence (24–73). Marilyn Butler's discussion of *Frankenstein* and radical science is also helpful in historicizing early nineteenth-century scientific arguments (302–313).

<sup>4</sup> See "Penetrable." Def. 1. *Oxford English Dictionary Online*, Oxford University Press, n.d. Web. 13 July 2013.

<sup>5</sup> For my discussion of Darwin's use of the architectural metaphor, see the "Mansion of Twenty-Four Apartments" section of my first chapter.

<sup>6</sup> Hazlitt's influence on the idea of negative capability has already been well documented. Walter Jackson Bate explains that "the immediate suggestions [of negative capability] have come to Keats from Wordsworth but are further substantiated by what he has been reading of Hazlitt" (239). Hazlitt's philosophical criticism, a precursor to Keats's idea of negative capability, is "confidence in the imaginative act—an act whereby sensations, intuitions, and judgments are not necessarily retained in the memory as separate particles of knowledge to be consulted one by one, but can be coalesced and transformed into a readiness of response that is objectively receptive to the concrete process of nature and indeed actively participates in it" (Bate 239).

<sup>7</sup> This cosmopolitan dimension of inoculation will be developed further in my fourth chapter's treatment of Mary Shelley's *The Last Man* (1826).

<sup>8</sup> As I have mentioned in the introduction, Tim Fulford and Debbie Lee's article on Jenner contains an efficient summary of vaccination's conservative afterlife (139–165). For a more thorough historical account of vaccination politics in the nineteenth century and the emergence of interventionist state power in matters of health, see Deborah Brunton's historical study *The Politics of Vaccination: Practice and Policy in England, Wales, Ireland, and*

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*Scotland, 1800-1874* (2008). Brunton goes even further to describe the public issue of vaccination as “the relationship of medical practitioners to the state” (4), leaving the vaccinated body completely out of the equation.

<sup>9</sup> The battle for vaccination gained its primacy through some remarkably sensationalistic images. See Haslam (235–244) on the connection between vaccination and its visual culture in *From Hogarth to Rowlandson: Medicine in Art in Eighteenth-Century Britain* (1996). See also Ron Broglio’s chapter “Cattle and Human Animality” (187–208) in which he discusses bovine images in vaccination propaganda.

<sup>10</sup> In Tamara Horowitz and Allen Janis’s edited collection of essays on scientific failure, the editors begin, “There are indeed many instances where an examination of the failures of science sheds light on its development or, in the case of contemporary failures, provides insights that help one see one’s way out of the morass” (1). Romantic medicine, I argue, thrives under these conditions.

<sup>11</sup> For the history of medical professionalization, Porter has the authoritative account. Porter’s reading of vaccination is not unique, however. See also Erwin Ackerknecht’s *A Short History of Medicine* in which he also conscripts vaccination into the familiar Enlightenment story (142–144).

<sup>12</sup> See Alan Richardson’s chapter “Keats and the Glories of the Brain” in his *Romanticism and the Science of the Mind* (114–150).

<sup>13</sup> In a study about John Keats and medicine, Hermione de Almeida begins, “The period of Romantic medicine has existed as a hiatus in the history of science” (3). Even since her groundbreaking study, we tend to view Romantic medicine as a minor embarrassment in Enlightenment histories of scientific progress.

<sup>14</sup> Grinnell describes hypochondria as a malady that resists the legibility of the body, requiring both physician and patient to produce diagnostic accounts of illness: “hypochondria embodies an anxiety troubling disciplinary formations that would produce the body as an object of knowledge” (3).

<sup>15</sup> For a concise summary of these changes in “medical cosmology,” see the two diagrams in Jewson (228).

<sup>16</sup> Unless otherwise indicated, citations of the poem come from the earlier manuscript version of the poem.

<sup>17</sup> Mary Shelley’s narrator in *The Last Man* (1826) is certainly aware of the connection between climate and contagion: “Winter was hailed, a general and never-failing physician. The embrowning woods, and swollen rivers, the evening mists, and morning frosts, were welcomed with gratitude. The effects of purifying cold were immediately felt; and the lists of mortality abroad were curtailed each week. Many of our visitors left us: those whose homes were far in the south, fled delightedly from our northern winter, and sought their native land, secure of plenty even after their fearful visitation. We breathed again. What the coming summer would bring, we knew not; but the present months were our own, and our hopes of a cessation of pestilence were high” (*The Last Man* 237–238).

<sup>18</sup> Alan Bewell, for example, immediately assumes that the knight’s “wasted body and pallid face flushed with fever reveal that he is suffering from consumption” (*Colonial Disease* 187). In this reading, the lily on the brow, the damp fever, and the fading rose are all symptoms of the same disease.

<sup>19</sup> McGann says the *Indicator* version is self-consciously ironic (*Beauty of Inflections* 25–65). The change from knight to the archaic “wight” is meant to convey the interlocutor’s conservative dependence on precedence and old knowledge.

<sup>20</sup> Of the abandoned *Hyperion*, Keats explains that “there were too many Miltonic inversions in it—Miltonic verse cannot be written but in an artful, or rather, artist’s humour. I wish to give myself up to other sensations” (*Letters* 272).

<sup>21</sup> If Agamben’s book had been written more recently, the more familiar example would probably be the controversial case of Terri Schiavo.

<sup>22</sup> For an example of such a correlation, see Alter and Carmichael (114–32). The article is also a useful elaboration on the history of the ICD.

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<sup>23</sup> Canguilhem's work on the history of pathology has become foundational in discussions in medical anthropology. See especially his discussion of "distinguishing anomaly from the pathological state" (181). For some important echoes of this study, see Foucault's *Birth of the Clinic*, especially his shifting definitions of "spaces" and "classes" (*Clinic* 3-21).

<sup>24</sup> Here, I refer to Foucault's famous description of the clinical gaze. He explains, "The gaze is passively linked to the primary passivity that dedicates it to the endless task of absorbing experience in its entirety, and of mastering it" (*Clinic* xiv).

<sup>25</sup> For more on the distinction between the plague victim and the leper, see Foucault (*Discipline* 195-209; *Abnormal* 31-54).

<sup>26</sup> Much has been made of the former paradigm beyond the Romantic period. For a representative study of such a rhetoric of bodily self defense, see Cohen, especially his reliance on the central example of Metchnikoff's definition of biological immunity and its reliance on metaphors of intrusion and defense (1-2).

<sup>27</sup> I take biopolitics to mean the imposition of sociopolitically constructed (and enforced) norms onto the body. Romantic disease discourse, I argue, offers us a positive (rather than eugenically coercive) biopolitical perspective on the social management of human disease.

<sup>28</sup> For the full discussion, see Esposito (45-77).

<sup>29</sup> Recall that Sontag polemically describes "metaphoric thinking" as "punitive or sentimental fantasies concocted about that situation [of illness]" (3).

<sup>30</sup> For the full anecdote, see Charon (3-6).

<sup>31</sup> In their influential article, Tricia Greenhalgh and Brian Hurwitz appeal to a lost "oral tradition of myths and legends" (50) to make their case for narrative in medicine. However, as this paper demonstrates, the period of Romantic medicine offers a more contemporary and concrete reference point from which to build a theory of narrative medicine.

## Chapter 4—We Must Live Elsewhere: Mary Shelley and Immunity

### Biopolitics by Induction

As the previous chapter argues, Keats imagines biopolitics in the restrictive terms of localized health: life and death felt on the pulse, inspiration breathed into the lungs, knowledge distributed across branching neural pathways. What changes in this politics of embodiment, though, when Keats's one-body problem divides in two? Mary Shelley's apocalyptic novel *The Last Man* (1826) enlarges the terms of Keats's local vision of health, imagining the end of disease not by peering inwardly to the regulation of the individual body, but by enforcing a cosmopolitan ethics in the geopolitical space *between* vulnerable bodies. To speak of humanity's triumph over disease in a novel that spectacularly stages epidemic annihilation against the crippling futility of human endeavor might, at first glance, seem particularly perverse. To read the novel as any kind of biopolitical intervention, then, this chapter first recovers the radical utopian potential within the threateningly nihilistic plot to articulate very precisely how Shelley hopes to leverage Kantian cosmopolitanism against natural disaster. It is with this sense of infection from otherness, an idealized cosmopolitanism that Kant calls "unsocial sociability," that Shelley arrives at not only the Keatsian concept of physical and mental well-being, but also sociopolitical stability and a cogent model of the healthy state. *The Last Man* incrementally compounds the biopolitical problem of health by piling on infected bodies; in this way, Shelley mobilizes a Romantic disease discourse to construct inductively a biopolitics by sheer numbers.<sup>1</sup>

This biopolitical induction depends on the presumption that the personal and political catastrophes that cluster around both author and novel *inform*, but do not determine, the ideological texture of Shelley's apocalyptic plague narrative. Despite charges of nihilism and anti-Romantic conservatism, Shelley offers several sites of social resistance to natural disaster



that renovate, rather than reject, the philosophical and political idealism of the earlier generation of Romantic authors. Shelley's lifelong struggle with the ideal of androgyny, for example, demonstrates a staunch commitment to finding social solutions to ostensibly biological problems. Her evocation of Kant's cosmopolitanism of "unsocial sociability" similarly imagines strong moral checks to inevitable human conflict. Through a sustained narrative genealogy of social resistance, Shelley employs a shrewdly revisionist strategy that continuously writes notions of human community and companionship—in the variable terms of gender, race, and even species—into nineteenth-century medical discourse. The central metaphor of inoculation manages these volatile terms by reference to a long material history of medical science, from Lady Mary Wortley Montagu's Turkish inoculation to Edward Jenner's cowpox vaccine. In the end, Shelley models a cogent politics of possibility and articulates a mature, medical evolution of the Romantic imagination's potentially transformative agency.

To this end, Shelley's novel reworks Burke's infamous warning against the radicalism of the French Revolution in which he associates the word "inoculate" with political contamination:

We wished at the period of the Revolution, and do now wish, to derive all we possess as *an inheritance from our forefathers*. Upon that body and stock of inheritance we have taken care not to inoculate any cyon [*sic*] alien to the nature of the original plant. All the reformation we have hitherto made, have proceeded upon the principle of reference to antiquity; and I hope, nay I am persuaded, that all those which possibly may be made hereafter will be carefully formed upon analogical precedent, authority, and example. (181)

Burke uses the process of grafting a "cyon" (a scion or bud) onto a host plant as a metaphor for unjustifiable revolution. He elides two major details in his pursuit of rhetorical flourish at the expense of scientific precision: (1) botanists graft foreign buds onto plants to bolster resistance to diseases and to increase the health of the "body and stock" of the "original plant" and (2) by 1790, smallpox inoculation (variolation) had already proven to be a relatively effective deterrent

to full-blown infection. Shelley, a meticulous and critical reader of Burke, must have noticed Burke's doubly-poor choice of metaphor, and she may be capitalizing on his infelicitous turn of phrase in her own scene of inoculation in *The Last Man*. Since the novel is told from the perspective of Lionel Verney, the eponymous last man after a virulent plague sweeps across the world, the entire premise hinges upon his mysterious survival and the mechanism of his immunization. What saves Verney turns out to be his inoculating embrace of racial otherness and his inhalation of the "death-laden" breath of a "negro half clad."<sup>2</sup> By the end, though, Verney wanders the globe alone, his immunity a pyrrhic victory at best. Shelley's inductive step falters here in the regression of biopolitics back to the base case of Keats's solitary body. However, Shelley's novel works in broader strokes in its careful manipulation of vaccination history, which complicates the medical register of the shaky conclusion. Shelley's failed induction deliberately imagines an alternate—and hence avoidable—history of medicine in which Jenner's smallpox vaccine never gains traction, leaving humanity with the prospect of non-reproductive life, hopeless isolation, and even species extinction.

### **Genealogy**

Shelley certainly had cause for this level of pessimism. By the time she published *The Last Man* (1826), her social and literary circles had disappeared, her husband had drowned, and the radical promises of the French Revolution had deteriorated into Napoleonic violence and despotism.<sup>3</sup> Nevertheless, Lionel Verney, Shelley's narrator and eponymous last man, seems eager to recover from this sense of personal and political loss:

Hope beckons and sorrow urges us, the heart beats high with expectation, and this eager desire of change must be an omen of success. O come! Farewell to the dead! farewell to the tombs of those we loved!—farewell to giant London and the placid Thames, to river and mountain or fair district, birthplace of the wise and

good, to Windsor Forest and its antique castle, farewell! themes for story alone are they,—*we must live elsewhere*. (*The Last Man* 326, emphasis mine)

The comforting cultural geography of Edmund Spenser's appeal to the Thames in *Prothalamion* (1596), Wordsworth's rustic paradise, and Alexander Pope's patriotic propaganda in *Windsor-Forest* (1712) vanish into the immense map of a plague-stricken globe. The "we" is no longer British, and the "elsewhere" appears nowhere on the redrawn map of the world. *The Last Man* is a novel of visions and revisions that strives with great difficulty to reconstruct both subject ("we") and place ("elsewhere") in a new framework of cosmopolitan community and political radicalism.<sup>4</sup> Before *The Last Man*, Shelley's career had relied upon varying degrees of collaboration to work through such nuances and revisions. She had a solicitous reader of *Frankenstein* (1818) in her husband Percy Shelley and an aggressive editor of *Valperga* (1823) in her father William Godwin. With *The Last Man*, she found herself completely alone, a feeling that she expresses in a frequently cited journal entry: "The last man! Yes I may well describe that solitary being's feelings, feeling myself as the last relic of a beloved race, my companions extinct before me" (*Journals* 476–477). Through Verney's "Hope," however, Shelley constructs several sites of effective social resistance to this ponderous sense of despair and alienation. She continuously rewrites redemptive narratives into *The Last Man* and gives shape to a politics of possibility that recovers the novel from charges of nihilism or anti-Romantic conservatism.

Many readers of *The Last Man* have emphasized this morbid pessimism. For example, Morton D. Paley has neatly classified readings of the novel into three categories that reflect its perceived reactionary posture: 1) a reaction against the violence of the French Revolution and Napoleonic despotism (Sterrenburg 324–347), 2) a reaction against Shelley's own ideal of the nuclear family in *Frankenstein* (Mellor, *Mary Shelley* 141–168), and 3) a reaction against the millenarianism of the "Romantic ethos" (Paley, "Apocalypse" 111).<sup>5</sup> If one reads the novel at all,

it seems it must be read as a largely sterile *reaction* against the optimism of a bygone age, and any reading that locates a productive site of Romantic possibility seems to miss a “cruel joke by the author upon reader” (“Apocalypse” 119). Paley finds this joke in one of the novel’s most poignantly ironic scenes: the organ performance of Haydn’s “New-Created World” by an infected girl for her blind, dying father. In Anne K. Mellor’s account, that joke is refashioned into a familiar axiom of deconstruction: “all conceptions of human history, all ideologies are grounded on metaphors or tropes which have no referent or authority outside of language” (*Mary Shelley* 164). The ideologies, metaphors, and tropes of the “New-Created World” falter when the plague unapologetically claims both father and daughter, silencing any recuperative possibility of the girl’s desperate hymn of praise. For this reason, Barbara Johnson, Mellor, and Audrey A. Fisch have all proleptically dubbed *The Last Man* an early—if not the first—novel of deconstruction.<sup>6</sup> In all these accounts, *The Last Man* reads as a novel out of time, a strange postmodern tribulation in an era of exuberant, Romantic prophecies about imagination, reform, and revolution.

Nevertheless, Mellor and Fisch also warn against the reductive “nihilism of a politically harmful deconstruction” in favor of a reading that credits Shelley for her tentative “roadmap for political change” (Fisch 274). For Fisch, the framing narrator (the authorial voice in Shelley’s odd “Introduction”) provides a model of political agency that at least partially rescues the novel from the deconstructive vacuum that Mellor describes. Jean de Palacio turns to three musical movements in the novel (the domestic drama in Windsor, the arrival of the plague in England, and the Haydn performance) to find “une période de concorde et de paix” (329) in the redemptive power of music to transcend its deconstructive containment. Sandra M. Gilbert, Susan Gubar, and Mary Poovey rely on Shelley’s strategies of narrative indirection and her

shrewdness about the status of the professional female writer to recover a sense of authorial agency amidst the stubborn nihilistic undercurrents of the plot (Gilbert and Gubar 95–104; Poovey 146–159). These critics argue quite reasonably that if “Shelley had staked her emotional and financial security on *The Last Man*” (Poovey 158), then eccentrically perverse nihilism hardly seems an appropriate strategy; instead, they struggle to resuscitate civilization from the life-denying force of the plague and conclude that Shelley participates in a liberal “politics of imperfection” (Fisch 278–281) or a dialectical “state of incompleteness prolonged into eternity” (Poovey 153). These Romantic readings (as opposed to the more pessimistic readings of Paley and, to a lesser extent, Mellor) range from Hartley S. Spratt’s triumphant proclamation that “Verney is prepared to confront the dream and win through to Romantic art” (535) to Robert Lance Snyder’s more circumspect relegation of the novel to “the realm of the indeterminate,” expressing a redemptive yet “chastened imagination” (451). This perceived personal and political “ambivalence” on Shelley’s part prompts these various challenges against anti-political readings of the novel and articulates a hopeful reanimation of Romantic possibilities, no small feat in this decidedly dreary tale.<sup>7</sup>

My approach in this chapter continues this line of criticism but offers a more sustained narrative genealogy rather than isolated moments of authorial ambivalence. Neither Fisch’s attention to the framing narrator nor Palacio’s work on the musical episodes does sufficient justice to the novel’s thematic unevenness. Any genealogy of the novel that relies on the severely flawed cast of main characters will incur some vexing residues. For example, when Paley invokes the division of power and knowledge in Percy Shelley’s *Prometheus Unbound* (1820) as an evaluative standard for Adrian, Raymond, and Verney, he finds each of them lacking in some way or another and quickly returns to his anti-Romantic reading (“Apocalypse” 112–115).

