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"A NEW STRANGE DISEASE": ATLANTIC MEDICINE, AFFECTVE HISTORY, AND THE NOVEL IN AMERICA; 1690-1800

BY

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ABSTRACT OF THE DISSERTATION

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This dissertation demonstrates the previously unacknowledged role of the Hippocratic case history—a brief narrative of illness experienced by a patient and observed by a physician—in the formation of scientific and literary culture in eighteenth-century America. Specifically, I argue that the medical case registers in literary form the unresolved commingling of confidence and despair that characterizes the colonial Enlightenment. To a tradition of early American scholarship that posits complicity between medical discourse and the expansion of European empire in the New World, I offer the individual patient history as an aperture through which to glimpse the contingent, affective experience of colonization. Rather than presenting a familiar narrative of hegemony and subversion, I focus on how authors struggled in literary form with the tragic paradoxes present at the dawn of the modern age.

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Introduction.

"Unsuccessful cases": Medicine and History in the Atlantic World

1. Life is short, art is long, occasion brief, experience fallacious, judgment difficult. It is requisite that the Physician exhibit what is essential, and that the patient, attendants, and all which surrounds him, concur therein.
--Hippocrates, Aphorisms¹

In May of 1754 the Philadelphia physician Dr. Thomas Bond (1712-84) sent a letter to his colleague in London, Dr. John Clephane. Bond's letter recounts the "remarkable case" of a patient under his care: the suffering, treatment, and eventual death of the widow, Mrs. Holt, from an apparent "worm bred in the liver." The case begins from the woman's pain—severe, recurrent, and concentrated in her right side—and describes her methods of self-treatment. "[I]n the beginning [the pain] was like the stinging of a bee, or the pricking of a pin. This pain ... gradually extended," Bond writes, until it "was so increased that she compared it to a bull-dog gnawing her liver." In addition to its developing intensity, the nature of the sensation, which Mrs. Holt perceived as a "tickling and quirling," convinced her that "there was something alive in her side." Though she gained some relief from locomotion, either on horseback or on foot, the patient also developed her own therapy: "a quick smart blow, struck with an open hand on the affected place, gave immediate relief, and therefore [she] often called on her sister to do it." Dr. Bond's various interventions—a regimen of riding, a poultice applied to the afflicted side, as well as the standard heroic treatments of blistering and

bloodletting—all failed to produce a lasting recovery. Finally, concurring with the patient's initial, violent, self-treatments, the physician resorted to a series of strong anodynes in order to alleviate her suffering. Mrs. Holt's pain eventually abated, she voided parts of an intestinal worm, lost her ability to swallow, and passed away shortly thereafter. The case concludes with an autopsy, a description and accompanying plate of the worm ("this horrid animal...was nourished by sucking the blood"), and some brief speculation parsing the parasites' colonial origin ("[it] may justly be called a hepatic leach"). Bond thus records Mrs. Holt's horrific suffering and death, punctuated by her struggles in language to convey the subjective experience of her illness, while also confronting the failure of his knowledge and expertise to alleviate her pain.

The "remarkable case" of Mrs. Holt's opens a unique aperture into medical, as well as colonial, history. Dr. Bond's narrative takes the form of a case study: the recounting of an individual patient's illness, treatment, and outcome, as reported to and observed by a physician. The case study has been, as one modern critic notes, "the distinctive figure of Hippocratic medicine itself" for centuries. Ancient origins notwithstanding, the flourishing of European empiricism in the eighteenth-century brought the case study renewed epistemological currency. Bond's case was one response to a clarion call sounded throughout the Atlantic world for both learned and lay medical inquirers to not only record cases, but to share them in correspondence and in print.

Accordingly, the case of Mrs. Holt was composed with a readership beyond Dr. Clephane in mind. The narrative was published in the first volume of *Medical Observations and Inquiries* (1757), an annual journal produced by "a Society of Physicians in London" of

which Clephane was a founder, and to which Bond, a figure of renown in colonial medicine, was a regular contributor.⁵

The medical case abetted not only the development of the London Society of Physicians but also the Edinburgh "Society for the Improvement of Medical Knowledge," a group founded a decade earlier, in 1731, to manage the dissemination of medical information in "collections of small treatises," of "a sheet or two," like the case of Mrs. Holt.⁶ The members of the Edinburgh Society, who the London Society members cite as their inspiration, provide detailed directives for the content of case studies in the first issue of their journal, *Medical Essays and Observations*:

The Histories or morbid cases, whether in Physick or Surgery, are to be related without any theoretical Reasoning on the Nature of the Disease ... such Histories will only be a clear and succinct Narrative of Facts, in which the Patient's Age, Sex, Constitution, former Way of Life, Diseases to which they have been subject, or any other Circumstances which serve to explain the present Case, are to be remarked. If any manifest Cause of a Disease has been known, it is to be mentioned. All the Symptoms, with the State of the Pulse, Appetite, Thirst, Sweat, Urine, Feces, &c. are to be set down; and the Sequel is to be an exact Account of the Symptoms, Medicines prescribed, their evident Effects, and of the Event, whether into Health, some other Disease or Death. If the Patient died, and a Dissection was allowed, the Parts preternaturally affected in their Situation, Texture, &c. are to be described.⁷

The narrative account of Mrs. Holt's affliction—like others included in the journals of both the Edinburgh and London societies, or those printed in more general journals of natural philosophy, such as the *Philosophical Transactions* of the Royal Society and the *Transactions of the American Philosophical Society*, as well as the classical models included in the *Epidemics* of Hippocrates—follows these directives closely. The "remarkable case" provided by Bond emphasizes the colonial physician's embodied, firsthand witnessing of the patient, isolates her as an identifiable individual, and generally refrains from medical theorizing beyond her illness, preferring instead the inductive

collection of such individual instances. It indexes the broader, on-going shift in Enlightenment medicine from relying on the aphorisms of ancient theorists to the practical observations of eighteenth-century physicians. As such, the case of Mrs. Holt corresponds to the movement away from Aristotelian knowledge systems, relying on the particular case as an exemplar of ancient truths, to an Enlightenment emphasis on induction and experience.

The London Society elaborates on these directives for the content and style of case studies by explicitly stating the philosophical motivation for the collection of records of practice. The preface to the first volume of *Medical Observations* summarizes the renewed importance of the case study in the development of learned medicine and medical culture in the eighteenth century: "[T]he nature of our plan...is indeed no other than that recommended by the great Lord Bacon; who advises us 'to revive the Hippocratic method of composing narratives of particular cases" In the field of Enlightenment medicine, the authors of both prefaces suggest, the accretion of true knowledge from experience should begin at the bedside, with the fundamental interaction between physician and patient recorded in a case study.

The members of the London and Edinburgh Societies thus route their renewed attention to the Hippocratic case study, and particularly their call for case studies like that of Mrs. Holt, not through the writings of the ancients, but instead through the founding figure of English empiricism, Francis Bacon. In *The Advancement of Learning* (1605), the philosopher addresses the state of "medicinal history" directly, and despairingly. "Medicine is a Science which hath been more professed than laboured, & yet more laboured than advanced;" Bacon observes, "the labour having been, in my judgement,

rather in circle, than in progression. I finde much Iteration, but small Addition." A return to the Hippocratic case history, or "*Narrationes Medicinales*," the philosopher hopes, will enable Enlightenment physicians to break this cycle. Over a century after Bacon wrote, European medicine, as evidenced by the plan laid out by the London and Edinburgh societies, still fitfully endeavored to progress. Medical history, rather than recording new knowledge and narrating the alleviation of human suffering, seemed to be, as Mrs. Holt's description suggests, stuck in a quirling cycle of hope and pain.

The members of both the London and Edinburgh societies aim to break this cycle by adopting the model of the Royal Society for their collection of the raw materials of natural philosophy. And, the organizers contend, colonial physicians like Bond have a unique place in their renewed *res publica medica*. As the London physicians write: "The extensive commerce ... carried on with all parts of the world, affords the greatest advantages for establishing a general correspondence; and our particular connection with the British colonies and settlements, where there are physicians of great experience and abilities, will be the means of our receiving much useful information." Accordingly, the table of contents of the first volume presents case studies from across the globe. Aside from Bond's report from Philadelphia, the journal includes accounts from the Atlantic world, and beyond: South Carolina, Jamaica, West Africa, Provence, Constantinople, Aleppo, and the Persian Gulf city of Gambron. The London physicians clearly aim to demonstrate the far reach of their society and also the utility of the case for a diverse group of medical observers to participate in this network.

Mrs. Holt's story, however, offers a more complex history than the familiar triumph of scientific method and knowledge throughout the colonial world. More than

producing new knowledge, the narrative recounted therein is one of ineffectual therapy and nearly inexpressible pain. Such a case was far from exceptional in the colonial medical literature of the eighteenth century. Moreover, the physician's failure to successfully treat his patient was seen as a benefit to the development of medicine. For, as the physicians of the Edinburgh society advise, "Unsuccessful Cases, or even Mistakes in the Nature of the Disease, or in the Practice, when known, do very often more service to Practisers [sic] of Medicine, than several successful cases." Bond's narrative thus demonstrates the ascension of empirical science in European medicine, asserts the epistemological authority of the individual, learned, physician in the colonial world, and demonstrates the importance of the case study for accomplishing these ends. For colonial physicians the medical case study offered a way to participate in the circum-Atlantic republic of science and letters, thereby conferring the status that such participation implied. However, such participation inevitably involved confronting, in narrative, the repeated failure of learned medicine to alleviate human suffering. The medical case study thus narrates a history of Enlightenment hope, undermined by colonial suffering, an affective response that structures the experience of both the patient and physician. My dissertation traces this dynamic as it recurs across the colonial periphery in the British Atlantic World throughout the eighteenth century.

A New Strange Disease: Atlantic Medicine, Affective History, and the Novel in America; 1690-1800, demonstrates the importance of the medical case study to scientific and literary culture in colonial and early national America. I argue that the medical case study provides an affective history of settlement and nation formation in eighteenth-century America. Elite colonials confidently asserted the possibilities for human

flourishing made available through scientific inquiry, the vast wealth created by a West Indian plantation economy, and the expanded liberties promised by republicanism. These Enlightenment ambitions, however, produced disorder, violence, and death throughout the colonial world. *A New Strange Disease* demonstrates how not only learned colonial physicians, but also theologians, natural historians, and novelists employed case histories to apprehend the affective response to these developments, a New World phenomena which behaved like disease, but exceeded the epistemological capacity of Enlightenment medicine. For those witnessing firsthand the violent fits of witchcraft possession in New England, the mass death and dissipation on Jamaican plantations, or the anxious social upheavals of revolution and counter-revolution in early national Philadelphia, the medical case study offered a literary form and epistemic genre capable of holding in suspension the mixture of confidence and despair that was unique to the colonial Enlightenment.

The medical case study facilitated participation in the Atlantic republic of science and letters for colonial elites, a cohort struggling to assert their epistemological authority on the periphery. However, like Dr. Bond's narrative of Mrs. Holt, such cases record the inability of European medicine to alleviate individual suffering. The publication of consistently unsuccessful cases in ecclesiastical histories, natural histories, scientific journals, and novels offers repeated glimpses of the limit of Enlightenment knowledge in the making. That is, the moment when discourses of improvement, refinement, and individual liberty confront the human suffering requisite to the advancement of human flourishing. This affective structure persists through the revolutionary period and registers most clearly in the sentimental and gothic novels of the early U.S. republic.

of the novel as an epistemological tool for identifying and interpreting the affective response to social and economic instability in the early national period. Reading the early U.S. novel alongside the medical case study, *A New Strange Disease* thus brings to light the literary forms and publication strategies employed by Enlightenment authors, but obscured by our literary and scientific histories, to capture the affective register of historical experience.

From classic scholarship on biological imperialism, to newer analyses of epidemiology and narrative form, early American historiography and literary studies have long understood Enlightenment medicine to be bound up with European colonialism in the New World. Taking Bacon's maxim—"scientia poestas est"—at face value, colonial discourse theory has emphasized the mutual imbrication of knowledge production and the imposition of European hegemony. 14 In the last decade historians and literary critics have brought renewed attention to the importance of the new science for our understanding of the literature and history of colonial America. Attention to the complexity of scientific culture in colonial America has revised the easy complicity of European empiricism and imperialism in colonial America. The work of Ralph Bauer has been particularly important for locating within the structure of Baconian science a division of labor that complicates our understanding of the relationship between colonization and Enlightenment knowledge production. In The Cultural Geographies of Colonial American Literatures (2003), Bauer emphasizes a divide between colonial knowledge "miners" and European "refiners." For Bauer, as for the members of the London and Edinburgh medical societies, Bacon's philosophy is foundational to this formulation.

Baconian empiricism created a hierarchy that mirrored the mercantilist exchange of colonialism, what Bauer refers to as an "epistemic mercantilism": "the colonials in the bowels of nature would provide the epistemic raw material, and the metropolitan natural philosopher would refine it into truth." Thus Spanish and English "Creoles" struggled for intellectual authority in light of the Baconian revolution in knowledge production, Bauer argues, helping illuminate how "modernity is the product of the complex and inextricable *connectedness* of various places and histories, of the way in which these places *acted upon each other*."¹⁵

Bauer's argument thus brings renewed attention to the ways European knowledge production depended on not only the raw materials of New World nature, but also were highly implicated in the social dynamics of settler colonialism. Susan Scott Parrish demonstrates how the epistemological emphasis on induction in post-Baconian science had the ramification of making bodily colonial experience central to the production of Enlightenment truth throughout the eighteenth century. Colonial authors thus gravitated towards genres that emphasized their firsthand witnessing of natural phenomena in the New World, and developed rhetorical techniques that transformed their geographic liminality into an epistemological advantage. Parrish traces the cultures of natural historical exchange and correspondence, from New World to Old, placing a "unique matrix of contested knowledge-making" at the center of Enlightenment ways of knowing. The "contested-knowledge-making," Parrish emphasizes, arises from the necessary interaction of Amerindian, African, and European epistemologies and cosmologies in the New World. Furthering Bauer's stress on the connectedness of geographic spaces, therefore, Parrish highlights a colonial scientific culture in which one does not "watch the English create modernity singlehandedly, whether in epic triumph or brutal domination." Instead, her work emphasizes the ways "various peoples issuing from various parts of the Atlantic world, made facts about America in vexed chains of communication." 16

More recently, Christopher Iannini has turned our attention to the representational innovations in these "chains of communication," arguing for a unique set of hermeneutics developed by creole authors in the eighteenth-century. Colonial elites "refashion[ed] themselves as Enlightened authors and subjects" throughout the eighteenth century by participating in natural historical networks fostered by the empirical privileging of "factual eyewitness reports." However, Iannini reminds us, such reports are always implicated in local, colonial conditions such as the plantation economy, and are therefore freighted with a sedimented mode of representation that has a significant bearing on the future of colonial and early national Enlightenment science and letters. The empirical project of the new science therefore sparks at once a means of participation in literary culture for colonial elites attendant to the promises of improvement through Enlightenment knowledge production, while also compelling the repeated confrontation with the lived horrors of colonialism in order to reap the gains of such a project.¹⁷

Like the natural history letter and the botanical specimen description, the medical case study reveals for us a set of social practices and representational complexities in the development of literary culture on the periphery of the British Atlantic world. The case distills the empirical imperative of firsthand witnessing in the medical field, making it a central genre in the development of Atlantic science. Eighteenth-century medical cases emphasize a physician's bearing bodily witness to the experience of illness, as opposed to studying patient fluids at a distance. Such a position is accomplished through employing

the thick, sensory description exercised in other genres of scientific correspondence. As the Enlightenment developed and the practices of observation became increasingly the mark of a learned gentleman, creole elites participated in polite metropolitan culture by presenting these objective case studies. Figures long-familiar to scholars of the colonial eighteenth-century—including Cotton Mather, Benjamin Franklin, Jonathan Edwards, Thomas Jefferson, and Charles Brockden Brown, among others—maintained abiding interests in medical knowledge, including the production, collection, or publication of medical case studies. In this dissertation I thus trace how, in the colonial world, the medical case was as a flexible literary form employed not just by physicians but also by others interested in the origin and progress of disease, such as ministers, natural historians, and literary novelists.

The case appealed so broadly because it embodies a kind of inductive openness that corresponds to the humble position of the colonial observer in the hierarchy of Atlantic scientific exchange. Between the seventeenth and early nineteenth centuries, the individual medical case evolved from functioning primarily as an exemplar which deductively ratified theories about human health, such as Galenic humoralism or beliefs in divinely-ordained illnesses, to an inductive tool which builds towards a systematic understanding of disease predicated on firsthand observation in a disciplined setting, such as a hospital or dispensary. Perched between the Renaissance genre of *historia* and the professional, clinical case, the eighteenth-century medical case study generally resisted overt theorizing, offering only hesitant judgments about the etiology of a given illness. In this period, then, the case study functioned as a transitional epistemological instrument, keyed to an inductive method, but not situated within a reliably systematic approach to

medicine. Therefore, the development and deployment of the case relies on technologies of collection and collation, building towards a truth that can be developed through the observation of similar instances. And the abbreviated, isolated case is eminently reprintable and therefore available for wide re-contextualization. Cases appeared in medical journals and essays, as demonstrated above, but also in religious treatises and sermons, in almanacks and domestic health manuals, and in natural histories or aesthetic genres including the novel. Read across these multiple genres and disciplines, the colonial case study tells a series of similar histories; histories imbued with the hope for improvement that characterizes Enlightenment science, and the despair at the realities of exploitation or the failures of that science to improve life in the colonial space.

Such histories are particularly available in colonial medical case studies because of a set of developments in eighteenth-century European medicine that influenced the work of learned physicians in the New World. As the case with which I began this introduction suggests, in the period of medical history covered in this dissertation the case study narrates a history of failure. That is, the advancement in medical knowledge over the course of the eighteenth century did not produce improvements in therapy, nor an attendant improvement in human health and flourishing. Medical historian Roy Porter has called this the "apparent paradox of Enlightenment medical science—great expectations, disappointing results." With the advent of the new science in the sixteenth century, European physicians, surgeons, and anatomists greatly increased understanding of and knowledge about the body. Accurate depictions of the nervous system by Italian physician Andreas Vesalius (1514-1564), for instance, or of the circulatory and pulmonary systems by Englishmen William Harvey (1578-1657) and Richard Lower

(1631-1691), effectively corrected basic tenets of classical medicine. However, these developments produced no tangible understanding of the actual microbial or viral origin of most diseases. Such knowledge, therefore, did not result in the improved treatment of individual patients. Physicians could understand and describe the body better, autopsies became more prevalent, and doctors could trace the ravages of disease through the body, but therapies did not significantly change and outcomes did not improve. As Porter concisely summarizes: "The anatomically based scientific medicine which emerged from Renaissance universities and the Scientific Revolution contributed more to knowledge than to health." This paradoxical advance in knowledge without an attendant advance in therapy, what Bacon identified as a cycle of "much iteration, little addition," was particularly heightened for physicians in the New World. The geographic space of the North America provided European medicine with miracle cures, including the Jesuit's Bark (the bark of the Peruvian chinchona tree, a natural source of the anti-malarial quinine), or key innovations like the practice of smallpox inoculation. But life on the colonial periphery also threatened Europeans, indigenous Americans, and transplanted Africans alike with new diseases, virulent outbreaks of familiar ones, and ostensibly dangerous climates.²⁰ Thus, as scientific societies and individual physicians retained and circulated cases of interactions with patients or tests of New World botanicals, hopeful to contribute new knowledge and new cures, they inevitably recorded repeated instances of failure.

In a twenty-first century re-iteration of Bacon's critique, medical historian David Wootton explains European medicine's persistent failure to produce advancements in human health, both on the colonial periphery and elsewhere. According to Wootton,

medical science produced no lasting advancements in human health prior to the advent of germ theory, popularized by Joseph Lister's practical application of anti-septic beginning in the 1860s. "Until 1865," Wootton reminds us, "virtually all medical progress ... enabled doctors to get better and better at prognosis, at predicting who would die, but it made no difference at all to therapeutics." While not the first historian to identify medicine as "the youngest science," by emphasizing the field's repeated failures Wootton challenges us to tell a history of medical science in a new way, one that resonates with the telling of colonial history. "We know how to write histories of discovery and progress," Wootton writes, "but not how to write histories of stasis and delay, of digression." The history of the colonial world offered in this dissertation, as told via the medical case study, is an attempt to tell such a history: one of stasis, delay, and digression.

This study examines a series of moments in the history of colonial medicine when the protocols and acumen of European medicine were brought to bear on various social phenomena in the colonial world. Though such moments provided little to no advancement in scientific understanding, those moments are not, therefore, not useful. As a means to locate their extra-scientific meaning, I draw on the insights of Katherine Montgomery Hunter. Hunter, a scholar of literary studies, reminds us that medicine, whether in the eighteenth century or the twenty-first, cannot be called a science. In making this claim, Hunter draws an important distinction between the controlled production of knowledge about the physical world via empirical observation and experiment, and "[m]edicine's goal ... to alleviate present suffering." Science has the former as its goal, while medicine takes—or should take—as its object the latter. And, for

Hunter, the non-scientific nature of medicine is most apparent in medicine's reliance on the case study as the most basic element of knowledge. Medicine, she points out, "is the art of adjusting scientific abstractions to the individual case." Because medicine is a science of individuals, a practice that cannot be elevated into abstraction, it always needs to come back to the individual patient and to their "present suffering."

The confrontation of "present suffering" pervades colonial case studies, lending them a combination of Enlightenment hope, undermined by despair. They capture the Enlightenment fantasy of improvement, or the desire to enhance human flourishing through the knowledge networks of the new science as well as through attendant epistemological, political, and economic changes. Hallmark developments long associated with European Enlightenment—the rise of a secular, print public sphere, the emergence of speculative finance and market capitalism, and the development of republicanism—depend upon and are forced to confront the embodied experience of life in the colonial world, a dynamic distilled in the medical case study.²⁴ The affective structure I am describing in these case studies, in this way, parallels what Lauren Berlant has called the "cruel optimism" characteristic of capitalist modernity. Berlant claims that an orientation of "cruel optimism" exists "when something you desire is actually an obstacle to your flourishing."²⁵ Berlant attaches this dynamic to what she calls the "systemic crisis" of the late 20th and early 21st-century, a world in which fantasies of the "good life"—characterized in her account by political equality, economic stability, and durable intimacy—repeatedly fail to materialize.²⁶

I think we can identify the beginnings of a similar dynamic in the medical case studies of the colonial Atlantic world, a world in which the structural changes which give rise to liberal capitalism are beginning and being tested. In each of the four chapters of this dissertation, therefore, I address a specific site in which the Enlightenment promises that will come to constitute the fantasy of "the good life" are recognized, at their moments of origin, to be fantasies. That is, that the promises for human flourishing promised via, for example, a secular, print public sphere in New England or the plantation economy in Jamaica, cannot be attained without the production of human suffering.²⁷ Therefore, in addition to simply recording the repeated confrontation of Enlightenment physicians with the failure of new knowledge to produce useful therapies, the medical case study registers their affective response: a mixture of hope and despair.

In this way, the colonial medical case study accords with the various "genres of unforeclosed experience" that Berlant identifies in *Cruel Optimism*. Such genres serve to mediate the affective experience of enduring the "systemic crisis" of the present. That is, they are abbreviated cultural forms, across various media, which attempt to mediate historical experience before it has coalesced, before it has hardened into an "event or an epoch on which we can look back." While Berlant does not include the case study among the "genres of unforeclosed experience," she has discussed the case elsewhere, and in very similar terms. In a 2007 issue of *Critical Inquiry* dedicated to the function of the case across disciplines, Berlant describes the genre as having a kind of "potential energy," an energy derived from the weighing of possible outcomes and possible meanings. The colonial medical case—shaped by the requisite immediacy of trans-Atlantic empiricism, by its role as an inductive instrument in networks of scientific exchange, by the unstable epistemological, racial, social, and political realities of the periphery, and by the persistent failure of Enlightenment medical science to produce

viable therapies—enables elite colonials to weigh, but not resolve, such tensions. In this pendulous weighing the medical case study renders visible the affective structure of the colonial experience.

Understood in this way the colonial case study contributes to the telling of an affective history of the British Atlantic world, what critics have recently termed the "unsettling" experience of colonial settlement. Kathleen Donegan accounts for "the unsettling act of colonial settlement," that is, "how English settlers became colonial through the acute bodily experiences and mental ruptures they experienced." In so doing, Donegan makes an important distinction between "colonization as an imperial project," with its hegemonic binary of colonizer and colonized, and "becoming colonial as a lived condition."³⁰ The shift in emphasis draws us away from teleological historical narratives, be they of Enlightenment progress or imperial exploitation, to focus on the "ongoing catastrophe" of colonial encounter, exchange, and settlement. Such a history attends to contingent moments of the colonial present, seeking to describe how the affective experience is mediated in textual or cultural forms. In the chapters that follow I posit the medical case study as one such form which colonial and early national elites employed to manage the "unsettling" experience of colonial expansion and nation formation across the eighteenth century.

With its focus on the eighteenth-century, however, this dissertation addresses a more settled era than the "discourse of catastrophe" which characterizes colonial encounter.³¹ Spanning roughly 1690 to 1800, my work covers the periods of "Atlantic history" that Bernard Bailyn has characterized as focused on "imperial integration" and "creole triumphalism." Economic and political consolidation contributed to a more

stable Atlantic world over the course of the eighteenth-century, a stability attested to by the development of the kind of commercial as well as intellectual networks which facilitated the exchange of medical case studies among doctors and lay medical inquirers in Boston, New York, Philadelphia, Charleston, Kingston, Saint Domingue, Barbados, London, Paris, Edinburgh, and elsewhere. Such stability, I contend, contributed to the hopeful orientation that characterizes the work of writers as apparently disparate as Cotton Mather, Hans Sloane, or Charles Brockden Brown. However, as outlined above, European medicine struggled to produce lasting therapeutic improvements in the same period, assuring that the medical case study would inevitably narrate a history of recurrent pain. As my chapters trace the arc of the medical case study from it's origins in the early modern genres of historia to its role in the emergence of clinical medicine and engagement with the early U.S. novel, I pay attention to what versions of history are made available in the medical case while it floats free from larger epistemological frameworks. One such history I turn our attention to is the dynamic of hope and despair, an affective structure governing experience in the eighteenth-century, colonial and early national world.

My opening chapter focuses on Cotton Mather (1663-1723), the Boston-based minister who trained as a physician in his youth and maintained a lifelong interest in medicine. I begin with a detailed depiction of the creative literary and publication strategies of a group of Puritan scientists, Cotton and his father Increase Mather foremost among them. This group, the Boston Philosophical Society, modeled their rhetorical and publication strategies on the London-based Royal Society, seeking to extend access to divine truth through scientific genres, including the observational case study. I

demonstrate how Cotton Mather drew upon the descriptive protocols and narrative logic of the medical case to frame a series of possession narratives he circulated in manuscript during the outbreaks of witchcraft in and around Salem, Massachusetts. By turning to the medical case—particularly its emphasis on embodied observation and rich sensory detail—Mather signals his own status as an Enlightened man of science. Mather exploits the inductive logic of the case study—a form that refrains from rendering definitive judgment—to keep open the possibility of divine knowledge. This combination of empirical science and providential theology transforms Mather's case studies of possession into devotional tracts of particular power. The chapter traces the scribal circulation of Mather's case studies through the Boston Philosophical Society, a network of physicians, divines, and politicians, residing in New England, the West Indies, and beyond. Re-creating the dissemination of highly realistic torture narratives reveals a colonial public confident in the representation of divine truth, while tacitly acknowledging the violence necessary to maintain religious authority in an increasingly secular New England.

In my second chapter I turn to Sir Hans Sloane (1660-1753), London-based natural historian and one-time physician to the Royal Governor of Jamaica, to provide an affective history of the plantation economy in the New World. Sloane included a collection of case studies as part of his natural history, *A Voyage to...Jamaica* (1707). My reading of these cases offers glimpses of the impact of plantation life on both black and white, as well as a reflection on how the production of Enlightenment modes of discourse have been instrumental in obscuring that process. Sloane sought to inductively locate the cause of mass mortality and illness plaguing planter society. His case studies treat the full

spectrum of the Jamaican population: European and African, male and female, slave, servant, and free. Sloane's cases strive to counter, through learned observation and limited medical theorizing, the then-dominant climatological assumptions about New World disease. In so doing, however, Sloane cannot help but depict the unrelenting horrors of plantation life. The narratives of illness thus repeatedly confront the centrality of affect in managing bodily health, and therefore social and epistemological authority, on the colonial periphery. While eighteenth-century satirists such as William King (1663-1712) and Ned Ward (1667-1731) condemned the island as a way to distance themselves from the obvious horrors unfolding there, Sloane's case studies resist confident judgment, presenting instead unresolved narratives of the ongoing colonial present.

The second half of *A New Strange Disease* charts the intersection of the medical case study—as both narrative form and epistemological instrument—with the emergence of the novel in the post-Revolutionary U.S.³³ American physicians in the 1780s and 90s embraced new possibilities for medical practice and publishing. Leading medical thinkers encouraged doctors to look beyond the body in order to understand the complex interaction between the new social formations of the post-Revolutionary U.S. and the workings of disease. Practicing physicians, however, circulated and published case studies that often included a pathological anatomy, or autopsy, thereby investing a physician's professional authority in the knowledgeable description of human anatomy. The emphasis on pathological anatomy risked ignoring the complex set of factors that could, according to the new nation's foremost physician, Benjamin Rush (1745-1813), influence a patient's body "through the medium of the mind." Into this impasse stepped the sentimental novel, a genre uniquely suited to addressing the kinds of psychological,

biographical, and social forces that were thought to cause physical illness. I address this development in the medical case study alongside *The Hapless Orphan* (1793), an anonymous, epistolary novel that details a series of tragedies befalling seduced women and suffering soldiers. The novel satirizes early national attitudes towards health, yet simultaneously borrows the form and logic of the medical case study to assess the bodily impacts of a social crisis facing the new nation. Placing this understudied novel in dialogue with the medical case history demonstrates how literary narratives not only exposed the shortcomings of medical discourse but also expanded the epistemological possibilities of the novel form.

Such possibilities are most fully realized in the novels of Charles Brockden Brown (1771-1810). Brown was well versed in medicine and medical discourse, a context I elaborate by demonstrating the author's close association with the first U.S. medical periodical, *The Medical Repository* (pub. 1797-1824). Brown's debt to medicine is well known in scholarship: two of his later novels take contagious disease and its treatment as their central plot device. By reading *Wieland; or The Transformation* (1797) alongside the medical periodical, however, I not only demonstrate the influence of medicine as a thematic element, but also argue for the fundamental role of the medical case study as a logical tool which structures Brown's epistemological method. As the charts and tables included in early volumes of *The Medical Repository* demonstrate, the increasingly professionalized medical field of the late eighteenth century attempted to coordinate general observations about disease patterns through a central authority. While this shift in medical epistemology has been understood as a movement from narrative to non-narrative forms of knowledge, I demonstrate instead how the narrative form of the

case study persists in medical writing, particularly due to its ability to render a general observation particular enough to be useful for practicing physicians. Taken either as data points or as exemplars of a given constitution, case studies offer provisional, affective knowledge in the era of clinical medicine. While Brown's novel addresses the hereditary and social sources of madness, or mania, as manifest in the titular Wieland family, I argue its greater debt to the medical field is in probing the relationship among early U.S. republicanism, affect, and the origin of mental diseases. As such, *A New Strange Disease* concludes by offering not only a glimpse of the history of an un-accounted for genre—the medical case study—but also responds to the longstanding critique of the American novel as an immature sub-genre of its European, particularly British, forebears. When understood through the history of the medical case study, what emerges is a version of the American novel that is epistemologically, as opposed to aesthetically, experimental.

Dr. Bond's unsuccessful case treating Mrs. Holt is accompanied in *Medical Observations* by an additional narrative of her illness. Mrs. Holt's sister, Sarah Browne, wrote a letter to Benjamin Franklin which Bond included for publication in the London-based journal. Browne's narrative follows closely on that of Dr. Bond, the author promising to present as "exact a description of [her] sister's case as [she] can." Browne's write up of the case tracks the same arc as that of the learned physician: from complaints of a fever to an escalating pain in her shoulder and her side, through myriad, ineffectual treatments (including her own administering of violent blows) and the patient's eventual demise. Browne's account substantiates Bond's truth-claims regarding the "remarkable" animal that tortured Mrs. Holt. Her letter testifies to the credibility of

the physician by corroborating the events and by being routed through Franklin, the consummate transatlantic man of science, who, Browne claims, took an interest in the case and had seen the "part of a worm" that Mrs. Holt voided.³⁵ It also demonstrates the hope that was widely shared among medical observers in the New World: bits of medical knowledge, recorded by the learned and lay, collected in cases studies from throughout the British Atlantic world, would alleviate such suffering.

Browne re-iteratres her sister's struggles to articulate the nature of her pain, including repeated references to the "quirling" sensation mentioned by Dr. Bond. In Browne's case we also are witness to protracted scenes of anguish: "her pains then began to be violent, and she would scream out, and would beg me to pound her back...which I did for 10 or 15 minutes at a time." A sense of futility pervades Browne's account. She recounts some of Dr. Bond's treatments, but cuts herself off, claiming, "it would be too tedious to relate all the medicines that were applied." Friends and loved ones "who saw her, judged her to be in the agonies of death ... She continued in this agony for three days, when all at once she screamed out, and said the quirling pain was got into her stomach; called for her friends, and took leave of them in a most affectionate manner. The agonies she was in cannot be expressed."³⁶ Sarah Browne follows Bacon's proscription—she contributes one of many "Narrationes Medicinales"—but also echoes the philosopher's lament: the case offers "iteration, but not addition." We are left not with the triumph of Enlightenment medical knowledge but instead mired in the tragic, quirling pain of a lone woman. This dissertation aims to address the window into colonial, medical, and literary history afforded by such a case study: a history of hopeful iterations, of repeated failures, and, often, of quirling pain.

¹ The Aphorisms of Hippocrates: From the Latin Version of Verhoof, ed. and trans. Elias Marks (New York, 1817), 3. Marks' translation was the first published in the United States.

² "An account of a worm bred in the liver, communicated in a letter to Dr. John Clephane, by Dr. Thomas Bond," *Medical Observations and Inquiries. By a Society of Physicians in London. Vol. 1.*, 4th Ed. (London, 1776), 68. Bond twice mentions Mrs. Holt's use of the term "quirling" to describe the pain in her side. The OED, citing Mrs. Holt's use as its only example, defines the term as "a coiling or swirling sensation." The word appears to be either a derivative of the English word "curling" or an Anglicization of the German word "quirlen," meaning to whisk or to stir. See "quirling, n." *OED* Online. Oxford UP, 2014. February 2015.

³ "An Account," 69, 72-5. The worm is "hepatic," meaning, of or relating to the liver. Bond concludes as much after the autopsy and through comparing the parasite with one described in another case study published in the Edinburgh medical society's journal, *Medical Essays and Observations*. Although Bond is not clear about the precise origin of the worm, he does aim to dispel the notion of "the common people" who "believe them to be real snakes," generated by the bites of rattlesnakes, a species indigenous to the Americas (74).

⁴ John Forrester, "If *p*, then What? Thinking in Cases," *History of the Human Sciences* 9.3 (1996), 13. Forrester's assessment is echoed more recently by Warwick Anderson: "Since Hippocrates, European medicine has used exemplary cases to structure and inform clinical reasoning. Explaining cases has proved an exceptionally powerful pedagogical technique, a conceptual tool demonstrating the natural course of disease, the means of diagnosis, and the effects of therapeutic intervention." See "The Case of the Archive," *Critical Inquiry* 39.3 (2013): 537. Kathryn Montgomery Hunter agues that the case not only serves as the fundamental pedagogical instrument of modern medicine, but also that the narrative knowledge transmitted via the case constitutes medical knowing. See, *Doctor's Stories: The Narrative Structure of Medical Knowledge* (Princeton, 1991).

⁵ Bond, a native of Maryland, was a European-educated surgeon and physician. Upon his return to the colonies he established a practice in Philadelphia, where he developed a close friendship with Benjamin Franklin. Bond was a founding member of Franklin's "Junto," lectured on surgery and physic at the University of Pennsylvania, served in colonial administration as a Port Inspector for Contagious Disease, and was instrumental, along with Franklin, in the founding of the Pennsylvania Hospital, the first permanent institution of its kind in the colonial United States. For biographical details on Bond, see J. Alison Scott, M.D., "A Sketch of the Life of the Thomas Bond, Clinician and Surgeon," University of Pennsylvania Medical Bulletin 18.11 (1906), 306-18. On Bond's connection to Franklin, see Stanley Finger, Doctor Franklin's Medicine (Philadelphia, 2006). The "London Society of Physicians," which collected and published Medical Observations and Inquiries, existed from the early 1750s through the late 1790s. The group should not be confused with the Royal College of Physicians, the Royally-chartered guild founded in the early sixteenth century. Though ostensibly responsible for medical oversight throughout England, the College limited its membership to physicians, leaving out surgeons and apothecaries, and refused membership to doctor's from non-Oxbridge universities. This limited the College's influence to a very small sphere (there were typically fewer than 60 members and 100 licentiates) and resulted in the proliferation of local societies in London, and throughout the British Atlantic world. On the history of the Royal College of Physicians, see Andrew Wear, Knowledge and Practice in English Medicine; 1550-1680 (London, 2000), 21-28; and Roy Porter, The Greatest Benefit to Mankind: A Medical History of Humanity (New York, 1997), 245-303.

⁶ "Preface," *Medical Essays and Observations, Published by a Society in Edinburgh, Vol. 1.* 3rd ed. (Edinburgh, 1747), v.

⁷ *Ibid.*, xviii-xix.

⁸ Part of the *Hippocratic Corpus*, or body of ancient writings attributed to Hippocrates and his school, the *Epidemics* includes a set or 42 case studies, most of which treat fevers. Though parts of the *Corpus*, especially the aphorisms, had been available in English since the late sixteenth century, the first translation of the *Epidemics* into English was by John Floyer (*A Comment on Forty two Histories Described by Hippocrates in his Fifth and Third Books of the Epidemics* (London, 1726)). Subsequent translations, with divergent commentaries, are by Francis Clifton (*Hippocrates Upon Air, Water, and Situation; Upon Epidemical Diseases, and Upon Prognosticks in Acute Cases especially* (London, 1734)); Samuel Farr (*The History of Epidemics by Hippocrates in Seven Books* (London, 1780)); and Francis Riollay (*Doctrines and Practice of Hippocrates in Surgery and Physic* (London, 1783)).

⁹ "Preface," *Medical Observations and Inquiries*, ix.

¹⁰ The Two Books of Francis Bacon. Of the Proficiencie and Advancement of Learning, Book II, (London, 1605), 41.

¹¹ The phrase *res publica medica* first appears in a prefatory letter to Johann Schenck's widely reprinted collection of medical case studies, *Paratereseis; or Medical Observations, Rare, New, Wonderful, Monstrous* (1584-97). The seven-volume compendium excerpts and collects observational medical cases from ancient sources, those from Schenck's practice as a town physician in Freiburg, and those of his contemporaries. In the preface, Swiss humanist Theodor Zwinger lauds Schenck's volumes for embodying the past, present, and future circulation of knowledge amongst a community of practicing physicians. On the emergence of this commonwealth of medical letters, see Gianna Pomata, "Observation Rising: Birth of an Epistemic Genre, 1500-1650," in *Histories of Scientific Observation*, eds. Lorraine Daston and Elizabeth Lunbeck (Chicago, 2011), 45-80.

¹² "Preface," Medical Observations and Inquiries, v-vi.

¹³ Medical Essays and Observations, xix. The London Society's journal provides a similar disclaimer, although they recognize the delicacy of a practicing physician presenting such a case to the public: "Relations of unsuccessful attempts, or even errors in the cure of diseases, often furnish matter of instruction; for which reason, such accounts will be acceptable, and the relater treated with the candour due to a person ingenuous enough to acknowledge a mistake" (Medical Observations and Inquiries, xi).

¹⁴ Bacon's maxim actually refers to the authority of the divine. It translates as "knowledge is His power" and appears in *Meditationes Sacrae* (London, 1597). In *Novum Organum* Bacon addresses more explicitly the relationship between human knowledge and power: "Human knowledge and human power meet in one; for where the cause is not known the effect cannot be produced. Nature to be commanded must be obeyed; and that which in contemplation is as the cause is in operation as the rule." See *Novum Organum* (London, 1620), aphorism 3. For classic articulations of the connection between Enlightenment science and power, see Max Horkheimer, and Theodor W. Adorno, *Dialectic of Enlightenment: Philosophical Fragments* (Stanford, 1987;

trans. 2002); and Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York, 1970; trans. 1994). On the connection between Enlightenment and imperial expansion, see Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation* (New York, 1992). And on New World natural history and British imperialism see Richard Drayton, *Nature's Government: Science, Imperial Britain, and the 'Improvement' of the World* (New Haven, 2000); Joyce Chaplin, *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-*1676 (Cambridge, 2000); and Londa Schiebinger, *Plants and Empire: Colonial Bioprospecting in the Atlantic World* (Cambridge, 2004).

¹⁵ Ralph Bauer, *The Cultural Geographies of Colonial American Literatures: Empire, Travel, Modernity* (Cambridge, 2003), 2, 14; emphasis original. Bauer's project is broadly comparative, addressing Creoles in both Ibero and Anglo-America. For a similar treatment of Iberian science in the colonial world, see Jorge Canizarres-Esguerra, *Nature, Empire, and Nation: Explorations of the History of Science in the Iberian World* (Stanford, 2006). Canizarres-Esguerra has also explored the overlapping conceptions of New World expansion in both Spanish and English literatures in *Puritan Conquistadores: Iberianizing the Atlantic* (Stanford, 2006).

¹⁶ Susan Scott Parrish, *American Curioisity: Cultures of Natural History in the Colonial British Atlantic World* (Williamsburg, 2006), 7, 23. James Delbourgo makes a similar argument about a distinctly "American" Enlightenment, characterized by experiments with electricity throughout the eighteenth century. Delbourgo traces a "science from below," routed through "non-elites," "fleshy bodies," and "experimental machines" rather than the disembodied rationalism of ideas and texts. See *A Most Amazing Scene of Wonders: Electricity and Enlightenment in America* (Cambridge, 2006), 7-9.

¹⁷ Christopher Iannini, Fatal Revoluations: Natural History, West Indian Slavery, and the Routes of American Literature (Chapel Hill, 2012), 3-5.

¹⁸ A number of recent studies have made important contributions to our understanding of how disease and its management was negotiated across cultural lines in the colonial and early national world. Particularly significant in this respect are Cristobal Silva, *Miraculous Plagues: An Epidemiology of Early New England Narrative* (New York, 2011); Simon Finger, *The Contagious City: Politics of Public Health in Early Philadelphia* (Ithaca, 2012); and Kelly Wisecup, *Medical Encounters: Knowledge and Identity in Early American Literatures* (Amherst, 2013). On elite and popular medical knowledge in the early Republic see Sarah Knott, *Sensibility and the American Revolution* (Chapel Hill, 2009); and Justine Murison, *The Politics of Anxiety in Nineteenth-Century American Literature* (Cambridge, 2011). On the imbrication of colonialism and cultural understanding of modern epidemics, see Priscilla Wald, *Contagious: Cultures, Carriers, and the Outbreak Narrative* (Durham, 2008).

¹⁹ The Greatest Benefit to Mankind, 248, 11.

²⁰ The classic treatment of the biological impact of colonial expansion is Alfred Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport, CT, 1972). For a more recent appraisal, see Chaplin, *Subject Matter*. On the history of chinchona in particular, see Schiebinger, *Plants and Empire*, 214-5. Cristobal Silva has recently traced the cyclical epidemiological patterns among New England colonists, highlighting in particular how drops in herd immunity among second- and later-generation Europeans contributed to virulent outbreaks of old world diseases such as smallpox. See *Miraculous Plagues*, esp. 101-41.

which people are compelled to take its history, seek out precedent, write its narratives, adjudicate claims about it, make a judgment, and file it somewhere: a sick body, a traffic accident, a phenomenon, instance, or detail that captures the interpretive eye. Most often, the singularities of the event are adjudicated by normative expertise, which makes them general through pattern recognitions. Sometimes, though, an event more than perturbs; it

²¹ David Wootton, *Bad Medicine: Doctors Doing Harm since Hippocrates* (New York, 2006), 16. Wootton particularly highlights the lack of systematic scientific thought governing the medical profession between 1690 and 1820.

²² *Ibid.*, 14. The phrase "the youngest science" comes from the book of the same name: Lewis Thomas, *The Youngest Science: Notes of a Medicine Watcher* (New York, 1983).

²³ She elaborates: "medicine is not a science as science is commonly understood: an invariant and predictive account of the physical world. Medicine's goal is to alleviate present suffering. Although it draws on the principles of the biological sciences and owes much of its success to their application, medicine is (as it always has been) a practical body of knowledge brought to bear on the understanding and treatment of particular cases." Hunter, *Doctor's Stories*, xvii-xviii.

²⁴ For this classic articulation of Enlightenment modernity, see Jurgen Habermas, *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*, trans. Thomas Burger (Cambridge, [1962] 1991); Michael McKeon, *Origins of the English Novel*, *1600-1740* (Baltimore, 1987); Ibid., *The Secret History of Domesticity: Public, Private, and the Division of Knowledge* (Baltimore, 2009); and Charles Taylor, *A Secular* Age (Cambridge, 2007). For a similar assessment in the American context, see Robert Ferguson, "The American Enlightenment," *The Cambridge History of American Enlightenment, Volume 1: 1590-1820*, ed. Sacvan Bercovitch (New York, 1994), 345-538.

²⁵ Such a relation, Berlant continues, creates an "affective structure of an optimistic attachment [that] involves a sustaining inclination to return to the scene of fantasy that enables you to expect that *this* time, nearness to *this* thing will help you or a world to become different in just the right way." See Berlant, *Cruel Optimism* (Durham, 2011), 2.

²⁶ *Ibid.*, 3, 10.

²⁷ A recent critical roundtable in the journal *Eighteenth-Century Theory and Interpretation* explores the implications of Berlant's formulation for the period more broadly. As Tita Chico summarizes: "[Berlant's] arguments about civil society and the good life have important connections to the eighteenth century, the period when the possibility of individualized economic prosperity that has come to emblematize the good life emerged, if fitfully and unevenly, across a variety of discourses." The colonial medical case study, I offer, provides us with one particularly "fitful" glimpse at this emergence. Tita Chico, "Civil Society and its Discontents: The Good Life," *Eighteenth-Century Theory and Interpretation* 55.1 (2014), 99; and *passim*. I would like to thank Cristobal Silva for calling this roundtable to my attention.

²⁸ Berlant references, but does not limit her analysis to "the situation [as in the situation-comedy], the aside, the episode, the interruption, the conversation, the travelogue, and the happening," as among such genres. Berlant, *Cruel Optimism*, 4-5.

²⁹ In her introduction to this issue, Berlant describes the genre as follows:

When an event occurs out of which a case is constructed, it represents a situation in

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disturbs, creates a louder noise that opens up the field of debate about expertise, modes of description, narration, evaluation, argument, and judgment. Sometimes you can't tell in advance.

See Lauren Berlant, "On the Case," Critical Inquiry 33.4 (2007): 670-1.

- ³⁰ Kathleen Donegan, Seasons of Misery: Catastrophe and Colonial Settlement in Early America (Philadelphia, 2014), 2, 4.
- Under the rubric of "a discourse of catastrophe" Donegan draws together the "early modern literature of crisis," a literature characterized by the pervasive misery of English settlers in the New World: "Misery was not only a material condition but also a language through which new settlers revealed how the social links that tied them to England, and to their own sense of Englishness, were breaking down." See *Ibid.*, 4. Donegan's framing of the colonial experience as an "ongoing catastrophe," as distinct from the kinds of psychic rupture addressed by trauma theory, is similar, I would suggest, to what Berlant calls the "crisis ordinariness" of the present era. Both formulations aim to understand how the lived experience of disorientation and disorder is managed through cultural forms, particularly in narrative. Studies of illness narratives have long addressed the facility for, and limits of, medical genres in comprehending such experiences. In addition to Hunter, *Doctor's Stories;* see Rita Charon, *Narrative Medicine: Honoring the Stories of Illness* (New York, 2006); and Ann Jurecic, *Illness as Narrative* (Pittsburgh, 2012).
- ³² According to Bailyn, the term "Atlantic history" refers to the period encompassing "the first encounters of Europeans with the Western Hemisphere through the Revolutionary Era." He frames the period (from the 1400s through the 1800s), as moving roughly through three stages: the era of "contested marchlands" (marked by "pervasive social disorder and disorientation"), the era of "integration" (marked by increasing commercialism and imperial consolidation, with varying degrees of success) and the era of "creole triumphalism" (marked by the emergence of a sense of creole identity as well as the independence movements beginning in North America and continuing through the Caribbean and South America). Bailyn's periods and categories are, as he admits, fluid. Atlantic history itself is an attempt to grasp "history as process." See *Atlantic History: Concepts and Contours* (Cambridge, 2005), 4, 61, and *passim*.
- In this my work shares a line of inquiry with that of Jason Daniel Tougaw in *Strange Cases: The Medical Case History and the British Novel* (Routledge, 2006). Tougaw's argument, which I discuss in more detail in chapters three and four, has been very instructive for my thinking about the parallel dynamics of sympathy and judgment at work in the medical case and the novel. His work is, however, distinct both temporally and geographically from my own. Tougaw's archive is anchored in the late eighteenth and nineteenth century British tradition—both in literary and medical history—and traces an emphasis on the exercise of clinical judgment by physicians as influencing and being influenced by the novel. My dissertation, anchored in the eighteenth-century colonial world, unpacks the unique role of the case study in Atlantic scientific culture. That is, how it facilitated participation in literary culture for provincial, colonial elites, as well as connections between the novel and the medical case before either had cohered into a distinct genre.
- ³⁴ "A letter from Mrs. Holt's Sister to Benjamin Franklin, Esq; describing the same case," *Medical Observations and Inquiries*, 76. Browne's letter, along with Bond's narrative, was also re-printed, without additional commentary, in Matthew Carey's *American Museum, or Repository of Ancient and Modern Fugitive Pieces, &c., Prose and Poetical* 2.6 (1787): 570-4. The original letter has not been located.

³⁵ *Ibid.*, 77-80.

³⁶ *Ibid.*, 77.

Chapter One.

"A picture of Hell": Cotton Mather's Case Studies of Possession

Where the divine ends, there the Physitian must begin; and it is a very preposterous course that the divine should there begin where the physitian makes an end.
-- William Perkins¹

In November of 1712, Cotton Mather directed a letter to John Woodward, renowned naturalist and then provincial secretary of the Royal Society in London. Mather's letter, one in a number of correspondences the Boston-based minister sent to the Society, begins by referencing a set of medical miracles well-known to early Enlightenment virtuosi. These "Operations of the Invisible World" communicated through "the Knowledge of Medicine" range from the ancient to the modern, including a reference to Galen's own references to cures communicated to him in a dream. Mather's discussion serves as prelude to his motivation for writing, that "In my Neighbourhood, I have mett with several such Instances." The body of the letter includes three separate medical cases that he has collected. Each recounts a New Englander cured, apparently miraculously, by remedies revealed in dreams. First, a man who suffered "an obstinate pain in his Stomach," found relief from a recipe for a topical remedy ("boiling a perch and a parsnip together") told to him in a dream. In a similar manner, an unnamed gentlewoman obtained temporary relief from chronic pain in her breast via a prescription ("cutt ye Warm Wool from a Living Sheep ... apply it arm unto ye the grieved part") communicated in a dream.² These parallel instances, gathered as individual cases,

deductively ratify the truth proffered by Galen and provide ostensible proof of the divine at work in the New World.

Mather's third case, of Lydia Ingram of Boston, provides the fullest and most empirically detailed account of the miraculous events, suggesting the minister's close familiarity with the case, perhaps even having tended to her. On Mather's telling, Ingram suffered from a fever and a "very great swelling of her Stomach, and Sides, and a total Suppression of Urine for ten days together." Her physicians tried multiple interventions, all to no avail, before declaring her "case altogether hopeless." Ingram then, like the patient's in Mather's other cases, dreams of a man who provides her with a remedy. Her case stands out from the previous two in its precision and amplification: the man returns to her in multiple dreams, as Ingram fails to accurately remember the remedy upon waking the first time and then fails to follow his instructions for taking the medicine. Upon returning to her dreams the third time only to learn that Ingram has failed to follow his instructions because she could not find enough white wine, the exasperated gentleman exclaims, "but people that want a will seldom want in Excuse!" The remedy itself is described in sharp detail. The gentleman directs Ingram to employ the "powder of a burnt beef marrow bone, as much as may ly upon the lid of the Civet-box now in your hand," a unit of measure which Mather clarifies in a parenthetical "[which happened now to be there, and was as broad as a sixpence]." Just as Ingram's agency is required to complete the miracle cure, so Mather's empirical precision assures the reader that such a cure can be repeated, thereby accommodating Mather's orthodox Puritanism to the discursive exchange of scientific knowledge. When the physician cannot cure, Ingram's dream hopefully suggests, the divine will intervene. And Mather's recounting of the dream

echoes Ingram's optimism: a colonial medical observer can find a wider audience for divinely-revealed truths through the rhetorical protocols of Enlightenment science.

Mather's letter, the sixth in a series the minister titled the *Curiosa Americana*, was read and commented upon by the Royal Society in 1714. Shortly thereafter Mather was appointed the first American-born Fellow of the Society. Commentators of the twentieth and twenty-first centuries have been more skeptical of the Puritan scientist. While Mather's contribution to early American medicine—particularly his involvement in the 1721 small-pox inoculation controversy—has long been recognized by scholarship, his status as an "over-sexed and overwrought" "propagandist" for the Salem witch trials or later as the petulant antagonist of the "First Scientific American," Benjamin Franklin, has helped instantiate the minister of Boston's North Church as the consummate figure of provincial, New English superstition holding out against a rapidly enlightening world.⁵ Recent historiography and literary criticism, however, has called attention to the dynamic of competing cosmologies and epistemologies characterizing provincial science. Mather's letter to Woodward—rooted in local, New World phenomenon; emerging in concert with alternate interpretations produced by the non-systematic, hybrid nature of colonial inquiry; offering both Providential interpretations and empirical matters of fact—demonstrates the innovative ends to which the medical case study could be put in the colonial world.

This chapter focuses on Mather's employment of the medical case study at another, particularly fraught moment in colonial history. Roughly three decades before encountering Laura Ingram, Mather produced a series of case studies of possessed young girls that he encountered during the 1680s and 90s: an account of the Goodwin children

included in *Memorable Providences, Relating to Witchcrafts and Possessions* (1688), the Mercy Short narrative, *A Brand Pluck'd Out of the Burning* (1693), and *Another Brand Pluck'd Out of the Burning*, the narrative of Margaret Rule (1693). Mather's effort to observe and describe the interconnections among these individual instances of possession, and to circulate knowledge of them within an Atlantic reading public depended on and fostered new strategies of narration and publication. The specific contours and consequences of those strategies are made clear when we situate Mather's case studies of possession in the scientific, religious, and literary culture of early modern New England.

Mather's case studies of possession are best understood not as part of the outbreaks at Salem, but instead as an extension of his work with the Boston Philosophical Society, a provincial institution of pious natural philosophers modeled on European scientific societies. The society, although short-lived, produced a periodical publication, *An Essay for the Recording of Illustrious Providences* (1684), which published, alongside other wondrous phenomena, a number of observational medical case studies. For members of the society the individual medical case functions as both a rhetorical technology and a logical instrument through which to record, collect, and circulate wonders akin to the miracle cures Mather sent to Woodward. Such cases assert their validity via empirical style while deferring to theological authorities to ascertain their Providential meaning. The medical case study therefore offered not just Mather, but a number of colonial authors a literary form with which to collect, collate, evaluate, and circulate potentially wondrous phenomena.

The virtuosic Mather, who would later draft his own medical tract, *Angel of Bethesda*, draws upon this epistemologically flexible genre to structure his possession narratives. In each case study of possession, a phenomenon closely associated with medicine, Mather exploits the genre's combination of empiricist prose and episodic form in order to produce highly realistic narratives of each girl's tribulations. As such, his cases aim not at the juridical identification of witches but instead at extending access to a uniquely powerful instance of divine Providence to a wider audience, while aiming to circumscribe the interpretation thereof. Though such powerful providences could prove theologically useful by inspiring religious renewal, they also required careful interpretation by clerical authorities. In the case studies of possession, then, we see how the minster martials the pedagogical utility of empiricist prose, yet attempts to target its effectiveness through the epistemic genre of the medical case study and the technology of scribal publication.

Recent scholarship has turned our attention anew to the complex interplay of natural philosophy, theology, and Puritan social formations in early modern New England.⁶ Cristobal Silva and Kelly Wisecup in particular demonstrate the central role of medicine for negotiating knowledge production and identity formation in the colonial world.⁷ By bringing to light the overlooked genre of the medical case study, this chapter not only contributes to this vein of scholarship but also positions Mather's case studies as presenting unresolved narratives of what Kathleen Donegan has called the "ongoing" colonial present.⁸ In his case studies of possession, Cotton Mather fused the conventions of typological interpretation and empirical realism in order to transform the scene of demonic possession into a prompt for spiritual devotion and possibly conversion.⁹

Mather's case studies attempt to capture the "ongoingness" of a particular event—both the individual instance of each possession as well as the wider outbreak in and around Salem—and to make that event available to and visceral for devout readers throughout the British Atlantic world. For both Mather and those suffering through the horrors of demonic possession, the case study was a hopeful form: one in which the potentially dangerous phenomenon could be captured and disseminated, albeit without the socially destructive effects seen through the courts. Through the correspondence and publication network of the Boston Philosophical Society, such case studies could reach an empirically-minded, yet pious public. The chapter re-creates this scribal circulation, tracing Mather's case studies through the Boston Philosophical Society, a network of physicians, divines, and politicians, residing in New England, the West Indies, and beyond. Tracing the dissemination of highly realistic torture narratives reveals a colonial public confident in the representation of divine truth, while tacitly acknowledging the violence necessary to maintain religious authority in an increasingly secular New England.

1. A discourse of wonders saturated the early modern, British Atlantic world.

Colonial elites corresponded with individual virtuosi and European scientific societies, contributing firsthand accounts of exotic flora and fauna, different meteorological cycles, new medicines and maladies, as well as unfamiliar patterns of epidemic disease.

Collectors and reporters of New World wonder narratives often looked to scriptural precedents, as well as to the long tradition of marvels, portents, prodigies, and providences circulated in both folk and learned traditions of Europe. This tradition

always included medical phenomena (e.g., so-called monstrous births, unusual deaths, or surprising recoveries) alongside apparitions, hauntings, and instances of witchcraft. Such tales constituted a flexible genre and inspired a robust discursive network spanning both high and low, print and scribal formats; what David Hall aptly terms a flourishing "traffic in wonder stories."

In New England in particular the final quarter of the seventeenth century punctuated by the violence of King Philip's War, the imposition of religious toleration under the short-lived Dominion of New England, debates over the loss and re-negotiation of the Royal Charter, notably unsettled weather patterns, and virulent outbreaks of contagious disease—brought significant cultural anxiety over the position of the colonies within the empire, as well as within the eyes of the Lord. 11 Accordingly, the period witnessed an uptick in reports of wonders. New England authorities strove to assert hermeneutic control over this proliferation in part by adopting and adapting the epistemological, rhetorical, and publication practices employed to by their counterparts in European scientific organizations. Historians and literary critics have long assumed seventeenth-century New England to be a scientific backwater. However, as Walter Woodward and Sarah Rivett have recently demonstrated, far from resisting natural philosophy, Puritan authorities in Boston and throughout New England drew on the tools and methods of the New Science as they sought empirical evidence of the divine. 12 New England elites of the late seventeenth century in fact organized a local scientific society, the Boston Philosophical Society, participated in trans-Atlantic scientific culture, and were attentive to the publication and rhetorical protocols outlined by the early members

of the Royal Society, and summarized by Thomas Sprat in his *History of the Royal Society of London for the Improving of Natural Knowledge* (1667).

Building on the experimental method summarized in Robert Boyle's New Experiments (1660), Sprat advocated for members of the society to produce "faithful records of all the works of nature" which employ language with a "primitive purity." ¹³ In New Experiments, as well as Continuation of New Experiments (1669), Boyle articulates the epistemological and ideological utility of a long-extant, anti-rhetorical style that is most associated with the philosophical writings of Francis Bacon and had been developed concomitant with New World exploration. Over the course of the seventeenth-century, the grounds of what constituted knowledge came under contestation throughout the European Atlantic world. The received haltingly gave way to the perceived as the accepted mode for creating usable knowledge, contributing to an epistemological shift that can be neatly summarized in the frontispiece image prefaced to Bacon's *Novum* Organum (1620). The print depicts a pair of ships sailing out from the Mediterranean through the Pillars of Hercules and into the Atlantic beyond, allegorizing through Old and New World geographies the epistemological shift from an Aristotelian system of deductive logic to the experimental induction that governs Baconian empiricism, a transition Biblically sanctioned through a caption from the Book of Daniel; "Many will travel and knowledge will be increased." This empiricism evolves into a pervasive skepticism that will be codified later in the century in the motto adopted by the Royal Society and emblazoned on the first edition of Sprat's *History*: "Nullis in Verba" (nothing in words). 15

But, of course, everything had to be communicated in words. Therefore, such confident empiricism was undermined in the era by the practical challenges of experimental and experiential replication. Problems of mediation and questions of trust arose from the difficulty of performing experimental philosophy and gathering eyewitness accounts of natural phenomena from across wide geographic spaces. Therefore, Robert Boyle's self-described reportorial prolixity has been identified by Steven Shapin and Simon Schaffer as "the most powerful technology" developed in service of expanding the epistemological and social structures of natural philosophy. The innovation Shapin and Schaffer label "virtual witnessing" involves the "production in a reader's mind of such an image of an experimental scene as obviates the necessity for either direct witness or replication." If properly accomplished, the reader, "would be recruited as a witness to be put in a position where he could validate experimental phenomena as matters of fact." Accordingly, natural philosophers and historians developed a set of generic and rhetorical protocols which court assent to what is, in effect, virtual experience.