Similarly, Fisch tracks Shelley's various portraits of male political leadership—"republicanism by Raymond; hereditary monarchy by Adrian; democracy by Ryland; theocracy by the 'imposter prophet'" (273)—and finally fails to find a viable political model, which then leads to a somewhat hasty conclusion about the framing narrator's "nonhuman" alternative to limited humanistic politics. I have selected these two archetypal trajectories because they illustrate interpretive structures that have significantly overdetermined our readings of the novel: the former rejects human agency in favor of an anti-political, anti-Romantic, and even nihilistic conclusion while the latter replaces that elusive agency with volatile ambivalence and a shaky faith in isolated redemptive episodes or characters.

Thus, instead of relying on a faltering genealogy of familiar faces—Adrian, Raymond, and Verney are more or less well-rehearsed portrayals of Percy Shelley, Byron, and Mary Shelley respectively—I will turn to the novel's buried genealogy of what Fisch would call "nonhumanness" (281) or what Spratt would refer to as the "more-than-natural" (534). This paper organizes the novel around Shelley's four unlikely attempts at pinning down both Verney's "we" and his fading "elsewhere": the much-discussed cave explorers of Shelley's introduction, the significantly under-theorized Evadne, Verney's embrace of the "negro half clad" (*The Last Man* 336), and Verney's canine companion. I argue that this sustained (yet admittedly somewhat obscure) genealogy evens out some of the ostensible ambivalences and indeterminacies of *The Last Man* and allows for not just a haltingly compensatory politics of imperfection or incompleteness but a mature evolution of the transformative agency of Romantic imagination and a surprisingly material and social basis for a reclaimed politics of possibility. In particular, I track Shelley's continuous revision of models of companionship and community, from the ungendered creativity of the introductory pair, to the androgynous balancing act of

Evadne, to the cosmopolitan embrace of the negro, and finally to the cross-species coupling at the novel's conclusion.<sup>8</sup> Even though the trajectory follows a gradual degeneration into farce, Shelley's revisionist strategy continuously invokes Verney's "Hope" through each iteration and finally recovers that politics of possibility despite the novel's tragic history of failure.

### **Gender and Agency**

Like many of the other accounts that I have surveyed, my genealogy begins, quite predictably, at the beginning with Shelley's introduction. The framing tale is usually read as fictionalized autobiography; it tells the story of the Shelleys and their friend Claire Clairmont's exploration of the Cave of the Sibyl at Baiae on the Bay of Naples. Gilbert and Gubar take great pains to feminize this cavernous space and diagram a complex triangulation of agency involving Mary Shelley, Percy Shelley, and the Sibyl. Yet Shelley seems to take equally great pains to purge the feminine from this space. The framing narrator (not necessarily Shelley herself) maintains a Steinian aversion to gendered pronouns, the womb-like cave appears eerily sterile, and the divinely feminine Sibyl is conspicuously absent. If the unordered sibylline leaves indeed represent a lacuna of creative potentiality, it is not necessarily a feminine one. The epigraph from Adam's complaint to Michael in *Paradise Lost* (1667), "Let no man seek / Henceforth to be foretold what shall befall / Him or his children," does not immediately prompt an empowered Sibyl to claim, "But a woman can."<sup>9</sup> The two figures in the cave, neither women nor men, continually labor to rearrange the leaves into a coherent narrative. A narrowly autobiographical focus on this episode obscures the strangeness of this task and misses the unique, ungendered texture of Shelley's strategies of narrative deflection and disavowal. At least two critics have remarked upon Shelley's "lifelong concern with the psychological ideal of androgyny" (Veeder

2), but unfortunately they have mostly restricted this broad observation to readings of *Frankenstein*.<sup>10</sup> The genderless cave explorers in *The Last Man* propagate Shelley's lifelong theme with two crucial differences. The first is semantic: the pair is ungendered rather than simply androgynous. The second is thematic: in *Frankenstein*, androgyny materializes in efficient bifurcations (for example, the masculine Victor Frankenstein and the feminine Henry Clerval) whereas the genderless pair consistently resists easy psychological classifications, opening up several creative possibilities of sibylline revision in the erasure of restrictive gender differences. Shelley refines her search for the "psychological ideal of androgyny" into the ungendered cave explorers, which necessarily complicates any biographical reading that relies on fixed categories of masculine and feminine.

However, completely ignoring the autobiographical dimension of that sibylline labor also means glossing over important correlations in Shelley's *roman à clef*. She conceived the novel partially as an opportunity to exorcise her guilt over Percy Shelley's untimely death in 1822.<sup>11</sup> In the introduction, execution quickly catches up with conception when the framing narrator decides to share the task of deciphering the sibylline leaves with a companion who suddenly disappears: "For awhile my labours were not solitary; but that time is gone; and, with the selected and matchless companion of my toils, their dearest reward is also lost to me" (*The Last Man* 6). Just as Shelley's intellectual circle began to desert her, the framing narrator finds herself/himself alone with the sibylline prophecies. At this point, those "obscure and chaotic" (*The Last Man* 6). leaves come to represent not only the collaborative intellectual and literary work of the Shelley circle but also the contested posthumous legacy of Percy Shelley's vast, unorganized body of visionary poetry. After his death, Shelley became an assiduous editor of her late husband's work despite the constant interference of Sir Timothy Shelley, her priggish and



disapproving father-in-law. Through the framing narrator, Shelley imagines a way to circumvent the legal obstacles that stood between her and her husband's literary estate and claim the agency that she had been denied. As sole "decipherer" (*The Last Man* 6), the narrator takes up the task of not only preserving the ancient documents but also of translating them into intelligibility: "Doubtless the leaves of the Cumaean Sibyl have suffered distortion and diminution of interest and excellence in my hands. My only excuse for thus transforming them, is that they were unintelligible in their pristine condition" (*The Last Man* 6–7). The narrator/Shelley boldly moves past mere translation to interpretive transformation and willful distortion, which not only mitigates the loss of the companion, but also provocatively suggests that the following tale of the last man might finally provide a satisfactory answer to Adam's lament.

Gender and agency are Shelley's twin preoccupations in the introduction; the ungendered narrator affords her the pragmatic means to articulate her idealistic ends: to renovate—not reject—the "Romantic ethos" of her late husband. Just as Michael confidently relates to Adam the redemptive martyrdom of the Son, the framing narrator offers (perhaps just as confidently) the story of the last man to the first. The impressive work on the novel's publication history has documented its participation in the increasingly hackneyed and "ridiculous" (Paley, "Apocalypse" 107) discourse of "Lastness" (several other last man narratives preceded Shelley's, including Byron's "Darkness"), but the novel's compensatory epigraphic handling of Edenic *firstness* remains underappreciated and under-theorized.<sup>12</sup> Ungendered agency affords the framing narrator the transcendent objectivity to survey entire trajectories, from first to last, from airy prophecy to pragmatic interpretation, from masculine bluster to feminine revision. While Michael's quick answer skips over Noah's intervening last man narrative and moves directly to the *felix culpa* endpoint, Shelley expands the middle term and resists the easily redemptive

conclusion. Because of this, her fixation on diluvian *middleness* has been misread as nihilistic *lastness*; in other words, Verney's story, like Noah's, does not necessarily fill out Shelley's expansive thematic trajectory. Her narrative strategy is both cautiously dialectical and consistently open-ended; firstness, middleness, and lastness are all constantly being shuffled into different permutations of the sibylline leaves. Thus, any gendered triangulation of creative agency underestimates the complexity of Shelley's narrative circumlocution and miscalculates the intersection between plot and autobiography. Instead, *The Last Man* is a novel of proliferating trajectories and frequently unwieldy potentialities that continuously revise Shelley's own discussions of gender, agency, and creativity.

As Shelley moves away from the cave and begins Verney's first-person narration, Evadne emerges as a calculated degeneration of the ungendered framing narrator into mere androgyny. At worst, critics have been content to discard her from the plot completely, and at best they have read her as a simple foil that exposes Raymond's critical flaws as a leader or a symbol of the plague itself.<sup>13</sup> However, the elaborate introductory setup for Evadne's sustained theme of androgyny and her long literary history suggest that Shelley put considerable thought into her own version of the character.<sup>14</sup> The two strongest literary antecedents are Beaumont and Fletcher's play *The Maid's Tragedy* (1619), where Evadne is mistress to the king and involved in a sham marriage to Amintor at the king's request, and Richard Sheil's play *Evadne, or, The Statue* (1819) where Evadne "Veil[s] all her charms in spotless chastity" and "Turn[s] strong temptations to the cause of Truth" (vi). The stage history of *The Maid's Tragedy* suggests that despite several popular performance runs in the seventeenth and eighteenth centuries, the play went silent until its Victorian revival. Shelley either encountered Beaumont and Fletcher's play via Sheil or from Charles Lamb's extracts in his *Specimens of English Dramatic Poets* (1808,

1813).<sup>15</sup> Despite the apparent correspondences (cross-dressing, adultery, and physical beauty), Shelley's Evadne departs significantly from both her dramatic forbears because of her uniquely subversive claim of authority and her rational, Wollstonecraftian mind: "she could subdue her sensible wants to her mental wishes, and suffer cold, hunger and misery, rather than concede to fortune a contested point," suggesting even a "disdainful negligence of nature itself" (*The Last Man* 116). The earlier play portrays Evadne as a mildly transgressive character who finally reasserts her "natural" femininity through tragic sacrifice, and Sheil's Evadne mobilizes feminine virtue to tame the masculine villainy of Ludovico's political scheming and the King's wild libido. Shelley's iteration of the character amplifies both the androgynous ambiguity and the liberatory transgression of her literary antecedents. Through this amplification, Shelley revisits her critique of Victor Frankenstein's interventionist science as a "a rape of nature, a violent penetration and usurpation of the female's 'hiding places,' of the womb" (Mellor, *Mary Shelley* 122), which precariously aligns Evadne's "disdainful negligence of nature" with Victor's masculinist violation, a charge that most likely explains some of the critical disdain for her character.

However, Evadne manages to escape those interventionist indictments against Victor. Shelley's literary due diligence about the history of the character and the expanding theme of androgyny unbalance the gendered formulas of masculinist violence against a feminized Nature. Most readers of *The Last Man* can hardly suppress their disgust at Evadne's excesses, but a few cautious critics have resorted to some tactical hedging. Poovey argues that Evadne represents the author's frustration toward the repressive conditions of professional female authorship, and Bewell reluctantly acknowledges these biographical links even as he casts Evadne as a foul embodiment of the plague itself (Poovey 114–142; Bewell, *Colonial Disease* 299). Nevertheless,

Evadne is not simply Shelley's sounding board to vent her dissatisfaction with her career; instead, she offers Evadne as the androgynous alternative that *Frankenstein* lacked. As several accounts of Shelley's earlier novel have established, *Frankenstein* is not a bitter tirade against science in general, but a more specific critique of Sir Humphry Davy's masculinist approach to science.<sup>16</sup> Nature does not emerge from the novel a sacrosanct, noumenal limit outside of human understanding but an object of study that requires empirical observation and reverent circumspection. In *The Last Man*, Shelley articulates more clearly this alternative relationship to nature through Evadne and a deft reversal of the didactic terms of *Frankenstein*: whereas her earlier novel encourages human endeavor to check its reach with natural delimitations, *The Last Man* constructs various ways for human social constructions to check nature itself. Evadne's "unnatural" qualities should not be mistaken for grotesque exaggeration; rather, her challenge to the "natural" via destabilized categories of gender, race, and class brings nature within human reach and complicates the already fragile economy of the social and the natural in *Frankenstein*. In this sense, *The Last Man* strives to complete the partial critique in *Frankenstein* with its positive substitution of Evadne's androgynous challenge to nature in place of Victor's criminal abomination.

Evadne voices (via Verney's narration) her preference for the social over the natural in her assessment of Adrian's radical yet impractical politics: "She thought he did well to assert his own will, but she wished that will to have been more intelligible to the multitude. She had none of the spirit of a martyr, and did not incline to share the shame and defeat of a fallen patriot" (*The Last Man* 44). This passage echoes both the Milton epigraph in its revision of the Son's martyrdom and the introduction in its insistence on the intelligibility of prophecy. Shelley mirrors her own skepticism about her husband's political and poetic projects through Evadne's

coldness toward Adrian's system of reform. Skepticism, though, does not necessarily imply rejection; in the same language as the introduction, Shelley continues her efforts to ground those sibylline prophecies into something material and "intelligible" without dismissing them as fundamentally unworkable. Whether as Adrian's advisor, anonymous architect, Raymond's mistress, or cross-dressing soldier, Evadne always manages to find the appropriate practical means to achieve her ends. Yet this pragmatic opportunism also gets her killed in the very first chapter of the second volume. Verney finds Evadne, in well-worn military drag, dying on the Grecian battlefield. In her delirium, she curses Raymond, her former lover:

By my death I purchase thee—lo! the instruments of war, fire, the plague are my servitors. I dared, I conquered them all, till now! I have sold myself to death, with the sole condition that thou shouldst follow me—Fire, and war, and plague, unite for thy destruction—O my Raymond, there is no safety for thee! (*The Last Man* 181)

Just as Nature ultimately triumphs against Victor's overreaching science, it seems that death wins out against Evadne's constructed human agency and has turned her into a bitter, vengeful, cursing wretch, which potentially undercuts both her claim to the socially "intelligible" and her thoughtful rejection of martyrdom.

Out of context, the curse certainly legitimates some of that accumulated critical scorn directed against Evadne. However, Shelley's invocation of the curse must recall Percy Shelley's earlier tweaking of the same literary device in *The Cenci* (1819) and *Prometheus Unbound*. In *The Cenci*, Beatrice is legally and morally condemned for her vengeful curse upon her incestuous and abusive father, whereas in *Prometheus Unbound*, Prometheus achieves his redemptive conclusion because he retracts his violent curse against the tyrannical Jupiter.<sup>17</sup> In Evadne's revision, Prometheus's four rewards—"Life, Joy, Empire, and Victory" (IV.578)—are snidely rewritten as fire, war, plague, and destruction. Percy Shelley's blatantly misogynistic

schematization privileges Prometheus's masculine virtue of forgiveness and nonviolence over Beatrice's feminine hysterics of vengeance. Through Evadne, Shelley reclaims Beatrice's curse against Count Cenci and calls for worldly justice against worldly villains, recasting the curse as a material prophecy that sets up the subsequent plague narrative. Percy Shelley's "obscure and chaotic" idealism has no answer to Evadne's fourfold vision of apocalypse precisely because it fails Evadne's (and the framing narrator's) criterion of intelligibility. Evadne's early death does not erase her from the narrative because her prophecy survives as a reminder of human resistance to natural disaster. Her immunity against disease (she is one of the few characters who recovers from illness), for example, suggests that her many social projects have inoculated her against natural threats, that the social has indeed triumphed over the natural.<sup>18</sup> Verney describes her recovery from illness in precisely those terms: "reflection returned with health" (*The Last Man* 146). Evadne's body becomes a contested site of human agency ("reflection") and natural contagion ("health"), and the surprising return of "reflection" in the face of debilitating illness suggests that civilization has some hope to survive well beyond Evadne's anti-Promethean vision.

### **Race and Species**

Most of the novel's thirty-seven occurrences of the word "reflection" stage in some way or another the conflict between the viability of human social constructions and natural decay, disease, and disaster. Verney makes this connection explicit when he cites the most (in)famous reflection of the Romantic era:

the mode of existence decreed to a permanent body composed of transitory parts; wherein, by the disposition of a stupendous wisdom, moulding together the great mysterious incorporation of the human race, the whole, at one time, is never old, or middle-aged, or young, but, in a condition of unchangeable constancy, moves

on through the varied tenour of perpetual decay, fall, renovation, and progression.  
(*The Last Man* 228)

This passage, as Shelley herself documents in a contextual note, comes from Burke's *Reflections* (1790) in which he notoriously advocates the preservation of conservative political institutions because of their "just correspondence and symmetry with the order of the world" (184); in other words, Burke claims that the social whole is much more than its decomposing natural parts.