Key among these was the medical case history. The combination of an individual subject with the physician-as-witness characterized the case as it circulated among early modern medical practitioners, typically distinguished generically as *observationes* (observations) or *curationes* (cures). Though the case had been employed in European medicine since Hippocrates, brief histories stressing the firsthand observation of symptoms, disease, and treatment underwent a revival in popularity during the early modern period. University-trained physicians recorded cases which emphasized bodily witnessing and note-taking (as opposed to consultation of patient symptoms at a distance,

via fluids) as fundamental protocols of learned medicine. Literary form therefore signaled social and epistemological distinctions between trained physicians and empiricks, apothecaries, barber-surgeons, mountebanks, quacks, as well as kitchen or folk practitioners.¹⁷

By the end of the seventeenth century, the epistemic category of observation characterized in writing across fields of natural philosophical inquiry by embodied witnessing, rich sensory description, and the scrupulous recording of time and place combined with expanding print and epistolary networks to create what Lorraine Daston calls an "empire of observation." Learned medical writers therefore extracted and reprinted *observationes*, or individual instances of sickness, from a wide variety of sources. The same patient histories circulated among physicians and naturalists, were printed in scientific periodicals and collected in annual constitutions of disease, or appeared in collections of wonders and providences. Cotton Mather, for instance, re-contextualized a number of medical cases he encountered through reading or correspondence, re-printing them over decades and across his varied oeuvre. 19 Unlike its modern descendant, then, the early modern medical case functioned less a tool of institutionally integrated, or clinical, research and more as flexible, episodic narrative form which at once asserted membership in an epistemic community of learned observers yet only attained meaning provisionally, contingent upon its context of publication and circulation.

Like other elite New Englander's, Mather was introduced to the practices and protocols of natural and experimental philosophy while at Harvard under President Leonard Hoar, a close friend and correspondent of Robert Boyle's. The university, though in dire financial straits during Hoar's brief tenure as president in the 1670s,

nevertheless made elements of the new science integral to its education. John Winthrop, Jr., who was among the founding fellows of the Royal Society, presented the college with a three-and-a-half foot telescope in order to facilitate instruction in Copernican astronomy. Microscopes were also widespread, relatively speaking, in the colony: in 1683 Cotton Mather recorded viewing "little eels ... playing about in one drop of water."²⁰ By the late 1680s, Charles Morton's Compendium Physicae (1687), a textbook blending discussions of astrology and alchemy with modern references to Galileo and Torricelli, was circulating in scribal copies among Harvard students. Tracts and sermons on the natural world (e.g., Samuel Danforth's "An Astronomical Description of the Late Comet' (1665); Increase Mather's Kometographia, or, A Discourse Concerning Comets wherein the Nature of Blazing Stars is Enquired into... (1683) and Discourse Concerning Earthquakes (1702); and Cotton Mather's second publication, The Boston Ephemeris (1683), an almanac which included technical descriptions of Halley's Comet and other astronomical phenomenon) index the diffusion and application of scientific inquiry beyond the college. Furthermore, Cotton's father, Increase Mather, exhibited a life-long interest in the new science, the culmination of which was his founding the short-lived Boston Philosophical Society, of which his son was likely a member. So, although Isaac Greenwood's first course of public experiments employing a Boyle-an air pump would not happen until the 1720s, the influence and spread of the experimental method associated with natural philosophy was evident throughout New England in the late seventeenth century.²¹

The Boston Philosophical Society, an organization of empirically minded, pious New Englanders met under the direction of Increase Mather from roughly 1683 to 1688.

Membership likely included the Mathers, the Winthrops, the Brattles, and other ministerial and political authorities. ²² As secretary of the Society, Increase Mather solicited, edited, and composed An Essay for the Recording of Illustrious Providences; wherein an account is given of many remarkable and very memorable events which have hapned [sic] this last age, especially in New-England (1684). Mather's text is remarkable not only for combining Puritan orthodoxy with natural philosophy but also for its discursively reflexive take on such an endeavor. A variety of European collections of providences pre-dated Mather's and were in circulation in New England at the time, including Thomas Beard's *Theater of God's Judgement* (1597), Samuel Clarke's A Mirrour or Looking Glass both for Saints and Sinners... (1646), and William Turner's Compleat History of the Most Remarkable Providences (1697). As Michael McKeon points out, the apparition or witchcraft narratives included in such European collections of Providence tales were held to the same standards of truth that characterized other works of the empirical age. Of such narratives, McKeon contends that, "[b]ecause the explicit and overriding aims ... are to proclaim the reality of the spiritual world in a materialistic age that has come to doubt it, these narratives assert the truth in the terms that are now most persuasive, and derive their techniques of authentication from the very stronghold of skepticism which it is their purpose to refute." The authenticating devices of a scientific style—claims to firsthand witnessing, empirical details, the insistent recording of names, dates and places—though marshaled to prove the truth of supernatural content devolves into little more than the empty generic devices of popular wonder tales. Therefore, what McKeon calls a "modified skepticism" ultimately proves untenable in European scientific societies.²³

Unlike such popular wonder tales or European collections that imply a passive readership through theatrical or visual metaphors (e.g., Beard's *Theater*, Clarke's Mirror), Mather's Illustrious Providences is predicated on discursive exchange. An Essay for Recording... imagines a pious, active public that participates in an ongoing project of witnessing, recording, evaluating, and circulating wondrous phenomena.²⁴ Although motivated by Increase Mather's education and brief ministry first in Ireland and then in the Channel Islands, a period in which he was exposed to the methods of the new science specifically as they were being developed to respond to the creeping materialism of the empirical era, *Illustrious Providences* is explicit in both content and form about its status as a New World text. While not strictly limited to providences occurring in the New World, the instances of earthquakes, lightning strikes, apparitions, and miracle cures collected and published by Mather are overwhelmingly local in origin. Furthermore, the uniquely New World categories of "remarkables about thunder and lightning," "remarkable sea-deliverances," and the consideration of Native Americans further demonstrates Illustrious Providence's position as a work of Provincial science, not a collection of popular wonder tales.²⁵ Mather makes such motivations explicit in his preface. Addressing the work that *Illustrious Providences* has begun, he writes,

I have often wished, that the Natural History of New-England might be written and published to the World; the rules and method described by that learned and excellent person Robert Boyle Esq. being duly observed therein. It would best become some scholar that has been born in this Land, to do such a service for his country.²⁶

By making such providences insistently recent and insistently local *Illustrious*Providences articulates an incipient trend in both the intellectual and political culture of the colonies.

The model of inductive collation presumed in Mather's preface recreates in micro a Bacon-ian influenced hierarchy at work in the systematic manufacture of knowledge about the natural world in the early modern era, what Ralph Bauer refers to as "epistemic mercantilism." Influenced by the experimental model of the New Science, creoles understood themselves as observers or collectors of the raw materials of empirical knowledge. Accordingly, colonial authors refrained from the kind of abstract theorizing or systematic synthesizing performed by their metropolitan counterparts, instead cultivating a position of inductive openness, at times manifest as the kind of credulity McKeon calls "modified skepticism." Such credulity, however, did not disqualify the creole, or anyone else for that matter, from contributing matters of fact to the raw materials of natural philosophy. In fact, such openness could be encouraged in such a hierarchy, especially with the metropolitan authorities acting as a sieve through which data could be passed before being made useful in the form of experimental laws. As Shapin and Schaffer have noted, Robert Boyle himself allowed that even the experiments of alchemists could provide useful matters of fact, once one separated out otherwise occult speculations. Therefore, the re-creation of the institutional model of the Royal Society in Boston reflects an intellectual climate with an affinity for more open literary forms such as the medical case study.²⁷

To accomplish this, *Illustrious Providences* outlines both an institution modeled on the Royal Society and a periodical publication similar to the *Philosophical Transactions*. In the text's preface, Mather summarizes a set of eight proposals governing the "Recording of Illustrious Providences:

Ministers of God [will] diligently enquire into, and Record such Illustrious Providences...in the places whereunto they do belong ... the Witnesses of such

notable Occurrents be likewise set down in writing ... Although it be true that this Design cannot be brought unto Perfection in one or two years, yet it is much to be desired that something may be done therein out of hand, as a Specimen ... and Posterity may be encouraged to go on therewith (*IP* unpaginated preface).

Mather's *Illustrious Providences* is such a "Specimen." The body of the essay quotes repeatedly from sources, often at great length, and cites individuals who either experienced or witnessed a particular wonder by name, location, and date. The punctuality befitting a periodical is evident in *Illustrious Providences*' admittedly haphazard incorporation of individual instances outside their proper categories. For instance, Mather inserts the account of a recent lightning strike on a house in Duxborough into the preface apologizing that he received it "after that Chapter about Thunder and Lightning was Printed" (*IP* unpaginated preface).

This self-consciously visible editorial practice asserts at once the inductive thrust of wonder-seeking—the members of the Boston Society are not content to leave the canon of wonders in the past—while also demonstrating the gatekeeping function performed by the clerical class. Despite the omnipresence of wonder tales in the period, an individual instance was not incorporated into *Illustrious Providences* without first receiving the imprimatur of the theocratic elite. "[W]hen anything of this Nature shall be ready for the Presse," Mather writes, "it shall be read, and approved of at some Meeting of the Elders, before Publication." The collection and dissemination of "parallel stories" could be both "pleasing and edifying," but only if done according to the proper method (*IP* unpaginated preface). The collection thus courts an interpretive community of pious empiricists: those expecting inductive rigor to yield divine truths, yet acutely aware of the need for hermeneutic control over the process.

Such a community often turned its attention towards medical phenomena as a key aperture through which to glimpse the workings of the divine on earth. As recent scholars have argued, the practice of medicine in the early modern Atlantic world carried significant bodily, social, and spiritual meaning. "Colonists, Natives, and Africans," Kelly Wisecup summarizes, "understood disease both as a physical state and as a moral or spiritual condition that indicated an imbalanced relationship to other-than-human powers, who were responsible for illness."²⁸ For the Puritan in particular the destabilizing sign of illness pointed to divine displeasure or heralded spiritual regeneration. Bodily disorder brought physically home the need for humiliation, an essential first step in the morphology of conversion for an individual, and could also be used to track the larger community's relationship with the Lord. Literary responses to illness in New England reveal, according to Cristobal Silva, "the relation between immunology and ideology in the formation of a communal identity" among Puritans, responding to incursions from Quakers, Anglicans, or Natives Americans.²⁹ Members of the Boston Philosophical Society—including Increase Mather and Samuel Sewall—thus scrutinized their own physical well-being as well as that of those around them, keeping diligent health records in correspondence and personal writings. These diarists maintained informal case studies, attentive to the early signs of a sickness that could signal a spiritual transition for an individual or a community.

Sewall—a Boston merchant, printer, close associate of the Mather family, and eventual judge at the witch trials—recorded medical cases alongside other potentially wondrous events in his diary. In the late summer of 1676, for instance, Sewall chronicled the sickness and death of his cousin, Anna Quinsey:

Aug. 31. Cousin Anna Quinsey is taken ill of the flux, accompanied, as it is said, with a fever. Note Aunt Quinsey is providentially here. My dear Mother, Mrs. Judith Hull, grows sick the same night and is extremely distrested [sic]. Sept. 1. Her face very much swelled. Night following, Mother's pain somewhat abated: humours dissipated.

Sept. 3. Ana Quinsey died about ten of the Clock A.M. Buried Monday.

Quinsey's illness resonates with Sewall for a variety of reasons, not least of which is the threat it poses to his own mother and himself. Moving from the earthly to the divine significance of the illness, Sewall notes that his cousin was "the first person ... buried out of an house where I was then dwelling," the fact inspiring a brief reflection on his own, precarious position before the Lord.³⁰

While noting the case history's utility for religious devotion, Sewall also makes an assertion about epistemological authority. Sewall emphasizes his own firsthand witnessing by criticizing a physician who failed to diagnose the severity of his cousin's illness. Although Quinsey's "water was carried to Dr. Snelling on Sab.[bath] morning" by members of the household, Sewall pointedly notes that "[the physician] affirmed her not to be dangerously ill." Unlike the medical professional, Sewall and other observers of Anna's condition recognized the full constellation of the patient's worrying symptoms: "her trembling pulse, restlessness, Wormes [sic] coming away without amendment, and the well-looking of her Water." The temporal accounting of Quinsey's sickness evident in the details of the sick girl's changing appearance over multiple days and speculation into the rising and falling of her humors—affirm the perspective of the observer while also placing her maladies in parallel with other events Sewall records in his diary for the period, particularly reports of violent clashes between English settlers and Native Americans to the west and south of Boston in what will come to be known as King Phillip's War. In Sewall's account, the spreading contagions of colonial violence

and domestic fevers warrant immediate, observational scrutiny and recording alongside other wonders. Sewall's diary thereby demonstrates the multiple forms of knowledge—bodily, political, and spiritual—made available in the individual medical history and asserts the authority of non-physicians to scrutinize their meaning.

Sewall's attention to firsthand witnessing of patient illness accords with the ascendance of observation in European medicine in the period, an epistemological shift that took literary form in the case study. The observational medical case study was a genre through which learned and lay physicians, theologians, and ministers could address the importance of medical knowledge to advancing natural philosophy as well as spiritual life, while simultaneously drawing on the hermeneutic control inherent in the form to circumscribe the possible interpretations of such wondrous, medical phenomena.

Whereas Sewall recorded his account of Anna Quinsey's illness in his private diary and therefore did not orient it towards a wider public, the Boston Philosophical Society brought similar medical cases into consideration alongside other instances, culled from a wide circum-Atlantic correspondence network as well as the libraries of the theocratic elite. *Illustrious Providences* therefore endorses an illness's spiritual significance through its inclusion in the periodical, yet circumscribes that meaning via the generic demands of the case study form.

For instance, under the heading "Remarkable Preservations," Increase Mather printed the surgical case of Abigail Eliot, a young daughter of a Boston elder who had been struck with an iron hook in the back of the head while playing. Mather recounts in vivid, empirical detail the girl's injury as well as the procedure decided upon by the "able Chyrurgeons ... *Mr. Oliver* and *Mr. Prat*":

[They] gently drove the soft matter of the bunch into the Wound ... there came forth about a spoonful, the matter which came forth was Brains and Blood (some curdles of Brain were white and not stained with Blood) So did he apply a Plaister. The skull waisted where it was pierced to the bigness of an Half Crown piece of Silver or more (*IP* 33-4).

Though he does not claim to have witnessed the surgery, Mather not only individually identifies those who did but also adopts their perspective to describe the procedure. Specifics about the appearance of brain matter, the invocation of a quotidian spoon as a unit of measurement, and the analogy of the size of the wound to the uniform "Half Crown piece of Silver" all vouchsafe medical matters of fact in service of evoking wonder at Abigail's salvation. Furthermore, Abigail's case attains significance through its placement alongside other "preservations"—including captivity narratives, lightning strikes, and sea deliverances—either reported to Mather via correspondence or culled from European sources.

Another case included in *Illustrious Providences* demonstrates the utility of the case history—particularly for its episodic form and emphasis on empirical details—to the ongoing collection and dissemination of medical wonders. Mather recounts the case of a man from Hull (Massachusetts) who, after suffering for years from pain in his throat found relief by voiding a large stone from under his tongue. Mather collates the unnamed man's case alongside other instances of "*Lapidecus* [stony] *Humours* in the bodies of men" re-printed from various medical treatises as well as contemporary European scientific journals, including the *Philosophical Transactions* and *The Weekly Memorials* for the Ingenious (IP 304). Mather thus demonstrates the facility of the case study to produce new knowledge through its arrangement in a series. By connecting individual instances that he observed in person, collected via correspondence, or encountered in

print, an event which appears anomalous in isolation can be asserted as having a regular, reliable form best apprehended as one episode in a series of similar cases. In Mather's recounting, the case of the New England man demonstrates not just the wondrous individuality of that event, but in fact points to such a wonder's repetition throughout the Atlantic world, a repetition made visible as such case studies circulate through a far-flung network of observationally-attuned correspondents and publishers.³²

Therefore, in the Hull case, Mather focuses his stylistic attention not on bearing witness to the scene of illness, but to the scene of writing, an act that can link such observations across time and space. As in the case of Abigail Eliot, empirical details demonstrate embodied witnessing, but at a remove. Despite not having witnessed the man's illness, Mather stresses the detail that "[the local man's tonsil] stone I have by me, Whilst I write this, only some part of it is broken away; that which remains, weighs 12 grains" (*IP* 304). With the highly sensory image of the tonsil stone Mather conflates the act of witnessing with the act of writing: both steps are necessary for the collection and dissemination of similar "*Remarkables*." For, just as part of the stone has broken away and been lost, so Mather notes preceding the case of Abigail Eliot, "A multitude of Instances to this purpose are now lost, in the Grave of Oblivion, because they were not *Recorded*" (*IP* 32; emphasis original). Readers are thus encouraged to scour their own experience and, as Sewall and Mather do, maintain cases of potentially wondrous medical phenomena for submission to the society.

Mather repeatedly calls attention to his own function as gatekeeper in such a network. For instance, he reports another remarkable medical history of a woman who, after carrying a child for over twenty years, delivered it stillborn. Of her case Mather

writes: "I should hardly give credit to a story so stupendous and incredible, were it not mentioned in the *Philosophical Transactions* (*No. 139, P. 979*) as a thing most undoubtedly true" (*IP* 309). Both firsthand witnessing and the model of social assent institutionalized by the editorial practices of the Royal Society, and adopted by that society's New World counter-part, lends even the most wondrous events an air of empirical truth, particularly when they are extracted and re-contextualized by the proper authorities.

The Boston Philosophical Society was short-lived. Diary references to the fortnightly meetings cease in 1687/8, three years after the simultaneous London and Boston publication of *Illustrious Providences*. Interest in collecting and circulating wondrous cases nevertheless persisted. While colonial printing options remained limited—Hugh Armory reminds us that there were never more than two presses operating simultaneously in Boston before 1700—the final decades of the seventeenth century witnessed an increase in booksellers and coffeehouses clustered around the Exchange in Boston's North End. 33 This period also saw an up-tick in the number of gazettes and newsbooks, which included reports of remarkable providences alongside other, more mundane news, as well as the single issue of Benjamin Harris's *Publick Occurences* (1690), Boston's first, albeit abortive, periodical. Therefore, venues proliferated in which readers were able to contemplate the providential significance of phenomena ranging from the local rebellion against Royal Governor Andros, continuing confrontations with Native Americans on the Maine frontier, the Glorious Revolution and subsequent Nine Year's War, the Port Royal earthquake, a series of devastating hurricanes in Barbados and Jamaica, the significant changes in local weather conditions, and the repeated

outbreaks of smallpox which marked the final decades of the seventeenth century in New England.³⁴

As the increased diffusion of print technology through the final decades of the seventeenth century abetted the collection and dissemination of parallel wonders, the need for proper interpretive protocols of potentially destabilizing phenomena intensified, a hermeneutic crisis culminating in the outbreak of possessions, accusations, and eventual hangings in Salem. In the possession of the young women Mercy Short, Martha Goodwin, and Margaret Rule, Cotton Mather encountered such phenomena. As I argue in the next section, Cotton Mather dramatizes in his studies of possession what volumes of historical scholarship on the events in Salem have demonstrated: only the careful filtering of such wonders through the proper authorities could prevent them from being dangerously mis-interpreted. Mather therefore turns to the medical case study as a form through which he can both expand access to a powerful instance of God's Providence and still control an event's interpretation.

2. In the late 1680s and early 1690s, Cotton Mather encountered and recorded three instances of possession in and around Boston: those of the Goodwin children (particularly Martha Goodwin) that of Mercy Short, and that of Margaret Rule. The then circulated these narratives, as both print and scribal publications, in an increasingly contentious theological and political climate. Though narratives of witchcraft constituted a sub-genre within collections of wonder tales—examples of which colonial divines encountered in Joseph Glanvill's *Saducismus Triumphatus* (1681) or Nathaniel Crouch's *The Kingdom of Darkness* (1688)—such European sources generally forgo the phenomenon of

possession, focusing instead on anomalous events known as *maleficium*, or the damage to or haunting of one's property by a witch. Mather's histories—which emphasize both the minister's firsthand witnessing of possession and endeavor to place the individual instances in parallel with one another—stand out for their sustained focus on this socially and spiritually fraught phenomenon. The framework of possession—in which an individual, often a young woman, has their faith tested through physical tortures by demons or the devil himself—offered a cultural script whereby the socially or spiritually marginal could become conduits of the divine will. Unlike witches, who willfully leagued with the demonic, victims of possession made visible and physical the dynamics of torment and regeneration that were central to Puritan theology.³⁶

For both minister and possessed, therefore, the scene of demonic suffering, though highly fraught, paradoxically offered hope that each was among God's chosen few. Furthermore, bearing witness to the violent and visceral throes of possession, like Samuel Sewall's experience witnessing the death of his cousin or Increase Mather's encounter with the case of Abigail Eliot, could also prove to be a particularly powerful devotional tool. Cotton Mather recognized the unique devotional opportunities in these events and therefore crafted sensationally engaging narratives while attempting to circumscribe their potentially destabilizing subject matter. Mather composed his possession narratives in a manner similar to a medical case study. Each case traces the progressive, temporal unfolding of a possession, emphasizes the firsthand witnessing of an individual subject by an epistemological authority, and endeavors to place a solitary instance in parallel with others, thereby only hesitantly asserting its meaning.

Such a debt is perhaps unsurprising. The polymathic Mather maintained an interest in medicine throughout his life, culminating in his preparation of an unpublished medical treatise, *The Angel of Bethesda*, and his controversial stance in favor of inoculation during a smallpox outbreak in 1721. One biographer even claims that a young Mather, despairing of his spiritual state while undertaking divinity studies at Harvard, considered becoming a physician.³⁷ Mather, like many early modern New Englanders, closely associated bodily illness with his spiritual state. Both Cotton and his father Increase kept close track of their physical well being in their respective diaries, tracing possible lapses in health as signs of an underlying spiritual issue.

Generally, to devout Puritans, illness was understood as divine punishment. As Mather himself records at the beginning of *Angel of Bethesda*, "Lett us, Look upon SIN as the *Cause* of *Sickness*. [T]he *Sin* of our *First Parents* was, the *First Parent* of all our *Sickness*." Somewhat paradoxically, however, lapses in health could also signal spiritual regeneration, the beginning of the process of humiliation central to the Puritan morphology of conversion. Therefore, in addition to understanding illness as punishment, the devout should, in Mather's terms, "Lett our *Sickness* itself, be such an *Emetic*, as to make us *Vomit* up our Sin, with a peonitent [*sic*] *Confession* of it." Puritan divines thus called on both minsters and physicians to distinguish between the natural course of disease, the throes of regeneration, and the visible manifestations of demonic torture. As Reverend Richard Bernard wrote in his popular juridical treatise on the identification of and prosecution for witchcraft, *A Guide to Grand-Jury Men* (1627), those confronted with potential cases of possession should first seek "the judgment of some skilfull

Physician to helpe discerne, and to make a cleere difference between" demonic tortures and mere illness before initiating legal proceedings.⁴⁰

Much of the criticism of the events surrounding the witch trials at Salem, both in the seventeenth century as well as in the twenty-first, has centered on claims of access to the supernatural, or invisible, world by witch accusers such as those observed by Mather. Historian Mary Beth Norton has convincingly argued that the performance of invisible tortures by victims in the courtroom, what seventeenth-century commentators labeled spectral evidence, was in part a response to the traumatic violence witnessed and experienced by members of the Salem community during a series of confrontations with Native Americans on the Maine frontier. Turning from the performers of possession to their spectators, Sarah Rivett has productively re-situated our understanding of the events by pointing out that the willingness of theological authorities to grant credence to spectral evidence during the trials was part of a broader debate over the possibility of locating empirical proof of the divine. Providential theologians throughout the British Atlantic world directed the kind of systematic inquiry associated with experimental philosophy at supernatural wonders of the invisible world in hopes of offering evidence of the intervention of the spiritual into the material in an attempt to refute a creeping atheism associated with mechanical philosophy. 41 Despite this wider frame, analyses of the events in Salem have maintained a focus on the courtroom and the theatrical aspects of such a setting, thereby obscuring developments in prose narrative unfolding in response to the epistemological crisis. Mather's possession narratives represent one such sustained and systematic attempt to locate the presence of the invisible world and extend access to that

presence to a wider audience via the experimental methods and rhetorical technologies associated with the new science, particularly the medical case study.

Near the middle of *A Brand Pluck'd from the Burning*, the second of his three case studies of possession, Mather vividly describes a scene of horrific violence. To an already exhaustive catalogue of Mercy Short's physical "Tortures" he adds that the specters "thrust an hot Iron down her Throat" which "fetch'd [the skin] off her Tongue and Lips." Just as the brutality reaches its crescendo with this horrifying image, Mather's account shifts registers from observation to sermonic address:

Reader, If thou hadst a Desire to have seen a Picture of HELL, it was visible in the doleful Circumstances of Mercy Short! Here was one lying in Outer Darkness, haunted with ye Divel & his Angels, deprived of all common Comforts, tortured with most cruciating Fires, Wounded with a thousand Pains all over, & cured immediately, that ye Pains of those Wounds might bee repeated. It was of old said, If One went unto them from the Dead, they will repent. As for us, wee have had not only ye Damned coming to us from ye Dead in this Witchcraft, but ye very State of the Damned itself represented most visibly before our Eyes: Hard-Hearted Wee, if wee do not Repent of ye Things which may expose us to an Eternal Durance in such a State!

Mather's scriptural allusion (the passage following on "It was of old said") cues the devout reader to employ a typological frame. Mather alludes in this passage to the "Rich Man and Lazarus," a parable from the gospel of Luke in which a Rich Man, condemned to hell after a lifetime of ignoring the plight of the beggar Lazarus, entreats Abraham first that Lazarus be sent from heaven to "dip the tip of his finger in water and cool [the Rich Man's] tongue." That request refused, the Rich Man begs that Lazarus return to earth and testify to the Rich Man's kin, saying: "if one went unto them from the dead, they will repent." Abraham refuses because "if they hear not Moses and the Prophets, neither will they be persuaded though one rose from the dead." Stated simply, the theological lesson for a reader to draw from Mercy—who allegorizes the Rich Man, as underscored by the

corresponding scorched mouths—is to hearken to God's previous call and repent. On this reading, a divinely ordained plot unfolds in the case study of possession, transforming Mercy Short from an historical subject into a type, or imitation, of Christ. No longer an individual, she becomes a Christian exemplar.⁴⁴

Mather expands on the allusion, however, inverting the typological hermeneutic and thus strengthening the divine resonance of Mercy's experience for the reader. After the direct quotation from Luke, Mather expounds: "As for us, wee have had not only the Damned coming to us from the Dead in this Witchcraft, but the very State of the Damned itself represented most visibly before our very eyes" (emphasis added). More than a biblical type, Mercy's image functions here as an extra-scriptural exhortation whereby the faithful of New England are called to renewal. In this "Picture of Hell," then, the devout reader encounters not just an allusion to the sainted Lazarus returning to earth but also the counter-biblical possibility of the Rich Man returning from hell to address his brothers. The frame narrative of the parable—Christ teaching his disciples within hearing distance of the Pharisees—models both typological interpretation in the self-referential prophesying by Christ of his own resurrection and election, another essential doctrine of New England Puritanism. This complex passage, then, offers dual levels of the *imitatio* Christi as Mercy suffers like Christ while Mather and the reader, invoked via direct address, read like Christ, asserting through proper interpretation their belonging to a convenanted community. Instead of the scriptural reference filling out the events at hand, lending them transcendent meaning through allegorical affinities, the narrative of Mercy actually re-writes the parable, suggesting that meaning resides in the here and now, in the immediate experience "represented most visibly before our eyes," and that spiritual regeneration is in some degree about assenting to that as an empirical matter of fact.

As Sacvan Bercovitch points out regarding the interpretive mode at work in a passage like this, New England Puritans transformed the traditional, providential vision of history into a more radical hermeneutics. Mather in this instance collapses distinctions between regular events in a fallen world, what Bercovitch calls a "secular history" and the millennial schema of salvation, or "soteriology." Time and time again we find New England Puritans such as Mather in his *Magnalia* or Sewall in his diaries "conflating God's acts of wonder with the events of secular history." As such, Bercovitch writes, New England divines "opened the very concept of Scripture to the modern world, as the Testament of the End-Time." Such an interpretive mode, however, required careful monitoring of the kind, for instance, built into the publication protocols of the Boston Philosophical Society. Therefore, in a debt to both empiricist induction and pious humility, an author like Mather observes but limits analysis, collects events but resists conclusion, relying instead on incremental or fragmentary narrative structures like the observational, medical case study that build towards an assumed synthesis but always, in the material, remain incomplete. Significantly, therefore, neither of Mather's case studies concludes with the juridical identification of a witch, but instead with reports of renewed religious zeal among the young people of Boston. 46

Cotton Mather's claim for Mercy Short's extra-biblical function echoes a statement he made five years earlier about a similarly afflicted young woman in *Memorable Providences*. Although included within a larger treatise on witchcraft, and addressing all the Goodwin children, Mather comes to focus on the eldest daughter.

"[A]ll my library," Mather writes of Martha Goodwin, "never afforded me any Commentary on those Paragraphs of the Gospels, which speak of the Demoniacs, equal to that which the passions of this one child have given me." He continues, laying bare the logical method his studies of possession will employ: "I shall now confine my Story chiefly to Her, from whose Case the Reader may shape some Conjecture at the Accidents of the Rest."⁴⁷ The case signifies at once via recourse to generalization but also in the serial, episodic repetition of its particulars. In 1693, Mather affirms the value of witnessing yet another possession, citing the Psalmist—"he that is wise will observe things"—before elaborating that "the Surprizing Explication and confirmation of ye biggest part of ye Bible which I have been given in these things, has abundantly paid me for observing them."48 Mather clearly understands these to be parallel instances of possession. Each girl is a "brand"—a still smoldering piece of wood plucked from the fires of hell as an emblem of Divine mercy—and therefore each narrative employs the parallel typological mode outlined above in the case of Mercy. Just as Increase Mather does with individual instances of "stony humours" in Illustrious Providences, recontextualized and re-printed to alter their meaning via inclusion in a series, here Cotton Mather turns to the inductive logic of the case study form to argue for the serial recurrence of witchcraft possessions.

Mather extends this parallelism synchronically by locating his subjects within a family line and with a geographic specificity. As he does, for example, with the Goodwin children: "There dwells at this time in the south part of Boston, a sober and pious man, whose name is John Goodwin" (*MP* 99). Mather continues, "[t]his is the story of Goodwins Children, a Story all made up of Wonders! ... and the Whole happened in the

Metropolis of the English America, unto a religious and industrious Family" (*MP* 123). Margaret Rule's narrative, *Another Brand*, is also geographically and temporally situated by an introductory anecdote about a "Christian Indian" in the "Southern Parts" of the Province who reported being pursued by the "Black-Man, accompanied by Spectres" in a manner similar to that of the possessed maids. Mather argues that this experience should serve as evidence of a broader pattern unfolding across New England: "[t]was not much above a year or two after," the devil appeared on Martha's Vineyard that "there was a prodigious descent of Devils upon divers places near the Center of this Province," to which Margaret Rule's affliction "in the North part of Boston" can be linked as the final burst of the "General Storm" (*Another Brand*, par. 1-2). Each case study of possession presents both a timeless, typological figure and the periodical experience of a specific individual located within a topologically distinct milieu, a dual register accomplished via their serial presentation as case studies.

In addition to drawing on the serial narrative structure of the medical case study, Mather's possession histories also emphasize eye-witness observation of both the spiritual and material truth of each girl's sufferings. The minister demonstrates keen awareness of the rhetorical conventions that mark the empirical age in both the form and format of his *Brand* narratives, recruiting the reader as a "virtual witness" to each experiment with possession. ⁴⁹ For example, *A Brand*, is written entirely in the third person, referring repeatedly to "a minister" who observes Mercy Short, thus investing the study's truth-claims in a veneer of objectivity rather than capitalizing on his character as a prominent divine. Shifting tactics in the second case, Mather writes in the first person and repeatedly claims his own "Ocular Observation" and "Ear-witness"-ing of the scenes

of possession. The more subjective form, however, is counter-balanced by a new mode of objectivity. After a preface attesting that "I was myself a Daily Eye-witness to a large part of those occurrences," Mather inserts a trio of statements, written in different hands and bearing the signatures of five different men, that avers the factual nature of the most wondrous event in Margaret Rule's possession, namely, her levitation (*Another Brand*, unpaginated preface; see Appendix i). The para-text combines the objective truth-claims of multiple observers with the kind of subjective, embodied witnessing implied in the personalized chirography. Each signature evokes the invisible hands that raised Margaret Rule from her bed almost to the ceiling, collapsing reader-ly assent to the supernatural content of the narratives into both form and format.⁵⁰

Readers are further brought into the room with Mather, invited to participate imaginatively in the scene of Mercy Short's possession, through the girl's animated conversation with her spectral tormentor. In *A Brand*, Mather shifts from his observing narrative stance to Mercy's first-person perspective for five of the manuscript's twenty-two (extant) pages. "Oh You horrid Wretch!," Mercy begins her dialogue, set off in the text with quotation marks, "You make my very Heart cold within mee. It is an Hell to mee, to hear you speak so." Mercy not only speaks to but also provides clues to the words of her interlocutor, which allows those in the room to, in Mather's words, "gather the Tenour of [the spectres'] assaults." In addition, through Mather's formal innovations in passages such as "'—Heaven! What a foolish Question is that? Was I ever there? No, I never was there; but I hope I shall be there'" readers, like those in the room, become "Ear-witnesses" to Mercy's possession (*A Brand*, par. 14). Mather's shift from objective, scientific reportage to subjective, first-person perspective when he records

Mercy's conversation with a specter imitates the note-taking protocols of the medical case study and also encourages his devout readers to imaginatively complete the other side of the conversation, thereby entering direct disputation with the devil.

Mather further acknowledges the importance of a sensory-driven, readerly imagination in the proliferation of quotidian objects that act as empirical touchstones throughout his case studies. Aside from the above-mentioned "hot iron," straight pins, poppets, white powders, handkerchiefs, and even a demonic rat scampering across a pillow illuminate snapshots of highly sensationalist prose, conjuring for the reader not only a set of tortured body parts but also triggering the olfactory and tactile senses. For example, as part of an evidentiary pattern that emerges as a possession narrative trope, victims repeatedly struggle against "Venefic Witchcraft," or poisoning. Mather records the following instance in his case study of Margaret Rule:

[T]he standers by plainly saw something of that odd Liquor it self on the outside of her Neck; She cried out ... as if <u>Scalding Brimstone</u> poured into her, and the whole house would Immediately scent so strong of Brimstone that we were scarce able to endure it ... Moreover there was a whistish Powder and one time some of this Powder was ^ FALLEN actually <u>visible</u> upon her Cheek, from whence the People in the Room wiped it with their <u>Handkerchiefs</u> (*Another Brand*, par.7).

The introduction of bystanders into this room, along with their moveable "Handkerchiefs," brings the para-textual, co-signing witnesses into the scene, thereby reenforcing the social nature of empirical truth while also gesturing towards a more fully realized architectural space, a phenomenon elaborated via the sulfurous odor permeating the house. This physical environment makes clear that Mather's evidentiary claims in the case studies are not directed towards the juridical identification of witches—he repeatedly orders Margaret Rule to "forebear blazing the Names" of any specters she recognizes among her torturers—but instead towards the realistic re-creation of the scene

of possession through the rhetorical technology of the observational case study (*Another Brand*, par. 4).

Another important object that fulfills this empirical function is the devil's book, a familiar set piece of witchcraft folklore that Mather renders in precise detail in each case study. The presence of the devil's book in these narratives owes a debt to a Europeaninfluenced, contractual understanding of witchcraft, one in which individuals pledge themselves to Satan by signing their names (or making their marks) in his book. In keeping with the broader seventeenth-century interest in contract theory, John Gaule, author of a touchstone guide to witch-hunting, Select Cases of Conscience Touching Witches and Witchcraft (1646), locates the moment of ontological transformation from mere superstitious human dalliance into "Pacted-Active-Apostate" witchcraft in the signing of the book: "The formall cause of a Witch, is the Covenant, Compact, Contract, Confederation, League, societie, familiarity, with the Devill."⁵² The trope retained particular force in New England diabology as one example of the more general inversion of Puritan theology by the devil and his minions. A presumed parallelism between forms of Divine and demonic worship influenced European descriptions of a devil's mass, or witch meetings held on the Sabbath in mocking inversion of Christian ritual. In the New World such correspondences were strengthened by a trans-colonial belief that all of America was the special province of the devil, or, at least, had been under the sway of the devil longer than the Old World, and therefore was in need of active resistance, or exorcism. The appearance of the devil's book in the scene of possession thus became a particularly resonant repository for the broader struggle against the devil among Providential theologians.⁵³

Accordingly, Mather's possession narratives dwell both on the physical reality of the book offered to the bewitched and the book's talismanic powers. Each girl mentions the book and Mather depicts it in increasingly specific detail. The devil offers Margaret Rule a "book about a cubet long, a Book Red and thick, but not very broad" to sign (*Another Brand* par. 4). Mercy Short also confronts a "Book of Death" that she describes as "somewhat long and thick (Like the wast-books of many Traders), butt bound and clasp't, and fill'd not only with the Names or Marks, but also with the explicit (short) Covenants of such as had listed themselves in the service of Satan, and the Desgin of Witchcraft; all written in Red characters" (*A Brand* par. 7). These sensory details, rooted as they are in a Protestant vernacular tradition steeped in both the material and spiritual valences of the printed word, serve theological ends by employing the language of contract, asserting the wide transverse of the devil in collecting his New-World witches, and suggesting—via the detail of "Red characters"— a series of compacts signed in blood. 54

Further, each narrative stresses that the girls need only touch, not sign, the book to enter the devil's service and thus bring an end to their spectral tortures. For example, in an oddly sensational scene centered on the moveable object, the demons haunting Mercy Short "diverse times made her Eyes very sore by thrusting [the book] hard upon them, to make her Touch it, when shee [sic] should unawares lift up her Hands to save her Eyes." What had been a visualized, albeit invisible, object becomes bluntly tactile in this synesthetic description, and the supernatural enters the natural world through an appeal to the reader's senses which, like, Mercy Short's are "forced ... from conversing with their ordinary objects and captivated ... unto this communion with the powers of Darkness" (A

Brand par. 7). A Brand features not just one devil's book, but three, and while the two other books are not physically described, one becomes, in Mather's terms, "corporeal" when Mercy reports that the specters dropped their "Second Book, in the Cockloft of a Garret belonging to the House of a person of Quality not far off." Mather and Gov. Phips consult before sending a servant to search the attic discreetly, thus affording the witches time to cover their tracks, but not before the anecdote has conjured in the reader's mind an object, a space, and a "great Black Cat" reportedly seen by the servant sent to fetch the book away (A Brand par. 25). More than simply granting heft to the author's truth claims, therefore, the quotidian objects in the possession narratives help create for a reader the backdrop of a richly rendered physical environment in which each possession takes place.

This technique emphasizes a change of venue—from the Salem meetinghouse to the semi-private space of Mather's library—and therefore in epistemological focus of Mather's case studies. Mather, after all, never attended the witch trials themselves. Not only does such a setting accord with the household practice of medicine in the period, it also carries political and theological significance. The move from the Salem meetinghouse to the semi-private spaces of Mather's library and the Rule home evokes the private rooms of Gresham College and Arundel House, the experimental spaces in which the Royal Society held its early meetings. In his *History*, Thomas Sprat stresses the importance of the private space of experimental labor and discussion as a sanctuary from the violence, both rhetorical and actual, which dominated the English public during the fraught period of the Civil War. "Their first purpose," Sprat wrote of the founding Society meetings at Oxford, "was no more then onely [sic] the satisfaction of breathing a freer air, and of conversing in quiet with one another, without being ingag'd in the

passions, and madness of that dismal Age." More than a temporary safe haven or a pastoral ideal, the experimental space described by Sprat is at once reflective and replicable, a pattern of thought and a model of social converse which indulges dissent without the specter of violence: "The contemplation of [Nature] draws our mind off from past, or present, misfortune ... that never separates us into mortal Factions; that gives us room to differ, without animosity; and permits us, to raise contrary imaginations upon it, without any danger of a *Civil War*." 55

In this sense, the experimental laboratory functions as a quasi-devotional space, one in which the individual can commune with nature, and thus nature's God, without the dissension and distraction inherent in human affairs. As scholars of Puritanism in New England have long observed, the primitive Christianity espoused by radical Protestants sought to eliminate religious ritual, especially the forms of mediation represented by the formal spaces of cathedral and abbey. Puritans found order for their religious experience in the frameworks of scripture, devotional writing, and the contemplation of the as-yetunrevealed text of Divine Providence. Mather's movement from the courthouse to the library, then, subtly combines these discourses of empirical science and Puritan orthodoxy. By rendering each instance in the form of a medical case study fundamentally reliant on the stylistic markers of firsthand witnessing—Mather hopes to transform the disordered and destabilizing scene of possession into a phenomenon that does not threaten the unity of the social fabric of Congregationalist New England. Instead he makes it an imaginary space of contemplation and devotion, similar perhaps to an Augustinian garden in which one can "pick up and read" from the scripture of the invisible world.⁵⁶

The case histories are, nonetheless, extremely violent. All three young women report brutal tortures which parallel tales of Native American captivity, including being forced to fast for days on end, restrained in painful positions, and roasted over flaming coals. The remarkable similarities in the repertoire of suffering upon which the young women draw likely has its origins in the actual violence both perpetrated by and visited upon English settlers during a series of battles with Native Americans on the Maine frontier in the 1680s. Mercy Short in particular had been taken captive by the Wabanaki during a raid on the settlement of Salmon Falls just two years earlier. Cotton Mather and Mercy Short both clearly draw upon the framework of captivity in *A Brand*. Mercy describes her invisible sufferings in details reminiscent of captivity and Mather makes the direct connection for the reader by introducing Short with a brief biography that details her Indian captivity before referring to her current predicament as "a Captivity to Spectres" (*A Brand* par. 14).

Despite apparent similarities to such narratives, witchcraft possession is a unique form of captivity. It offers the reader immediate, yet safe, access to a figure of God's Providence. When recorded via the rhetorical technology of a medical case study the possession can circulate more widely, thus serving as a particularly powerful Jeremiad for the broader community. As Mather writes in one of his few diary entries which remain from the period of the trials: "I had afterwards the Satisfaction of seeing not only [Mercy] so brought home unto the Lord, that shee was admitted unto our Church, but also many other, even some scores of young People, awakened by the Picture of Hell, exhibited, in her sufferings, to flee from the Wrath to come." Therefore, moving the setting of captivity from the wilderness of the frontier and into the domestic spaces of

Boston's North End triggers a renewal of religious zeal among the rising generation in New England. Mather writes that the case study of Margaret Rule, *Another Brand*, recounts a "very Entertaining story" in response to which:

Some scores of other young People ... were ... struck with the lively demonstrations of Hell evidently set forth before their Eyes, when they saw persons cruelly Frighted, wounded and Starved by Devils and Scalded with Burning Brimston, and yet so preserved in this tortured estate as that at the end of one Months wretchedness they were able to still undergo another, so that of these also it might now be said, Behold they pray in the whole—The Devil got just nothing (*Another Brand* par. 12).

Through the appeal to virtual witnessing, then, these possession narratives recreate for the reader a set of "captivating Impressions" similar to those that haunt Mercy Short and Margaret Rule, thereby capitalizing on the rhetorical form of the medical case study to not only record, but also disseminate these incursions from the invisible world.

The "scores of other young people" that Mather references had been an object of both medical and theological concern in New England for decades. As Cristobal Silva demonstrates, the loss of herd immunity among the second and third generation New Englanders increased the frequency of contagious disease outbreaks during the final decades of the seventeenth century. Whereas earlier generations of colonists had seen illnesses such as smallpox ravage Native American populations, a natural phenomenon often read as divine intervention, later colonists speculated that a spiritual sickness was the source for new patterns of disease which turned the epidemics on newly vulnerable European communities. Divines like Mather connected increased outbreaks of contagious disease to declines in church membership among the rising generation, a worrying correlation that did not bode well for the spiritual state of the colony. Circulating in such a climate, Mather's case studies of possession aim to not only diagnose the young women

he observes but also to inoculate a cohort of younger New Englanders who appear most susceptible to both bodily and spiritual illnesses.⁵⁸

In a scene which dramatizes the healing role of the minister, Mather carries Martha Goodwin into his study, demonstrating for multiple visitors how her tortures relent in the calm of his library, although he is wary of making the room into, as he terms it, "a Charm" (MP 116). Mather's wariness derives in part from the danger of such inquiries. Converse with the "King of Lies" and those pledged to his service is especially fraught, and subjects of possession were frequently accused of or confessed to being witches themselves, thereby rendering them unreliable as instruments of investigation into the invisible world.⁵⁹ Hedging a cautionary middle way in *Memorable Providences*, Mather observes, "I was not unsensible that it might be an easie thing to be too bold, and go too far in making of Experiments: nor was I so unphilosophical as not to discern many opportunities of Giving and Solving many Problems which the Pneumatic Discipline is concerned in" (122). Such openness to detailed recording of wonders combined with a resistance to a definitive interpretation draws at once upon the passivity of Providential theology as well as the inductive openness of empirical science. Thus, Mather employs a high level of both empirical specificity and an experimental method in order to ground his truth claims for each possession narrative, and, by extension, the entire witchcraft outbreak, in the medical case study.

The phenomenon of possession was particularly destabilizing in both its theological and social ramifications. Typically experienced by young women in positions of social and economic disadvantage, often at a moment of religious crisis, possession made explicit certain fundamental tensions underlying Providential theology. Pervasive

uncertainty over the state of one's soul combined with a repressive morality and predestinarianism transformed the scene of possession into an exercise of both individual and collective catharsis for New Englanders. Indulgence in illicit behaviors—including cursing, cavorting and dancing, and even direct confrontation of ministerial authorities by Godly young people only to be redeemed by a benevolent Providence offered both a release of repressed urges as well as an assurance of covenanted status. However, phenomena involving the demonic were by definition an unpredictable threat to the covenanted community and, because of the primacy of divine sovereignty in Providential theology, the ministerial authority entered the scene not as crusading exorcist performing a ritual to drive out the devil but instead as passive observer and prophet, reporting and interpreting the sign for the community at large. 60 Therefore, the scene of possession was rife with destabilizing forces that had to be contemplated and somehow contained. Mather defensively avers as much in *Another Brand*, claiming, "I did myself offer to provide Meat, Drink and Lodging for no less than Six of the Afflicted, that so an Experiment might be made ... without giving the Civil Authority the trouble of prosecuting those things" (321). Ministerial authority in such cases functioned as a gatekeeper between the scene of possession and the accusation of witchcraft, thereby demonstrating the flexible interpretation of such events in New England.

There were possibly similar observations of the young women afflicted in and around Salem, and, based on the narratives reconstructed ex post facto, a number of sets of notes on the afflictions were likely taken and possibly circulated in manuscript form.⁶¹ While official documentation from the period of the Salem hysteria, including court transcripts and public sermons, are well represented in the archive, a lack of extant

personal writings from authorities involved in the events suggests a concerted effort by individuals or their descendants to purge the historical record of incriminating materials. For example, Increase and Cotton Mather's diaries from the years 1691 and 1692 have not survived, neither have those of Rev. Samuel Parris, a key figure in the initial response to the possessions of the young women in his household. Based on the detailed chronology of the fits suffered by the main accusers while away from the courthouse that are recorded in the trial transcripts, however, there must have been more firsthand studies of possession similar to Mather's *Brand* case studies, suggesting an incipient genre that did not survive the aftermath of the trials.⁶²

3. During the trials at Salem, the judges made the fits of possession into a public spectacle, stoking a communal imaginary and offering scripts to future accusers. As historians of Salem point out, the reliance on spectral evidence performed by the accusers proved socially destructive because it fundamentally undermined the semiotic stability that girded Congregationalism. Mather's case studies hope to avoid such instability through the controlled interpretation and dissemination of these phenomena. Unlike the theatrical space of the courtroom, the mediating technology of the medical case study expands access to these phenomena while circumscribing their interpretation. As with the accounts of parallel wonders included in *Illustrious Providences*, publication of the *Brand* narratives was essential for their devotional utility. However, because of their fraught content, Mather carefully issued his case studies in scribal, rather than printed, format targeting a readership open to their devotional possibilities yet aware of the need for their controlled interpretation. Well-developed networks of manuscript circulation by

powerful clerics existed in New England throughout the seventeenth and into the eighteenth century. Unlike in England or among continental intellectuals, in New England scribal publication was less the province of a politico-religious underground or an artistic coterie than it was a utilitarian alternative for authors writing on the technologically disadvantaged periphery. Such functionality combined with the ability to reach a strategically targeted audience to make scribal publication ideal for Mather's case studies of possession. ⁶⁴ In this final section I will outline briefly the pious, scribal public Mather hoped to constitute around the epistemic genre of medical case study. His cases presume a disciplined readership attentive to the virtuosic interplay of religious and scientific genres, yet willing to defer meaning, and thereby to embrace the hope that cases of demonic possession can offer wider access to knowledge of the divine. ⁶⁵

The lone, extant, manuscript copy of *A Brand* bears the hallmarks of a text designed for wider dissemination. The loosely bound volume has numbered pages and paragraphs for ease of reference (Mather corrected the numbering at one point), a wide left-hand margin offering ample room for comment and elaboration, indications of scripto-graphical emphasis including all caps and underlining of important phrases, passages, or scriptural allusions, and a cover with the admonition that the narrative be "returned unto Cotton Mather." Both *A Brand* and *Another Brand* are heavily revised: emendations dot the margins, they are written in two different inks (in *A Brand* the change in inks corresponds to the two phases of Mercy Short's possession, emphasizing Mather's punctual composition process), and large sections of empty space between the paragraphs in each narrative leave room for additions should the case continue to unfold (see Appendix ii).

Mather's choice to employ scribal publication for these studies certainly does not arise from his lack of access to print. As one of seventeenth-century New England's most frequently printed authors and owner of a 7,000+ volume library, Cotton Mather no doubt recognized the political, theological, and epistemological importance of print in early modern New England. Despite never wielding official licensing authority, the Mathers, both Increase and Cotton, maintained strict control over the Cambridge and Boston presses through a network of informal connections, what Edmund Morgan describes as a "Puritan tribalism." Frovincial Governor William Phips confirmed such authority when he selected Cotton Mather to pen and print an official defense of the witch court, Wonders of the Invisible World (1692). The minister had full access to having his case studies printed, therefore, but evidently chose not to do so.

One possible reason for this is that unlike print, the expeditious nature of scribal publication corresponded well to the phenomenon Mather treated. Mather's innovative formal techniques—his combination of the genre of the observational medical case study with typological modes of representation—required experimental publication. The evident urgency of Mather's composition recruits readers as virtual witnesses to both the possession and the scene of writing. Just as a threatening, albeit entertaining, "Picture of Hell" is made real to the reader through these narratives' highly sensational style, so the interpretive authority of Mather's pen comes through in the inkblots and strikes that litter the pages. Similar to the editing of *Illustrious Providences*, the highly visible composition process of the case histories of possession, presented to the reader as complete despite evident in-completions, evokes the inductive openness that generally characterizes both the collecting of empirical observations as well as the on-going accounting of redemptive

history. At the conclusion of *A Brand*, Mather even begs excuse from the reader for withholding his "opinion about the true nature and meaning of these Preternatural Occurrences" (par. 29). Each case is merely one in a series, but the entire arc of that series cannot yet be fully read, and therefore is not ready for the permanence of print.

In addition, considering the timing of Mather's encounters with Mercy Short and Margaret Rule, the limited reach of scribal copying should target a more sympathetic readership. Mather's *Brand* cases both circulated after the Salem court had been dissolved, thereby obviating their evidentiary function, but while theological, political, and social instability nevertheless persisted. In the preface to Another Brand, the narrative of Margaret Rule, Mather explicitly states his intended mode of, and reason for, publication: "I do not Write it with a design of throwing it presently onto the Press, but only to preserve the Memory of such Memorable things, the forgetting whereof would neither be pleasing to God, nor useful to Men." That Another Brand was not printed points to Mather's awareness of its important, yet potentially destabilizing content, as well as to the shifting power structures in New England. His narrative offers a "sight of some Curiosities" for "peculiar and obliging Friends," some of which Mather "would have omitted in a farther Publication" (Another Brand unpaginated preface). Such case studies are not intended for prurient consumption nor does Mather want their truth-value, empirical or spiritual, to be tainted by appearing alongside the kinds of overtly fictive wonder tales then on offer in a burgeoning print marketplace. The radical content, radical style, and radical function of the case studies of possession warrant an un-orthodox mode of distribution. The scribal publication of Mather's cases, therefore, points us towards the innovations in not only narration but also in publication fostered by the interplay of theology, print technology, and scientific inquiry on the colonial periphery.

Taking their cue from Jurgen Habermas, scholars of print culture in New England generally identify the public sphere as a virtual space of reasoned discourse enabled by the technology of print and defining itself, in the case of the colony, against the social, political, and theological authority of the clerical class. David Shields in particular has argued that such a public emerged on the periphery only once colonial elites began imitating the social and literary practices of their metropolitan counterparts. Drawing inspiration from Addison and Steele's *The Tatler* (1709-11) and *The Spectator* (1711-12) and building on a model of polite sociability enacted in salons, tea rooms, and coffeehouses, Anglo-creoles published and circulated periodicals, such as James Franklin's *New England Courant*—but not until the 1720s.⁶⁷

Such an account of the public sphere phenomenon discounts the inescapably sacred meanings of reading and writing for early modern New Englanders. The seventeenth-century discursive landscape of colonial New England was indeed crowded, but not always with print. Devotional writing in the form of private journals, diaries and commonplace books, as well as the circulation of more public verse, testimonies, biographies, autobiographies, and histories, formed a necessary and regular part of religious practice in Congregationalist New England. Devout readers and writers created and circulated such texts within well-developed, informal networks. Therefore, David Hall argues, on the periphery of the British Atlantic world, "social and political criticism ... were never fully differentiated from the language and practices of radical

Protestantism, which ... fashioned a certain kind of public sphere ... a 'republic of letters.'"68

This robust "republic of letters" owes its development in part to the relationship between the technology of print and reformed Christianity. To orthodox figures such as the Mathers the language of type and print carried spiritual significance. The authority of the printed word derived first from its direct resonance with the Word, not from the technology's capacity to facilitate an imagined space in which the public exercise of reason was brought to bear on the state. As Michael Warner points out, "Puritan typography and Puritan typology ... could be mutually reinforcing" because of their joint "emphasis on the perfect reception by the copy of a master original." Print itself embodied the human relationship to the Divine. Therefore, while writing and reading were essential "technologies of the self" in early modern New England, the printed word carried with it an authorizing power that even a minister might hesitate to grasp. In addition, the material fact of reduced circulation and dissemination of print in New England meant that print technology could not attain the level of saturation presumed in metropolitan treatments.⁶⁹ Restoring Mather's scribal, medical case studies to our understanding of the emergence of the print public sphere in early modern New England, I would like to suggest, casts into relief the hope that Mather, and the possessed young girls, brought to their case studies; a hope that the possibility for virtual experience in a public sphere could ratify their own elect status, if only through the experience of their suffering.

Mather's epistolary exchanges with Robert Calef, eventually printed in Calef's More Wonders of the Invisible World, offer an instructive glimpse of the friction between an inchoate print public and the public imagined though Mather's case studies of possession. Little is known about Calef beyond the brief biographical sketch offered by George Lincoln Burr: a cloth-merchant (though Cotton Mather disparagingly refers to him as a weaver) who arrived in Boston sometime before 1688. His *More Wonders* was among the first public critiques of the Salem trials, which, though completed in 1697, could not find a printer in Massachusetts Bay largely due to the Mather family's tight control over the presses. Based on diary references by both the Mathers, however, it seems to have been in scribal circulation as early as 1698. The text was finally printed in 1700, bearing a London imprint, but only after Calef himself faced libel charges for criticizing the theocracy.⁷⁰

More Wonders enacts a rational-critical, print public sphere within its pages. The treatise incorporates citations from Mather's earlier writings on witchcraft as well as lengthy excerpts from correspondence between Calef and the minister debating questions of theology and legal procedure arising from the trials. Calef also included, albeit without the minister's authorization, the last of Mather's case studies of possession. Calef makes the events of Margaret Rule's possession the centerpiece of his argument, offering his skeptical account alongside Mather's credulous one. For instance, Mather's scribal publication of Another Brand describes a young woman "born of Sober and honest Parents, ... ^^seriously concern'd for the everlasting Salvation of her Souls" and cruelly "assaulted by Eight ... Spectres" (par. 2). Calef, by contrast, re-contextualizes the case to include the minister's leading questions ("What, do there a great many witches sit upon you?"), the girl's curt responses ("Yes"), his own, firsthand observations of Margaret's fits ("they ... said that her Head could not be moved from the pillow; I try'd to move her head, and

found no ... difficulty"), and suggestive details about the young people of Boston keeping mixed company through the night after the ministers had left ("and having hold of the hand of a Young-man ... She pull'd him again into his Seat, saying he should not go tonight") (*More Wonders* 325-7). Calef thus introduces the skeptic into the virtual scene, deploying embodied witnessing to dispute the empirical, and therefore divine, truths that Mather asserted in his case studies of possession.

More Wonders also makes the possession of Margaret Rule part of a series of political, as opposed to strictly medical or supernatural, events. Calef places Mather's case study in parallel with the accusations and subsequent executions at Salem, thus offering a chilling meditation on what the witch trials had wrought. Following the reprinting of Rule's possession narrative Calef's account continues, depicting how Mather, perched on horseback, witnessed the execution of George Burroughs, convicted leader of the witches. Afterwards Mather addressed the assembled in order to, in Calef's words, "possess the People of his guilt." After Mather rides away, Calef's account lingers on the hurried, shallow burial of Burroughs and two others, adding the chilling detail that "one of his hands and his Chin, and a Foot of one [of] them [was] left uncovered" (More Wonders 361). In the pages of More Wonders, then, Mather's case studies are exposed to the sunlight of reasoned, metropolitan discourse, transforming the invisible, demonic chains into a metaphor for theocratic control over knowledge production, and literalizing the tragic consequences. Calef's critique posits completeness by placing the instances of Margaret Rule's possession within a series of other, political events. Mather, on the other hand, in his use of the medical case study, posits an alternate version of historical

contingency best captured generically and format-wise, in the scribally published, medical case study.

Legend holds that Increase Mather burned a copy of *More Wonders* in Harvard Yard when the book arrived in Boston in 1701. Both Mathers were defensive, and rightly so. The presence of a wider, critical, and increasingly empowered print, public sphere in New England can already be glimpsed in the audience Cotton imagined for his case study of Margaret Rule. "And now I suppose that some of our Learned witlings of the Coffee-House, for fear lest these proofs of an Invisible-World should spoil some of their sport," Mather wrote in 1693, "will endeavour to turn them all into sport" (Another Brand, par. 11). Like his insistent evocation of the private study and appeal to virtual witnessing, Mather's use of scribal publication was an attempt, however futile, to target his case studies of possession at a short-lived, alternate public in colonial New England. He seeks an audience akin to the members of the Boston Philosophical Society or the readers and contributors to *Illustrious Providences*. Unlike the "Learned witlings" of the coffeehouse, Mather's ideal public could encounter such tenuous case studies with the proper combination of scientific skepticism and hopeful piety. However, as a form of public discourse, the possession narratives make, in Michael Warner's words, "reaching strangers [their] primary orientation."⁷¹ In the demons that torture Martha Goodwin, Mercy Short, and Margaret Rule, perhaps, Mather found a compelling parallel for the hostile strangers populating an increasingly secular, print public sphere in New England. Both the minister and the young girls find themselves beset on all sides by specters. Yet they publicly bear witness to their suffering, firm in the hope that it signals their regeneration, and that the right public will someday recognize its truth.

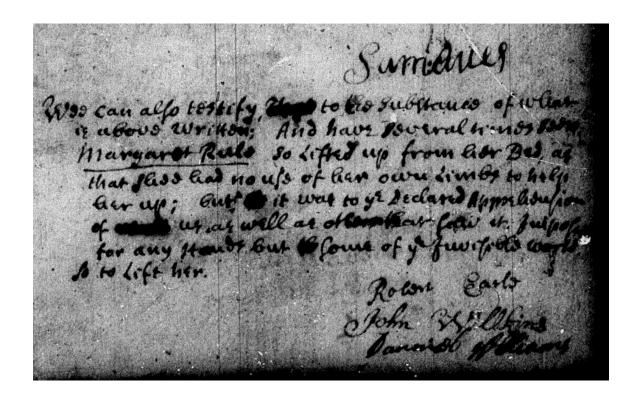
"A public is poetic world making," Michael Warner writes in *Publics and Counterpublics*, "Public discourse says not only 'Let a public exist' but 'Let it have this character, speak this way, see the world in this way.""

Cotton Mather's case studies of possession are hopeful for such a world; a world transformed via grace yet instantiated in narrative. As the minister wrote in his autobiography, *Paterna* (1703), "Sacramental Meditations" should employ both "Wit as well as ... grace" in order to lend devotions "a certain charming *Elegancy*, and sacred *Curiosity*" (38). Such a sensibility—at once orthodox and rational, timely and timeless, religious and aesthetic—imbues the scene of writing with divine possibility, a hopeful orientation captured, by Mather, in the rhetorical form of the case study.