When the language of Evadne's "reflection" reappears (almost verbatim) in Verney's encounter with a diseased "negro half clad," the associated concerns with the social and natural composition of "the great mysterious incorporation of the human race" must also reappear:

I lowered my lamp, and saw a negro half clad, writhing under the agony of disease, while he held me with a convulsive grasp. With mixed horror and impatience I strove to disengage myself, and fell on the sufferer; he wound his naked festering arms round me, his face was close to mine, and his breath, death-laden, entered my vitals. For a moment I was overcome, my head was bowed by aching nausea; till, *reflection returning*, I sprung up, threw the wretch from me, and darting up the staircase, entered the chamber usually inhabited by my family. A dim light shewed me Alfred on a couch; Clara trembling, and paler than whitest snow, had raised him on her arm, holding a cup of water to his lips. I saw full well that no spark of life existed in that ruined form, his features were rigid, his eyes glazed, his head had fallen back. I took him from her, I laid him softly down, kissed his cold little mouth, and turned to speak in a vain whisper, when loudest sound of thunderlike cannon could not have reached him in his immaterial abode.  
(*The Last Man* 336–337)

Halfway through the passage, Verney's "reflection" returns after the "aching nausea" of his infection by the negro, which provides another vital case study in Shelley's increasingly complex genealogy of inoculation and immunity. This time, though, she abandons the gendered apparatus of the framing narrator and Evadne in favor of a racial one.

Verney's passage of racialized immunity follows two parallel scenes, conveniently demarcated by Shelley's inoculating phrase "reflection returning": the grotesque yet redemptive cosmopolitanism of the embrace and what Mellor has referred to as Shelley's compensatory

“ideal of the loving family” (*Mary Shelley* 44). One of the novel’s few references to blackness comes with an anxious reassertion of whiteness in the description of Clara as “paler than whitest snow.” Both scenes begin with a light source illuminating the scene: “I lowered my lamp” in the first and “A dim light shewed me” in the second. Both scenes emphasize mouth-to-mouth communication: “his breath, death-laden, entered my vitals” in the first and “kissed his cold little mouth” in the second. With the negro, no words are exchanged, and with Alfred, Verney vainly whispers to him even though the “sound of thunderlike cannon could not have reached him.” The activity of the first scene and the passivity of the second highlights the distinction between the two competing ideals: whereas Verney actively lowers his own lamp to see the negro, some off-stage lighting director casts the spotlight on Alfred. The scene of the “loving family” appears passive, hygienic, and automatic yet ultimately ineffective since Verney’s kiss fails to save Alfred from death, and his whispered words are uttered in vain. In contrast, the active struggle of the first scene, what Kant would identify as an instance of “unsocial sociability” (“Universal History” 44), inoculates Verney against the plague while the easy social sociability of the “loving family” proves impotently tautological.<sup>19</sup>

The novel certainly questions conventional familial structures, but it does not, as some have suggested, reject outright the viability of Shelley’s former ideal. *The Last Man* develops rather than repudiates the ideal of family in *Frankenstein*; in the later novel, Shelley rewrites the De Lacey episodes with a provocative hypothetical: what if the De Laceys had warmly accepted the creature into their family? Verney’s forced embrace of the negro has several precursors that all offer tentative answers to this question. Early on, Verney, still wild from his Cumberland days, finds himself confronted with his ostensible persecutor, Adrian, only to be appeased a moment later by Adrian’s angelic recognition of their former friendship. Similarly, when



American and Irish invaders come to England, they fall under the beneficent powers of Adrian's persuasion, lay down their arms, and join their former enemies in the common purpose of survival. These moments of recognition and reconciliation stem from negative formulations of *misrecognition* and forced confrontation in *Frankenstein* and *Paradise Lost*. Just as the De Lacey family misreads the creature's kind intentions, Ithuriel fails to recognize Satan in *Paradise Lost* when he asks, "Which of those rebel Spirits adjudg'd to Hell / Com'st thou, escap'd thy prison, and transform'd" (IV.823-4). Satan, hurt, replies, "Know ye not mee? ye knew me once" (IV.827). In the creature's despair, he commiserates with Milton's misrecognized and disfigured Satan: "Many times I considered Satan as the fitter emblem of my condition; for often, like him, when I viewed the bliss of my protectors, the bitter gall of envy rose within me" (*Frankenstein* 87). These failures of recognition infuriate both characters, leading to serial murders in the creature's case and the fall of humanity in Satan's. *The Last Man* eagerly attempts to expand its definition of familial recognition yet the results seem significantly bleaker than either of its antecedents: the death toll dwarfs that of *Frankenstein*, and instead of a fortunate Fall that promises future redemption, the novel ends with a quasi-nihilistic scene of the last man, running around Rome with his dog and shouting in Italian at the ruins of civilization.

Verney's cosmopolitan inoculation is the culmination of this discourse of recognition and the increasingly plastic terms of familial sociability, but it is also a miserable failure. It would be hasty, though, to dismiss this scene as an inevitable human failure against a deterministic nature. As Verney wanders through the Grecian battlefield, he surveys the scope of the human casualties and laments humanity's own social failures rather than natural disaster: "I turned to the corse-strewn earth; and felt ashamed of my species" (*The Last Man* 180). At this point, the plague cannot compete with the scale of human violence. Verney's failure is the inability to transform

this species shame into a familial embrace of the diseased negro or, in Kant's terms, to use the encounter of "unsocial sociability" to model a new cosmopolitan, "lawful order among men" ("Universal History" 44) and "universal community" ("Perpetual Peace" 107). Since, as Peter Melville puts it, "Shelley's 'negro' is denied the chance to unburden himself of his miserable tale of suffering" (836), Verney loses this opportunity for a cosmopolitan discourse. Instead, the species discourse returns at the end of the novel with Verney's canine companion, a mocking reminder of Verney's social failure with the negro. Species confusion replaces that emergent discourse of recognition in an evocation of eighteenth-century confluences of race and species. Several critics have studied the frequently shocking metaphorical registers of racial discourse and have tracked an extensive literary-historical trajectory that explains, for example, Gulliver's suckling at the teat of a female Yahoo and his futile conversations with horses.<sup>20</sup> In such scenes, authors register fears of miscegenation through cross-species plots and, just as frequently, the comical association of fashionable women with their lapdogs. Under all this laughter lies a stubborn skepticism about cosmopolitan possibilities and a conservative resistance to Kant's drive toward a "universal history." Shelley, however, strips the miscegenation story of its laughter and its cross-species metaphors and takes seriously the possibility of a redemptive cosmopolitanism. By the end of the novel, this optimistic history seems incomplete. The cross-species farce returns, and Verney, having failed to say anything substantial to the negro or listened to his "miserable tale of suffering," now must converse with a dog, a situation that *would* be humorous if there were anyone left to laugh at it.

This disheartening conclusion unravels the narrative of *Robinson Crusoe* (1719) and its faith in the protagonist to reconstruct civilization. Verney reaches back almost four hundred years—the novel ends in the year 2100—to find his literary companion: "For a moment I

compared myself to that monarch of the waste—Robinson Crusoe. We had been both thrown companionless—he on the shore of a desolate island: I on that of a desolate world” (*The Last Man* 448). That moment of comparison quickly vanishes when Verney discovers his critical shortcomings. Whereas Crusoe single-handedly reenacts the entire history of capitalist individualism—from his domestication of indigenous animals, to his colonialist conscription of Friday, and finally to his return to England as a successful entrepreneur—Verney follows the story almost exactly in reverse: he begins his narrative with the patriotic metaphor of England as a “well-manned ship” (*The Last Man* 9), fails to make use of his own Friday (the “negro half clad”), and finally discovers already domesticated animals wandering the depopulated world. Verney vainly attempts to reproduce Crusoe’s story through obsolete eighteenth-century stories of race and species, but instead he finds imagined savages and animals divested of both labor and utility that do very little to console the failures of his aborted rags-to-riches story.

These discoveries occur in two Friday-inspired scenes that underscore the lost opportunity of Verney’s embrace with alterity. The first is the last man’s wistfully subjunctive revision of the earlier scene with the “negro half clad”:<sup>21</sup>

I *would* have knelt down and worshipped the same. The wild and cruel Caribbee, the merciless [*sic*] Cannibal—or worse than these, the uncouth, brute, and remorseless veteran in the vices of civilization, *would* have been to me a beloved companion, a treasure dearly prized—his nature *would* be kin to mine; his form cast in the same mould; human blood *would* flow in his veins; a human sympathy must link us for ever. (*The Last Man* 449, emphasis mine)

Crusoe’s education of his own cannibal proceeds more smoothly: “I made him know his name should be *Friday*...I likewise taught him to say *Master*...*Yes*, and *No*” (Defoe 163). In Verney’s case, the “wild and cruel Caribbee” remains strictly a colonial fantasy that cannot reproduce Crusoe’s racist mastery; Verney’s “would” replaces the hopeful future tense of Kant’s cosmopolitan endpoint of perpetual peace with an irretrievable loss of human community and

exchange. Even at this point, Verney still sees the negro through his racist lens: the imagined savage is wild and cruel, a merciless cannibal, uncouth, brute, and remorseless. His acceptance sounds like mere condescension, but the broken parallelism of the final clause substitutes a more promising moral imperative (“must”) for the ineffectual conditional. This grammatical and ontological shift becomes clearer in a second Friday-inspired scene when Verney comes to terms with his own savagery: “What wild-looking, unkempt, half-naked savage was that before me? The surprise was momentary. I perceived that it was I myself whom I beheld in a large mirror at the end of the hall” (*The Last Man* 455). Instead of finding Friday, Verney encounters his own degenerate humanity. Kinship, blood, and sympathy have finally been cast into the same human mold, but the victory remains solipsistically vacuous, wholly dependent on the mirrored subjectivity of “I myself”; the racial terms of difference and identity are crudely flattened into an unsignifying language of pure reflexivity.

Having failed to find his companion in either the imagined “Caribbee” or in his own savage reflection, Verney realizes that the eighteenth-century cross-species, miscegenation story has become his only recourse. In his desperation, he turns to a family of goats and an industrious sheepdog.<sup>22</sup> Both animal episodes parodically rehearse the novel’s earlier concerns: the former serves as a painful reminder of Verney’s family and the latter recalls the racial discourse of cosmopolitanism via the bestial metaphor. Verney discovers “two goats and a little kid” (*The Last Man* 459) feeding on a grass-covered hill and offers a handful of grass to the happy family. Just as the De Lacey family rejects the help of the creature, the male goat aggressively bares his horns at Verney’s well-intentioned offering to protect his family against the perceived intruder. Unfortunately, the discourse of recognition that I have tracked ends with this parodic, bestial scene, a revision that recasts Verney, the last man, as Victor’s monster, rejected again from the

“ideal of the loving family.” Nevertheless, at the very end, Verney manages to find a suitable (albeit quite absurd) companion:

My only companion was a dog, a shaggy fellow, half water and half shepherd’s dog, whom I found tending sheep in the Campagna. His master was dead, but nevertheless he continued fulfilling his duties in expectation of his return...Riding in the Campagna I had come upon his sheep-walk, and for some time observed his repetition of lessons learned from man, now useless, though unforgotten. (*The Last Man* 468–469)

Here, Shelley retells the “cruel joke” of *The Last Man* through the dog’s Sisyphean labor and his now worthless memory of “lessons learned from man.” The deconstructive reading of the novel takes Shelley’s annihilation of the human race as a categorical purge of all socially constructed metaphors, tropes, and ideologies, but it fails to account for the preservation of human memory in, for example, the dog’s bestial labor. Everywhere, Verney finds human civilization embalmed in these painfully inaccessible alterities. Unlike the real-life 1818 outbreak of *cholera morbus* in Calcutta, Shelley’s version of the plague cannot circulate across different species, which makes cross-species communication, in both senses of the word, impossible. Verney has no means to access bestial memory or the buried human narratives in the ruins of civilization. In an embarrassing travesty of the negro’s inoculating embrace, Verney abjectly describes his new willingness to recognize alterity: “I embraced the vast columns of the temple of Jupiter Stator, which survives in the open space that was the Forum, and leaning my burning cheek against its cold durability” (*The Last Man* 461). This concluding cross-species farce does not immediately authorize the deconstructive erasure of human civilization; rather, it serves as an ironic lament for the several missed opportunities—androgynous, familial, racial, cosmopolitan—and as a warning against repeating Verney’s apocalyptic history.

## The Scale of Nature

I have suggested that through this buried genealogy of redemptive alterity and companionship—the framing narrator, Evadne, the negro, and the dog—Shelley offers her version of a politics of possibility that persists even in conditions of war, scarcity, and plague. To make this claim plausible, though, I must account for the conspicuous disparity in scale between these localized resistances and the vastness of Shelley’s plague. The novel’s two orders of scale—the dizzyingly global and the claustrophobically embodied, the natural and the social—must be placed into productive conversation. In her survey of anti-contagionist (communication of disease through miasmatic air) and contagionist (person-to-person communication of bodily infection) views of plague, Anne McWhir convincingly locates Shelley firmly in the anti-contagionist camp, which makes the plague an impossibly immense and intractable force that colonizes the globe.<sup>23</sup> Bewell offers another helpful estimation of the plague’s overwhelming scale. When Verney writes, “I spread the whole earth out as a map before me. On no one spot of its surface could I put my finger and say, here is safety” (*The Last Man* 260), Bewell offers, in stark contrast, Tamburlaine’s infinitely higher cartographical ambitions: “Give me a map: then let me see how much / Is left for me to conquer all the world” (Bewell, *Colonial Disease* 296–297). Tamburlaine scans the globe for a place to conquer while Verney merely seeks escape from a plague that does not respect national, racial, or ideological boundaries; the localized resistances of *The Last Man* seem ill-equipped to match Tamburlaine’s imperial might and global reach. Malthus provides quite a sobering check to any aspiring Tamburlaines in his quintessentially anti-Romantic philosophy about the futility of human agency in the face of “positive checks to the population”: “all unwholesome occupations, severe labour and exposure to the seasons, extreme poverty...the whole train of common diseases and epidemics, wars, pestilence, plague,

and famine” (23). For Malthus, the natural inevitably overwhelms the social, a conclusion that both Godwin and Percy Shelley vehemently rejected with their more optimistic doctrine of social perfectibility.<sup>24</sup> In *The Last Man*, Mary Shelley departs significantly from both ideologies with a double agenda: to make sense of Malthus’s famously halfhearted solution to catastrophic overpopulation—“moral restraint” (23)—and to ground dewy-eyed notions of Godwinian perfectibility with earnest research into medical science and material evidence.

As part of this ambitious project, Shelley pits two failures—the war between Greece and Turkey and the devastation of the plague—against the two successful inoculations (Evadne and Verney) to work out this thorny question of scale. I have partially staked my reading of Shelley’s Romantic politics on cosmopolitan possibilities, so the novel’s divisive war stands out as a particularly apposite case study. As Paley notes, it is the “sole international issue” (“Introduction” viii) that Shelley includes in her futuristic plot.<sup>25</sup> Some quick historical calculation reveals that Shelley imagines the war “continuing after more than two centuries, but now being fought in Turkey itself” (“Introduction” viii). Such protracted temporality unfavorably links the politics of Godwin and Percy Shelley to the insane prognosticating of Merrival, the novel’s oblivious scientist who forever grasps at useless abstractions: “He was far too long sighted in his view of humanity to heed the casualties of the day, and lived in the midst of contagion unconscious of its existence” (*The Last Man* 289). Instead of merely tempering her idealistic radicalism after witnessing the reactionary, post-revolutionary despotisms of Robespierre and Napoleon like most of her fellow surviving Romantics, Shelley takes it one step further and imagines a two-hundred-year timeline of continued violence. This is hardly the quick social upheaval that the French Revolution promised. After “Stamboul” finally falls after surely one of the longest wars in human history, the “Mahometans” seem to vanish unceremoniously

from the novel without a clear explanation. After refusing to join Adrian's society in search of a safe haven from the plague, they disappear into the invisible margins of Verney's narration. The east, represented by the Mahometans, stubbornly resists integration even to narrative extinction, and Verney's feeble last word on this cosmopolitan failure is shame for his species and despair at the persistence of violence.

Even plague fails to unite Mahometan and Christian under the common purpose of survival. The mysterious plague remains elusive through the politicians' various social programs, its mode of transmission is never exactly discovered, its virulence is never seriously assessed, and its origins are only anecdotally established. Verney's sister Perdita naively raises the question of origin to which he responds: "That word, as yet it was not more to her, was PLAGUE. This enemy to the human race had begun early in June to raise its serpent-head on the shores of the Nile" (*The Last Man* 175). The hurried modulation of these two sentences—from vague linguistic marker ("that word") to a carefully plotted vector of infection from the Nile, to China, to Constantinople—puts into doubt Verney's narrative certainty about the African origin of the plague; his information hinges on mere hearsay and anecdotal evidence. When he starts associating the plague with the "serpent-head" of Satan, tracing the plague's origin becomes nothing more than a futile exercise in fantastical abstraction and metaphorical excess. Each attempt to map the disease encounters socially erected barriers that prevent England from acknowledging the consequences of a global empire that refuses to act out her nationalist script. Similarly, Albert Camus's *La Peste* (1947) conspicuously avoids Arab and Muslim references despite being set in Oran, an Algerian town with a mixed Arab and French population. Just as the plague-devastated citizens of Oran cling to the increasingly insular Christian faith of Paneloux, the local Jesuit priest, the survivors of Shelley's plague forgo the opportunity to begin productive



cosmopolitan community-building in favor of comforting, well-rehearsed Christian theodicies. Instead of questioning the national and ideological borders of the pre-plague globe, Verney stubbornly holds onto the “well-manned ship” of England until the very end when he frantically searches for any redemptive vestiges of western civilization.

Despite their local narrative scale, the inoculations of Evadne and Verney manage to temper these immense failures of war and plague through Shelley’s mobilization of a fairly comprehensive medical history of inoculation and vaccination, from Montagu’s experiments with smallpox in Turkey, to Jenner’s study of the cowpox vaccine, and finally to early nineteenth-century efforts to popularize the practice of vaccination. In a 1717 letter, Montagu proudly announces her discovery to Sarah Chiswell: “A propos of distempers I am going to tell you a thing that I am sure will make you wish yourself here. The smallpox, so fatal and so general among us, is here entirely harmless by the invention of engrafting” (*Turkish Embassy Letters* 81). Not coincidentally, Shelley takes Turkey as the main national representative of her exotic East and suggests, like Montagu, that international travel, cultural exchange, and cosmopolitan understanding can render even disease “entirely harmless.” Further, like the paradoxical agency of Montagu’s veiled Turkish women—“the only free people in the empire” (*Turkish Embassy Letters* 72)—Evadne’s fluid transversals of national, cultural, and gendered borders make her one of the only “free” people in the novel. Her numerous veiled disguises allow her to circulate freely among the masculine architectural and military circles of England, Greece, and Turkey. Instead of a figure that “emblemizes [the East and the West’s] epidemiological link” (*Colonial Disease* 299), as Bewell has claimed, Evadne “engrafts” her cosmopolitan experiences onto her infected body, inoculating herself against the diseased insularity of the British empire.

The historical trajectory from Montagu's Turkish inoculation to Jenner's cross-species vaccination strongly informs the novel's parallel movement from the gendered and racial discourse of cosmopolitanism to the parodic eruption of species confusion in Verney's encounters with goats, dogs, and even columns. Jenner's seminal discovery was the viability of the cross-species management of disease: "what renders the Cow-pox virus so extremely singular, is, that the person who has been thus affected is for ever after secure from the infection of the Small Pox" (6). Whereas Jenner champions the curative effect of a bovine virus on the human immune system, Shelley deliberately elides the cross-species communicability of disease. Jenner frequently seems disgusted by cross-species fraternization because of his medical breakthrough: "The deviation of Man from the state in which he was originally placed by Nature seems to have proved to him a prolific source of Diseases... he has familiarised himself with a great number of animals, which may not originally have been intended for his associates" (1). In a somewhat sardonic tone, he cites wolves that have become lapdogs, tigers that have become housecats, and the domestication of cows, pigs, sheep, and horses to illustrate his point about the unnatural and unhealthy environment of an industrial England. In Jenner's account, England has become a harmful breeding ground for cross-contamination and the circulation of new diseases, whereas at the end of Shelley's novel, the world has become a hopelessly sterile environment that precludes the circulation of both disease and humanistic discourse. Shelley selectively includes Montagu's discussions of inoculation and excludes Jenner's claim about cross-species contagion to reiterate her point that Verney's late embrace of alterity is not enough, that a cosmopolitan politics of species is a vacuous idealization, and that the degeneration of the discourse of gender and race into one of species is an irrecoverable loss.

This dire endpoint does not necessarily reproduce anti-Romantic, nihilistic readings of the novel; the narrative temporality authorized by Shelley's allegory of the cave permits—or perhaps even requires—continuous review and revision. Even in Verney's farcical Italian quest-romance, Shelley manages to recover at least the *form* of a redemptive cosmopolitan politics despite her conclusion's evacuation of all human *content*. Verney reverses the imperialist script by prostrating himself before the imagined savage, he rediscovers the ideal of familial structure in the goats, he finds companionship with a loyal dog, and, most absurdly and tragically, he simulates embodied human intercourse with the inanimate column of Jupiter Stator. His newfound discourse of recognition finds no accessible target, but the form of his strangely cosmopolitan good behavior recalls and revises the earlier failures in the novel. In subsequent arrangements of the framing narrator's sibylline leaves, Verney's substanceless shape of perfected cosmopolitanism can finally be filled out with material praxis.

The real history of vaccination, beginning with Montagu's importation of "engrafting" techniques from Turkish physicians, offers a brief glimpse of that ideal shape. After losing a brother to smallpox, she successfully inoculated her children against the disease and became an eager advocate of variolation in her aristocratic circle. By the end of the eighteenth century, her campaign was largely successful, and most believed that the benefits of inoculation far outweighed the risks. And in 1798, Jenner published his findings about the cowpox virus. He took his cue from country lore about milkmaids' unexpected immunity to smallpox and concluded that their exposure to the infected udders of lactating cows had inoculated them against the disease. The theory was met with immediate resistance because of its brazen crossing of species boundaries. By the time that Shelley published *The Last Man* in 1826, however, most

of this vaccination anxiety had subsided, and by 1840, England had banned the practice of smallpox inoculation in favor of much safer vaccination procedures.

Shelley's novel recapitulates this century-long history of vaccination with some crucial differences. The episode with the "negro half clad," for example, fictionalizes Montagu's mediation of Anglo-Turkish medicine. Just as Montagu finds a potential cure for smallpox through her travels to the exotic East, Verney's immunity from the plague comes from his own charged encounter with racial otherness. Shelley later represents Jenner's strange bovine experiments in the novel's equally strange interspecies conclusion. Left alone in the depopulated world, the last man can only interact with an intransigent family of goats and his faithful sheepdog. Even though the dog's bestial labor preserves the memory of human civilization, it remains a "useless" repetition of duty. Unlike Jenner's *very* useful interaction with infected cows, Verney and his dog wander without purpose through an empty world. These strange concluding bestial episodes raise a material question: since Shelley sourced her plague from a real-life outbreak of cholera in Calcutta, a disease that *was* communicable across species boundaries, why is the fictionalized plague species-specific?<sup>26</sup> Why would she have us forget the lessons learned from Jenner's discovery?

It was certainly not that Shelley was unaware of vaccination history.<sup>27</sup> As her work in *Frankenstein* (1818) exemplifies, she was always sharply attuned to the most recent discoveries in the scientific community. And by the time *The Last Man* was published in 1826, even those most ignorant of scientific developments would have been familiar with Jenner because of his apotheosis as a national hero and as the triumphant conqueror of the eighteenth-century scourge.<sup>28</sup> Furthermore, in Shelley's more famous novel, *Frankenstein*, she rehearses early nineteenth-century vaccination anxieties in the patchwork body of the creature, a body that has

been variously associated with, just to name a few, imperial critique, class warfare, and racial science.<sup>29</sup> Jenner's vaccination history should be added to this list of interpretations of the creature's body in order to ground metaphorical readings with contemporaneous medical science. Indeed, just as Shelley was revising the novel for the final 1831 edition, she compared her own pox-ridden body—after having contracted a mild case in 1828—with that of the creature, “a monster to look at” (*Journals* 508). Victor Frankenstein himself narrates a scene of Jennerian experiment with his famous description of the creature's genesis:

I collected bones from charnel houses; and disturbed, with profane fingers, the tremendous secrets of the human frame. In a solitary chamber, or rather cell, at the top of the house, and separated from all the other apartments by a gallery and staircase, I kept my workshop of filthy creation; my eyeballs were starting from their sockets in attending to the details of my employment. The dissecting room and the slaughter-house furnished many of my materials; and often did my human nature turn with loathing from my occupation, whilst, still urged on by an eagerness which perpetually increased, I brought my work near to a conclusion. (*Frankenstein* 36-37)

The leftover animal parts from the “dissecting room and the slaughter-house” offend Victor's “human nature” much as the anti-vaccinationists were disgusted by Jenner's cross-species propositions. Yet *Frankenstein* is not a prose translation of Gillray's famous visual satire of Jenner (fig. 1). The creature achieves strength and intelligence beyond his feeble and often misguided creator, suggesting that the hybridized construction of his body has inoculated him against human debility. The creature is far from Gillray's hysterical portrayal of half-human, half-bovine monstrosities. Given this medical precedent in Shelley's career, the conclusion of *The Last Man* must be read as a carefully calculated disavowal of the disease's cross-species communicability rather than merely a random novelistic lapse in medical precision.

Shelley's strategy revives early nineteenth-century vaccination anxieties in order to disrupt the possibility of regeneration at the end of her apocalyptic novel. Repopulation is now

out of the question, and no degree of interspecies communicability can fix the problem. That particularly embarrassing travesty of human interaction in which Verney desperately simulates intercourse with an inanimate statue powerfully captures this world that has been rendered completely bereft of reproductive possibilities. Just as with his canine sidekick, such interaction fails to reproduce human civilization and cruelly reminds us of Verney's missed opportunity with the inoculating embrace of the "negro half clad." Ever since he forcefully "threw the wretch" from his body—rather than actively fostering an experiment with cosmopolitan community to cope with the annihilating plague—Verney experiences nothing but loss and degeneration. Whereas, in *Frankenstein*, experiment exceeds ethical bounds, in *The Last Man*, Shelley suggests that Verney's early cosmopolitan experiment falls short of its productive payoff. In this way, the novel interrupts the linear historical progress from variolation to vaccination. In this fictionalized account of medical history, the world never learns to accept Verney's racialized version of Montagu's Turkish inoculation. As a result, Jenner's cross-species vaccination never enters the novel's medical discourse, and disease remains stubbornly species-specific: Verney's dog, the imagined "Caribee," and the columns of "Jupiter Stator" all remain inaccessible alterities with no regenerative potential. In this disastrous rewriting of the real-life history of smallpox, Shelley emphasizes the importance of sustained experiment and cosmopolitan conversation—without Turkish medicine, Montagu would not have popularized variolation, and without Montagu, Jenner would not have started his experiments with cowpox. The novel's disavowal of Jenner, then, is certainly not an anti-vaccinationist indictment but a trenchant reminder of our debt to medical experiment and cultural exchange. While *Frankenstein* suggests that experimental enthusiasm needs to be tempered with ethical consideration, *The Last Man* eagerly *encourages* it as an effective means to humanitarian ends.

Thus, Shelley's answer to the question of scale is twofold: first, she retroactively magnifies the roles of Evadne and Verney into viable resistances to the novel's vast scale of failure, and second, she provides the necessary material basis for her cosmopolitan inoculations through the invocation of a well-researched history of medicine. Godwin and Percy Shelley suggested vague notions about the palliative effects of social improvement and nebulous hints at the relationship between vegetarianism and reform, but *The Last Man* finally gives material shape to flighty social projects.<sup>30</sup> The charges of "ambivalence" and "indeterminacy" purchase cautious skepticism at the cost of missing Shelley's stunningly complex narrative temporality and the empirical basis for the plague's socially constructed cure. By the end, Shelley's cosmopolitan politics is both consistently compensatory and remarkably lucid.

### **Toward a Romantic Politics and Poetics**

Given Shelley's careful construction of a politics of possibility and her revisionist decoding of Romantic idealism, the central theme of *The Last Man* cannot be, as several critics have claimed in some form or another, the failure of the Romantic imagination in the face of natural disaster.<sup>31</sup> Since Jerome McGann's polemical warning against a damaging adherence to a unified, static "Romantic ideology," such anti-Romantic or pro-Romantic claims have lost some theoretical traction.<sup>32</sup> Nevertheless, I have read *The Last Man* as a sympathetic variation on a Romantic theme: Shelley's cosmopolitan politics reanimates the principles of a conventionally Romantic poetics in its belief in the vatic poet's infinite creativity, imaginative agency, and even, as Percy Shelley famously articulates in his *Defence of Poetry* (1821), world-shaping legislative power. The ideals of the novel—androgyny, family, cosmopolitanism—continue the familiar themes of *Frankenstein*, *The Cenci*, and *Prometheus Unbound* despite the apocalyptic devastation of the plague. This line of argument makes no claims for a unified Romanticism, but

these specific ideological continuities remain crucial to any complete understanding of *The Last Man*. Evadne's anonymous foray into architecture, for example, models with great fidelity the raw poetics of the archetypal Romantic amateur, full of unrealized and perhaps unrealizable vision:

The design was new and elegant, but faulty; so faulty, that although drawn with the hand and eye of taste, it was evidently the work of one who was not an architect. Raymond contemplated it with delight; the more he gazed, the more pleased he was; and yet the errors multiplied under inspection. He wrote to the address given, desiring to see the draughtsman [Evadne], that such alterations might be made, as should be suggested in a consultation between him and the original conceiver. (*The Last Man* 107)

The charm of Evadne's fanciful architectural project somehow offsets the multiplication of structural errors. She convincingly invokes a Romantic inexpressibility *topos* that delights in the brilliance of conception while bemoaning the inadequacy of execution. As Poovey has suggested, Evadne becomes a temporary stand-in for Shelley herself, a struggling Romantic artist whose conceptual reach exceeds her material grasp.

The love triangle of Raymond, Perdita, and Evadne hastily prioritizes the ideal of heterosexual love at the expense of Evadne's emergent androgynous poetics, a situation that closely mirrors Shelley's own turbulent balancing act between love and art.<sup>33</sup> Evadne's obdurate infatuation with Raymond clouds her "eye of taste" and pollutes her artistic vision. Shelley makes this conflict of interest explicit just after Raymond uncovers Evadne's disguise:

When Raymond offered to clear her reputation, and demonstrate to the world her real patriotism, she declared that it was only through her present sufferings that she hoped for any relief to the stings of conscience; that, in her state of mind, diseased as he might think it, the necessity of occupation was salutary medicine; she ended by extorting a promise that for the space of one month he would refrain from the discussion of her interests, engaging after that time to yield in part to his wishes. (*The Last Man* 116)



Even though her architectural “occupation was salutary medicine” (another socially constructed cure for the “diseased”), Evadne can only delay the inexorable force of the amatory plot “for the space of one month.” Just as Verney defers to the familiarity of his dying son after the aborted intercourse with the diseased negro, Evadne abandons her androgynous critique and conscripts herself into Raymond’s destructive war. Shelley’s twice-articulated claim—the first with Evadne’s disavowal of her artistic pursuits and the second with Verney’s turn from the negro to Alfred—is that these Romantic ideals of heterosexual love and the nuclear family mean precious little when they come so easily.<sup>34</sup> To correct this, Shelley cleverly reclaims Beatrice’s curse against Count Cenci in Evadne’s dramatic final speech and offers a belated repudiation of her amorous heterosexual obsession. Evadne’s curse—“Fire, and war, and plague, unite for thy destruction”—provides the necessary challenge with which to assess the practical viability of these untested Romantic notions. For this reason, readers of the novel have rightly noted that Shelley’s narrative terrain is not particularly forgiving: Shelley’s testing ground is a harsh battlefield of scarcity, war, plague, and destruction. Even though Evadne’s curse materializes in some spectacular failures, war and plague do not emerge from the rubble entirely triumphant. Sheil’s Evadne, for example, manages to turn rubble against tragedy. The second title of Sheil’s play (*The Statue*) refers to Evadne’s successful appeal to the lustful King’s conscience through the figurative reanimation of her father’s chastising statue. The actress who plays Olivia (Evadne’s erstwhile friend) concludes in the epilogue:

From that time forth, unwarmed by lover’s breath,  
Statues, or bone, or stone, have slept in death.  
But if to-night, you bid *Evadne* thrive,  
We hope to see the miracle revive.  
To beauty’s queen the Grecian poured his vow,  
Our poet bends to beauty’s daughters now;  
Oh! May they waken his dramatic wife,  
And, smiling, warm his statue into life! (Epilogue 39–46)

Verney's strange intercourse with the sculptured columns of Jupiter Stator is neither farcical nor futile in Sheil's account. The "Statues, or bone, or stone" at the end of *The Last Man* do not necessarily signify the cold, inanimate abjection of human endeavor against natural disaster; instead, through Evadne's (both Sheil's and Shelley's) relationship to art, it is possible to reclaim civilization from nihilistic lastness, to warm Verney's statue of Jupiter back into life. Reading the novel as a simple rehearsal of despair underestimates both Shelley's radical politics and her adaptive terms of autobiographical figuration. She recognizes the failures of the French Revolution, the rise of Napoleonic reaction, and the gradual disappearance of her literary and social circles, but she does not take them as occasions for idle hand-wringing or conservative retrenchment; instead, she revises these personal and political catastrophes into productive opportunities to round out Romantic prophecy and vision with material possibilities of cosmopolitan reform.

This revisionist strategy collects all those isolated redemptive moments that critics have identified and redeploys them into compensatory narratives that are continually returned to the cave of the Sibyl for redrafting. Melville's skepticism about Mellor and Bewell's readings of Shelley's negro begins to account for this expansive narrative strategy. He notes that Mellor allows for a quickly extinguished "deconstructive spark of optimism" that encodes a cosmopolitan ethics and that Bewell "treats the appearance of Shelley's black man in a similarly brief fashion, leaving his thoughts on the matter to punctuate the final paragraph of his otherwise scrupulously patient book chapter on *The Last Man*" (829–830). However, after concluding that neither "gives sufficient consideration to the contexts of Lionel's encounter" (830), he goes on to offer yet another isolated "spark" in his alternative explanation for Verney's inoculation that just replaces the "negro half clad" with Verney's fevered dream in "Stamboul" (*The Last Man* 202).