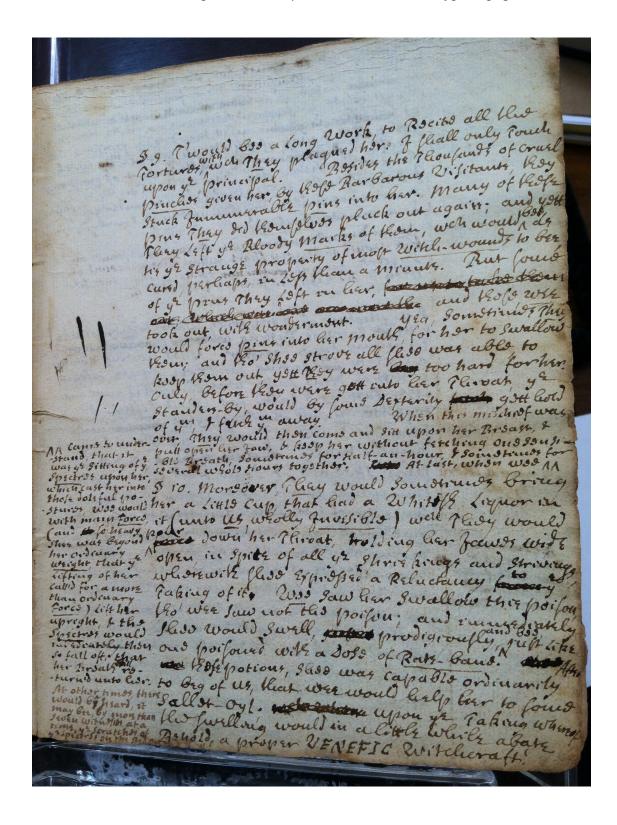
A full two decades after the events in Salem, Mather continued to hope for such a world and wrote it into existence in his series of letters to the Royal Society. Originally intended for the Boston Philosophical Society, Mather's *Curiosa Americana* report on a variety of natural historical phenomenon, yet focus particularly on medicine and its allied sciences of botany and anatomy. Mather incorporated a number of medical case histories sent to him by others into his *Curiosa*, including the one with which I began this chapter. In another letter from November of 1712, Mather describes certain American "Treasures of Ornithology" as prelude to a brief speculation about the destination of migratory birds that darken the New England sky each winter and spring. Perhaps, he reasons, they fly to "Sundry, Minute, <u>Planetary Bodies</u>, which ... may not be visible to <u>Us</u> without the help of instruments." "If <u>Glasses</u> were a little more improved, and Mens attention to the

there to be some "Semi-pellucid Bodies, between the Earth and the Moon." Until such technologies are developed, or human senses are improved, however, Mather's letters will have to suffice for rendering the invisible visible. As a visible sign of the potential world such writing conjures, therefore, Mather writes each letter, "With a Quill taken from One of the [Season-birds]." Unpacking the complex interplay of epistemology, cosmology, and social power at work in the scribal publications circulating during the Salem with trials points us to one instance of how readers and writers alike transformed "objects of faith into objects of knowledge" in the early modern, British Atlantic world. It also demonstrates the fraught nature of doing so, and how violence, both natural and supernatural, was at the center of such a project.

<u>Appendix i</u>: Another Brand... 1692. Box 6, Folder 6, Mather Family Papers, Manuscript Collection, American Antiquarian Society, Worcester, Mass. Detail of the prefatory paratext, showing signatures of corroborating witnesses.



Appendix ii: A Brand... 1692. Box 6, Folder 6, Mather Family Papers, Manuscript Collection, American Antiquarian Society, Worcester, Mass. A typical page of the ms.



¹ Perkins, Salve for a Sicke Man... (London, 1595), 25.

² Mather's letter to Woodward has never appeared in print. The original resides in the archives of the Royal Society. My quotations are taken from a manuscript copy of this letter included, along with a portion of Mather's extant correspondences with the Royal Society, in the Society's letterbook. A microfilm copy of a portion of the letters is held by the Massachusetts Historical Society, catalogued in the Mather Family Papers as the "Frederick Lewis Gay Transcripts, 1632-1786." I have consistently maintained the emphases and variances in spelling, syntax, etc., from Mather's originals. Quotations from the Gay Transcripts will hereafter be cited parenthetically as *GT*.

³ GT: 70, 68.

⁴ Produced intermittently between 1712 and 1724 and directed to Woodward, Society secretary Richard Waller, and his successor, Dr. James Jurin, the *Curiosa* document phenomena of interest to "ye true Friends of Religion and Philosophy." The extant *Curiosa* remain uncollected and unpublished. Highly redacted excerpts are included in Kenneth Silverman's *Selected Letters of Cotton Mather* (Baton Rouge, 1971), 107-40, and manuscript sources of the letters, or copies thereof, are spread among three archives on two continents. The Royal Society, the American Antiquarian Society, and the Massachusetts Historical Society each hold a portion of the collection. The only bibliography of the *Curiosa* is George Lyman Kittredge's "Cotton Mather's Scientific Communications to the Royal Society," *Publications of the Colonial Society of Massachusetts, Transactions* (Boston, 1913; rpt. in Beall, *Cotton Mather and American Science and Medicine*, vol. 1 (New York, 1980), 1-42). For scholarly treatments of the *Curiosa*, see Raymond Phineas Stearns, *Science in the British Colonies of America* (Urbana, 1970), 403-26; Silverman, *Life and Times of Cotton Mather* (New York, 1985), 242-54; and Susan Scott Parrish, *American Curiosity: Cultures of Natural History in the Colonial British Atlantic World* (Chapel Hill, 2011), 117-29.

⁵ The survey of Mather's characterization in scholarship derives from, respectively, Vernon L. Parrington, *Main Currents in American Thought, Vol. 1*, (1928; rpt. Norman, 1987), 107; Perry Miller, *The New England Mind: From Colony to Province*, (Cambridge, 1953), 201; and Joyce Chaplin, *The First Scientific American: Benjamin Franklin and the Pursuit of Genius*, (New York, 2007). On Mather and medicine generally, see Bernard I. Cohen, ed., *Cotton Mather and American Science and Medicine*, Vols. I, II (New York, 1980) and, Stearns, *Science in the British Colonies of America*, esp. 415-24. For a recent treatment of the small-pox controversy in particular, see Cristobal Silva, *Miraculous Plagues: An Epidemiology of New England Narrative* (New York, 2011), esp. 101-41; and Parrish, *American Curiosity*, esp. 279-89.

⁶ See Sarah Rivett, *Science of the Soul in Colonial New England* (Chapel Hill, 2011); and Walter Woodward, *Prospero's America: John Winthrop, Jr., Alchemy, and the Creation of New England Culture, 1606-1676* (Chapel Hill, 2010).

⁷ Cristobal Silva, *Miraculous Plagues* and Kelly Wisecup, *Medical Encounters: Knowledge and Identity Formation in Early American Literatures* (Boston, 2013). See also Joyce Chaplin, *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676* (Cambridge, 2003);

⁸ Donegan's work on settlement in seventeenth century English colonies argues for the important distinction between "colonization as an imperial project and becoming colonial as a lived condition." The latter happens, according to Donegan, in the "ongoing present" and is

apprehended via a "convulsive series of nows" which manifest in literary form as the fragmentary narratives of colonial encounter. I would contribute the observational case study as a genre that mediates the "ongoingness" of the colonial experience throughout the eighteenth-century, particularly during the notoriously unsettled period of witchcraft outbreaks in late seventeenth-century New England. See *Seasons of Misery: Catastrophe and Colonial Settlement in Early America* (Philadelphia, 2014), 4, 9.

- ⁹ A pair of recent articles on Mather's possession narratives address them as case studies, but from a different perspective. Janice Knight's "Telling it Slant: The Testimony of Mercy Short" (*Early American Literature*, 37.1 (2002): 39-69) and Deborah Kelly Kloepfer's "Cotton Mather's Dora: The Case History of Mercy Short" (*Ibid.*, 44.1 (2009): 3-38), both read a repressed response to the violence of Mercy Short's Indian captivity experiences into the tropes of possession, drawing largely on the psycho-analytic history of the case study and trauma theory to analyze Short's testimony. Mather's narrative mode, I contend, is better understood through the minister's engagement with early modern medicine and in the context of the epistemological and publication protocols of provincial science embodied by the Boston Philosophical Society.
- ¹⁰ David Hall, World of Wonder, Days of Judgment: Popular Religious Beliefs in Early New England (New York, 1989), 83; 71-116.
- ¹¹ On the unsettled natural conditions of the late seventeenth-century, see Matthew Mulcahy, "The Port Royal Earthquake and the World of Wonders in Seventeenth-Century Jamaica," *Early American Studies* 6.2 (2008): 391-421; *Ibid.*, *Hurricanes and Society in the British Greater Caribbean, 1624-1783* (Baltimore, 2006); and Karen Ordhal Kupperman's trio of essays: "The Puzzle of the American Climate in the Early Colonial Period," *American Historical Review* 87 (December 1982): 1262-89; "Fear of Hot Climates in the Anglo-American Colonial Experience," *William and Mary Quarterly* 41 (1984): 213-41; "Climate Mastery of the Wilderness in Seventeenth-Century New England," *Seventeenth Century New England*, (Boston, 1985), 3-37. On the changing patterns of contagious disease among later generations of New England settlers, see Silva, *Miraculous Plagues*, 101-15.
- ¹² Rivett, *Science of the Soul* and Woodward, *Prospero's America*. Classic articulations of Puritan resistance to science are Vernon L. Parrington, *Main Currents in American Thought, Vol. 1*, (1928; rpt. Norman, 1987); and Perry Miller, *The New England Mind: From Colony to Province*, (Cambridge, 1953). For a fuller treatment of early science in Puritan New England, see Stearns, *Science in the British Colonies of* America, esp. 159-61.
- ¹³ The History of the Royal Society of London for the Improvement of Natural Knowledge (London, 1667), 113.

¹⁴ Francis Bacon, *Novum Organum* (London, 1620), unpaginated prefatory material.

¹⁵ Sprat, *History*, unpaginated prefatory material. On Baconian style and New World narratives, see Myra Jehlen, "The Literature of Colonization," in *The Cambridge History of American Literature*, vol. 1 (Cambridge, 1994), esp. pp. 26-36. On mediation in the scientific culture of the British Atlantic world, see James Delbourgo, "Science," in *The British Atlantic World* (New York, 2009), 92-110.

¹⁶ Steven Shapin & Simon Schaffer, *Leviathan and the Air Pump: Hobbes, Boyle, and the Experimental Life* (Princeton, 1984); 60-1, 63. On the deployment of "virtual witnessing" across

Enlightenment era prose genres, both non-fictional and fictional, see John Bender, *Ends of Enlightenment*, (Stanford, 2012), esp. 57-78. On the socially constructed nature of empirical science, see Steven Shapin, *A Social History of Truth* (Chicago, 1994); and Bruno Latour, *Science in Action: How to Follow Scientists and Engineers Through Society* (Cambridge, 1988).

¹⁷ On the history of the *observationes* in European medical practice, see Gianna Pomata, "Sharing Cases: The *Observationes* in Early Modern Medicine," *Early Science and Medicine*, 15.3 (2010): 193-236; and *Ibid.*, "Observation Rising," *Histories of Scientific Observation* (Chicago, 2011), 45-80. For the ascendance of observation as an epistemic category across the sciences, see Lorraine Daston, "The Empire of Observation, 1600-1800," *Histories of Scientific Observation* (Chicago, 2011), 81-113. On the revival of Hippocratic medicine in the late seventeenth and early eighteenth centuries, see Andrew Wear, *Knowledge and Practice in English Medicine*, 1550-1680 (Cambridge, 2000) and Roy Porter, *The Greatest Benefit to Mankind* (New York, 1998), esp. 201-44.

¹⁸ Daston, "The Empire of Observation," 83.

¹⁹ For instance, the case of Lydia Ingram (discussed above) appeared in Mather's letter to Woodward and was also included in his medical treatise, *The Angel of Bethesda*. Another case, that of Abigail Eliot (discussed below), appears in Increase Mather's *Illustrious Providences*, Cotton Mather's unpublished letters to the Royal Society, known as the *Curiosa Americana*, again in the "Thamaturgus" section of his *Magnalia Historia Americana* (London, 1702), and in his unpublished biblical commentary, the *Biblia Americana*. On Mather's penchant for recontextualizing medical cases, see Beall, "Cotton Mather's Early 'Curiosa Americana' and the Formation of the Boston Philosophical Society," *William and Mary Quarterly* 18.3 (1961): 360-72. On the practice of re-arranging and re-printing individual patient histories in the early modern period, see Volker Hess and J. Andrew Mendelsohn, "Case and Series: Medical Knowledge and Paper Technology, 1600-1900," *History of Science* 48 (2010) 287-314.

²⁰ Qtd. in Silverman, The Life and Times, 42

²¹ For biographical details about Mather's education, see Silverman, *The Life and Times*, 17-23. On Increase Mather and the Boston Philosophical Society, see Stearns, *Science in the British Colonies of America*, 150-60. And, on Puritan science more generally, see Stearns, 117-60 and Delbourgo, "Science," 97-99.

²² Here, and throughout, my summary of the formation of the Boston Philosophical Society is indebted to Stearns, *Science in the British Colonies of America*, 150-9. See also Beall, Jr., "Cotton Mather's Early 'Curiosa Americana' and the Boston Philosophical Society." The only extant records of the Society are references in the diaries of Increase Mather and Samuel Sewall as well as in Cotton Mather's biography of his father, *Parentator* (Boston, 1724).

²³ McKeon, The Origins of the English Novel, 1600-1740 (Baltimore, 1987), 84.

Later printers and scholars have obscured this distinction in referring to the text by its running caption, "Remarkable Providences," rather than by its given title, *An Essay for the Recording of Illustrious Providences*. The mis-labeling of Mather's text began early—his son Cotton refers to it as "Remarkable Providences" in correspondence—but the real transition occurs with a pair of mid-nineteenth century reprints and is fully entrenched by George Lincoln Burr's excerpt in *Narratives of the New England Witchcraft Trials* (New York, 1914; rpt. 2002), 1-38. The most

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recent reprint of Mather's text, in Myra Jehlen and Michael Warner's *English Literatures of the Americas: 1500-1800* (London, 1997), restores the *Essay* while retaining the *Remarkable*: "from *Essay for the Recording of Remarkable Providences*" (504-17). On the theatrical motif of other collections of wonder tales, see Rivett, *Science of the Soul*, esp. 249-50.

²⁵ On the New World phenomenon of extreme weather, including but not limited to lightning strikes, see Delbourgo, *A Most Amazing Scene of Wonders*; and Matthew Mulcahy, *Hurricanes and Society in the Greater British Caribbean*.

²⁶ Increase Mather, *An Essay for the Recording of Illustrious Providences* (Boston, 1684 (rpt. New York, 1915)), 16-7. All further references will be cited parenthetically as *IP*. Although Boyle's *General Heads* was not published as a stand-alone text until 1690, his instructions for the systematic production of data for natural histories appeared under the same title in *Philosophical Transactions*, 1.11 (1666): 186-9.

²⁷ The full title of Mather's collection—An Essay for the Recording of Illustrious Providences; Wherein an Account is given of many Remarkable and very Memorable Events which have happened in this last Age; Especially in New England—makes explicit what I am calling its aspirations to be a uniquely creole text. Shapin and Schaffer discuss Boyle's interest in alchemy in Leviathan and the Air Pump, pp. 70-1. On "epistemic mercantilism," see Bauer, Cultural Geographies, 2. For important complications of this hierarchical framework, see Delbourgo, A Most Amazing Scene of Wonders; Parrish, American Curiosity; and Iannini, Fatal Revolutions. On the wider, institutional manifestations of a creole consciousness in the late seventeenth-century, British Atlantic world, see Bernard Bailyn, Atlantic History: Concepts and Contours (Cambridge, 2005), pp. 83-97; and David Armitage and Michael J. Braddick, The British Atlantic World, 1500-1800, Second Edition (New York, 2009).

²⁸ Medical Encounters, 3.

²⁹ Miraculous Plagues, 4.

³⁰ Diary of Samuel Sewall (Boston, 1878), 17.

³¹ Ibid.

Despite the Mather family's deep association with New England and Boston in particular, the project outlined in *Illustrious Providences* was intended to extend far beyond Massachusetts Bay. The Mather family is exemplary of what historian Bernard Bailyn calls the "integration" stage of Atlantic history: an era, beginning in the later seventeenth-century, in which "firmly established trade routes joining producers and consumers on both sides of the Atlantic made the ocean a common roadway rather than a forbidding barrier." Far-flung locales throughout the European Atlantic world—including, for example, Scotland, Ireland, the Netherlands, New England, and the West Indies—became intimately linked due to commercial, political, theological, and social ties. The Mather family in particular, Bailyn notes, "formed in itself an effective late seventeenth-century, Atlantic communication system." See Bailyn, *Atlantic History*, 83, 97. Both Increase and Cotton Mather's respective diaries make repeated references to correspondents in the West Indies as well as in Europe, and Samuel Mather was eventually appointed as minister in Barbados. On the Mathers' network, see Francis J. Bremer, "Increase Mather's Friends: The Trans-Atlantic Congregational Network of the Seventeenth Century," *Proceedings of the American Antiquarian Society* 94 (1): 59-96, 1984.

³³ Armory "Printing and Bookselling in New England," in *A History of the Book in America, vol. 1: The Colonial Book in the Atlantic World*, Eds. Armory and David Hall (Chapel Hill, 2007), 96-104.

One reason for the suspension of the Society was that its President, Increase Mather, and key members, including Samuel Sewall and Thomas Brattle, traveled to England in 1688 to renegotiate the colonial charter. While there, however, Society members sought out Gresham College and viewed the rooms of the Royal Society, visited the physick garden in Chelsea, and met with various persons affiliated with experimental and natural philosophy, including Dr. Nehemiah Grew, former Secretary of the Royal Society, and Royal Astronomer John Flamsteed. See Stearns, *Science in the British Colonies*, 158-9. Cotton Mather also re-printed a set of proposals for the systematic collecting and publication of wonder tales in the preface to *Thamaturgus*, his collection of providences in the *Magnalia*. The proposals, nearly identical to those included in *Illustrious Providences*, were distributed to New England ministers by the fellows of Harvard College in March of 1694 (342).

³⁵ Prior to the work of Janice Knight ("Telling it Slant: The Testimony of Mercy Short" (*Early American Literature*, 37.1 (2002): 39-69) and Deborah Kelly Kloepfer ("Cotton Mather's Dora: The Case History of Mercy Short" (*Ibid.*, 44.1 (2009): 3-38), whose articles I address in more detail below, Mather's possession narratives have received scant attention in scholarship, offered primarily as an addendum to a reading of *Wonders of the Invisible World* and thus as further evidence of Mather's own tragic credulity in the face of the witch accusers, or as studies of the accusers themselves. The most sustained discussions of the narratives can be found in Karlsen, *The Devil in the Shape of a Woman*, esp. 222-51. For biographical details about Mercy Short, Margaret Rule, and the Goodwin children, see Norton, *In the Devil's Snare*, esp. 176-81; 293; 38-40.

³⁶ My discussion of possession, both here and throughout this section, is indebted to Karlsen, *The Devil in the Shape of a Woman*, and Elizabeth Reiss, *Damned Women: Sinners and Witches in Puritan New England* (Ithaca, 1997), esp. 93-121. On the empowering aspects of possession, see Nancy Ruttenberg, *Democratic Personality: Popular Voice and the Trial of American Authorship* (Palo Alto, 1998), esp. 31-83.

³⁷ The biographical reference appears in Silverman, *Life and Times*, 22. On Mather and medicine, see Otho Beall and Richard Shyrock, *Cotton Mather: The First Significant Figure in American Medicine* (Baltimore, 1954) and I. Bernard Cohen, *Cotton Mather and American Science and Medicine: With Studies and Documents Concerning the Introduction of Inoculation or Variolation, 2 vols.* (New York, 1980). Two recent articles have brought renewed attention to Mather as a figure in the history of medicine, particularly focusing on his role in the 1721 inoculation controversy: Kelly Wisecup, "African Medical Knowledge, The Plain Style, and Satire in the 1721 Boston Inoculation Controversy," *Early American Literature* 46.1 (2011): 25-50 and Robert Tindol, "Getting the Pox off all their Houses: Cotton Mather and the Rhetoric of Puritan Science," *Early American Literature* 46.1 (2011): 1-23, as well as Silva, *Miraculous Plagues*, 151-79.

³⁸ Cotton Mather, *The Angel of Bethesda* (Barre, Mass., 1972), 5.

³⁹ Angel of Bethesda, 7.

⁴⁰ Qtd. in Norton, *In the Devil's Snare*, 30.

⁴¹ On the role of and justifications for spectral evidence in the trials, see Rivett, *The Science of the Soul*, esp. pp. 223-71; Norton, *In the Devil's Snare*, esp. pp. 194-265; Joseph Fichtelberg, *Risk Culture: Performance and Danger in Early America* (Ann Arbor, 2010), esp. pp. 50-94. For the wider debate in the circum-Atlantic world, see Shapin and Schaffer, *Leviathan and the Air Pump*, esp. pp. 310-31.

⁴² A Brand Pluck'd Out of the Burning (Boston, 1693), 10; emphasis original. All further references will be cited parenthetically as A Brand ms. A Brand was not printed in Mather's lifetime, although, as I argue below, it did circulate as a scribal publication. A bound manuscript copy remains in the "Mather Family Papers" (Box 6, Folder 6) at the American Antiquarian Society, from which I draw my citations. The printed version of A Brand, while it maintains Mather's characteristically inconsistent seventeenth-century orthography, does not recreate the textual emphases (underlining and all caps) that the minister included in his original, scribal publication. This passage in particular has some important instances of emphasis, including the underlined quotation from Luke, 16:30, "If one went unto them from the dead, they will repent" (cf. Burr, "A Brand" in Narratives, 267). Unless otherwise noted, I retain Mather's original emphases and additions. On the practice of scribal publication in New England, see David D. Hall, Ways of Writing (Philadelphia, 2008), pp. 29-80; and Ibid., "Readers and Writers in Early New England," in A History of the Book in America, vol. 1: The Colonial Book in the Atlantic World, (Cambridge, 2000), pp. 117-50; and below.

⁴³ The King James Bible, Luke 16:19-31.

⁴⁴ The seminal treatment of typology, or figural interpretation, on which I draw here and elsewhere is that of Eric Auerbach in *Mimesis* (Princeton, 1953; rpt. 2004) and "Figura," in *Scenes from the Drama of European Literature* (New York, 1959), 28-76. On typology's centrality to theological constructions in New England, see Sacvan Bercovitch, *The Puritan Origins of the American Self* (New Haven, 1975; rpt. 2011).

⁴⁵ Bercovitch, *Puritan Origins*, 43; xxvi.

⁴⁶ The Mercy Short case, *A Brand*, is both narratively and physically incomplete: the lone copy ends mid-sentence, likely due to lost pages. However, the two extant copies of the Margaret Rule case, *Another Brand*, demonstrate the narrative's intentionally open narrative structure. Although the central case terminates in both copies, the second copy includes a "Memorandum" in Mather's hand on the back cover. Mather reports an incident involving specters from the diary of a fellow minister, suggesting his ongoing collection and collation of parallel cases of possession.

⁴⁷ Cotton Mather, *Memorable Providences Relating to Withcraft and Possession* (Boston, 1688), 123. *Memorable Providences*, and the case of Martha Goodwin which constitutes its primary focus, differs in key ways from the other two possession narratives addressed here: it predates the *Brand* narratives by five years and was printed. In it, Mather also addresses the wider sufferings of the three Goodwin children, as well as the general haunting of the family home and property, connecting those events to other stories of supernatural activity in southern New England. All further references will be cited parenthetically as *MP*.

⁴⁸ Cotton Mather, *Another Brand Pluck'd from the Burning* (1693), par. 12. Like its predecessor, *A Brand, Another Brand* also circulated as a scribal publication. Two copies survive: an early

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draft in Mather's hand and another in an unknown hand. Both reside at the Massachusetts Historical Society (Cotton Mather Papers, Microfilm Reel 5). *Another Brand* later appeared in print, although without Mather's authorization. The case history was the centerpiece of Robert Calef's critique of the trials, *More Wonders of the Invisible World* (London, 1700 (rpt. in *Narratives of the New England Witchcraft Cases*, ed. Burr, (New York, 1914) 307-23)). I take the manuscript in Mather's hand as the source for my citations and retain his original emphases. All further references will be cited parenthetically as *Another Brand*.

⁴⁹ Shapin & Schaffer, Leviathan and the Air Pump, 63.

⁵⁰ Of the two manuscript copies of *Another Brand* held by MHS, one is not in Mather's hand and demonstrates clear preparations for circulation as a scribal publication: it is written in a neater, cleaner script, has incorporated Mather's marginal emendations and corrections from the other, likely earlier manuscript, and includes the prefatory attestations from Samuel Aves, Robert Earle, John Wilkins, Dan Williams, and Thomas Thornton. Robert Calef also re-prints these testimonies, along with the full text of Mather's narrative, as part of his *More Wonders*. However, Calef embeds the testimonies in a larger correspondence between he and Mather, claiming that he received a copy of them from Mather in response to Calef's letter questioning the events described in *Another Brand*. This publication history, arguing as it does that Mather added the testimonies to his second copy of *Another Brand*, offers evidence of Mather's creative deployment of the technologies of empirical science to abet truth-claims about the invisible world. See Calef, *More Wonders*, 337-9 and Mather *Another Brand*, unpaginated preface.

⁵¹ Elsewhere in the case study, Mather renders a conversation between Mercy and himself in the form of stage dialogue. As Janice Knight points out, Short's imagined dialogues produce at once conventional Puritan doctrine, fitting for Mather's pen, while also exorcising the young woman's own anxiety over her social and spiritual position in Congregationalist New England as well as her traumatic experiences in captivity among the Wabanaki. In addition to Knight, a number of other critics have speculated that a possible origin for the young women's repertoires of suffering was the actual violence both perpetrated by and visited upon English settlers during a series of battles with Native Americans on the Maine frontier in the 1680s. Mercy Short had, in fact, been taken captive by the Wabanakis during a raid on the settlement of Salmon Falls just two years earlier. Short's entire family was killed in the raid and she spent eight months in captivity, likely starving, often restrained, and, in at least one instance, witnessing the immolation of a fellow captive. On Mercy Short's biography, see Knight, "Telling it Slant," and Norton, *In the Devil's Snare*, 176-82.

⁵² Gaule, *Select Cases of Conscience Concerning Witches and Witchcraft* (London, 1646), 55-6. On the importance of contract theory in New England conceptions of witchcraft, see Karlsen, *The Devil in the Shape of a Woman*, esp. pp. 3-10.

⁵³ On the demonic inversion of Christian ritual throughout the Atlantic world, see Jorge Canizares-Esguerra, *Puritan Conquistadores* (Stanford, 2006); and Bernard Bailyn, *Atlantic History*, p. 66.

⁵⁴ On the Protestant vernacular tradition and the importance of the book in New England culture, see David Hall, *Ways of Writing*, esp. pp. 1-28; *Ibid.*, *Worlds of Wonder* (New York, 1989), esp. pp. 21-70; and Michael Warner, *Letters of the Republic: Publication and the Public Sphere in Eighteenth-Century America* (Cambridge, 1990), esp. 1-34.

- ⁵⁸ Though earlier scholars of New England Puritanism link the rise of certain cultural and narrative forms, specifically the Jeremiad, to the apparent declension of a chosen people, Silva points to the cyclical eruptions of epidemics in the latter part of the seventeenth century as an epidemiological pattern fitted to the Jeremiad's structure of dissipation, punishment, and renewal of a chosen few. See *Miraculous Plagues*, esp. 101-42.
- ⁵⁹ On the slippage between victims and perpetrators in cases of possession, see Karlsen, *The Devil in the Shape of a Woman*, pp.11-13; and Norton, *In the Devil's Snare*.
- ⁶⁰ On the significance of possession in the popular and theological imagination of New England, see Karlsen, *The Devil in the Shape of a Woman*, pp. 222-51; Godbeer, *The Devil's Dominion*, pp. 106-21; and Elizabeth Reis, *Damned Women*, pp. 92-120.
- ⁶¹ In fact, Mather's *Brand* cases are not an isolated example of non-legalistic inquiries into possession. In 1671 the minister Samuel Willard observed and recorded the possession of Elizabeth Knapp, a young resident of Groton, Connecticut. In a lengthy, narrative letter later excerpted by both Increase and Cotton Mather in *Illustrious Providences* and *Magnalia Christii Americana*, Willard documents the spectral tortures and eventual self-incrimination of Knapp but does not, importantly, submit the phenomenon to the scrutiny of the colony's legal system. Instead, the evidentiary burden of Willard's account, replete with similar moments of empirical specificity realism and a strict accounting for time and place, is directed towards empirical observation. On the Knapp case, see Karlsen, *The Devil in the Shape of a Woman*, pp. 244-51.

⁵⁵ Sprat, *History*, 53, 56. On the experimental method as providing a model of peaceable discourse, see Shapin and Schaffer, *Leviathan and the Air-Pump*, pp. 298-310.

⁵⁶ St. Augustine, *Confessions* (New York, 2008), 152.

⁵⁷ The Diary of Cotton Mather, v.1 (New York, 1911), 161.

⁶² On the archival purge following the trials, see Norton, *In the Devil's Snare*, 13.

⁶³ See Nancy Ruttenberg, *Democratic Personality*, esp. 31-82; and Rivett, *Science of the Soul*, esp. 223-70.

⁶⁴ On the practice of scribal publication in New England, see David D. Hall, *Ways of Writing* (Philadelphia, 2008), 29-80; and *Ibid.*, "Readers and Writers in Early New England," in *A History of the Book in America*, vol. 1: *The Colonial Book in the Atlantic World*, (Cambridge, 2000), 117-50. For the seminal treatment in England, see Harold Love, *The Culture and Commerce of Texts* (Amherst, 1998).

⁶⁵ On the practice of scribal publication in New England, see David D. Hall, *Ways of Writing* (Philadelphia, 2008), pp. 29-80; and *Ibid.*, "Readers and Writers in Early New England," in *A History of the Book in America*, vol. 1: *The Colonial Book in the Atlantic World*, (Cambridge, 2000), pp. 117-50. For the treatment in England, see Harold Love, *The Culture and Commerce of Texts* (Amherst, 1998). In *Letters of the Republic*, Michael Warner acknowledges the existence of a "counterpublic literature of foolish songs and sensational accounts" in early modern New England, although he does not theorize it beyond noting its ephemerality. Due to their format—cheap broadsides—such a tradition abjured "inheritability, and, with it, the self-referentiality of a definite tradition" (26). The possession narratives, which survive in part due to Mather's own

anxious notions of tradition, retain a sense of the counterpublic ephemerality with which they originally circulated.

- ⁶⁶ Morgan, *The Puritan Family* (New York, 1966), 173. Morgan further sharpens his now familiar characterization of late seventeenth-century New England Puritanism as "defensively tribal" (173). While the Mather's are definitely defensive, as the reach of their correspondence network demonstrates, such tribalism does not equate to a narrow provincialism.
- ⁶⁷ Shields, *Civil Tongues and Polite Letters in British America* (Chapel Hill, 1997). For a recent complication of Sheild's chronology, see Wisecup, "African Medical Knowledge."
- ⁶⁸ Hall, *History of the Book in America*, vol. 1: *The Colonial Book in the Atlantic World* (Cambridge, 2000), 10.
- ⁶⁹ Warner, *Letters of the Republic*, 20. This description of the Protestant vernacular literary tradition held beyond New England. Both Sarah Rivett and David Hall describe well-developed networks of circumatlantic correspondence and publication among nonconforming communities in Scotland, Ireland, as well as in the West Indies.
- ⁷⁰ For biographical background on Calef, see Burr, *Narratives of the New England Witchcraft Cases*, 291-5.
- ⁷¹ Michael Warner, *Publics and Counterpublics* (New York, 2008), 106.
- ⁷² *Ibid.*, 114.
- ⁷³ Mather's *Curiosa* reside in the archives of the Royal Society. My quotations are taken from a manuscript copy of this letter included, along with a portion of Mather's extant correspondences with the Royal Society, in the Society's letter-book. A microfilm copy of a portion of the letters is held by the Massachusetts Historical Society, catalogued in the Mather Family Papers as the "Frederick Lewis Gay Transcripts, 1632-1786."
- ⁷⁴ I borrow the phrase from Gianna Pomata in "Malpighi and the Holy Body: Medical Experts and Miraculous Evidence in Seventeenth-Century Italy," *Renaissance Studies* 21.4 (2007), 569. While Pomata's treatment of the overlap between theological and empirical interpretations of natural phenomenon focuses on traditions ostensibly distant from Salem (namely Italian and Roman Catholic), I share with her an interest in querying certain ex-post-facto categorical divisions between, for example, the Catholic and the Reformed, the religious and the scientific, or the modern and the pre-modern, especially in the realm of knowledge production. See also Pomata and Nancy G. Siraisi, eds., *Empiricism and Erudition in Early Modern Europe* (Cambridge, 2005), James Delbourgo and Nicolas Dew, eds., *Science and Empire in the British Atlantic World* (London, 2007). On the overlap between Anglo-Protestant and Ibero-Catholic imaginaries in the New World, see Jorge Canizares-Esguerra, *Puritan Conquistadores: Iberianizing the Atlantic*, *1550-1700* (Stanford, 2006).