Those “contexts” are strangely absent both in the narrow focus on the “Stamboul” episode and in his erroneous observation about the narrative isolation of Shelley’s negro: “[Verney] will not return to, reflect on, or recollect the incident at any other moment either before or after its brief appearance in the text” (835). As I have documented, the scene has both “before” and “after”: Evadne’s recovery and her “occupation” as “salutary medicine” anticipate the scene of inoculation, and the “cruel Caribbee” echoes Verney’s forced embrace of the negro. The narrative genealogy that I have offered reflects several of these continuous “contexts” and explains Shelley’s penchant for recapitulation, which makes sense of Shelley’s sustained trajectory of redemptive possibilities, from the introductory gender discourse, to the racialized problem of cosmopolitanism, and finally to the cautionary tale of Verney’s cross-species plot.

Accusations of philosophical inconsistency and political fickleness have dogged Shelley because of these wildly variable modes of representation. On the one hand, Shelley celebrates a chastened version of Romantic science in *Frankenstein*, and on the other she seems to annihilate any trace of social agency in *The Last Man*. However, as I have argued, *The Last Man* strives to complete, not retract, the partial argument of *Frankenstein*. Vengeful Nature punishes the overreaching masculinist science of Victor whereas, in *The Last Man*, Evadne and Verney’s invocation of an alternate medical history of inoculation offers a successful social anodyne for the cruelties of nature. Social agency becomes properly commensurate to the awful sublimity of nature, and lofty Romantic prophecies achieve their proper material ground. The novel coherently models both a politics of cosmopolitan recognition and a Romantic poetics of androgynous agency. In this way, Verney’s narration succeeds as Shelley’s secular version of Michael’s compensatory reassurance to Adam’s post-lapsarian despair. Through all this, Shelley emerges more ideologically articulate and philosophically coherent than most critical

pronouncements would suggest. The unexpected compatibility between the youthful exuberance of *Frankenstein* and the mature reflection of *The Last Man* might mean that some earnest reassessments of her other works might be in order. The historical novels—*Valperga* and *Perkin Warbeck* (1830)—and the domestic dramas—*Mathilda* (1819), *Lodore* (1835), and *Falkner* (1837)—might reward some careful rereading in light of Shelley’s intricate yet strikingly cogent weaving of political ideology with domestic ideals. More specifically, any evaluation of her literary career that attempts to track a steady trajectory toward conservative reaction must not take *The Last Man* as its exemplar because it is not a novel of anti-Romantic nihilism but a compensatory tale of levelheaded reflection. Throughout, Shelley compellingly persists in her assurance that Romanticism can indeed survive the extreme crucible of Evadne’s “Fire, and war, and plague.”

## Notes

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<sup>1</sup> I use the standard definition of mathematical induction: “The principle of mathematical induction states that if  $P(n)$  is a proposition defined for each  $n$  in  $\mathbf{N}$ , then  $\{P(1) \ \& \ [P(n) \Rightarrow P(n + 1)]\} \Rightarrow (n)P(n)$ ” (Royden 7). A proposition, in other words, is true *in general* if it is established for just two specific cases: (1) the base case  $P(1)$  must be true and (2) assuming that the case  $P(n)$  is true, then its successor  $P(n + 1)$  must also be true. If a Romantic disease discourse emblemized by the success of vaccination is the proposition in question, Keats has proven its results in the base case of individual health. The second inductive step belongs to Shelley’s apocalyptic novel.

<sup>2</sup> For the most influential readings of this scene as inoculation, see Mellor (“Introduction” xxiv) and Bewell (313-14). For a more skeptical reading, see Melville (825-46).

<sup>3</sup> Unless otherwise stated, references to *The Last Man* come from the 1998 Oxford World Classics edition and will be cited parenthetically.

<sup>4</sup> Throughout, I will use “cosmopolitan” in the Kantian sense. See Kant’s “Idea for a Universal History with a Cosmopolitan Purpose” and “Perpetual Peace: A Philosophical Sketch.” In these two pieces, Kant explains the paradox of man’s “unsocial sociability” (“Universal History” 44). The fourth thesis of “Idea for a Universal History” claims that “The means employed by Nature to bring about the development of all the capacities of men is their antagonism in society, so far as this is, in the end, the cause of a lawful order among men” (“Universal History” 44). The cosmopolitan end of history, then, is the slow, dialectical development of moral laws through various antagonisms between men.

<sup>5</sup> Paley even makes the strong claim that “Ultimately *The Last Man* is a repudiation of what might simplistically be termed the Romantic ethos as represented, for example, in the poetics and politics of Percy Bysshe Shelley” (“Apocalypse” 111). This paper references four essays (including Paley’s) from the important collection *The Other*

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*Mary Shelley: Beyond Frankenstein*: Paley (“Apocalypse” 107–123), O’Sullivan (140–158), Johnson (258–266), and Fisch (267–286).

<sup>6</sup> Johnson explains that “The story of *The Last Man* is in the last analysis the story of modern Western man torn between mourning and deconstruction” (265). Mellor proclaims *The Last Man* “the first text to base itself on the philosophical concept we now call Deconstruction” (“Introduction” xxii). Fisch expands on the novel’s politics of deconstruction: “The question of the politics of the novel might be read also as a parable of deconstruction” (278).

<sup>7</sup> “Ambivalence” is indeed the watchword here. See Barbara Jane O’Sullivan’s discussion of Shelley’s “ambivalence about female self-assertion” (155) in *Valperga*. See also “the ambivalence that had begun to cloud her [Mary’s] feelings about Percy” in Poovey (149). Even Paley moves inexplicably from a rejection to mere “ambivalence toward millenarianism” (“Apocalypse” 117). Shelley’s almost universally acknowledged ambivalence in *The Last Man* should cast suspicions on purely nihilistic or anti-political readings of the novel. At the same time, though, mere ambivalence is not enough to reclaim a politics of possibility or a compensatory poetics from Shelley’s apocalypse.

<sup>8</sup> Charlotte Sussman foregrounds the novel’s concerns with cosmopolitanism and overpopulation. She articulates an important paradox in Shelley’s narrative: “Although *The Last Man* is named for the ultimate solitary individual, Mary Shelley’s novel devotes much of its energy to representing human aggregates, to imagining populations” (286). Through an examination of Shelley’s models of companionship—ungendered, androgynous, cosmopolitan, cross-species—I will demonstrate the redemptive viability of these “human aggregates.”

<sup>9</sup> Here, Adam asks the archangel Michael whether “Famine and anguish will at last consume” (“Paradise Lost” XI.778) and “whether here the race of Man will end” (“Paradise Lost” XI.786). Michael’s famous answer in which he foretells the Son’s redemptive sacrifice—“One man except” (“Paradise Lost” XI.808)—is notably absent. Shelley’s novel has no recourse to Michael’s reasoned reassurance, and Adam’s question remains open-ended.

<sup>10</sup> In addition to Veeder’s discussion of androgyny, see William Patrick Day’s *In the Circles of Fear and Desire* where he claims that “Central to the treatment of these [Gothic] themes are the problem of sexuality, the relation of sexuality to pleasure and identity, and the possibilities and problems of androgyny as a response to the concept of identity and family that dominated nineteenth-century middle-class life” (5).

<sup>11</sup> Mellor offers an excellent and thorough history that cogently connects plot to biography (*Mary Shelley* 141–168).

<sup>12</sup> The complicated history of “Lastness,” including legal battles, bad reviews, and charges of plagiarism, is ably summarized in Paley’s piece (“Apocalypse” 107–109). In Mellor’s introduction to *The Last Man*, she hints at a corresponding concern with “firstness” when she suggests, “By fragmenting chronology, Mary Shelley may be writing not so much ‘the end of the world’ as the possibility of alternative beginnings” (“Introduction” xxiv).

<sup>13</sup> Alan Bewell reads Evadne as “a dangerous moral contagion that is undermining British society” and a figure that “emblemizes their [the East and the West’s] epidemiological link” (*Colonial Disease* 299) to illustrate his argument about the connection between plague and colonialism.

<sup>14</sup> Evadne makes appearances in Euripides’s *The Suppliants*, Virgil’s *Aeneid*, Beaumont and Fletcher’s *The Maid’s Tragedy* (1610), and Richard Sheil’s *Evadne, or, The Statue* (1818). See the explanatory note about Evadne in Anne McWhir’s edition of the novel.

<sup>15</sup> For a more detailed discussion of the play’s stage history, see T.W. Craik’s introduction to *The Maid’s Tragedy* (26–33). See also the short passages from *The Maid’s Tragedy* in Charles Lamb’s *Specimens*.

<sup>16</sup> Several studies of *Frankenstein* hinge upon the good scientist/bad scientist dichotomy of the novel. Any recent account of *Frankenstein* will likely include a discussion of Shelley’s mostly positive interest in science.

<sup>17</sup> Contrast Beatrice’s vengeful curse against Count Cenci with Prometheus’s renunciation of his curse against Jupiter in the very first speech of the poem: “The curse / Once breathed on thee I would recall” (1.58-9). See both pieces in the Norton edition of *Shelley’s Poetry and Prose* (“Prometheus Unbound” 202–286; “The Cenci” 138–202).

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<sup>18</sup> Many have noted the social potential of Verney's inoculation. Mellor suggests "If one were forced to embrace the Other rather than permitted to define it exclusively as 'foreign' and 'diseased,' one might escape this socially constructed plague" ("Introduction" xxiv). Similarly, Bewell concludes his chapter on *The Last Man* by suggesting that "biological diversity—the 'foreignness'—that caused so much pain and suffering in the colonial world might also hold within it something that will preserve at least some of us somewhere from the coming plague that Shelley prophesies" (*Colonial Disease* 313–314). More recently, Peter Melville offers a medically-informed corrective to these readings of Verney's inoculation (825–846). No one, though, has taken into account Evadne's earlier inoculation, which could account for the unnecessarily tentative conclusions about the redemptive possibility of inoculation.

<sup>19</sup> Melville corrects the silence on Alfred's familial presence in this scene, but he also misreads Verney's "forcible exclusion of all those outside the family circle" as a reason to reject the redemptive possibility of his encounter with the "negro half clad" (837).

<sup>20</sup> For two representative studies about eighteenth-century notions of race and species, see Rawson (92–182) and Brown (221–266).

<sup>21</sup> This significant echo of Verney's earlier cosmopolitan embrace seems to have escaped critical notice. Peter Melville, for example, rejects Verney's inoculating embrace of the negro partially because he misses Shelley's stunning recapitulation of the scene at the novel's conclusion (835).

<sup>22</sup> For an insightful look at Shelley's species discourse, see Cynthia Schoolar Williams's article on the novel's "bestiary" (138–148). She argues, as I do, for a destabilizing discourse of species that challenges humanistic ideologies and categories.

<sup>23</sup> See Anne McWhir's article for relevant nineteenth-century debates about contagion (23–38).

<sup>24</sup> For a fuller account of Godwin and Percy Shelley's belief in the social construction of disease, see Bewell's chapter on Percy Shelley's "revolutionary climatology" (*Colonial Disease* 205–241).

<sup>25</sup> In general, Shelley's "future" is quite similar to her nineteenth-century present. She describes a "sailing balloon," one of the only technological advances in *The Last Man*: "The machine obeyed the slightest motion of the helm; and, the wind blowing steadily, there was no let or obstacle to our course. Such was the power of man over the elements; a power long sought, and lately won" (*The Last Man* 71).

<sup>26</sup> For an interesting take on Shelley's treatment of animals, see Williams (138–48).

<sup>27</sup> We know that Shelley was quite anxious about the disfiguring scars of smallpox. In her April 11, 1828 journal entry, Shelley narrates her own experience with the disease: "I depart for Paris sick at heart yet pining to see my Friend—There was a reason for my depression—I was sickening of the small pox—I was confined to my bed the moment I arrived in Paris—The nature of my disorder was concealed from me till my convalescence—& I am so easily duped—Health—buoyant & bright succeeded to my illness—The Parisians were very amiable & a monster to look at as I was—I tried to be agreeable to compensate to them" (*Journals* 507–08).

<sup>28</sup> For a history of Jenner's struggle for legitimacy and his subsequent elevation to national hero, see Fulford and Lee (139–65).

<sup>29</sup> For these compelling arguments, see Spivak (243–61), Moretti (83–108), and Mellor ("Yellow Peril" 1–28).

<sup>30</sup> For some useful close readings of Godwin and Percy Shelley in this respect, see Bewell's chapter on Percy Shelley (*Colonial Disease* 205–241).

<sup>31</sup> For example, Paley takes "the failure of the imagination" as the novel's theme. He opposes Mary Shelley's pessimism to Percy Shelley's belief that "imagination is a creative and even a redemptive agency" ("Introduction" xi).

<sup>32</sup> See McGann's explanation of "Romantic Ideology" in his introduction (*The Romantic Ideology* 1–14).

<sup>33</sup> For biographical correspondences concerning similar amorous entanglements in the Shelley circle, see Mellor, *Mary Shelley*.

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<sup>34</sup> Shelley may have had Torquato Tasso's epic woman warrior Clorinda in mind when she pits the heterosexual love story against Evadne's failed androgynous ideal. Like Clorinda, Evadne eventually casts off her characteristic hybridity in favor of amorous sacrifice.

## Chapter 5—The Curious Case of Arthur Conan Doyle

### The Case Study

By the time that Charles Dickens published *Bleak House* in 1852, the efforts of Romantic-era authors and physicians to organize a system of healing, care, and community had begun to unravel, and the more familiar post-Foucauldian narratives of Victorian medicine—institutionalization, disease classification, professionalization—had begun to replace the radical experiments of Romantic medicine. Even so, Dickens begins his novel with a premise similar to Shelley's: he rewrites the world-enshrouding plague as a London fog that insidiously reaches into “the eyes and throats” while “cruelly pinching the toes and fingers” (11). Miasmatic contagion stands in for the human corruption of the central Chancery plot of *Jarndyce v. Jarndyce*, a multi-generational legal battle over a hopelessly contested will. Esther Summerson's illness materializes the despair that arises from this world of poverty, filth, and injustice. Dickens ultimately manages to clean up all this corruption and filth with a tightly-plotted comic ending in which the moonlight finally burns through the miasmatic fog, and the marks on Esther's face disappear to reveal her natural beauty (913-14). At the end, Dickens pairs patient (Esther) with physician (Allan Woodcourt) in a particular *un*-Romantic yoking of disease and cure, sufferer and curer. The triumphal ending's neatly-orchestrated marriage of patient and physician privileges a normative and rigidly-defined diagnosis—Allan's final assessment that Esther is more beautiful than ever (914)—that takes the non-normative as defective, a blemish that stands in the way of perfect happiness and perfect integration into society. Dickens carefully bookends his story with references to disease and contagion to plot a normatively linear progress from illness to cure. In this account of medicine, there is little room for the experimentalism and definitional detours of Romantic disease discourse; indeed, Dickens would liken such a process



to the deafening din of the aimless courtroom, a fog, a ceaseless debate that stalls a medical practice that quickly pathologizes for the sake of expedient rehabilitation. The novel fixes medical authority in the consecrated union of Esther and Allan; the physician has cured the patient through efficient diagnosis and has purged the body of disease. Only then can Esther end her narrative (and the novel) mid-sentence with the abortive phrase “even supposing—” (914), abandoning her quibbles with Allan’s claim—“you are prettier than you ever were”—in favor of contented silence. The patient can stop narrating her illness, the potential error of “supposing” can end, and Esther can finally stop writing her life in retrospect and start living it. In this case, Susan Sontag and Lennard Davis’s warnings about the pitfalls of metaphor start to make more sense: disability and illness converge with coercive pathology while health becomes more fully institutionalized, more carefully policed, and more meticulously defined against the non-normative. Within such a Victorian medical frame, biopolitics and literature can indeed seem like dead ends.

This is the dominant literary frame that has survived into contemporary discussions of disability and narrative medicine. Romanticism frequently gets short shrift in medical histories because of its awkward disruption of Enlightenment genealogies, but it can offer a potent historical reconfiguration that grounds both disability theory and narrative medicine with at least two positive precedents. First, its stubborn resistance to pathology may bring us yet another step closer to a just theory of disability. Second, its democratic inclusion of multiple perspectives—medical, literary, lay—should motivate narrative medicine’s push to place disciplines into productive conversation. We have lost this Romantic history, and we have been working diligently ever since to recover it from scratch: Esposito and Cohen’s search for a kind of immunity in community, disability theory’s goal to find a place for the non-normative, and

narrative medicine's work to forge a medico-literary language could all benefit from looking backward at the model of Romantic disease discourse.<sup>1</sup> Our focus on the Victorian case has obscured literature's role in representing illness and has blocked our access to a more generous biopolitical theory of immunity. The case of Romantic medicine instead reminds us that social justice and even medical efficacy are sometimes the casualties of contemporary medicine's brutal efficiency. This is not to discount the enormous gains we have made in the field, but modern medicine may be wise to reconsider brushing off Romantic medicine as a zany hiatus in the relentless drive toward Enlightenment progress. Instead, we should look more closely at a medico-literary culture that could produce both vaccination, one of the most important and enduring discoveries in the history of medicine, and *The Last Man*, one of the most medically-conversant novels in the history of literature.

This chapter takes Arthur Conan Doyle as a more or less representative case study of this Victorian clinic. Romantic disease discourse's open-ended experiment, non-pathological language, and generous distribution of medical authority find a shrewd antagonist in Arthur Conan Doyle's famous detective, Sherlock Holmes. Laura Otis even goes so far as to argue that Holmes's strange new method of medico-literary detection is not only a Dickensian privileging of pathological precision over the patient narrative, but also an aggressive form of imperial jingoism. She relies on the suggestive metaphor of a "national immune system" (91) to articulate Doyle's pitting of an infected outside (the imperial periphery and its colonial contagions) against a policing inside (the metropole and its nascent bacteriological investigations). Doyle's own keen interest in the swiftly developing science of bacteriology finds its way into the methods of his detective. In Otis's readings of the Sherlock Holmes stories, foreigners come to signify bacteria, the nation the bacteriologist:

disembodied faces abound in the Holmes stories not merely because the British fear of invasion of small, angry creatures, but because they fear for their own identity. Bodies in the imperial age exist as fragments, and Holmes's refusal to respect "the body's integrity as a living totality" reflects both cultural and medical changes. (118)

Infection becomes wholly synonymous with invasion (rather than controlled inoculation), and Holmes, perfectly assimilating the "cultural and medical changes" of the times, dons the uniform of the border patrol, keeping those "small, angry creatures" from overwhelming an insular sense of national "identity."

A medical practitioner himself, Doyle made it a point to keep abreast of contemporary medical research. In 1892, having already established his literary fame, he wrote to Dr. Joseph Bell, his surgical professor at the University of Edinburgh, of his debt to his mentor's medical acumen:

It is most certainly to you that I owe Sherlock Holmes, and though in the stories I have the advantage of being able to place [the detective] in all sorts of dramatic positions, I do not think that his analytical work is in the least exaggeration of some effects which I have seen you produce in the out-patient ward. Round the centre of deduction and inference and observation which I have heard you inculcate, I have tried to build up a man who pushed the thing as far as it would go—further occasionally—and I am so glad that the result satisfied you, who are the critic with the most right to be severe. (quoted in Liebow 172)

More than Erasmus Darwin and John Keats (who also balanced medical and literary careers), Doyle struggles to theorize the relationship between his two trades. For Doyle, the literary assumes a subordinate role to medicine's "centre of deduction and inference." Those "dramatic positions" and the "exaggeration of some effects" are circumscribed by the humility of a "though" clause and prefaced by the hedging "I do not think." He reaches toward a weak reconciliation of literature and medicine, and finds the former a mere adornment around the "centre" of the latter. In his attempt to make literature matter to medicine, and vice-versa, though, he tentatively offers his "further occasionally" to make a modest case for literature's

productive intervention into medical matters. The fiction of Sherlock Holmes allows Doyle to push medical deduction and inference to an imaginative extreme, but only “occasionally.” This strange negativity about the literary endeavor is neither satire nor false humility; rather, it is a sort of hero worship, a student’s saintly portrait of his teacher. Doyle is Watson to Bell’s Holmes, the sidekick literary humanist to the magisterial medical professional. The medical absorbs the literary, a convergence that gives precedence to the peering ken of the medical gaze over the capricious “exaggeration” of the literary imagination.

This hero worship extended to other medical scientists of his day. Having discovered the microscopic organisms responsible for anthrax, tuberculosis, and cholera, Dr. Robert Koch had solidified his standing as celebrity bacteriologist by the time Doyle published *A Study in Scarlet* (1887). During his headlining address at the International Medical Congress (August 4, 1890), Koch announced triumphantly that he had discovered a viable remedy for tuberculosis. Three months later, after the result had been published and republished in several languages, the headline of the *New York Times* read “Koch’s Great Triumph. The Discovery Called a Greater One Than Jenner’s.”<sup>2</sup> Here was the potential of mankind’s dramatic second act in its centuries-long war against the traumas of infectious disease. Doyle, of course, followed the whole affair with great interest. With the enticing prospect of a live demonstration of the remedy by Koch’s colleague Dr. Ernst Von Bergmann, Doyle headed to Germany even before securing an admission ticket. He explained this brash decision later in his 1924 autobiography:

A great urge came upon me that I should go to Berlin and see [Von Bergmann’s demonstration of Koch’s consumption cure]. I could give no clear reason for doing this, but it was an irresistible impulse and I at once determined to go. Had I been a well-known doctor or a specialist in consumption it would have been more intelligible, but I had, as a matter of fact, no great interest in the more recent developments of my own profession, and a very strong belief that much of the so-called progress was illusory. (*Memories* 87–88)

A no-brainer for the Romantic generalist, this “impulse” is hardly “intelligible” for the Victorian “specialist.” Unlike Darwin’s confident intervention in the Linnaean science of botanical mutation, Blake’s boldly sexualized botany, Keats’s medical prophecy of disease eradication, and Shelley’s literary theory of contagion, Doyle’s “very strong belief” would gain very little medical traction. Medicine had sloughed off its literary affiliations, dividing even further into its granular specialties. The professional specialist is, as Doyle would describe suggestively, a “veiled prophet” (*Memories* 89), closed off to discourse and dissent.

Doyle’s arrival in Berlin was met with little fanfare, and his burgeoning literary celebrity hardly impressed the German medical community. He had secured some introductions and a medical article in the *Review of Reviews*, but he failed to get in Dr. Von Bergmann’s good graces. Neither Koch nor Von Bergmann would speak to Doyle, but his trip was not entirely fruitless. An American physician who attended Von Bergmann’s demonstration took pity on the spurned author and agreed to share his notes. With lecture notes in hand, Doyle had enough to write his article for the *Review of Reviews*:

I studied the lecture and the cases, and I had the temerity to disagree with every one and to come to the conclusion that the whole thing was experimental and premature. A wave of madness had seized the world and from all parts, notably from England, poor afflicted people were rushing to Berlin for a cure, some of them in such advanced stages of the disease that they died in the train. (*Memories* 90)

Even though he was right about the “experimental and premature” result, Koch, the “veiled prophet” who had foretold the end of tuberculosis, prevailed. No one would trust the objection of a non-specialist who had just published a fantastical tale of Mormons and murder. Several months later, after treatment failures, premature deaths, and botched inoculations, Koch finally had to acknowledge his costly mistake. Here, Romantic disease discourse has ceased to function; literature has no access to the bustling and productive world of the professional physician. It

serves only an ancillary function, as an entertaining “exaggeration of some effects,” a trivial adornment, or a humble review of a much more significant work. Doyle’s literary turn away from medicine in his *Study in Scarlet* attempts to dismantle this emergent hierarchical disciplinarity with a balance of medical detection and literary delight but fails to imagine any sort of reconciliation beyond subordination (his almost obsequious deference to his medical heroes) or opposition (his largely unheard quarrel with Koch and Von Bergmann).

The character of Sherlock Holmes embodies these discursive changes almost perfectly. Our first impression of Holmes comes second hand from Stamford, one of Dr. Watson’s former classmates from medical school. After learning that the detective beats “subjects in the dissecting-rooms with a stick...to verify how far bruises may be produced after death” (“Scarlet” 6), Watson overhears Holmes’s triumphant first words: “I’ve found it!” (“Scarlet” 7). This is precisely the image of Doyle’s “veiled prophet” who solves the impossible case with impossible ease. By the late nineteenth century, that quintessentially Holmesian word “case” had evolved from its legal origins to signify a diagnostic view of disease. This medical meaning incurs an additional metonymic usage in which patients cease to be people and become merely cases to be solved: “an instance of disease, or other condition requiring medical treatment; ‘a record of the progress of disease in an individual’ (*New Sydenham Soc. Lexicon*). Also, (*colloq.*), a patient.”<sup>3</sup> In the colloquial usage, the physician hides the “patient” behind the “case,” a convenient metonymic abstraction ostensibly conducive to deductive objectivity. The OED’s 1881 example from the *British Medical Journal* is an emergent usage with which Doyle would have been familiar before writing his *Study in Scarlet*: “About two hundred cases of ulcerated legs pass through my wards annually.” The medical “case” reflects the changing priorities of the medical culture. Instead of open-ended Romantic experiment, we have the Holmesian method of flogging

directed answers out of silent bodies. Instead of anti-normative language, we have the “science of deduction” (“Scarlet” 10–20), a meticulous, nosological approach to cataloguing poisons, botanical tinctures, and diseases. And instead of lay knowledge, we have the distribution of authority into a singular mind, one masterful diagnostician who weaves connections effortlessly with recourse to neither patient narrative nor victim report. Susan Cannon Harris rightly describes Holmes as a new breed of physician, “the medico-criminal expert” (447), who alone possesses the necessary competencies of the increasingly cosmopolitan world of exotic infections and unsolvable mysteries. In this reading, Holmes is the fictionalized avatar of Doyle’s modern physician who glides effortlessly across national, disciplinary, and political borders to synthesize big data into compact solutions.

This is, however, hardly the whole picture. This first Holmes novel seeks to construct a composite portrait of the modern physician in tandem with Holmes’s partner in detection, Dr. Watson. The elusive ideal for Doyle is one who possesses the penetrating acumen of Holmes and the humanistic generosity of Watson. Sylvia A. Pamboukian taps into this uncertainty of representation in her probing study of nineteenth-century quackery and literature. She argues that rationalism, deduction, and scientism are not wholly valorized; rather, Doyle lingers with the half-guesses and surmises of professional medicine: “Doyle encourages readers to reexamine medicine not as a field of scientific certitude but as a field particularly invested in practices it theoretically deploras [namely, quackery]” (146). My argument pieces together these two conflicting readings of the Sherlock Holmes stories. On the one hand, Holmes is the “medico-criminal expert” who privileges methodical science over illusory superstition. On the other, Holmes strategically acknowledges the medical as literary—error, doubt, estimation, and misdirection—in his opaque dealings with the criminal world. I argue that Doyle attempts, as

Darwin and Keats did, to find a middle ground for his medical and literary vocations. Unlike his predecessors, though, he can only represent literature's intervention as "exaggeration," as a quiet objection to serious science, or as a sidekick in awe of the veiled prophet's diagnostic detection. There is little left of Darwin's effortless interdisciplinarity in Doyle's work. Medicine and literature had begun functioning as, in C.P. Snow's famous formulation, "two cultures" (1-21) with mutually exclusive vocabularies and specialized competencies. Unlike the Darwinian jack-of-all-trades and the Keatsian poet-physician, Holmes and Watson never cohere into that desired composite portrait, remaining forever an odd couple of medical professionalism and literary humanism.

### **Holmes's Bulldog**

It is no surprise, then, that Doyle's medico-literary mind works in oppositional pairs. The first appearance of Sherlock Holmes in print, for example, is also a curious disappearance. *Study in Scarlet* comes in two parts: the first is Watson's fast-paced retelling of Holmes's exciting search for an elusive murderer while the second is a slow-burn historical tale that indulges in the romance of love and revenge to detail the culprit's motive. In this second part, Holmes disappears almost entirely as we gradually learn of Jefferson Hope's convoluted Mormon backstory. Unlike Blake's progression through contraries, though, Doyle imagines the traffic between this pairing as subordination rather than sublimation. Students who read *Study in Scarlet* for the first time catch on to this awkward structural disjunction immediately.<sup>4</sup> And by modern critical standards, Doyle's fractured storytelling breaks almost every cardinal rule of detective fiction. *Study in Scarlet* violates, to varying degrees, sixteen of S.S. Van Dine's now famous "Twenty Rules for Writing Detective Stories" (1928). Most egregiously, the reader does not "have equal opportunity with the detective for solving the mystery" (Van Dine 189) since



Holmes points the finger at Jefferson Hope well before we even know who he is. And in the story's strange second act of Mormon melodrama and unrequited love, the reader must patiently endure the injunction of rule sixteen:

A detective novel should contain no long descriptive passages, no literary dallying with side-issues, no subtly worked-out character analyses, no "atmospheric" preoccupations. Such matters have no vital place in a record of crime and deduction. They hold up the action and introduce issues irrelevant to the main purpose, which is to state a problem, analyze it, and bring it to a successful conclusion. To be sure, there must be a sufficient descriptiveness and character delineation to give the novel verisimilitude. (Van Dine 192)

Doyle's early stab at the genre of detective fiction wants it both ways: the first part's "successful conclusion" of a medico-criminal mystery solved as well as the second part's "literary dallying with side-issues." Critics of the story (and Doyle himself) finally decide that this is an aesthetic impossibility. Having learned this lesson, Doyle gradually abandoned this stilted storytelling and focused more squarely on Van Dine's ideal of a tightly-organized structure of problem, analysis, and conclusion. That "literary dallying with side-issues" and the science of deduction prove entirely incompatible, and Doyle ultimately subordinates the romance of faith, superstition, and ignorance to the gripping reportage of Holmes's scientific detection.

Later, that humble deference to his teacher Dr. Joseph Bell would confirm this subordinate sense of literature as adornment, as a mere "exaggeration of some effects." This older and more reflective Doyle apologizes for the sprawling, literary exuberance of a story like *Study in Scarlet*. Literature must now act as support and supplement rather than as challenge or complication. This nascent disciplinary reconfiguration of literature and science, I argue, becomes a crucial precondition of Victorian biopower. This later Doyle sponsors an authoritative science that convinces us of our ignorance and incompetence while mobilizing literature as a kind of biopolitical propaganda to undergird its authority. Instead of Romantic disease discourse,

Doyle offers the magisterial healing power of the scientist and the imaginative fantasy of the detective-physician. Even though the early Doyle resists this instrumentalization of literature, he eventually succumbs. This trajectory from awkward opposition to tidy subordination suggests a discourse of disease that irritably reaches after fact and reason, never able “to hold two opposed ideas in the mind at the same time” (Fitzgerald 69) without crippling cognitive dissonance. The inoculating logic of Romantic disease discourse has shifted from inoculation as a cultivating, immunizing embrace of alterity to what Esposito describes provocatively as a purging exclusion of the infected part for the sake of the healthful whole.<sup>5</sup> The result is a disciplinary separation in which medicine finally frees itself from the dalliances of literature and embraces the mantle of monolithic authority.

Historians of science agree that the friction between these two cultures of the humanities and the sciences came to a head with the publication of Charles Darwin’s *On the Origin of Species* (1859).<sup>6</sup> In *Dover Beach* (1867), Matthew Arnold registers this polarity by nostalgically describing the world in terms of constant sea change: “The Sea of Faith / Was once, too, at the full, and round earth’s shore / Lay like the folds of a bright girdle furled” (“Dover Beach” 21–23). He wistfully imagines post-Darwinian modernity as an abrupt encroachment, a new order in which there is “neither joy, nor love, nor light” (“Dover Beach” 25). According to Arnold’s speaker, Darwin and Thomas Huxley’s subsequent popularization of evolutionary theory had substituted a biological and ecological mechanism for the human comforts of religious “joy.” Thus, when contemporary critic Gillian Beer advocates the potential rewards of the interdisciplinary endeavor, she does so with eloquent idealism on the one hand and cautious understatement on the other:

Encounter, whether between peoples, between disciplines, or answering a ring at the bell, braces attention. It does not guarantee understanding; it may emphasize

first (or only) what's incommensurate. But it brings into active play unexamined assumptions and so may allow interpreters, if not always the principals, to tap into unexpressed incentives. Exchange, dialogue, misprision, fugitive understanding, are all crucial within disciplinary encounters as well as between peoples. Understanding askance, with your attention fixed elsewhere, or your expectations focused on a different outcome, is also a common enough event in such encounters and can produce effects as powerful, if stranger, than fixed attention.  
(2)

Interdisciplinarity, or “understanding askance” as Beer puts it, is at once “common” and “strange.” It is as common as common sense: the dewy-eyed fantasy of cooperation, mutual understanding, and unconditional support. It is nevertheless strange: it stages an encounter that disrupts the disciplined focus, optimizations, and specializations of late capitalism. In *Revising the Clinic* (2010), Meegan Kennedy struggles to locate Victorian-era interdisciplinary traffic between medicine and literature. Her argument argues convincingly that medical authors manipulated the literary notion of sentimentality and that novelists employed a kind of medical realism (87–118), but comes just short of articulating something like a Romantic disease discourse in which interdisciplinary work is not merely attractive window dressing but the load-bearing column. The two halves of *Study in Scarlet* represent this disciplinary double bind; scientific detection and literary romance had reached a palpable contradiction. Doyle's unquenchable desire to understand askance, to imagine his vocations in generative conversation, had brushed up against the limits of cold reality, of Von Bergmann's brutal rebuff and Koch's casual disregard.