Chapter Two.

"A new strange disease": Affective Histories in Hans Sloane's Jamaican Case Studies

In writing a History of Diseases, every Philosophical Hypothesis that has inveigled the Writer's mind, ought to be left aside, and then the clear and natural Phenomena of Diseases...should be exactly marked as painters express the smallest spots or moles on the face.

-- Thomas Sydenham¹

While in Jamaica as physician to the colonial governor, Sir Hans Sloane (1660-1753) was called to the bedside of "Emanuel, a lusty *Negro* footman." The patient had taken ill suddenly during the night and by the morning Sloane arrived he lay paralyzed and unable to speak. The case confounded local medical authorities: "*Europeans*... thought him dead, Blacks thought him bewitch'd, and others were of opinion that he was poyson'd." Sloane—a university-trained, London-based physician, naturalist, and eventual president of the Royal College of Physicians—exercised his observational acumen by noting certain symptoms in tension with the patient's behavior. "[Emanuel's] Pulse beat well, neither had he any foaming of the Mouth, or difficulty in breathing," leading Sloane to surmise that either "this was a new strange disease, such as I had never seen, or was not mention'd by any Author I had read, or that he counterfeited it." The physician concludes the latter, based in part on the detail that Emanuel had been ordered to guide the Royal Governor across the island to seize a "great quantity of silver" hidden there by a group of pirates. Sloane thus determines to "frighten him out it," announcing

aloud his intention to "to apply a Frying-pan with burning coals to the crown of the head ... and to put Candles lighted to [the patient's] hands and feet." Faced with the prospect of these tortures, Emanuel recovers to lead the scouting party, "though he came too late for the Pirates" (*A Voyage* cxli-ii). The case of Emanuel offers us multiple, contingent histories. It offers at once a history of the improvisational culture of provincial science, a history of the difficulty of asserting imperial authority on the periphery, a history of the imbrication of Enlightenment medicine with the plantation economy, and, however fleetingly, a history of two individual's affective responses to the brutal violence of Atlantic slavery.

Sloane included Emanuel's case study, along with 127 others, in the first volume of the physician's major publication, *A Voyage to the Islands of Madera, Barbadoes, Nieves, S. Christophers, and Jamaica*. These 128 cases document the illnesses Sloane treated while physician to the Duke of Albermale, Royal Governor of Jamaica in 1687-8. He treats nearly the full spectrum of the Jamaican population: European and African, male and female, slave, servant, and free. Sloane's observations are among the first by an English physician treating non-English subjects outside of the British Isles, and have been little discussed in scholarship.³ Beyond their evident documentary value, however, these narratives offer insight into the multiple functions of the medical case study, particularly the genre's utility for elites to maintain intellectual authority at key moments of epistemological and social crisis in colonial life.

Sloane's brief narratives of illness struggle to identify the etiology for a set of maladies endemic to the fantastically lucrative planter society. In the course of treatments for diseases such as dropsy, gout, and venery, Sloane's patients, both black and white, are

subjected to a regimen of purging, blistering, and scarification. This metaphorics of purgation makes visible the otherwise invisible specter of plantation violence that haunts the entire natural history. Sloane's cases—grounded in empirical specificity, yet resistant to definitive interpretation—thus struggle to rectify the violence and suffering with the development of Enlightenment knowledge, a phenomenon of increasing interest to the wider British Atlantic public in the eighteenth century. As I will demonstrate, Sloane's cases can be read individually or collectively, offering at once matters of empirical fact about the progress and treatment of disease while also allowing in the history of encounter, exchange, and colonial violence that underwrites the production of Enlightenment knowledge. As such, the cases participate in a developing a trans-Atlantic debate over the mass mortality in Jamaica well into the eighteenth-century. I extend this argument briefly to demonstrate the importance of the medical case study to Sloane's notoriously laissez-faire editing practice at *The Philosophical Transactions*, thereby tracing the influence of this inductively open, fragmentary epistemic genre on the development of prose narrative throughout the British Atlantic world.⁴

Sloane is best known today as the Anglo-Enlightenment's consummate collector. His cabinet of curiosities, which later became the founding collection for the British Museum, featured thousands of natural specimens, many he acquired while in Jamaica. Accordingly, Sloane scholarship engages his position at the intersection of commerce, empire, and knowledge production in the eighteenth-century. Recent scholars have focused on his innovative natural historical descriptions, particularly the combination of empirical precision with pietistic interpretation. Kay Dian Kriz, for example, refers to Sloane's *Voyage to ... Jamaica* as a "supernatural history." Despite Sloane's attempt to

impose an empirical order on West Indian nature, Kriz argues, the engravings that accompany the natural history repeatedly conjure the specter of violence underpinning a plantation economy. James Delbourgo further demonstrates how the Enlightenment natural history presents the "human and nonhuman alike as complementary objects of curiosity," thus elaborating on the inextricability of Sloane's empirical practice from New World slavery. In restoring an account of Sloane as a significant figure of literary history in particular, Christopher Iannini extends these arguments by articulating Sloane's "emblematic method" of specimen depiction and description. The specimen in Sloane, Iannini argues, "[functions as] a medium for the revelation of spiritual knowledge and Providential meaning." Rather than reading Sloane as the quintessential demonstration of a "view-from nowhere," this body of recent scholarship on provincial science restores the contested, local conditions to our understanding of early modern knowledge production through this pivotal figure of the English Enlightenment.

Despite a rich contextualization of description in *A Voyage ... to Jamaica*, however, Sloane scholarship has yet to account fully for the case studies included at the end of the lengthy "Introduction" to Volume 1. The lone scholar to treat Sloane's cases in detail, Wendy Churchill, argues for their significance in the history of imperial medicine. Sloane's 128 observations, Churchill notes, were the first to document the treatment of non-English subjects outside of the British Isles. Despite their documentary value, Churchill concludes, Sloane's narratives present a "largely undigested overview of his entire practice." As the above scholarship on Sloane and provincial science demonstrates, however, the medical observations in *A Voyage* carry with them a highly charged set of local conditions. If bringing to light the cultures of provincial science

dictates that matters of fact can never be separated from their context of colonial production, then Sloane's medical cases cannot be isolated from the local conditions in Jamaica, complete with the horrific violence of plantation slavery and the new social formations made available by planter life. By situating Sloane's narratives within the dual contexts of early modern medical writing and the fraught local conditions of the colonial periphery, I aim to demonstrate the observational case study's broader importance as a literary form employed by colonial elites to navigate moments of significant epistemological and social contingency.

Sloane's narratives repeatedly confront the centrality of affect in managing bodily health, and therefore social and epistemological authority, on the colonial periphery. Such management, however, is rarely accomplished smoothly. In order to highlight this, in the final section of this chapter I follow Sloane's cases as they are picked up by metropolitan satirists, particularly William King. Reading Sloane's cases in the dual contexts of colonial life in Jamaica and in their re-appropriation in the satires of Enlightenment print culture, I suggest, opens in them a key aperture through which to glimpse what Elizabeth Maddock Dillon has usefully described as the "colonial relation." According to Dillon, "the colonial relation names the sustaining structure of economic dependence by the metropole on the colony at the core of capitalist modernity and the bourgeois ascendancy in Europe."8 While eighteenth-century satirists condemned the island and Sloane as a way to distance themselves, and an ascendant British empire, from the obvious horrors unfolding there, Sloane's case studies resist such confident judgment, presenting instead glimpses of the tragic intimacy of life in the colonial world. Therefore, by reading Sloane's medical cases in their uncertainty, in their redundancy, and especially in their

contingency we recover the ways that English medicine, literature, and historiography have occluded the affective horrors of settlement in Jamaica.

1. Sloane's *A Voyage to Jamaica* attracted a diverse audience in the early eighteenth century, including other gentlemen virtuosi, fellow botanists, apothecaries, and physicians. The volumes also appealed to merchants, slave traders, and planters residing in both England and the colonies. While the entire natural history gained popularity as an entertaining travelogue, luxury object, and source of practical knowledge about the West Indies, the medical cases in particular became the object of satires. Medical writing about Jamaica helped influence a variety of stereotypes that proliferated in British print culture during the eighteenth century. The credulous virtuosi, the predatory physician, the degenerated planter, and the reformed (or recidivist) drunkard or rake, all can be located among Sloane's cases. The brief narratives garnered such attention in part because they offered one of the earliest depictions in English literary history of what historian Richard Dunn has described as the "demographic catastrophe" of English Jamaica.⁹

Africans and Englishmen alike suffered a staggeringly high mortality rate on the island, leading to mid-eighteenth century descriptions of Jamaica as the "grave of the Europeans." Recent calculations suggest that the death rate for the British in Jamaica exceeded 10% a year, far higher than other locales, even in the West Indies. The white English population on Jamaica was unable to sustain itself through the first half of the eighteenth century—roughly 50,000 European immigrants increased the population by only 5,600. Mortality rates for enslaved Africans, though more difficult to measure, were comparable to and likely higher than those of whites. ¹⁰ Violence, overwork, disease, and

malnutrition assured that the enslaved population on Jamaica would also never maintain itself through natural means. Historian Vincent Brown estimates that throughout the eighteenth century one in every two slaves who reached the island did not survive.¹¹

Whether they were African or English, those who did not die on Jamaica typically did not stay. Enslaved Africans were sold from the island to other sites in the British Atlantic while English transplants typically resided on the island for less than two years. Landowners generally did not live on the island, instead dispatching surrogates who cycled through, along with other merchants. Because of these demographic factors, Jamaica came to figure as a kind of purgatory in the English cultural imagination: a liminal weigh station, perched between life and death. One example of this is the emergence in British print culture of the satirical figure Johnny Newcome. Depicted in cartoons as an upwardly mobile English transplant, Johnny's narratives begin with his arrival in Jamaica, proceed through bouts of illness brought on by both the torrid climate and his own licentious accommodation to the culture of slavery, and terminate in death. Newcome thus became the stand-in for the entire planter class: intemperate, degenerated, and perpetually arriving and departing both the island and the earth.

This mass death unfolded alongside—in fact contributed directly to—Jamaica's rise as the most important colony of the British Empire during the eighteenth century. Beginning with the establishment of a Royal Navy squadron at Port Royal in 1695, the island became both institutional center and economic engine of British Atlantic sugar production. By 1750, Jamaica was the wealthiest British colony in the New World, a status it maintained through the end of the century. It was, as Sloane terms it on the title pages to both the 1707 and the 1720 volumes of *A Voyage*, the "most considerable of her

majesties Plantations in America."¹⁴ Thus, Englishmen writing and reading about Jamaica in the period confronted unprecedented levels of both death and wealth.

Sloane himself embodies these dynamics. His time in Jamaica was brief—only 18 months—yet professionally significant, socially aggrandizing, and highly lucrative. Patronage by the Duchess of Albermale assured his status as a fashionable physician upon his return to London in 1689, his collection of natural specimens and firsthand observation of New World nature elevated him among the naturalists of the Royal Society (he was appointed secretary in 1693), and his marriage to a Jamaican planter's widow secured him a lifelong income from the sugar trade. Sloane's trip was also marked by illness and punctuated by death: the Duke of Albermale was notoriously dissolute, frequently in ill health, and died while in Sloane's care. The medical cases included in *A Voyage* therefore mediate in literary form the radical transformations wrought on Sloane's life, on the English body, and on the English nation by the settlement of Jamaica.

Sloane confronts these dynamics by turning to the observational case study. As we saw in the previous chapter, the combination of a non-anomalous, individual subject with the privileged physician-as-witness characterized the case study as it circulated among early modern medical practitioners, typically distinguished generically as *observationes* (observations) or *curationes* (cures). ¹⁶ University-trained physicians used their cases to emphasize bodily witnessing and note-taking (as opposed to consultation of patient fluids at a distance) as fundamental protocols of learned medicine. Due to the lack of institutional integration by organizations such as the Royal College of Physicians, however, the case functioned primarily as an instrument employed by and circulated

among practicing physicians.¹⁷ For learned physicians like Sloane, and in contrast to the use of the case study we saw by Cotton Mather and the members of the Boston Philosophical Society, such brief histories generally eschew contextual narrative details—especially patient biography or patterns of behavior that could be marshaled towards religious readings of illness as portent—in favor of the isolated observation of symptoms, disease, and treatment.

This more probative strain of the case study employed by Sloane recalls Francis Bacon's interest in the "deviating instance" as a catalyst for the reform of early modern knowledge production. For Bacon, anomalous or otherwise unresolved phenomena cultivated curiosity while disrupting received wisdom. Therefore, reform-oriented natural philosophers pursued wonders as sites of possible knowledge, since, "the sun, which passeth through pollutions ... itself remains as pure as before." Emergent ways of looking brought new worlds, both big and small, from across the cosmos or across the ocean, into focus for European virtuosi. And access to such new worlds inspired the Enlightened observer to collect wonders with the same confidence that inductive method will in time reveal the natural order to which each deviating instance belongs. Early modern scientific journals, including *The Philosophical Transactions* and its French counter-part *Le Journal des Sacvans*, manifest such interest by printing and re-printing reports of, among others, medical wonders well into the eighteenth-century. 19

Such wondrous phenomena engendered hope for two reasons. First, rational contemplation of individuated instances could combat folk superstition as well as atheistical skepticism since, as Robert Boyle reasoned in *The Christian Virtuoso* (1690), "God never wrought a Miracle to convince Atheists, because in his Visible Works he had

placed enough to do it."²⁰ A second, perhaps more fundamental source of optimism rests in the possibility of divine truths accessible only to the trained, attentive observer.

According to Boyle, the pious natural philosopher "will examine ... Miracles, Prophecies, or other Proofs, said to be Supernatural ... [and] if the certain and Genuine Characters of Truth appear in it, He will be more thorowly convinc'd of it than a less Skillful Man."²¹

Such faithful skepticism fosters a stance of inductive openness, akin to, but distinct from, that exercised by the Boston Philosophical Society. Rather than aiming towards direct access to the invisible world, the hopeful, Enlightened virtuoso trusts that the systematic, empirical study of the natural world will cultivate a faith grounded in irrefutable evidence. Incomplete knowledge is therefore essential to working towards this position.

For instance, in the tract "Suspicions about some Hidden Qualities of the Air" (1674; emphasis orig.), Boyle speculates about possible microscopic correspondences between the heavens and the earth. Reasoning from phenomena previously understood as wondrous (i.e., the operation of a loadstone or the oxidation of metals by salt-peter) Boyle posits that a "multitude and variety of Bodies ... lye buried out of our sight" not only below the earth but also possibly above, among the stars. He writes:

[T]he very small knowledge we have of the structure and constitution of Globes many thousands or hundred of thousands of miles remote from us...(as with excellent Telescopes I have often, with attention and pleasure observed, particularly in the Moon,) this great imperfection, I say, of our knowledge may keep it from being unreasonable to imagine, that some if not many, of those bodies and their effluxions may be of a nature quite differing from those we take notice of here about us, and consequently may operate after a very differing and peculiar manner.²²

Boyle thus summarizes the hopeful nature of imperfect knowledge. Human shortcomings, here brought to light via the mediation of scientific instruments, point the virtuoso towards the intellectual work yet to be done, holding out hope for fulfilled knowledge in

the future. In addition to drawing on the Hippocratic tradition, therefore, Sloane's medical case studies need to be situated within the epistemological archetype exhibited here by Boyle, the physician's intimate friend and correspondent. Similar to Boyle's telescope or Hooke's microscope, the Hippocratic medical case study functions for Sloane as a rhetorical instrument with the capacity to extend observation across time and space, bringing to light new knowledge and new worlds.²³

However, due to medicine's focus on the interior of a body, the medical case as narrative was informed by understandings of the occult, or hidden, on the part of both doctor and patient. Although the attentive observation recorded in Hippocratic practice corresponded to the protocols of the New Science, the persistence of ancient therapies maintained narratives of disease in which the invisible was made visible through the intervention of the physician. Though contested amongst learned physicians, a widespread understanding of disease in the early Enlightenment was as putrefaction: a decay or corruption within the body, often caused by the build up of a humor or fluid, which required an evacuative intervention. In part because of the competition among various healthcare providers, learned physicians persisted in employing Galenic therapies based on evacuation long after humoral theories had fallen out of favor in universities. Patients willingly underwent—perhaps even demanded—purging, bloodletting, and evacuation, out of an assumption that such outwardly visible signs signaled the expulsion of putrefaction and the consequent restoration of health. Illness, therefore, had a beginning, middle, and an end. And over the course of such narrative unfolding it crossed from the realm of invisible to the visible with the aid of the doctor. Therefore, even as medical cases asserted a learned physician's expertise and participation in the burgeoning Atlantic network of virtuosi, so the stories such cases told always conjured the invisible connections, among people, places, and their physical or mental states.²⁴

Due in part to this tension, the print publication of case studies came under epistemological and professional scrutiny in the late seventeenth and early eighteenth century. Despite a shared desire among learned medical practitioners—surgeons, physicians, and anatomists—to escape the accusations of secrecy and self-interest that accompanied proprietary medicine as practiced by apothecaries and empiricks, the sharing of cases in a res publica medica risked exposing trade secrets and, perhaps more damningly, revealing the kind of incomplete knowledge that a virtuoso like Boyle could find hopeful. A colleague of Sloane's, William Cockburn, responded powerfully to this anxiety in his 1703 treatise, The Present Uncertainty in the Knowledge of Med'cines. Writing in his capacity as physician to the royal fleet, Cockburn attached the advancement of medical knowledge to scientific, professional, imperial, and religious motivations. The systematic collection and publication of medical knowledge would advance physic beyond the vagaries of individual practice, thereby elevating medical professionals above "Quacks and Nurses" via the collective pursuit of a higher order of knowledge: "a true and accurate Theory of Diseases." Doing so, however, required acknowledging professional ignorance regarding both the cause of disease and the operation of certain medicines.²⁵

As an example, Cockburn cites "Jesuits pouder," a compound derived from the bark of the Peruvian chinchona tree and introduced into European medical practice in the early seventeenth century as a treatment for malarial fevers. Chinchona bark stands out in the history of European therapeutic medicine as among a small number of advances made

prior to the emergence of germ theory. In the early modern period and, arguably throughout the eighteenth century, advances in medical knowledge did not beget advances in care. Fuller understandings of anatomy, such as Harvey's accurate description of the circulatory system, or new theoretical conceptions of disease that challenged the Galenic doctrines, failed to materially change the practice of medicine or improve outcomes for individual patients. University-trained physicians may have known more, but people in their care did not feel better. Competing forms of treatment (e.g., from empiricks, secretive apothecaries, domestic medical providers, or via spiritual or other folk therapies) could even be considered preferable to the expensive and typically ineffective therapies of licensed of doctors. Unlike most other therapies employed by early modern and Enlightenment physicians, Jesuit's bark actually worked as a specific medicine to combat malarial fever. As one historian observes, "Peruvian Bark [as it was also known] was the most wonderful of wonder drugs before penicillin."

However, in Cockburn's opinion, a lack of understanding about such an exotic medicine contributes to the belief that it "operates almost like a charm." To combat superstitious quackery, and thereby prevent misuse of other *materia medica* introduced by imperial expansion, Cockburn encourages "Candid and Honest Physicians to set about a sedulous Inquiry for a true Theory of Disease." Central to this project is admitting stubborn instances of inconsistency in some medicines, as Cockburn does by openly acknowledging the failure of "Jesuits pouder" against certain fevers in Virginia. "I am sensible how ready some People may be to object against my thus exposing the Uncertainty of Med'cines," he acknowledges before asking, "who but such Pretenders ever wou'd have the World think that our Knowledge ... is Infallible?" Cockburn's

pointedly politico-religious language (he uses variations of "pretender" five times in two pages, clearly evoking the Stuart claimant to the English throne) indicates more than anxiety over professional esteem. Participation in the *res publica medica*—primarily via the attentive observation of diseases and their treatments exchanged in networks spanning the Atlantic world—would distinguish the practical English physician from not only the apothecary, empirick, or quack but more significantly from the Spaniard, Papist, and Jacobite. More than merely a conduit of detached medical knowledge, the Atlantic medical case study carries conflicting epistemological, social, political, and religious meanings for virtuosi of the early Enlightenment.²⁸

Despite Cockburn's polemical stance in favor of openness, English medical publications of the early eighteenth century generally subordinate the individual patient case to the status of example or demonstration, thereby circumscribing interpretation and meaning to an already expounded theory or cure. For example, Cockburn's own trade publications—*Profluvia Ventris: Or, The Nature and Causes of Looseness Plainly Discovered* (1701) and *Sea Diseases: Or, A Treatise of their Nature, Causes, and Cure* (1706)—both include a set of cases. However, the interest in theoretical understanding of an individual disease or class of ailments dictates the number and character of the cases. The five "histories" included in *Profluvia Ventris* follow a standard structure of a brief patient biography (limited to details such as sex, status, and occupation), symptoms, course of treatment, and a positive outcome. The thirty "observations" included in Sea Diseases, though somewhat more varied in their symptoms and outcomes, are further circumscribed by the division of the treatise into two sections: the "doctrine" and "maxims" of sea diseases are established before "patient histories" deductively ratify the

theory. Other treatises, such as Thomas Bate's *An Enchridion of Fevers* (1709 2nd Ed.), follow this convention by dividing the content between a theory and its demonstration in individual cases. Rather than conjuring possible meanings of disease as in the report of a probative medical anomaly, such case histories merely serve to, in Cockburn's words, "confirm the theory" which has been previously expounded and thereby attest to the efficacy of a given course of treatment.³⁰

In his preface to the second edition of Sea Diseases Cockburn expresses frustration with institutional anxiety over the publication of case histories, particularly when presented without an accompanying theory of disease. Cockburn attempted to coordinate the exchange of observational cases among surgeons on board vessels in the West Indies. Specifically, Cockburn wanted to collect "a good number of Orderly Observations" from those physicians familiar with the operations of disease in the tropics and disseminate them throughout the fleet. Such open exchange of partial medical knowledge acquired through experience would hopefully assure that "Expeditions to these Parts should not so often miscarry through the Loss and Sickness of Seamen," he reasoned. The Royal College of Physicians and the Navy Board rejected Cockburn's proposal, wary to pass judgment, via an endorsement in print, on "those Particularities which differ from our practice in these Parts of the World [i.e., England]: as being perfect Strangers to what does, or does not succeed in the West Indies."³¹ The sharing of West Indian medical cases, owing in part to the region's importance to the developing empire as well as to the Enlightenment promise of new knowledge to be gleaned through imperial expansion, was professionally, politically, and epistemologically fraught for individual physicians in the early eighteenth century.

Sloane's pedigree stands his cases in good stead, however. For the shaping of his practice, and therefore his cases, Sloane's most direct debt is to his mentor, Thomas Sydenham (1624-1689): celebrated London physician and author of the most influential English medical guides of the eighteenth century. Known as the "English Hippocrates," Sydenham championed physic grounded in observation rather than theoretical inquiry, a stance forcefully elaborated in his *Observationes medic*ae (1676). As evidence of his distaste for medical theory, an early biographer recounts that Sydenham, when asked to recommend a book on the subject, offered "Don Quixote; it is a very good book—I read it still." Medicine, to Sydenham, was best learned via practice rather than study of *materia medica* or anatomy. "I know an old woman in Covent Garden who understands botany better," Sydenham reportedly told a young Sloane. "As for anatomy, my butcher can dissect a joint full and well. No young man ... you must go to the bedside; it is there alone you can learn disease." 32

Sydenham's own contributions to the *res publica medica*, specifically his *Observationes medicae* (1676), elaborate a more complete (and more earnest) explanation of his approach to both the practice and discourse of medicine. "I think our Art may be best improved by a History, or a Description of all Diseases," Sydenham writes, carefully distinguishing his "History" of diseases from a "Theory" and dismissing the latter as "the trifling and unprofitable search after Remote Causes." Narrating a history of disease has a pragmatic, humanist function: to dissuade physicians from the "Art of talking" and turn them instead to the "Art of Healing." In this attempt to bring order to illness and disease both through systematic, empirical, and experimental research, Sydenham insists that diseases have a regular pattern human beings can discern

and employ to ease pain. And that pattern, presumably, is best apprehended via observation and represented in narrative.

Sydenham does briefly theorize about the origin of disease more generally, offering a combination of mechanical philosophy and Providential theology: "Seeing it has pleased GOD, the Governour of all things, that Human Nature should be fitted to receive the various Impressions that come from abroad ... [Human Nature] must be subject also to many Diseases, which partly proceed from Particles of Air all agreeing with the Body, which ... have insinuated themselves into it." Unlike what we saw from Cotton Mather in chapter one, here disease is not a product of the fundamental disorder of man's fallen state, but instead follows a pattern that can potentially be understood through careful, dispersed observations. The bulk of Sydenham's "Observations" is given over to descriptions of the "epidemick constitution" manifest in three-year periods between 1661-76, demonstrating the inductive thrust of his intellectual project.

Sydenham thus rejects both a merely climatological or Providential theory of disease, instead arguing for a cyclical, temporal pattern that he repeatedly alludes to but never claims to resolve.

Rather than orienting towards the kinds of certainty associated, for example, with sermonic readings of epidemic disease as punishment for an individual or a community, as we saw in chapter one, Sydenham advocated the kinds of collation technologies driving natural history: observation, description, and collection. "It is necessary," Sydenham writes, "that all diseases should be reduced to certain and definite species, with the same diligence we see done by Botanick Writers." Sydenham further distills his rhetorical program via a direct analogy to natural historical description: "In writing a

History of Diseases, every Philosophical Hypothesis that has inveigled the Writer's mind, ought to be left aside, and then the clear and natural Phenomena of Diseases ... should be exactly marked as painters express the smallest spots or moles on the face." Sydenham thus serves as a primary example of what Michel Foucault calls the "botanical model" in medical thought. In such a model, disease, like a botanical specimen, "is perceived fundamentally in a space of projection without depth, of coincidence without development... The first structure provided by classificatory medicine is the flat surface of perpetual simultaneity. Table and picture."

Sloane, as a practical and observational physician on the model of Sydenham, approaches the science of medicine as empirical, inductive, and discursive. However, Sloane's Jamaican case studies, though rooted in the classificatory project endorsed by Sydenham, nevertheless carry with them a set of local meanings. As I demonstrate in the following section, the "epidemic constitution" Sloane observed among the planter class and their slaves could not be reduced to a Foucauldian "coincidence without development." Therefore, in Sloane's cases we can read the physician's struggle to reconcile the his confidence that the colonial experiment will contribute to the Enlightenment knowledge network with the notoriously high mortality rate for the Africans and English in Jamaica. Sloane's patients, meanwhile, struggle with the horrors endemic to life in colonial Jamaica, horrors which the case studies make visible over and over.

2. Sloane's collection signals a social and epistemological shift within the field of early modern medicine, a fact made evident by their formal position within *A Voyage*.

Sloane's cases stand apart from one another on the page, and the collection, though it comes at the close of the *Introduction*, is marked by a sub-heading and a page break (see Appendix iii, iv). Due to this doubled, formal isolation Sloane's patient histories demonstrate the function of the case study as a transitional, epistemological instrument. The non-integrated nature of Sloane's cases corresponds to what Lorraine Daston and Katherine Park refer to as the "grainy" nature of early modern scientific narrative. In the late seventeenth century "strange facts" were separated out from explanations, representing a short-lived "epistemological autonomy" from an Aristotelian incorporation of individuals into generalities and the Enlightenment flattening of data into what Foucault calls the medicine of "Table and Picture." Unlike its modern descendant, then, the early modern medical case functioned less a tool of institutionally integrated, or clinical, research and more as what medical historian Gianna Pomata terms an "epistemic genre." That is, "a framework for gathering, describing, and organizing the raw materials of experience."

Literary critic James Chandler has identified this strain of the case study more broadly as the "individuation form": a brief narrative that details a single, localized phenomenon, demonstrates a high degree of empirical specificity, and emphasizes observation over interpretation. The individuation form contrasts with the "judgment case," a mode indebted to the tradition of casuistry, or case-based moral reasoning, and most familiar via the term's deployment in legal discourse. ³⁹ The casuistical tradition—associated in counter-Reformation Europe with papacy and critiqued famously in Pascal's *Provincial Letters* (1660)—understands the case as an instantiation of an already established system; an exemplum that justifies an abstraction such as "Providence" or

"Law." Similar to Chandler, Lauren Berlant points to a productive tension between inquiry and adjudication in the case. According to Berlant, although the "idiom of judgment" unifies the genre across disciplines, there is nevertheless a kind of potential energy at work in the form. Rather than "reading the case study as the presentation of an enigma and its resolution," Berlant contends, "the case can incite an opening, an altered way of feeling things out, of falling out of line."40 Or, as André Jolles writes in his taxonomy of "simple forms," the case "is the place where are realized the swaying and swinging of the mental activity that weighs and ponders; ... the place where a weighing of things is carried out, but not the result of that weighing."41 In a similar manner, Sloane's medical cases resist tautological resolution. Instead they derive narrative energy from the pondering of possible outcomes and possible meanings. He thus turns to the case study both as a way to differentiate himself professionally—to demonstrate his awareness of the rising power of observation among learned physicians and metropolitan virtuosi—and as a means by which to forestall judgment regarding the catastrophe unfolding in Jamaica.

Despite this inductive openness among the cases, *A Voyage to Jamaica* casts

Sloane's professional life as an early Enlightenment parable of upward mobility: an enterprising young man born on the colonial periphery rises to the esteemed position of learned, metropolitan gentleman through his own intellectual labor. The text positions

Sloane's trip to Jamaica as an extension of his childhood interest in "those kinds of Curiosities, which were to be found either in the Fields, or in the Gardens or Cabinets of the Curious" in his native Killyleagh, south of Belfast (*A Voyage*, unpaginated preface). *A Voyage* then attests to his transformation through the sophistication, size, and luxury of

the volume in which the reader encounters that uplift narrative. While Sloane's personal experience on Jamaica can be retroactively marked as pivotal within the broader arc of his own life, the individual, observational case studies do not easily correspond to a triumphant narrative.