Darwin, of course, was not solely responsible for this cultural schism. If Romantic-era science's defining moment was the public spectacle of the Lawrence-Abernethy vitality debates, then the Victorian era's analogous moment was surely the Wilberforce-Huxley debate on the question of evolution. In his seminal *Ever Since Darwin* (1973), Stephen Jay Gould gleefully animates the scene with the morbid language of combat and humiliation: “At the famous British

Association meeting in 1860 (where Huxley creamed ‘Soapy Sam’ Wilberforce), the unbalanced Fitzroy stalked about, holding a Bible above his head and shouting, ‘The Book, The Book.’ Five years later, he slit his throat” (33). In Gould’s sensationalistic retelling, Robert Fitzroy, Darwin’s captain on the HMS *Beagle*, fatally expiates his guilt over his complicity in Darwin’s heresy. Six years later, though, J.R. Lucas casts some doubt on Wilberforce’s “creaming” because of an inconsistent historical record. Even with this revisionist goal in mind, however, Lucas finds the appeal of Gould’s triumphal rhetoric irresistible:

The legend of the encounter between Wilberforce and Huxley is well established. Almost every scientist knows, and every viewer of the BBC's recent programme on Darwin was shown, how Samuel Wilberforce, bishop of Oxford, attempted to pour scorn on Darwin's *Origin of Species* at a meeting of the British Association in Oxford on 30 June 1860, and had the tables turned on him by T. H. Huxley. In this memorable encounter Huxley's simple scientific sincerity humbled the prelatial insolence and clerical obscurantism of Soapy Sam; the pretension of the Church to dictate to scientists the conclusions they were allowed to reach were, for good and all, decisively defeated; the autonomy of science was established in Britain and the Western world; the claim of plain unvarnished truth on men's allegiance was vindicated, however unwelcome its implications for human vanity might be; and the flood tide of Victorian faith in all its fulsomeness was turned to an ebb, which has continued to our present day and will only end when religion and superstition have been finally eliminated from the minds of all enlightened men. (313)

Enlightenment science exposes and undoes the “literary dallying” of “clerical obscurantism,” “pretension,” “Victorian faith,” and “superstition.” Instead of the porous boundaries of Romantic disease discourse, Beer and Lucas both imagine cross-disciplinary dialogue as a violent, or at least awkward, “encounter” rather than as fluid exchange. It is into this world of hardened contraries that the character of Sherlock Holmes takes his first steps and why my reading of this collection of detective stories leans on this fumbling first attempt. Otis’s bacteriological reading, Harris’s image of pathological empire, and Pamboukian’s attention to the narratives of quackery all depend on the later work, the more tightly-plotted affairs of, for example, “The Adventure of

the Speckled Band” (1892) and *The Stark Munro Letters* (1895). The neophyte author of *Study in Scarlet*, however, has yet to work out his disciplinary loyalties. In this sense, my reading of this early Doyle casts him as a Romantic author born out of time, a pre-disciplinary mind conscripted into a post-disciplinary world.

In this awkward first tale, disciplinary issues crop up even at the expense of narrative flow. Having investigated the grisly murder of Enoch Drebbler, Doyle has Holmes and Watson pause to debate the connection between art and science. Upon returning from a concert, Holmes muses out loud:

Do you remember what Darwin says about music? He claims that the power of producing and appreciating it existed among the human race long before the power of speech was arrived at. Perhaps that is why we are so subtly influenced by it. There are vague memories in our souls of those misty centuries when the world was in its childhood. (“Scarlet” 39)

Watson, playing Wilberforce to Holmes’s Huxley, rebuts lazily with “That’s rather a broad idea” (“Scarlet” 39).<sup>7</sup> This brief exchange reenacts in extreme miniature the “creaming” of the 1860 Oxford evolution debate. The contest, though, is quickly dropped without a declared winner, and the two continue in their collegial spirit of collaboration. The Romantic doctor (Watson) goes on resisting the Darwinian thesis and the Victorian pathologist (Holmes) continues to insist on radical materialism and biological mechanism. In this quick allusion to Darwin, Doyle stages an unresolved encounter between these two medical models of, as Lucas might put it, the humanistic “obscurantism” of Watson and the “plain unvarnished truth” of Holmes. In this inaugural tale of the Sherlock Holmes stories, Doyle yokes these heterogeneous ideas by violence together in generative dialogue rather than destructive encounter. Structurally, if not thematically, Holmes and Watson get equal billing in the two parts of *Study in Scarlet*. Doyle invokes the evolution controversy not to relive the thrilling spectacle of Huxley’s trouncing

victory over Soapy Sam, but to regulate the “turbid ebb and flow” (Arnold, “Dover Beach” 17) of faith’s comforting anthropocentrism and science’s encroachment into human life, a binary that Matthew Arnold would famously harden into the Swiftian battle of the books between the “sweetness and light” (*Culture and Anarchy* 42) of culture and the modern philistinism of anarchy.<sup>8</sup>

Part I, “BEING A REPRINT FROM THE REMINISCENCES OF JOHN H. WATSON, M.D., LATE OF THE ARMY MEDICAL DEPARTMENT,” presents this divide first from the perspective of the cultured doctor. Holmes’s exaggerated image of the Victorian specialist particularly confounds Dr. Watson:

His ignorance was as remarkable as his knowledge. Of contemporary literature, philosophy and politics he appeared to know next to nothing. Upon my quoting Thomas Carlyle, he inquired in the naïvest way who he might be and what he had done. My surprise reached a climax, however, when I found incidentally that he was ignorant of the Copernican Theory and of the composition of the Solar System. That any civilized human being in this nineteenth century should not be aware that the earth travelled round the sun appeared to me to be such an extraordinary fact that I could hardly realize it. (“Scarlet” 12)

Here, Watson is more Arnold than Wilberforce.<sup>9</sup> His bafflement at Holmes’s blind spots suggests that a liberal arts education in “contemporary literature, philosophy and politics” would bring one closer to being a “civilized human being.” The medical professional, according to Watson, should be well-versed in both Carlyle and astronomy, which sounds very much like Erasmus Darwin’s generalist approach to medicine and literature. Watson’s “reminiscences” are meant not only to record the exploits of the extraordinary detective but also to civilize the Victorian philistine. Holmes’s efficient knowledge, admirable elsewhere in the story, is here ridiculous. Not being familiar with Carlyle, “the Copernican Theory,” and “the composition of the Solar System” would be utterly unthinkable in the late nineteenth century, and Doyle’s dramatic irony is targeted squarely at his detective. Through the characters of Watson and Holmes respectively,

Doyle struggles to find a judicious balance between Romantic and Victorian discourses of disease and care. What is perhaps most surprising about this passage is that its sympathies seem to lie not with the magisterial anatomical knowledge of a Dr. Joseph Bell, but with the literary Watson, the Romantic jack-of-all-trades who navigates the world equipped with the inefficient niceties of civilization and the meandering learning of culture.

Holmes's arrogant charisma, though, swiftly takes back the narrative reins. His section gets first billing, his name titles the first chapter, and his oblique disquisition on the case as "a study in scarlet" makes it to the title page:

The ring, man, the ring: that was what he came back for. If we have no other way of catching him, we can always bait our line with the ring. I shall have him, Doctor—I'll lay you two to one that I have him. I must thank you for it all. I might not have gone but for you, and so have missed the finest study I ever came across: a study in scarlet, eh? Why shouldn't we use a little art jargon. There's that scarlet thread of murder running through the colourless skein of life, and our duty is to unravel it, and isolate it, and expose every inch of it. And now for lunch, and then for Norman Neruda. Her attack and her bowing are splendid. What's that little thing of Chopin's she plays so magnificently: Tra-la-la-lira-lira-lay. ("Scarlet" 37)

Holmes again theorizes the connection between art and science, this time without recourse to Darwinian allusion. And instead of taking Holmes to task for his "broad idea," Watson learns to keep his response to himself: "Leaning back in the cab, this amateur bloodhound carolled away like a lark while I meditated upon the many-sidedness of the human mind" ("Scarlet" 38). The disciplinary encounter loses a vital participant while the doctor dully ponders and the detective glides swiftly along from the case, to visual art, to lunch, and finally to music. Holmes's superhuman processing speed makes his deductive focus seem effortless, even trivial. The nonessential material immediately fades into the "colourless" background while he unravels, isolates, and exposes the scarlet thread. That scarlet centerpiece excites, and all else remains tightly shackled to the tedious, clockwork mechanism of everyday life. The Darwinian

hypothesis had laid bare life's grand plan, and our mysteries, the retreating waves of Arnold's "Sea of Faith," were fast drying up along "the vast edges drear / And naked shingles of the world" ("Dover Beach" 27–28). Holmes's task, then, is a form of cleanup, to deal with the few bloody, scarlet threads left over from that initial Darwinian purge of superstition and obscurantism.

In this mechanistic worldview, little room is left for art. Only after calculating, "two to one," that his immediate task had reached completion can he casually turn to an assessment of Wilma Norman-Neruda's violin performance. His caroling "Tra-la-la-lira-lira-lay" suffices as musical commentary, as a pretty afterthought to his ponderous metaphysics. Art remains for Holmes a pleasant distraction from the more serious matters of scientific deduction. Watson's literary *apologia* from their previous exchange vanishes entirely as he settles into his role as a sidekick whose sole function seems to be to bring cases to Holmes's attention (Holmes "might not have gone but for" Watson) and to document his exploits. Thus, when Holmes homes in on both problem and solution, proudly fingering Jefferson Hope as the culprit, the story appears to have reached its timely conclusion. Watson, left "meditat[ing] upon the many-sidedness of the human mind" while Holmes has moved on to lunch, eventually catches up to Holmes's ever-proliferating chains of deduction, and the story seems to reach its logical end when sidekick and detective finally arrive on the same page.

Watson, however, decides the story could do with some "many-sidedness" after all. After the breathless pace and precision focus of the story's first half, Watson abruptly abandons the detective to relate a long-winded history of Jefferson Hope. Without any guiding preamble, we find ourselves on the Great Alkali Plain of Utah, in "an arid and repulsive desert, which for many a long year served as a barrier against the advance of civilization" ("Scarlet" 63). Watson does



away with the dry, expository reportage of the first part and indulges in some uncharacteristically Byronic purple prose:

From the Sierra Nevada to Nebraska, and from the Yellowstone River in the north to the Colorado upon the south, is a region of desolation and silence. Nor is Nature always in one mood throughout this grim district. It comprises snow-capped and lofty mountains, and dark and gloomy valleys. There are swift-flowing rivers which dash through jagged canons; and there are enormous plains, which in winter are white with snow, and in summer are gray with the saline alkali dust. They all preserve, however, the common characteristics of barrenness, inhospitality, and misery. (“Scarlet” 63)

Again, Watson’s narrative task is to civilize. Just as he brings Arnoldian “culture” to Holmes’s philistinism, he now imperiously proposes to usher in “the advance of civilization” to the barren, inhospitable, and miserable frontiers of the New World. Brigham Young’s Latter-Day Saints and their violent policing of love and marriage meet Watson’s disapproving narration as we gradually learn of Jefferson Hope’s motive for revenge and his terrible mistreatment at the hands of Mormon fanatics. In this early tale (Doyle would later step back from his trenchant criticism of Mormonism), the Danites, or the secret police of the Latter-Day Saints, come to signify a perilous dogmatism, steeped in unnecessary mystery and unverified superstition rather than empirical observation and evidence-based knowledge. An erstwhile proponent of the “literary dallying” of Carlyle and Arnold, Watson discovers his miscalculation, and fully commits himself against what Lucas described as “clerical obscurantism.” Here, Doyle as Watson finally takes a stance in the Wilberforce-Huxley debate, and becomes, like Huxley, “Darwin’s bulldog.”<sup>10</sup> He would later make the opposite choice. His late-in-life conversion to spiritualism and his odd insistence on the psychic traffic between the natural and supernatural led him astray from Watson, Holmes, Darwin, and Huxley. In either case, that fantasy of reconciliation briefly hinted at in Holmes and Watson’s congenial conversation about Darwin becomes impossible. A clear disciplinary choice must be made between medicine and literature, science and faith, anarchy

and culture. And Watson, after “meditat[ing] on the many-sidedness of the human mind,” chooses Holmes over Brigham Young. Thus, in his very first appearance in the detective series, Watson willingly assumes his role as Holmes’s bulldog.

This expansive scene of international crime—the American frontier, London back alleys, street Arabs, Mormons, Indians—demands a different kind of detective. Now that Watson has decided his loyalties, he gladly takes to his role as “bulldog” and names Holmes the man for the job. In contrast to local policemen like Inspectors Lestrade and Gregson, Holmes can more readily navigate the vast, dangerous world of “barrenness, inhospitality, and misery.” These inspectors remains beholden to Old-World forensics and cannot hope to locate that fine scarlet thread within the immense colorless skein. Here, Mary Shelley’s idealized cosmopolitanism degenerates into a fearful paranoia of proliferating allegiances and indecipherable motives, and we are to put our faith in Holmes to decode the foreign ciphers of the modern world. Shelley pits the local, inoculated body against the global scale of plague, and ends with a hopeful politics of possibility. Doyle stages a similar encounter, but ends with almost the exact opposite, with Cohen’s conception of bodily defense and Otis’s reading of the Holmes stories as a kind of thwarted bacterial invasion.<sup>11</sup> It makes sense, then, that Doyle violates Van Dine’s first rule of detective fiction—that the reader should “have equal opportunity with the detective for solving the mystery” (189)—because Doyle would have us defer to his detective to solve the mystery for us and to allay our xenophobic fears. This is the conclusion of Doyle’s initial disciplinary experiment, beginning with collegial conversation, leading to generative opposition, and ending with utter subordination to the master detective, the romance to the detective story, the literary to the clinical, and the body to the regulation of biopower.

This trajectory is even clearer in the subsequent installment, *The Sign of Four* (1890). In this second outing, there is decidedly more detection and less romance. In a wry moment of meta-narration, Watson narrates Holmes's evaluation of Watson's narration in *Study in Scarlet*:

"I glanced over it," said he. "Honestly, I cannot congratulate you upon it. Detection is, or ought to be, an exact science and should be treated in the same cold and unemotional manner. You have attempted to tinge it with romanticism, which produces much the same effect as if you worked a love-story or an elopement into the fifth proposition of Euclid.

"But the romance was there," I remonstrated. "I could not tamper with the facts."

"Some facts should be suppressed, or, at least, a just sense of proportion should be observed in treating them. The only point in the case which deserved mention was the curious analytical reasoning from effects to causes, by which I succeeded unravelling it." ("Sign of Four" 125)

Holmes anticipates Van Dine's distaste for "literary dallying," and lays out his own rules of "proportion." By this point, we are meant to nod along with Holmes. Dramatic irony is no longer on Watson's side since Holmes's "cold and unemotional" method, even without the heliocentric model, is by now tried and true. The very idea of a "love-story or elopement" in Euclid's fifth proposition (that the base angles of an isosceles triangle are congruent) is indeed absurd. Erasmus Darwin's *The Loves of the Plants*, then, becomes as unimaginable to Holmes as it was to the snide satirist of *The Anti-Jacobin* who penned *The Loves of the Triangles*.<sup>12</sup> Holmes's "sense of proportion" prohibits the rambling "romanticism" of Darwin's amorous plants, and consequently Watson must learn to edit his own literary digressions and defer to Holmes's "analytical reasoning from effects to causes." If the fact that the earth revolves around the sun does not immediately pertain to the case, then that fact "should be suppressed." Efficient detection mandates efficient storytelling, and Watson is only too happy to comply.

In this way, Doyle's Sherlock Holmes stories tend toward a *literary* justification of institutional biopower. Doyle offers Dr. Joseph Bell (via Holmes) as the image of the

unflappable expert who alone can manage the big data of the modern world with the necessary diagnostic efficiency. Watson's "literary dallying" becomes almost synonymous with a kind of degenerate faith, a backwards superstition that prevents "the advance of civilization" by insisting on, for example, barbaric codes of revenge, marriage, and providence. Jefferson Hope, for example, represents the detective-physician's anti-type. He foolishly allows his targets a fifty-percent chance to live by choosing the correct pill: "Let the high God judge between us. Choose and eat. There is death in one and life in the other. I shall take what you leave. Let us see if there is justice upon earth, or if we are ruled by chance" ("Scarlet" 112). He leaves it to "the high God" to decide the guilt of his Mormon persecutors, Enoch Drebber (who chooses incorrectly) and Joseph Strangerson (who chooses instead to attack Hope). Hope fails twice: he is unable to convince Strangerson to play along, and he eventually gets caught by Holmes. Several materialist conclusions are meant to follow from this double failure: (1) that there exists no poetic or divine "justice upon earth," (2) that we are indeed "ruled by chance," (3) that Holmes's scientific deduction is our best bet to manage those odds, and (4) that literature, whether romance, revenge tragedy, or detective fiction, should merely undergird this clinical authority as delightful adornment. Even though Doyle begins the project as a Romantic author, as unwilling as Keats to completely abandon medicine for literature and as generous as Erasmus Darwin in his "literary dallying," he emerges a hardened Victorian, unable to imagine Holmes and Watson as a truly productive partnership.

### **Victorian Disease Discourse?**

The rich afterlife of the Sherlock Holmes stories is quite telling. A sprawling fandom has grown around Doyle's creation, and in the 2012 edition of the *Guinness World Records*, Holmes became "the most portrayed literary human character in film & TV," edging out Hamlet, the

previous record holder.<sup>13</sup> In *As If: Modern Enchantment and the Literary Prehistory of Virtual Reality* (2011), Michael Saler argues that Holmes stands apart from other eighteenth- and nineteenth-century literary creations and fandoms in his ability to transcend historical context:

Sherlock Holmes was the first fictional creation that adults openly embraced as real while deliberately minimizing or ignoring its creator, and this fetishization of Holmes has continued for over a century. The cult of Holmes focuses not just on a singular character, but on his entire world: fans of the “canon” obsess about every detail of the fictional universe Conan Doyle created, mentally inhabiting this geography of the imagination in a way that was never true for partisans of earlier characters. And the Holmesian phenomenon has continued for over a century, far longer than the intermittent eighteenth-century vogues for Samuel Richardson’s *Pamela*, let alone the more restricted generational enthusiasms for *Werther*, *Little Nell*, and others. Sherlockian devotion is thus a departure from preceding public infatuations with fictional characters and a template for subsequent public infatuations for imaginary worlds and their protagonists. The popular fascination with Holmes commenced the transformation of certain imaginary worlds into virtual worlds. The question is, why Holmes? (107)

Perhaps another more pertinent question for this dissertation might be, why *not* Romantic-era creations like Dr. Frankenstein, his creature, or Dracula (a character inspired by John William Polidori’s *The Vampyre*)? Even though these characters are just as long-lived, adaptations of these works have little care for an internally consistent “canon.” Dr. Frankenstein and the creature have largely become interchangeable, and filmic representations of Dracula range from the murderous Count Orlock in *Nosferatu* (1922) to the vampire-possessed dog of *Zoltan, Hound of Dracula* (1978). Saler’s case about the singularity of “Sherlockian devotion” is probably overstated, but he touches on a crucial difference. Sherlock’s imaginary world tends toward an internally consistent order that Saler identifies as a precursor to our modern notion of “virtual reality.” The similarly enduring legacies of *Frankenstein* and *Dracula*, however, enjoy no such organizing principle toward order or consistency. Again, why Holmes, then? The detective’s appeal, I contend, lies in the attractive fantasy of biopower. In exchange for a normatively-

defined and closely-policed state of health, we gladly volunteer our bodies to the Holmesian detective-physician and place our faith in the ability of the biopolitical “canon” to close the case.

A desire for this kind of closure pervades modern adaptations of the Sherlock Holmes stories. The pilot episode of the BBC series *Sherlock* (2010) expunges the entire Mormon story from *Study in Scarlet* for a cleaner introduction to the primetime detective team. Gone is Doyle’s disciplinary vacillation, and in its place, a more coherent, reverent portrait of the master of deduction. In “minimizing or ignoring its creator,” the BBC incarnation of Holmes participates in the heavily-regulated world of Sherlockiana. Authorial objections remain silent, leaving only the loud celebrity of that Kochian scientist who promises an unseen solution to our ills. In the television series *Star Trek: The Next Generation* (1987), Data, the crew’s resident android, frequently plays dress up as Holmes. Here, the detective is reimagined as an infallible machine capable of “60 trillion operations per second.”<sup>14</sup> He becomes wholly synonymous with that “veiled prophet” or the all-seeing pathologist, promising his miracle cure if only we cease to see ourselves as patients and give our bodies over to the case study. Saler takes this as a kind of emergent, secular faith. In the “absence of communal beliefs and higher ideals in an age that seemed dominated by positivism and materialism” (107), he argues, we build imagined worlds into virtual houses of worship. Biopolitical faith, then, means a slavish devotion to Dr. Bell or Dr. Koch’s latest medical triumph, and Holmes’s strictly-curated afterlife becomes a sort of reassuring dogma that awards its adherents eventual salvation.

Even after trying to kill off Holmes in the famous Reichenbach Falls episode, public clamor brought the beloved character back. The stubborn desire to treat Holmes as real baffled even his creator who found it “incredible how realistic some people take [this imaginary character] to be” (Doyle quoted in Saler 106). Doyle’s hideous progeny generated unauthorized

biographies of Holmes and Watson, speculation about Holmes's education, and fabricated documentation about Watson's marriages. He would later try to disassociate himself from the empirical Holmes with his turn toward spiritualism, but this did little to dampen Holmes's popularity. Doyle's disciplinary struggle between Darwinian materialism and Arnoldian culture in *Study in Scarlet* had been resolved for him and had claimed Holmes for the ordered taxonomies, nosologies, and internal consistency of the new biology's clinical paradigm. Medico-literary fiction could no longer afford to dally with the literary. The triumph of modern medicine found an enduring partner in the detective story, leaving behind Darwin's sprawling botanical epic, Blake's visionary poetics of violation, Keats's imaginative medicine of eternal life, and Shelley's cosmopolitan prophecy of global immunity. The thrill of detection—case and solution—fills out the medical narrative, and Jefferson Hope's motive is discarded as a trivial afterthought. Victorian disease discourse, then, becomes a closed, self-regulating system that absorbs any literary-minded resistance and repurposes it as support. Doyle discovers this in *Study in Scarlet*; the romance of the second half, even as it complicates the mechanistic worldview of the first with mitigating motives, only succeeds as propaganda for its real star. Any incongruence with the infallible science of deduction becomes strictly fiction, mere "exaggeration of some effects" to be disciplined again into the ordered world of Sherlockiana.

In some sense, this dissertation's disciplinary struggle coincides with Doyle's. As I have claimed throughout, smallpox eradication was as much a literary triumph as it was medical. But in this post-Victorian climate of two discrete cultures, could vaccination be rediscovered now? Dr. John Snow's 1854 discovery of cholera's transmission vector through London's water supply typifies the seductive procedures of modern medicine. The affiliated genre is now Holmesian detection: he systematically mapped out London's cholera cases and gradually traced the source

to the Broad Street water pump.<sup>15</sup> The well-defined problem and the single solution leave little room for the vaccination-producing dallying of the Romantic medical narrative. The answer to the hypothetical question, then, is perhaps no. Medicine, as I have shown through several close readings, matters to literature, but here we see literature's potential to affect medical outcomes, a foundational insight that underlies the emergent fields of disability studies, medical humanities, and narrative medicine. However, we must, like Doyle, at least attempt to imagine a role for literature beyond this kind of calculating instrumentality. Rather than, for example, asking how literary deduction helped Snow isolate the cholera outbreak or, as narrative medicine asks, how a literary education can make doctors better equipped to practice medicine, we need the genuine cross-disciplinary dialogue that led to variolation, to vaccination, and finally to smallpox eradication. Truly interdisciplinary work must be omni-directional, and Romantic disease discourse has proven to be the closest approximation to that ideal spirit of collaboration.

Without this omni-directionality, vaccination's afterlife has played out like the unruly legacy of Doyle's creation. Vaccination's endpoint is biopower, and compulsory immunization has become the best argument for the state regulation of individual bodies. And the very people who now resist vaccination are, ironically, those advocating Romantic-style medical discourse. Naturopaths, scientologists, evangelicals, faith healers, and "rogue" (Park 2012) scientists like Dr. Andrew Wakefield have proven that vaccine refusal cuts across all the usual lines of class, gender, race, education, politics, and sexuality. The staged vaccination drive that led to the assassination of Osama bin Laden has stigmatized preventive medicine in the developing world. Here in the first world, Jenny McCarthy recently secured a national platform on *The View* to advocate her anti-vaccination agenda. More than a decade after measles was declared eliminated in the United States, Texas is now reporting twenty-one infections among members of the Eagle



Mountain International Church near Fort Worth.<sup>16</sup> Alternative medicine, admittedly, is a broad category. As in the eighteenth and nineteenth centuries, quacks and genuine innovators managed to coexist uneasily. In our worshipful adherence to the magisterial detection story of Holmes and Snow, we have mostly stopped the former, but we have also stalled the latter. Romantic disease discourse offers an obdurate bulwark against a potentially coercive biopower, but it also arms quackery and anti-intellectualism with dangerous agency. It is this paradoxical ecology of experimental discovery and paranoid suspicion that makes vaccination stand out in the history of medicine as one of the strongest examples to recommend more cross-disciplinary chatter. We must keep those channels cautiously open if only for the mere possibility of rediscovering vaccination.

## Notes

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<sup>1</sup> See the third chapter's discussion of Esposito's concept of immunity, Cohen's historicizing study of the defensive body, and my discussion of Romantic disease discourse.

<sup>2</sup> The entire Doyle-Koch anecdote is recounted in more detail in Howard Markel's short article "Medical Detectives" in *The New England Journal of Medicine* (2426–2428).

<sup>3</sup> See "Case, *n.l.*" Def. 8b. *Oxford English Dictionary Online*, Oxford University Press, n.d. Web. 13 July 2013.

<sup>4</sup> See <http://www.fusonwang.com/reviews-of-study-in-scarlet/> for some of my students' less than favorable reactions to the jarring tonal shift between the two parts of *Study in Scarlet*.

<sup>5</sup> For my discussion of Esposito's use of immunity, see chapter three. Vanessa Lemm's answer to Esposito via Nietzsche's dual conception of *Einverleibung* (incorporation) neatly encapsulates the semantic shifts of immunity between a diversity-increasing cosmopolitanism to an exclusionary, eugenic principle: "Esposito raises the question of whether it is possible to preserve life by means of immunization without thereby destroying itself. This article argues that the idea of *Einverleibung* in Nietzsche understood as a creative transformation offers an answer to the question posed by Esposito. It moreover points to a different politics of immunity, where immunity does not name the including exclusion of the other, but the openness of life to the horizon of justice and community" (3).

<sup>6</sup> See Stephen Jay Gould's *Ever Since Darwin: Reflections in Natural History* (1973) for a representative study of Darwin's legacies.

<sup>7</sup> Holmes may have been thinking about the passage in *Origin of Species* in which Darwin uses the example of Wolfgang Amadeus Mozart's natural genius to explain the idea of humanity's instinctive musicality (190).

<sup>8</sup> In the preface to *Culture and Anarchy* (1875), Matthew Arnold traces out this disciplinary binary. He mentions a "brilliant and distinguished votary of the natural sciences" (*Culture and Anarchy* 3), a clear allusion to his agnostic interlocutor, Thomas Huxley. Throughout their careers, Arnold and Huxley would debate the merits of literary and scientific educations.

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<sup>9</sup> See the previous endnote.

<sup>10</sup> Huxley's ardent advocacy of Darwin's theory of natural selection earned him the appropriately bestial nickname.

<sup>11</sup> For Cohen's historicization of the defensive body, see my discussion in chapter three. For my discussion of Shelley's cosmopolitanism, see chapter four.

<sup>12</sup> For a discussion of this parody, see the first chapter on Erasmus Darwin and his hostile reception.

<sup>13</sup> This recent result can be found on the *Guinness World Record* website ("Sherlock Holmes Awarded Title for Most Portrayed Literary Human Character in Film & TV").

<sup>14</sup> For Data's processing speed, see the episode "The Measure of a Man" (Scheerer).

<sup>15</sup> In *The Ghost Map* (2006), Steven Johnson casts Dr. John Snow as a kind of Holmesian "investigator," armed with scientific deduction and empirical method (57–80).

<sup>16</sup> For more information on the CIA's staged vaccination drive, see the recent *New Yorker* article (Specter, "The C.I.A., Vaccines, and Bin Laden"). The rise of vaccine refusal extends also to the super-rich and educated (Seitz-Wald). As of August 28, 2013, the story about the measles outbreak in Texas is still developing (Zimmerman and McKay).

## Figures



**Figure 1:** James Gillray, *The Cow-Pock—or—the Wonderful Effects of the New Inoculation!*, 1802. Colored etching, 24.8 x 34.9 cm. London, Wellcome Library.



**Figure 2:** Here is visual mapping of Darwin's poetic representation of the "CAPRI-FICUS" in *Loves of the Plants*: pictured above is the process of caprification, the enclosed fig flower, the curculio, a linnet nest, lightning, and a compass. Darwin's roundabout pedagogy depends not upon a single, extended metaphysical conceit, but a frenetic shuffle through loosely-analogical or barely-related poetic images.



Figure 3: These are Darwin's poisonous plants. Pictured are, from the top left, the Burning-bush (Dictamnus), the little apple of death (Mancinella), the stinging nettle (Urtica), and the pokeweed (Lobelia).

Figure 4: An illustration of Linnaeus's twenty-four classes of flowers, the organizing principle behind Darwin's *Loves of the Plants*.

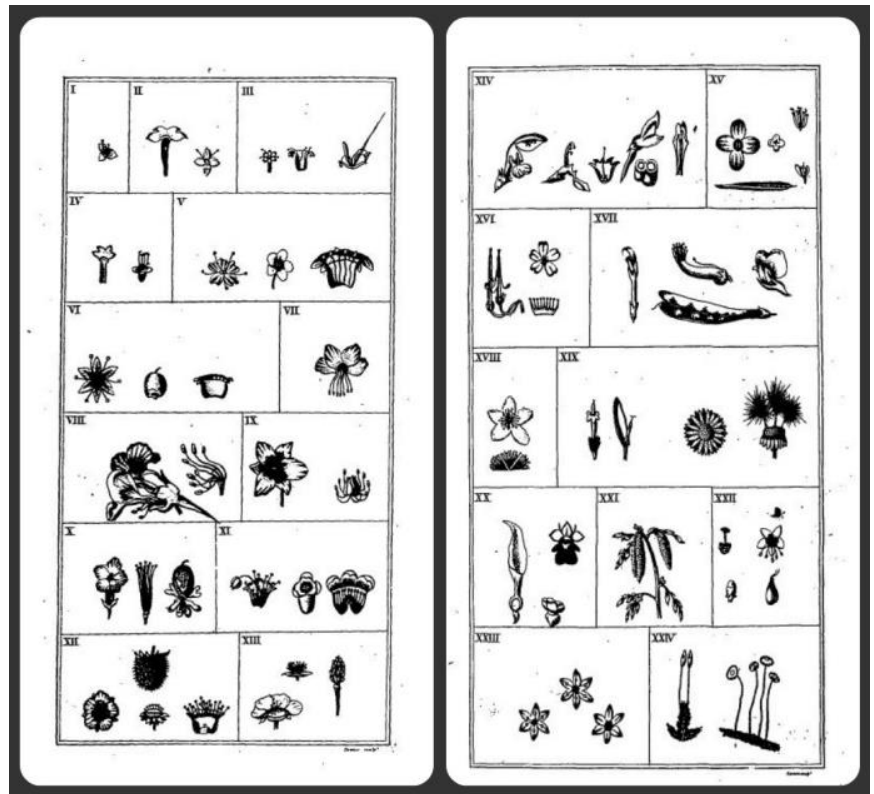




Figure 5: Here are Blake's revisions of the floral images in *The Botanic Garden*. The first is the frontispiece of *The Book of Thel*, the second is the argument plate of *Visions of the Daughters of Albion*, and the third is "The Sick Rose" from *Songs of Experience*. Note the repeated motif of human figures emerging from curling flowers. These images are taken from the *Blake Archive*.

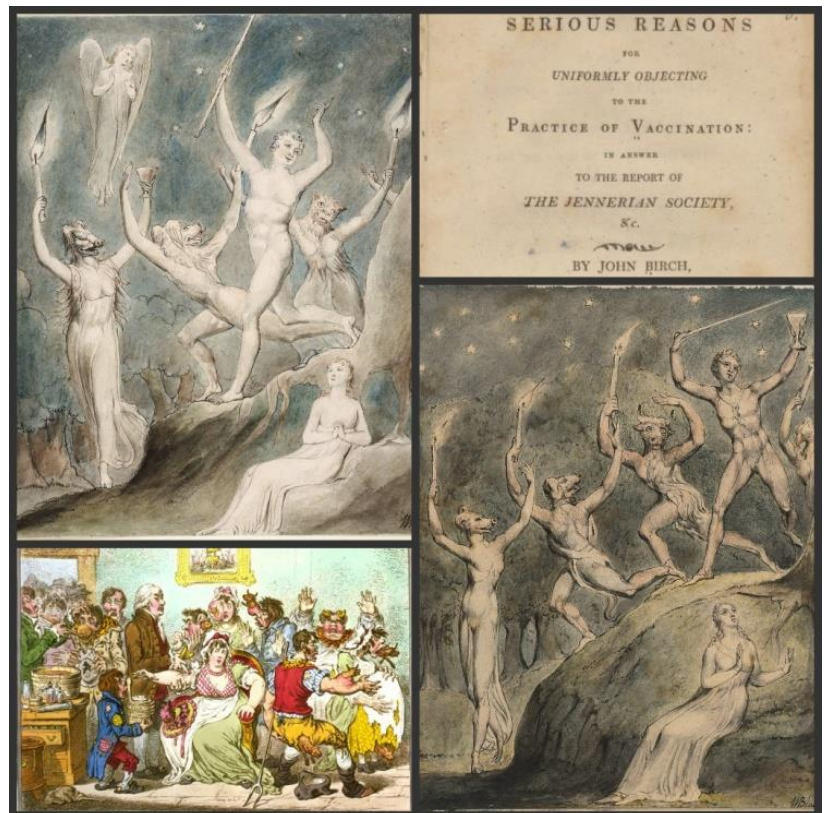
Figure 6: This is the frontispiece of *Visions of the Daughters of Albion* where the violence of the sexual act leaves Bromion (left) and Oothoon (center) bound in chains with Theotormon (right) writhing in jealousy and shame. *Visions of the Daughters of Albion*, copy B, object 1 (Bentley 1, Erdman I, Keynes i). The image is taken from the *Blake Archive*.





Figure 7: Blake built in deliberate inconsistencies into the production process of his illuminated work. Of note here is the disappearing vermicular appendage of the rose. The “invisible worm” does not necessarily succeed in restraining the emerging female figure or destroying her life. On the top left of each image, note also the caterpillar that has chosen the plant’s largest leaf. Songs of Innocence and Experience, copy AA, 1826 (The Fitzwilliam Museum). The images are taken from the *Blake Archive*.

Figure 8: Here are Blake’s two Comus images: on the left is the 1801 version of “Comus with his Revellers” and on the right is the 1815 revision. The other two images are Gillray’s satirical “Cow-Pock” (1802) cartoon and Birch’s anti-vaccination pamphlet (1806), both of which may have been influential in Blake’s decision to change the lynx to a bearded cow-goat.



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