The title page of Sloane's first volume of A Voyage to ... Jamaica offers a complex a cognitive apparatus in which to situate an understanding of Jamaican disease. The full title divides the text itself into three primary sections—a "Voyage," a "Natural History," and an "Introduction"—each with sub-sections—"the islands of Madera, Barbados ...," "Herbs and Trees, Four-footed Beasts, Fishes...," and "Inhabitants, Air, Waters, Diseases ... ". The tripartite division established both syntactically and typographically on the title page is re-enforced by the running titles above each section in the body of the text ("The Introduction," "A Voyage to Jamaica," and "The Natural History of Jamaica"). Nevertheless, Sloane's fundamentally Enlightenment division between nature and culture—re-inscribed in the divide between the New World objects of knowledge and their apprehension by a curious, European subject—breaks down within each section. References to previous colonial enterprises in the West Indies, to the mixture of Carib, African, and European social practices among creoles, to the transported natural specimens from Europe and Africa which appear in the New World landscape, and Sloane's personal experience all embed specimen description within a deeply sedimented history of violence and exploitation. In fact, far from being a disinterested selection of representative cases, the full collection, reveals a broader narrative arc spanning Sloane's entire time on the island. Early cases include telling details of the sea voyage (he treats the Captain, pustules break out when they near the

line), the arrival in Port Royal is evident from the above discussion of seasoning, and a growing familiarity with the island is clear in later cases through more generalized comments on a patient's character as well as excursions into the Jamaican countryside reflected in encounters with local medical practices.

Kay Dian Kriz has linked the generic hybridity of Sloane's text with the multiple publics he imagined. She describes *A Voyage* as an "eclectic natural history," or a text which attempts to not only catalog the natural order but also to contain the "diverse array of humans inhabiting the outer limits of an empire that was in flux." Such a reading envisions Sloane's text as perched between an Enlightenment natural history and the early modern genre of *historia*, a narrative form which combined understandings of the natural and the human and imagined a diverse a readership of learned empiricists who could balance observational acumen with erudition. Sloane's 128 medical cases are therefore weighing multiple meanings for multiple audiences: they are weighing the meaning of a constellation of symptoms, the fitness of a particular course of treatment, the utility of a given *materia medica*, the behavior of subjects under treatment, the fitness of the island of Jamaica for investment, the wider possibility of improvement through colonial enterprise, and, finally, all of these factors as they reflect on the practitioner himself.

Perched as they are between early modern and Enlightenment literary forms, as well as systems of knowledge, Sloane's Jamaican cases function akin to the various "genres of the present" described by Lauren Berlant in *Cruel Optimism*. Berlant contends that such abbreviated, temporal genres manage the "simultaneous, incoherent narratives ... that mark the unfolding activity of the contemporary moment." Published at a time

when English culture was beginning to confront the radical excesses (social, financial, and bodily) made possible by a plantation economy, Sloane's cases I contend, depict an affective present on English Jamaica. Because of this orientation towards the colonial present, Sloane's cases resist tautological resolution, deriving narrative energy from the pondering of possible outcomes and possible meanings. The brief narratives of patient illness register the historical present of colonization, a present in which epistemological and imperial authority remain contingent upon the affective response of colonial subjects—both European transplants and enslaved Africans—to the ongoing horrors of English Jamaica.

Sloane explicitly justifies the inclusion of medical case studies in a natural history based on their pragmatic utility. "I think it necessary to give an account of the diseases in Jamaica, and how I endeavor'd to relieve them," he writes. "This may be useful to some, as I'm sure would have been to me, as to have met with any such Observations before journeying thither." His purpose is not the presentation of novel medical knowledge, but instead to prove that one "will find the same Diseases here as in Europe, and the same method of cure." He even goes so far as to include "some very ordinary Observations and Methods, that this matter may be very plain" (*A Voyage* xc). Sloane's cases thus serve as a kind of practical field guide to health in Jamaica, a fact abetted by a marginal index, organized by disease (e.g., "Of a dropsie," "Of a colick," etc.) and running through the entire section (see Appendix iv).

However, such easy utility implied by the index is undermined by the frequent representations of unmanageable affects, in both doctor and patients. Sloane's most direct statement of the relationship between affective disposition and patient health comes in a

case indexed as "Of one who dyed of an ill opinion of his Health and Melancholy." The patient, Isaac, "belonged to the Crawle plantation" (A Voyage cxxx). 45 Sloane was summoned to treat Isaac after the latter had been greatly weakened by unexplained vomiting and diarrhea. Sloane prescribes a course of medicines to ease the symptoms, but his interventions fail to spur a full recovery. Despite the admonition that he was well, Isaac remained bed-ridden. Sloane turns from treating his body, to considering Isaac's mental disposition. Here, unlike the above-mentioned case of Emanuel, Sloane tries positive re-enforcement to rouse Isaac:

his mind being very much sunk within him, I advis'd the People about him to chear [*sic*] him as much as possible, to ease his mind, and get him up out of Bed. He died being very morose and Melancholy, and though I took much pains to examine him nicely, I could find no Disease, but only he said he was sure, say what I could, that he would not recover (cxxxi).

Sloane succeeds in healing Isaac's apparently physical maladies through firsthand observation and the exercise of his superior medical knowledge. And yet when the physician's epistemological authority fails to elicit the proper patient complicity, affect shoulders the blame. "The Passions of the Mind, both Hope and Fear," Sloane concludes from Isaac's case, "have a very great influence on the Body" (cxxxi). Generalizable from this instance is the power of the colonial experience over the mental, and therefore bodily, well-being of colonial subjects, and the physician's struggles to effectively manage patient affect.

While the connection between the passions and physical health has a long history in European medicine, hope and fear were affective dispositions often associated with the New World. The promise and the peril of "becoming colonial," Kathleen Donegan has recently argued, manifest bodily in the medical phenomenon known as seasoning: a brief,

intense fever which struck Europeans arriving in the New World. He West Indies and other parts of the so-called torrid zone presented particularly acute cases of seasoning, leading a number of Sloane's contemporaries to initiate a discourse of "hot climate" medical literature that differentiated disease both racially and geographically, what historian Gary Puckerein has labeled the "climate-race-health" nexus. 47

The urgency for Sloane to produce a collection of apparently mundane observations arises not only from a lack of information about life in English Jamaica, but also from this deliberate campaign of mis-information about European health in the West Indies that Sloane sets out to counter. Before journeying to the islands, Sloane "was told that the Diseases of [Jamaica] were all different from what they are in Europe, and to be treated by a differing method" (A Voyage xc). Climatological notions of the etiology of disease relied on firsthand accounts of seasoning—typically figured as a brief, but intense fever which struck European but not African arrivals in the tropics—thus enlisting medical theory as a justification for racial enslavement by pathologizing Caribbean nature and climate. The ideological association of race, climate, and health also proscribed alterations in the behavior of whites in the tropics, leading to a medically supported belief that refraining from labor was constitutionally ordained for Englishmen in the torrid zone, or that subjecting oneself to such dangers was the cost of gaining great wealth from engaging in Caribbean trade. 48 Therefore, when Sloane claims that, despite fears that his treatments might do more harm than good in the unfamiliar climate, he finds the opposite to be true, his assertion is as much about medical science as it is about the perceived constitution of the English nation in Jamaica.

Such assertions ran counter to climatological English medical theory, a set of beliefes initiated in part by Thomas Trapham's Discourse of the State of Health in the Island of Jamaica (1679). 49 Trapham's propagandistic treatise was designed to advise colonists of the change in customs necessary to maintain health in a tropical environment. Trapham rejects the case study form altogether, instead ascribing to Galenic theory of the climatological influence over bodily humors. He therefore begins his Discourse with discussions of the island's air and water quality as well as its key topographical and geographical features, particularly as they differ from the "northern Climes" before explicating a theory for treating certain island diseases. ⁵⁰ Despite stressing his firsthand observation of Jamaican "matters of fact," Trapham filters Jamaica's "Air, the Place, and the Water" through the tropes of romantic travel narrative. Subtle asides position the reader as colonial emigrant, arriving first in Port Royal and traveling through the surrounding countryside. "Thus we bring our new Comer from the sandy point to the more apparent Terra firma of Jamaica," Trapham's narrator declaims as description shifts from the seaside to the inland settlements of Ligania and St. Jago. He guides his reader's attention variously to the island's pastoral beauty ("while we journey, refresh our sight sometimes with the numerous herds of larger oxen ... and delight our ears with the sweet breathed Cowes, whose lowings echoing make rural musick ... here we must needs drink, as custome is, and by drinking commend the fame, as the best of any River water in Jamaica"), the English colonials' industrious improvements ("on the margin of the rising hills which still terminate our dexterous aspects; the most remarkable sugar-works allure us thither"), and the alluring curiosities of New World nature ("I will now only refresh our [New comer] with a surpassing rarity ... worth his pains to visit"). 51

Following this enchanting tour of an improved Jamaica, Trapham's *Discourse* describes diseases chronic to the island and recommends fundamental alterations in English medical practice as well as social customs in order to maintain health. While Jamaica does not present new or unique contagious diseases, among the "endemic evils" Trapham addresses are the "Diarrhea or Flux," a distinct class of fevers, "the Dropsie" that rages among servants, and what he calls the West Indies' native disease, the "French Pox," or syphilis. Though familiar to European medicine, each disease requires modulation in treatment to accord with the island's tropical climate. In keeping with the theory of correspondences, or the belief that "Nature is the infallible curer of every distemper," Trapham repeatedly suggests the use of local cures in response to local ills. Madeira wines, for example, produced in a climate more approximate to that of the West Indies, far surpass French Clarets, white wines, or sacks as the ideal cordial to be taken in Jamaica. Furthermore, Trapham asserts that certain English customs must be adjusted to life in Jamaica: "The quantity, times, and quality of our English Drink and Food ought ... to be wholly changed for other more natural and agreeable to the clime and circumstances of living."52 In addition to taking Madeira, the Jamaican colonial should drink chocolata rather than tea, substitute candied citrus fruits for cheese as a digestive aid, and dress the board with lighter seafood dishes (he is particularly fond of turtle) instead of salted beef or pork. Despite Trapham's claim to its healthfulness, the island requires an entirely new doctrine of consumption, since, in "the Tropicks, ... all motions being necessarily more quick, the punishment of all Intemperances afford less time for Repentance."53 In their habits of eat and drink, in other words, the Englishman in Jamaica should follow the

Spaniard before him. The adoption of Iberian alimentary customs by Englishmen in Jamaica, however, carries political, religious, and racial implications.

Responding to this discourse, Sloane claims that, despite fears that his treatments might do more harm than good in the unfamiliar climate, he finds the opposite to be true: "My medicines had the better operation, because people had a belief I could help them, and submitted to the taking of Remedies in the order they were prescribed, without changing the Medicines, altering the method, or judging harshly in case the Person died" (A Voyage xc). Not only is Jamaica safe for Englishmen, Sloane claims, but supposedly degenerated Englishmen in Jamaica are responsive to calls for improvement in health and lifestyle. Sloane repeatedly notes the docility of some patients—demonstrating the proper maintenance of social hierarchies in the New World—and, as in the case of Isaac, laments the failure of others to attach their hopes to the learned physician. Affect—both as fear of the tropics and faith in the physician—is thus integral to Sloane's medical practice and structures the case studies.

To allay patient fears and gird their faith, Sloane insists that illnesses in Jamaica are no different from the diseases in England. He even outright questions the existence of a seasoning fever. In concluding the case of a fever that struck "Richard, a white servant," Sloane observes:

A great many were of opinion that this Fever was what is call'd the Seasoning ... That this fever was not so, is manifest in that not only we New-comers were taken with it, but likewise many of the ancient inhabitants of the place ... and that a great many who were lately arrived, escap'd this (*A Voyage* xcviii).

Sloane's firsthand witnessing and recording of patient histories in the New World allows him to inductively track who the fever strikes and when, thereby dismissing the ideologically and racially motivated assumptions about its origins in climatological theories of disease.

However, the confidence with which Sloane is willing to dismiss, or at least reduce, seasoning runs somewhat in tension with Richard's experience as narrated in the specifics of the case study. Richard's fever was part of an outbreak that struck many of the Duke's household (including Sloane himself) shortly after their arrival on the island. Perhaps motivated by a fear of seasoning or by the general morbidity of the tropics, Richard's life-threatening symptoms are exacerbated by a shared panic among those around him. Sloane visits the patient late one night, finding that "[Richard] had a mighty oppression and anxiety on him, a very great difficulty in breathing, and could scarce speak." Richard's "vast Agony" mirrors the fear of those around him, whose collective assessment of the patient Sloane captures when he notes that "everyone thought [him] a dying" (A Voyage xcvii). Sloane modifies the therapies employed by another physician, leaving off cordials and removing heavy blankets to ease the patient's perspiration. In a few days Richard does recover, but not before the case registers the shared, affective shock of arriving in Jamaica. Richard's survival and Isaac's deaths owe as much, in Sloane's estimation, to each patient's belief in the doctor's treatments as to the superiority of his medical knowledge. The assertion of Sloane's intellectual authority as a metropolitan physician as well as his social authority over Isaac and Richard facilitates the representation of intractable patient affects.

The instance of seasoning notwithstanding, Sloane's collection departs from generic convention by refraining from medical hypothesizing in the majority of his cases.

As noted above, and as Trapham's *Discourse* exemplifies, English medical publications

(as opposed to manuscript patient histories circulated among physicians or recorded in personal casebooks) of the early eighteenth century generally subordinate the individual patient case to the status of example or demonstration, thereby circumscribing interpretation and meaning to an already expounded theory or cure. Sloane's collection, however, is not attached to a medico-theoretical apparatus and makes no unified claim about the maintenance of health on the island or the operations of one, specific disease. Sloane states his resistance to theorizing outright during a dispute with another physician over the course of treatment for a patient suffering from an insistent cough. "I desir'd [of the physician] that we should put off talking of the Theory, and come to the Practice," Sloane writes, "perhaps we might very well agree in the Medicines he should take, as ... very often happens to Physicians, who may disagree in the Theory" (Voyage xcix). Accordingly, Sloane's cases address a variety of diseases as they manifest in and are treated across the full spectrum of Jamaican society, regardless of gender, race, status, or age. 54 Structurally therefore Sloane's cases are spare. Each includes limited patient information (generally name or initials, age, gender, race, occupation, and physical description) followed by symptoms, course of treatment, and outcome. In this sense, the indexes reduce the case to the description of a disease, thereby flattening the lived, colonial experience, from narrative to non-narrative forms of knowledge. However, it becomes increasingly easy to discern multiple meanings for the narratives particularly as they turn to the representation of patient affect.

For instance, the opening case, indexed as "Of a *Cholera Morbus*, want of Appetite, &c," narrates the treatment of "Captain *Nowel*, aged about forty, Cholerick, who had drunk very hard, and was very thin of flesh." Nowel, presumably Captain of the

Assistance, the Duke of Albermale's frigate, complained of frequent "Vomiting, and going often to Stool." Sloane prescribes therapies to ease the symptoms and encourages a diet of "Rice Milk, and Milk-Meats" to soothe the patient's stomach. The illness returns, owing, Sloane suggests, to the patient's intemperance. Nowel then complains of a pain in his breast, which the physician speculates to have arisen from damage to the thorax caused by self-medicating with daily drams of brandy. Subsequent treatments prove futile and Sloane concludes by observing that Nowel, "reduc'd ... his Stomach to that weakness, that at last, since I came from Jamaica I have been told he could keep nothing therein but the Milk of a Negro Woman he suck'd" (A Voyage xc-i). This cautionary tale about proper therapeutic control ends as Captain Nowel seeks physical and emotional relief from the excesses of English Jamaica. Instead of an insight about the treatment of cholera in the colonial space, as suggested by the index, Sloane's history offers a static tableau of the social, racial, and sexual intimacies that emerge in a plantation economy.

And Captain Nowel is hardly the only such case. The collection often contains subjective assessments of patient behavior and Sloane's prescriptions come to read like punishments. Nearly half of Sloane's observations cite drunkenness or venery (or both) as the cause of an individual's sickness. As in, "John Parker, about thirty-five years of age, a lusty, full-blooded fellow, was much given to drink" (*A Voyage* cxliv) or, "One *R*., a Tavern-keeper's Wife, about Forty years of age, Fat and Phlemagtic, was upon excessive drinking of Brandy, taken with a Lethargy, inclining to an apopleptick fit." The tavern-keeper's wife proves a particularly challenging patient. Sloane prescribes cupping, scarification, and bleeding, and yet her seizures persist. Sloane continues the aggressive treatment for four days until her symptoms abate, and "being morose [she] would take

nothing, and shut her eyes." Sloane employs the same coercive ruse he used on Emanuel—"that I would get a Pan of Coals and burn her with them on the head"—and frightens her out of her depressive state (*A Voyage* c). Her reprieve, like so much on the island, proves temporary: a year later her fits return and she dies.

These purportedly objective and practical patient histories offer fragmentary glimpses of dissipation and violence across Jamaican society: drunkenness abounds, servants—both black and white—dissimulate illness to avoid labor; multiple women feign disease in hopes the remedy will induce abortion; lues venera, or syphilis, presents in both men and women, and manifests repeatedly in poxes and blindness; a number of children die in childbirth, inducing hysteria and melancholy in their mothers. Even the patients who recover are subjected to the palliative violence of Sloane's humoral medicine. Despite his strong anti-theoretical stance, Sloane's therapies nevertheless derive from a debt to humoralism, and a nascent, quasi-germ theory which held that the regulation of bodily fluids could be disturbed by the introduction of invisible, morbisick (infecting) matter. Sloane's course of treatments—consisting of sweating, bleeding, cupping, blistering, scarification, purging, and the use of emetics—attempt to draw out such morbisick matter and restore health. Therefore, even cases with positive outcomes are characterized by excessive sweating, bleeding, vomiting, and evacuation, painful therapies that patients respond to with varying levels of discomfort, distress, and despair.

Nevertheless, Sloane's cases can be understood as an extension of the ideology of refinement that Kriz argues permeates the entire production of *A Voyage to ... Jamaica*. If the specimens Sloane gathered in the West Indies are transformed into objects of knowledge by their depiction in natural historical engravings and inclusion in the cabinet

of curiosities, so the case studies demonstrate how metropolitan medical knowledge and practice can improve bodily health on the periphery. Central to this refinement is the medical treatment of slaves, which Sloane's cases present as a means of bolstering the business acumen of the planter class. For instance, in one case Sloane treats Henry, "a Negro, overseer of Colonel Ballards" for a loss of sight. Upon consultation, Sloane ascribes the blindness to an "excessive Venery," recommends chastity and performs weeks of cupping, scarring, and blistering. His sight restored, Henry returns to his position as overseer, cured bodily and morally. After all, Sloane surmises, had Henry relapsed he would have been sent to him again, "for Planters give a great deal of Money for good Servants ... and take great care of them for that Reason" (A Voyage cxxxii). The case thus argues for the complementary function of both Sloane's and Henry's faculties of vision. The assertion of epistemological authority by the learned physician restores social order to the plantation system by managing the health of the slave body. Medical knowledge thus abets the financial health of English Jamaica.

However, elsewhere in Sloane's collection attempts to buttress the social and economic order through medical knowledge is frustrated by the patients' and their physician's affective responses to the plantation economy. A trio of cases which treat African slaves make clear the imbrication of Sloane's enlightened medical practice with the omnipresent violence of slavery. The first considers "*Prince*, a lusty *Negro*, [who] had been ill of the *Yaws*" and an excessive "salivation" (*A Voyage* ciii). Yaws, a communicable skin infection endemic to Africa and America, was a subject of much debate among Sloane's contemporaries.

Trapham, for instance, follows conventional medical wisdom of the era by theorizing the origin of sexually transmitted diseases in the mixing of European, American, and African bodies in the New World. All venereal diseases, he reasons, originate in the "large Tracts of the American, ... or the African deserts," specifically as a punishment for bestiality. Syphilis, or the "French Pox," is no exception. As evidence, Trapham points to yaws, along with the "strange monstruous mixtures of Animal Shapes [e.g., baboons, mandrills, marmosets]" which proliferate on both continents. Since primates "bespeak too neer an alliance with the Lords of the creation," they must be the result of "some unhappy jumble of the rational with the brutal Nature, a sin against the principles of our Being, therefore significantly punished as well as naturally inflicted with the polluted Yawes."55 A violation of the divinely ordained chain of being began the degeneration of indigenous Americans and Africans, a "matter of fact" ratified via the proliferation of syphilis in Europe after Spanish incursions into the New World. Thus, Trapham couches a justification for colonization and racial enslavement in West Indian medical knowledge. English health, and the maintenance thereof, cannot be understood apart from the context of Atlantic slavery.

Significantly, Trapham frames the epidemiological transmission of syphilis as the passing of original sin from generation to generation and across continents; a banishment from the Garden that recurs across time and space. First, Africans and indigenous Americans fell via their mixture with the beasts, then the Spaniards suffered due to their mixture with the conquered and enslaved. Now, the arrival of the English in Jamaica offers a chance for redemption:

Hence the Black may well become naturally slaves, and the vast Territories of the Indians be easily invaded and kept in subjection by inconsiderable force of the

Spanish Tyranny. And even those Conquerors through mixture with these animal people, reap their infirmity of Body and Mind, and now lay them open to newer and more hopeful conquest; of which its no place for me to treat saving lightly to point at Nature's disposition thereto and to warn the intending Conquerors to escape the same degenerating Pit of naturally necessary destruction.⁵⁶

English improvement of Jamaica, then, is predicated on the ability to resist the temptations of paradise and modulate physical appetites. In order to "enjoy the West Indies without its native disease," the English must not be the Spanish.⁵⁷ However, as noted above, more general health on the island requires the adoption of certain Spanish practices, particularly habits of consumption. The earlier tour of a salubrious Jamaican landscape—highlighted by the transformation of dilapidated Spanish sugar works into industrious English villages—stands in tension with the possibility that the temptations of Jamaica will re-make the English body. Just as the landscape can be improved, so the body can degenerate, with illness the visible marker of that invisible change.

In this sense, the formal difference between Trapham and Sloane's description of English health on the island performs key social as well as epistemological functions. Disease, for Trapham, does not have an ontology that can be identified via induction. Instead, an individual illness represents a larger imbalance between the body and the environment. Trapham's climatological understanding therefore makes the representation of individual cases irrelevant. The pastoral, travel mode that unifies Trapham's narrative communicates the salubrious nature of the West Indian environment, offering a reader the deductive ratification that Jamaica is safe for Englishmen, albeit with moderations in customs and manners. Conversely, Sloane's resistance to medical theorizing in Jamaica results in his privileging of observation, an epistemic category given literary form in the field of medicine by the case study. The non-integrated nature of Sloane's cases—how

they stand in isolation not only from one another but also from the formal composition of the entire natural history—marks a further distinction from Trapham's unified narrative. The logic of induction and close description that characterizes Sloane's cases in opposition to Trapham's *Discourse* thus asserts the former's participation in the epistemological community of polite, Atlantic scientists, but also leaves the medical matters of fact open to divergent meanings.

The divergent meanings in Sloane's cases accrue across parallel instances, in part an example of the physician's attempt to at once counter the kind of deductive reasoning of a figure like Trapham, while also asserting social and epistemological authority on the unsettled periphery. For instance, Sloane treats not just Prince, but another slave for the yaws, at one point hazarding some uncharacteristic speculation from his observations. In curing his second case of yaws (this time appearing in an unnamed "Negro lusty fellow ... not long from Guinea") Sloane questions the divine authority ascribed to the disease. He finds yaws no more contagious than the common pox and, despite claims to the contrary, curable without relapse. Sloane thus counters Trapham's argument that West Indian colonization raises the specter of divine judgment, a generalization Sloane draws from the parallel instance of yaws included in the earlier case of Prince.

However, while Prince's case inductively verifies Sloane's claims about the treatment of yaws, it also reflects the importance of affect to the management of the plantation system. Sloane is called to treat Prince after the latter had escaped forced therapy in "one of the Chirurgeons Hot Houses at Town." Prince had been "kept extremely hot and abridged of Victuals" and, "either being mad, or extremely uneasie, broke open the Door and ran home in a very great Breeze of Wind" (*A Voyage* ciii).

Sloane alleviates Prince's symptoms with a milder course of sweating accomplished in the home. The movement from "Chirurgeons Hot House" to the plantation asserts Sloane's authority as a learned, metropolitan physician while simultaneously demonstrating the necessary intimacy of the plantation system. Prince's enslavement is not accomplished by asserting divine will, but instead is managed, improvisationally and contingently, in response to his affective disposition.

Sloane confronts a similar case in an enslaved, African woman named Rose:

[She] grew Melancholy, Morose, Tactiturn, and by degrees fell into a perfect Mopishness or stupidity. She would not speak to any Body, would not eat or drink, except when forc'd, and if she were bid to do anything, she was wont to do, before she had gone about it, she would forget what her Commands were. If one brought her out to set her about anything, she would stand in the posture she was left, looking down on the ground, and if one further ... put a broom in her Hands to sweep the house, there she stood with it, looking on the ground very pensive and melancholy (*A Voyage* cxiv).

In response, Sloane forces multiple, strong purgatives down Rose's throat. "This," he notes flatly, "did not work" (*A Voyage* cxiv). Rose persists in this state for over a month, her symptoms waxing and waning with the moon. Her "own Country people" assume her bewitched, a diagnosis that Sloane's case sets out to challenge. He treats her for an unspecified "Disease of the Head, Nerves or Spirits," or, as the case is indexed, "Of Madness" (*A Voyage* cxiv). Sloane alternates a regimen of cupping, blistering, and scarification, with doses of mercury and emetics, eventually rousing her through the Enlightened violence of metropolitan medical practice.

But the narrative of Rose's treatment concludes ambiguously, leaving her illness both unclassified and with a set of unresolved symptoms (towards the end he notes that "some white pustules rose all over her skin," an indication that a fever of some sort had broken and been fluxed, but Sloane does not venture a diagnosis (*A Voyage* cxv)). The

case's story of science trumping superstition is thus undermined by the inability of Sloane to both identify the etiology of Rose's distemper and the glimpses of mental anguish (she was "very hard, as all mad people are, to work on") that emerge from the details of her treatment (*A Voyage* cxv). The devil may not be the source of Rose's madness, but Sloane's inability to locate its genuine origin leaves the case open. Despite his conclusion that she "came to herself, went about her business, and was well," Sloane's parallel syntax suggests multiple ways to measure Rose's apparent cure—via her affective disposition, bodily wellness, or willingness to resume enslaved labor (*A Voyage* cxv). In so doing the case acknowledges the limits of metropolitan medical authority, presenting a history in which the epistemological apparatus girding the plantation system appears highly contingent.

3. After returning from Jamaica, Sloane rose to stature and prominence as an Enlightenment man of science, serving as President of the Royal College of Physicians as well as Secretary of the Royal Society. Investment in Jamaican sugar plantations secured his gentlemanly status and the cultural capital accrued via his collection of curiosities and the publication of *Voyage to ... Jamaica* assured his position at the hub of an expanding network of eighteenth-century natural historians, botanists, and physicians. As Secretary of the Royal Society, Sloane edited its periodical, the *Philosophical Transactions*, for nearly two decades. In this capacity he solicited and published continuing dispatches from the colonies and elsewhere, serving as the conduit for medical and natural historical correspondence between metropole and periphery.⁵⁸

The collection and circulation of such knowledge required a broad network of correspondents, often with differing interests, uneven training, and varied epistemological commitments. Therefore, the kind of inductive openness and abbreviated form that characterized Sloane's medical cases in A Voyage was evident in the observations he chose to publish in the scientific journal. Sloane justified the inclusion of sensational or fragmentary accounts of, among other phenomena, medical abnormalities, in the Transactions by drawing a distinction between "matters of fact" and "Hypothesis." He writes in the preface to the *Transactions* for 1699: "There is no doubt but the more discerning will make a great difference between what is related in [the transactions] as Matter of Fact, Experiment, or Observation, and what is *Hypothesis*. The first sort of Relations ... are, and must always be useful, and the latter may be pass'd over by such as dislike them."⁵⁹ This notoriously *laissez-faire* editorial policy made Sloane the object of multiple satires in the years of his secretary-ship. These satires targeted the author, his association with the degenerated, unhealthy West Indies, and his chosen literary form, the case study.

The most sustained attack on Sloane's public persona and scientific writings came in the productions of the prolific poet and essayist, William King. King lampooned the Royal Society and its publications during Sloane's tenure as secretary in a trio of works: *The Transactioneer* (1700), *The Useful Transactions* (1709), and *The Present State of Physick in the Island of Cajamai* (1710). While *The Transactioneer* frames its critique as a dialogue between a gentleman and a pair of broadly drawn caricatures of the new science, a "Virtuoso" and a "Transactioneer," the latter productions aim directly at Sloane and his medical cases, both in their content and in their form.

The Present State of Physick is framed as an epistolary contribution to the Royal Society from one who can offer an "Account of the Progress of Medicine on Cajamai." The brief satire then takes as its source material and target Sloane's cases, often quoting the physician's words in order to demonstrate the backwards state of health on the island. King emphasizes the racial ambiguities of the colonial space, repeatedly referring to the thinly-veiled figure of Sloane as the foremost "White Physician" among "several of that Profession in this uncivilized Part of the World, and these both White and Black." In King's satire, Sloane's reputation as a physician appears contingent upon his association with the colonial world.

As evidence, King parodies Sloane's own case study of "a negro doctor famous for curing gonorrhea who was so far from being able... to cure that disease, that he was very ill of it himself' (*A Voyage* cxli). In the satire, Sloane's practice on the island develops only after "*Hercules*, a Black Overseer and Doctor" visits the Englishman. ⁶¹ King turns Sloane's own logic back against him: just as Sloane portrays the "negro doctor" as a physician blind to his own malady, so King presents Sloane as ignorant of his own philosophical shortcomings. Sloane's remedies are depicted as random and pegged to little more than references to a patient's constitution, his classification of diseases vague, and his outright dismissal of anatomy and chemistry hypocritical with regard to his own training. Due to this perceived lack of systematic organization and theoretical rigor, Sloane's collection of cases constitutes, according to King, little more than "a House-Wife's Receipt Book, or as Physick was said to be in its first Age." ⁶² In the satirist's estimation, the creolized Sloane is not a respectable man of science.

King's *Useful Transactions* elaborates this line of critique by not only satirizing the content of Sloane's medical writing but also by adopting, and thereby undermining, its inductive form. Couched as a periodical akin to the *Philosophical Transactions*, the second volume of the *Useful Transactions* consists entirely of a parodic re-writing of Sloane's natural history. Titled "A Voyage to the Island of *Cajamai* in *America*," the parody purports to be a translation from the Dutch of a work by "*Jasper Van Slonenbergh*, a Learned Member of the Royal *Vertuosos* of *Great Britain*." King hews closely to the basic structure of Sloane's original, dividing "Van Slonenbergh's" "Voyage" among a biographical preface, a lengthy introduction describing the natural curiosities of Cajamai, and a section on "The "Method I used to cure Diseases in Cajamai." Like his previous satire, King borrows extensively, and overtly, from Sloane's cases. He exploits the fundamental openness and brevity of the case study form, cutting and pasting from Sloane's original to add commentary or offer an alternate logic for the cases.

Whereas the arrangement of Sloane's collection makes few generalizable claims about a specific disease or health on the island, King clusters the cases around "deaths," "cures," and "extraordinary cases." This re-arrangement mocks the competence of the learned physician while presenting a version of English Jamaica as debauched and unhealthy, a critique all the more effective when it comes in Sloane's own words. For instance, "Van Slonenbergh" describes the English in Jamaica as "Jolly Companions, and Hard Drinkers. I was sent for to several when they were drunk, and left them dead drunk." King then weaves a coherent narrative from Sloane's references to patient

intemperance, thereby assigning definite causality for individual deaths and suggesting a blame for the high mortality rate on the island:

Monsieur Homperus had lost his limbs by drinking Rum Punch, I in some measure recover'd him; but afterwards he fell into a violent Vomiting and Looseness, and in a very few days he died. Dr. Hopman had been a great Drinker of Rum Punch; I gave him chicken Broth and Watergruel; he sent for another Physician, fell in Convulsions, and died. 64

Here, and throughout, King employs italics to differentiate direct quotations from his own, parodic interpolations and includes marginal citations referencing page numbers in Sloane's *Voyage* (see Appendix v). The satirical effect is two-fold: to mock Jamaican patients and their physician while also undermining the logic of collection, collation, and citation that governs the inductive method of scientific publishing.

King's satire also makes abundantly clear what he has added, and what he has left out of Sloane's observational accounts of English health in the West Indies. King repeatedly invents comedic causes or resolutions for Jamaican illnesses aimed at lampooning both the patients and the physicians. In King's revision, for instance, the above-mentioned case of the tavern-keeper's wife morphs into a farce. The physician fends off a trio of drunken women who insist the best remedy is another "Three or Four Bowls of Punch" and contends with neighbors bothered by odors from the vomit and defecation produced by the physician's therapies. King's re-telling manages these excesses through a conventionally affective turn at close, when Van Slonenbergh observes: "[A]s she grew sober she grew well, and ... her moroseness of Temper proceeded chiefly from her being asham'd of what she had done." The woman's affective response to becoming colonial and the physician's struggle to manage such a

response are reduced to a conventional temperance narrative made all the more amusing by the pedantic physician's failure to recognize it as such.

A similar effect unfolds in the revision of the history of Emanuel, the case with which I began this chapter. King's critique focuses on Sloane's claim that his uncovering possible dissimulation in a servant warrants publication, a risible insight included among "Van Slonenbergh's" "exrtraordinary" cases. After quoting much of Emanuel's history verbatim—including Sloane's threat to awaken him by applying a "Frying-pan with burning coals ... to his Head"—"Van Slonenbergh" appends the justification that he includes this detail not as "Receipt, but as a Turn of Thought ... [that] is very useful for a Physician."66 King transforms a conventional, and gently comedic, narrative of the physician's superior canniness and the slave's gullibility into a depiction of the creole doctor as comically inept. However, especially when juxtaposed with the satire, Sloane's case confronts more openly the mechanisms of colonial power. His counterfeit of violence is not, after all, truly a counterfeit. Emanuel's recovery is motivated by his fear of Sloane's threat—a fear grounded quite rightly in the iterable violence of slavery. What King reduces to the conventional trope of a sawbones, or a physician who does more harm than good, Sloane's case recognizes as the radically new and destabilizing irony of violent chattel slavery abetting the triumph of Enlightenment knowledge production. In the satire, however, slavery and its omnipresent violence can be circumscribed as a condition befitting the patients and physicians in Jamaica, a dynamic laughed outside the English nation.⁶⁷

These parodies thus fix responsibility for the ongoing catastrophe of English Jamaica firmly in Jamaica: what plagues the island is an unhealthy climate, debauched

planters, and bad medicine. King's satires register the kind of confident judgment of English Jamaica that Sloane's case studies lack, thereby distancing the metropolitan readership from the violence of planter society in Jamaica. The satires place Jamaican society—and the foreign "Jasper Van Slonenbergh's" that it produces—outside of an emergent English nation. However, Sloane's medical cases—in their uncertainty, their contingency, and especially their fragmentary glimpses of the affective responses to plantation life—reveal the impossibility of extricating the production of Enlightenment medical knowledge from the horrors of slavery. As an epistemological instrument, Sloane's cases thus close the distance between the metropole and the nightmarish world of the colonial periphery: Jamaica and Jamaicans become part of Enlightenment England.

The case of the melancholic Rose demonstrates most clearly King's effort to eliminate the contingency of becoming colonial through literary form, thereby circumscribing the catastrophe of Jamaica to Jamaica. In "Van Slonenbergh's" re-telling Rose is renamed "Bess," and her case counts among the "cures." King quotes verbatim from Sloane's account of her symptoms before cutting the case drastically short. "Van Slonenbergh" cures her bodily "by Cupping, Vomiting, and Jalap," and imposes his will on her mind: "I made her stir the Broom, Sweep the House, do as she was bid, and tend the Children." Imperial authority, viewed from the metropole, imposes itself on the level of syntax. What in Sloane's account appeared as a hesitant, deferred agency—
"[Rose] came to herself, went about her business, and was well"—here transforms into an assertion of imperial will: "I made her stir ...". In King's account, the very possibility that colonial mastery may require the contingent management of slave affect appears

laughable. By comparison, English Jamaica mediated through the form of the observational case study, appears as a place of enduring pain and sadness. Sloane's Jamaican cases studies recognize, however hesitantly, that the Atlantic world cannot produce human flourishing without attendant human suffering.

It is significant therefore that King's earlier satire of Sloane, *The Transactioneer*, addresses the form of the case study in particular. In a general critique of dilettante-ism passing for philosophy in the *Philosophical Transactions*, King mocks the physician's interest in botany (a field too mired in minutiae), and medicine (too mean a subject for proper philosophy), as well as Sloane's association with the New World, particularly the West Indies, a space whose economic and cultural influence was beginning to destabilize hierarchies of status among Englishmen. For King, "useful knowledge" proved itself as such via an elegance of style and a fullness of form. Sloane and his correspondents, however, publish "Notes, and Pieces of no more than 4, 6, or perhaps 8 lines. Matter of only Scraps pick'd up from one and from another, or Collected out of this book or that ...'Tis obvious what a writer he must needs make." The observational case study predicated on induction, suspended judgment, and fragmentary glimpses of possible, affective knowledge—fundamentally fails the test of useful knowledge. Knowledge, viewed from the metropolitan perspective, must be whole, must be, to borrow a term from Kriz, "refined." Yet, for Sloane, it is precisely the incompletion, the raggedness, and deferred utility that make the case study preferable for approaching the epistemological, representational, and social instabilities of the colonial world. For, his cases repeatedly confront the matter of fact that such refinement requires ineffable suffering.

The criticisms of satirists like King landed. After Sloane retired from his position as secretary his successor changed editorial practice at the *Philosophical Transactions*. Sloane's activities had, nevertheless, brought him into contact with a number of key figures of the colonial Enlightenment—Cotton Mather, Benjamin Franklin, Jonathan Edwards, William Byrd, John Bartram—and his narrative sensibilities exercised significant influence over the representation of New World nature and medicine throughout the eighteenth century. For Sloane, as well as other colonial authors, the individuated medical case study combines a belief in the primacy of observation with an inductive openness and deferral of conclusive judgment, making it an epistemologically flexible genre to contemplate the complexity of illness in the New World, while retaining intellectual authority in a contested public. Furthermore, attention to the reception of Sloane's Jamaican cases offers an instructive instance of the interplay between scientific inquiry and literary form idiosyncratic to the colonial periphery in the age of Enlightenment. Such attention enables us to recover some of the contingent, affective histories of colonization in the Atlantic world.

Sloane retreated from medical and scientific publishing after completing *A Voyage*. However, near the end of his life the physician did publish a brief pamphlet: *An Account of a Most Efficacious Medicine for Soreness, Weakness, and several other Distempers of the Eyes* (1745). The tract begins with a recipe for a liniment of red clay and aloe mixed with "Viper's Grease," instructions for its application ("to be used daily, Morning or Evening, or both ... applied with a small hair pencil, the eye winking or open"). Though opthamalia typically afflicts the "poorer Sort," this *materia medica* has proven widely effective across social, geographic, and racial borders. Sloane's

representative patients—gentle and common, English, French, Italian, and "East-Indian"—experience improved vision and diminished pain "without the Help of any Opiate." "The medicine has cured many," Sloane insists, "so totally deprived of sight, as to be under a Necessity of being led to me and after some time could perfectly well find their Way without a Guide." This medicine, Sloane hopes, can restore sight to the blind.⁷³

As the tract repeatedly asserts, however, Sloane failed to publish this treatment sooner due to a professional obligation to keep it secret. He witnessed the application of the liniment by a colleague and pursued the recipe upon that physician's death, purchasing the formula from an apothecary on the condition of keeping it private. After admitting to this bit of professional maneuvering, Sloane protests that he has nevertheless "always been very free, and open ... far from following the Examples of some Physicians, who have on many occasions thought proper to conceal part of their own assured knowledge." Anxiety about the physician's lack of transparency pervades *An Account*. Sloane exercises an explicit defensiveness, reminding his readers reminds four times of his "promised secrecy" If other physicians operate under the motto "Artes est celare artum [It is true art to conceal art]," Sloane appears at pains to make-up for having kept his art invisible for so long (Ibid. 14).

The remedy suggested in *An Account*, and Sloane's anxiety over having kept it hidden for so long, resonates with an instance of *gutta serena*, or sudden blindness, with which Sloane concludes his Jamaican case studies. An unnamed patient, described only as being "about fifty years of age, given to Fellowship and drinking of Drams" suffered from recurrent belly-aches prompting his early return to England aboard the frigate bearing the Duke's body back to England. Once on board, the patient's health rapidly

deteriorates despite Sloane's treatments. The man's symptoms accumulate: he suffers from colich, experiences pains all over and a great weakness in his hands, becomes jaundiced, and finally, inexplicably, loses his sight. Sloane treats his blindness with blistering, albeit to no avail. The man falls into a state of extreme lethargy marked by "strange persuasions or imaginations in his head." His sight returns with the full moon, and his distemper eases, but life in English Jamaica has clouded more than his vision. "A great many things were blotted out of his memory, so that the remembrance of things past not only during his sickness, but likewise before were lost," Sloane observes, "and some imaginations and fancies, were so fast imprinted in his mind ... that afterwards ... there was need to take pains with him to undeceive him and make him sensible of his mistakes." Sloane's final case study thus offers a last glance at English Jamaica, but it is one that refuses to see the violent reality of the colonial project, a pattern repeated until recent interventions in historiography. This case, and thus Sloane's entire collection, closes with the image of an Englishman driven mad by life in Jamaica, and offers only the hope that gutta serena cures itself, but not without much "bleeding, purging, [and] blistering" (A Voyage cliii-iv).

XC

The Introduction.

Of the Diseases I observed in Jamaica, and the Method by which I used to Cure them.

D Efore I conclude this Introduction, I think it necessary to give an Account of the Diseases of Jamaica, and how I endeavour'd This may be useful to some, and I am sure would to relieve them. have been to me, had I been so fortunate before my going thither, as to have met with any such Observations. I was told that the Diseases of this place were all different from what they are in Europe, and to be treated in a differing Method. This made me very uneafie, lest by ignorance I should kill instead of curing, and put me on trying with the utmust caution the Remedies and Methods I had known effectual in Europe, which in a very little time, I found to have great success on the Diseases there. My Medicines had the better operation, because people had a belief I could help them, and submitted to the taking Remedies in the order they were prescribed without changing the Medicines, altering the Method, or judging hatfuly in case the Person died. Indeed, at first, the Inhabitants would scarce trust me in the management of the least Distemper, till their observation of the good effects the European method had in the Duke of Albemarle's numerous Family, in the same Diseases, brought them to make trial of what I could do with some of the meaner fort, accounted in desperate Conditions. I shall give some of these Observations both in the Voyage thither, and during my abode there, in as few words as I can, chiefly relating Matters of Fact, whereby, abating some very sew Diseases, Symptoms, &c. from the diverfity of the Air, Meat, Drink, &c. any Perlon who has feen many fick People, will find the same Diseases here as in Europe, and the same Method of Cure. For this reason I have put down some very ordinary Observations and Methods, that this matter may be very plain. For my own part I never saw a Disease in Jamaica, which I had not met with in Europe, and that in People who never had been in either Indies, excepting one or two; and fuch Instances happen to People practifing Phytick in England, or any where elle, that they may meet, amongst great numbers, with a singular Dil eale, that they had never feen before, nor perhaps meet after with a parallel instance.

xciv

The warned tich.

cels in Syder and Pandoo he was raken after a thine the Fit and Fever. with pains in his Side plac which he was Bled, and thereby telievid. The Gozt coming again; he could not be perfuaded; or kept from tampering it with Gowe Dong and Vinegar fried, and applied as a Poultels ! the Cowe Dung Petroughe tright be ar intiocent Anodyne; but the Vinegar as being a difforer and thinner of the Blood, I opposide On the ale of it incited at Loothels, and sometimes Vamiting, which commund; not withfranding the Decost: Alb. easie Opiates, and whatever I could think of, till he died. His Stomach was always out of order, because of his excessive drinking, especially Brandy and Sugar, by way of Drain in a morning, to fettle, as he thought, his Stomach.

Blocd.

Colonel Walker, aged about Forty five, Plethoric; upon drinking, used always to be troubled with Rheumatick and Gouty pains Offpicting through all his Joints, after an excessive manner, of which by bleeding he was still reliev'd, though sometimes he was forc'd to fly to Opiats. Once he fell instead of his pains, mro a spicting of Blood, which came up in large quantities without pain. Going to the Palifados in a hot day to drink Milk, he spit or vomited up half a pint, for which he was Bled, and took an Opiat at night, with other Astringents. I advis drepeating of the Bleeding, continuing in the use of Opiats, great Quiet, Issues in the Shoulders, we. with which, Rice Milk, and other cooling, thickning, &c. Medicines for the Blood, he was perfectly cur'd. Upon his return to England, he fell into a Relaple, with the same Symptoms, and I have heard died Consumptive.

Of a com-

Mr. Rayney, of about Seventeen years, sell into a Fever, from mon con-which he was freed by bleeding, cooling Juleps of Barley-water with Syrup of Lemons, and other things of that kind.

Of the efhot Wea-Body by

When we came into hot Weather, it was a very ordinary complaint in every ones Mouth, that they were fo troubl'd with an itch from small red Pustles or Wheals, that they knew not what to do to be easie, They came out usually on the Back, along the Spine, though formetimes they cover'd the whole Body. I told them I thought this Diftemper was the greatest advantage they could have. it being a great Purger of the Blood from hot and sharp parts, and therefore was to far from complying with their defires of curing them, out Puttles, that I usually gave something to forward the eruptions, as Flos Sulph. or some other innocent Diaphotecick; but if their impatience was to be complied with, Bleeding, and Purging after it, was an infallible Remedy. I concluded the alteration of the Climate was the occalion

Appendix v: A typical page of King's *Voyage to Cajamai*, showing the variations in typeface and marginal citations of Sloane's *Voyage to Jamaica*.

34 The Introduction.

a Morning to settle, as be thought, his Stomach; he fell into a Vomiting and Looseness, which continued notwithstanding the Decoctum Album, Easy Opiats, and whatever I could think of, till he died.

The Chevalier Mahoni given to drinking and fitting up late, much troubled with Belchings, died of a Dropfy. I had a Wheelwright died of a Dropfy, another

p. 93. of a Dropsy, Comsumption and Pox. One by a Salivation ill manag'd was choak'd, votwithstanding what could be done for

p. 105. him. Mounsieur Homperus had lost his Limbs by drinking Rum Punch, I in some measure recover'd him; but afterwards he fell into a violent Vomiting and Looseness, and in a very sew days he died. Dr. Hopman had been a great Drinker of Rum Punch; I gave him chicken Broth and

p. 112. Watergruel; he sent for another Physitian, fell in Convulsions, and died. James,

a Servant Man, tho' I struggled all I could, p.112,113 died of a Dropsy. A Joyner died of a Consumption notwithstanding Consect. de Hyacin. and other things of that Nature, given to stop his Looseness. I found several whose Brains and Senses were disturbed by their Excesses: One aged about Sixty, from drinking too much Wine, for faintness fell into a Lethargick Distemper, talk'd incoherently and died. A Gentleman much

given to Venery and Intemperance, bad a Dropfy,

¹ Sydenham's Compleat Practice of Physick; trans. John Pechey, (London, 1695), unpaginated preface.

² Hans Sloane, *A Voyage to the Islands of Madera, Barbadoes, Nieves, S. Christophers, and Jamaica*, Vol. 1 (London, 1707), cxli. Hereafter, Sloane's text will be cited parenthetically as *A Voyage*.

³ The most sustained discussions of Sloane's cases appear in Wendy Churchill's "Bodily Differences?: Gender, Race, and Class in Hans Sloane's Jamaican Medical Practice," *Journal of the History of Medicine and Allied Sciences* 60.4 (2005): 391-444; and *Ibid.*, "Sloane's Perspectives on the Medical Knowledge and Health Practices of non-Europeans," *From Books to Bezoars* (London, 2012), 90-98. Kay Dian Kriz also addresses Sloane's cases, albeit briefly. See *Sugar, Slavery, and the Culture of Refinement* (New Haven, Conn., 2009), 27-9.

⁴ Sloane's participation in the *res publica medica* demonstrates the diverse forms and formats of publication that governed these networks of exchange. Though best known for his printed, two-volume natural history of the British West Indies, Sloane also published a brief pamphlet (*An Account of a Most Efficacious Medicine for Soreness, Weakness, and several other Distempers of the Eyes* (London, 1745)), contributed a number of papers to *The Philosophical Transactions* (some as primary author and others as editor and compiler), and circulated in manuscript his *Memoir of Beaumont* (1740), a collection of case studies covering diseases of the mind, specifically the belief in the supernatural which haunted Sloane's colleague and acquaintance, the fellow virtuoso John Beaumont. One of my interests in this chapter is in tracing the form of the case study across Sloane's multiple sites of engagement with the dissemination of medical knowledge, thereby illuminating the form's utility for knowledge production in the British Atlantic world. For more on Sloane's publication history, see below and *Magic and Mental Disorder: Sir Hans Sloane's Memoir of John Beaumont* (London, 2011).

⁵ Kriz, "Curiosities, commodities, and transplanted bodies in Hans Sloane's *Voyage* to...Jamaica," An Economy of Colour: Visual Culture and the North Atlantic World, eds. Geoff Quilley & Kay Dian Kriz (Manchester, UK, 2003), 86; Delbourgo, "Sir Hans Sloane's Milk Chocolate and the Whole History of the Cacao" Social Text 29.1 (2011): 73; and Iannini, Fatal Revolutions: Natural History, West Indian Slavery, and the Routes of American Literature (Chapel Hill, 2012), 26. See also a new collection on Sloane, From Books to Bezoars: Sir Hans Sloane and his Collections (London, 2012).

This phrase—which captures the detached, objective perspective characterizing scientific observation—comes from the title of a work by philosopher Thomas Nagel, *The View from Nowhere* (New York, 1986). In the field of natural history in particular, the elaboration of this epistemological stance has long been associated with the work of Michel Foucault. Of the practice of eighteenth-century natural historians, Foucault writes, "The documents of this new history are not other words, texts or records, but unencumbered spaces in which things are juxtaposed: herbariums, collections, gardens; the locus of this history is a non-temporal rectangle in which, stripped of all commentary, of all enveloping language, creatures present themselves one beside the other, their surfaces visible, grouped according to their common features, and thus already virtually analyzed, and bearers of nothing but their own individual names." *The Order of Things: An Archaeology of the Human Sciences* (New York, 1994 [1966]), 131.

⁷ Churchill, "Bodily Differences?: Gender, Race, and Class in Hans Sloane's Jamaican Medical Practice," 441.

⁸ Dillon continues: "The story of the rise of freedom in the Atlantic world—the newfound authority of the commons within a politics of popular sovereignty—cannot be separated from its hidden dependence on the colonial relation." For Dillon, Atlantic theater performance, "where presence and absence appear in tandem," affords a privileged lens into the previously invisible relation. As I elaborate below, the medical case study can bring such relations into a similar focus, further elaborating the rhetorical strategies used to efface them. See *New World Drama: The Performative Commons in the Atlantic World* (Durham, 2014), 22-3. On the circulation of performance and cultural forms in the Atlantic world, see Joseph Roach, *Cities of the Dead: Circum-Atlantic Performance* (New York, 1996).

⁹ Dunn, Sugar and Slaves: The Rise of the Planter Class in the West Indies, 1624-1713 (Omohundro, 2000, rpt.), esp. 149-87.

¹⁰ Vincent Brown, *Reaper's Garden: Death and Power in the World of Atlantic Slavery* (Cambridge, 2008), 16-17. For a corroborating set of statistics on white mortality in Jamaica, see Trevor Burnard, "The Countrie Continues Sicklie: White Mortality in Jamaica, 1655-1780," *The Social History of Medicine* 12.1 (1999): 50. Burnard relies on Jamaican parish registers to argue that white mortality actually exceeded that of slave deaths for the better part of the eighteenth-century, an assessment that Brown disputes. Regardless of comparative mortality rates, both historians agree that omnipresent death shaped social life in eighteenth-century Jamaica, a condition that influenced metropolitan depictions of Jamaica as a "charnel house" for blacks and whites alike. See Burnard, "The Countrie Continues Sicklie," 46.

¹¹ Brown, Reaper's Garden, 2.

¹² Burnard ascribes both Jamaica's failure to coalesce as a settler colony and its occlusion (until recently) in the historiography of British America to the high mortality rate and an association of the island as a space of temporary incursion rather than settlement. See, "The Countrie Continues Sicklie," 47.

¹³ On the figure of Johnny Newcome, see Dillon, *New World Drama*, esp. 165-215. On the association between Jamaica and illness, see Burnard, "The Countrie Continues Sicklie," 45-72.

¹⁴ Sloane's boast constitutes the identical dedication of each edition. The sole change is pronominal: the thirteen-year gap in publication between Vols. 1 and 2 of *A Voyage...to Jamaica* saw the death of Queen Anne and ascension of George I.

¹⁵ For biographical details on Sloane, see monographs by G. R. de Beer, *Sir Hans Sloane and the British Museum* (London, 1953 [rpt. 1975]); Eric St. John Brooks, *Sir Hans Sloane: The Great Collector and His Circle* (London: 1954). Two recent collections on Sloane include the most recent biographical scholarship. See *Sir Hans Sloane: Collector, Scientist, Antiquary, Founding Father of the British Museum*, Ed. Arthur MacGregor (London, 1994) and *From Books to Bezoars: Sir Hans Sloane and his Collections*, Eds. Alison Walker, Arthur MacGregor, and Michael Hunter (London, 2012).

¹⁶ Physicians sometimes drew subtle distinctions between these genres. "Observationes," or observations, were brief narrations of a particular patient, their symptoms, and their treatment, regardless of outcome. "Curationes," or cures, generally represented the successful treatment of an illness. The latter term fell out of favor during the eighteenth-century, as the term observation

gained greater currency in Atlantic scientific culture. On the history of the *observationes* in European medical practice, see Gianna Pomata, "Sharing Cases: The *Observationes* in Early Modern Medicine," *Early Science and Medicine* 15 (2010): 193-236; and *Ibid.*, "Observation Rising," *Histories of Scientific Observation* (Chicago, 2011), 45-80. For the ascendance of observation as an epistemic category across the sciences, see Lorraine Daston, "The Empire of Observation, 1600-1800," *Histories of Scientific Observation* (Chicago, 2011), 81-113.

¹⁷ On the revival of Hippocratic medicine in the late seventeenth and early eighteenth centuries, see Andrew Wear, *Knowledge and Practice in English Medicine*, 1550-1680 (Cambridge, 2000) and Roy Porter, *The Greatest Benefit to Mankind* (New York, 1998), esp. pp. 201-44.

¹⁸ The Two Books of Francis Bacon. Of the Proficiencie and Advancement of Learning, Book I, (London, 1605), 7.

¹⁹ Historians of science Lorraine Daston and Katherine Park connect the emergence of the neutral, scientific fact to the domestication of such wondrous phenomena by virtuosi of the late seventeenth-century. Reports of monsters, strange lights in the sky, or sudden deaths—events previously enlisted as testimony of divine intervention in earthly affairs—were not so much rationally explained by natural philosophers as they were denied their status as evidence in purely religious disputes. Wonders, once ripe with meaning, instead served as the model for the stubborn, strange facts of modern science. See Lorraine Daston "Marvelous Facts and Miraculous Evidence in Early Modern Europe," *Critical Inquiry* 18.1 (1998); and, *Ibid.* and Katherine Park, *Wonders and the Order of Nature* (Oxford, 1998), esp. Ch. 6.

²⁰ Robert Boyle, *The Christian Virtuoso* (London, 1690), 8.

²¹ *Ibid.*, 110.

²² Robert Boyle, *Tracts: Containing I. Suspicions about Some* Hidden Qualities *of the* Air..., (London, 1674), 4-5.

²³ On the interrelation between scientific instruments and literary genres as mediating technologies in the period, see Kevis Goodman, *Georgic Modernity and British Romanticism: Poetry and the Mediation of History* (Cambridge, 2004), esp. 17-37. Despite the important work of Antoine Van Leeuwenhook (1632-1723) and Marcello Malpighi (1628-1694), the microscope did not become fully integrated into medicine until the nineteenth century. On this delay, see Wootton, *Bad Medicine*, esp. 110-138.

²⁴ Priscilla Wald describes the "outbreak narrative" in a similar manner. The "outbreak narrative," in Wald's terms, is a collection of cultural forms, ranging from scientific data, to news reports, and popular novels or films, through which a population comes to terms with a new, epidemic illness (e.g. typhoid in early twentieth-century New York City, or SARS in the late 1990s). Wald highlights the ways the "outbreak narrative" operates as a technological instrument, extending perception to make visible the kinds of biological and social connections that produce disease, as well as the larger forces that lead to its proliferation and uneven treatment. See Wald, *Contagious*, 2-3. On the narrative understanding of disease in early modern England, and beyond, see Wear, *Knowledge and Practice*, pp. 126-53; and Nancy G. Siraisi, *The Clock and the Mirror: Girolamo Cardano and Renaissance Medicine* (Princeton, 1997), esp. 196-213.

²⁵ William Cockburn, The Present Uncertainty in the Knowledge of Medicines (London, 1703), 3.

²⁶ James E. McClellan III, *Colonialism and Science: Saint Domingue in the Old Regime* (Baltimore, 1992), 161. Thomas Sydenham, Benjamin Franklin, and Thomas Jefferson, among others, used and trumpeted the the efficacy of "the bark." On the divergence between medical knowledge and medical practice in the early modern and Enlightenment periods, see Porter, *The Greatest Benefit to Mankind*, esp. 230-40; Wear, *Knowledge and Practice*, esp. 434-73; and *passim*.

- ²⁸ On medicine as a science of empire, see James D. Alsop, "Warfare and the Creation of British Imperial Medicine, 1600-1800," in *War, Medicine, and Britain, 1600-1830*, Eds. Geoffrey Hudson and Roy Porter (Amsterdam, 2006).
- ²⁹ Gianna Pomata demonstrates how the individual case study emerged from other medical genres of the early modern period, owing both to a renewed emphasis on medical practice, as opposed to theory, as well as the development of widespread correspondence networks among physicians throughout Europe, and beyond. See Pomata, "Sharing Cases: The *Observationes* in Early Modern Medicine," esp. 194-6.

²⁷ Present Uncertainty, unpaginated prefatory material, emphasis original.

³⁰ Profluvia Ventris (London, 1701), 177.

³¹ Present Uncertainty, unpaginated prefatory material, emphasis original.

³² Qtd. in G. R. de Beer, *Sir Hans Sloane and the British Museum* (London, 1953 [rpt. 1975]), 25. See also, Eric St. John Brooks, *Sir Hans Sloane: The Great Collector and His Circle* (London: 1954), 45; and G.G. Meynell, *Materials for a Biography of Dr. Thomas Sydenham* (Folkestone, England, 1988), 71. Despite his importance to the history of English medicine, Sydenham has yet to receive a modern biography.

³³ Sydenham's hugely influential *Observationes Medicae*, better known as "Sydenham's Observations," went through multiple editions and re-printings throughout the eighteenth century. The source for my citations is the first English translation after his death, *Compleat Practice of Physick;* trans. John Pechey, (London, 1695), *unpaginated preface*.

³⁴ *Ibid.*, unpaginated preface.

³⁵ Ibid.

³⁶ Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception* (New York, [1963] 1994), 6.

³⁷ Lorraine Daston and Katherine Park, *Wonders and the Order of Nature* (New York, 1998), 237; Michel Foucault, *The Birth of the Clinic*, 7.

³⁸ Pomata, "Sharing Cases," 197, and *passim*. On the role of the case in clinical medicine, see Foucault, *The Birth of the Clinic*, 88-106.

³⁹ Chandler's taxonomy of the case as a literary form is elaborated in "On the Face of the Case" Conrad, *Lord Jim*, and the Sentimental Novel," *Critical Inquiry* 33.4 (2007): 837; and *England in* 1819: The Case of Romantic Historicism (Chicago, 1998), 203-12, and passim.

⁴⁰ Lauren Berlant, "On the Case," Critical Inquiry, 33.4 (2007): 666-7.

⁴¹ André Jolles, Einfache Formen (Darmstadt, 1930), 191 (qtd. in Chandler, 208).

⁴² Kriz, Sugar, Slavery, and the Culture of Refinement, (10).

⁴³ On *historia* as a genre, see Gianna Pomata and Nancy Siraisi, eds., *Historia: Empiricism and Erudition in Early Modern Europe* (Cambridge, 2005), esp. 1-28. James Delbourgo makes a similar claim to the Renaissance tradition at work in Sloane in "Sir Hans Sloane's Milk Chocolate and the Whole History of the Cacao," *Social Text* 29.1 (2011): 71-94. Kelly Wisecup argues for the wider importance of *historia* in New World medicine. See *Medical Encounters*, esp. 9-12.

⁴⁴ Berlant, Cruel Optimism, 4, 12.

⁴⁵ Sloane does not identify Isaac by race, as he does many other patients. The association with an individual plantation, though suggestive, does not necessarily confirm Isaac as an enslaved African. Other patients are identified as white and described as "belonging" to a given plantation. More important for my analysis is the power Sloane ascribes to a patient's affective disposition regardless of their race.

⁴⁶ Donegan, Seasons of Misery, 8.

⁴⁷ Gary Puckrein, "Climate, Health, and Black Labor in the English Americas," *Journal of American Studies* 13.2 (1979): 181.

⁴⁸ On the regional as well as racial implications of seasoning, see Joyce Chaplin, *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676* (Cambridge, 2001), esp. 151-2.

⁴⁹ Trapham preceded Sloane on the island, arriving in 1673, and resided there longer, likely through 1705. Trapham served first as the personal physician to Lord Vaughn (the colonial governor who preceded Sloane's patron, the Duke of Albermale) and later became a successful planter who was active in island politics. The two men were acquainted and competed for patients and prestige. In fact, Sloane consulted Trapham during the Duke's fatal illness in 1688. Sloane, however, rejected Trapham's remedy ("a grain of bird pepper in a potched egg") which was based firmly in a climatological understanding of disease. The disagreement escalated with the Duke's subsequent death. Trapham and others cried malpractice and called for an inquest and autopsy after which Sloane was exonerated. However, the history of personal and professional rivalry between the two men suggests Trapham's *Discourse* as a central interlocutor for Slaone's cases in *A Voyage*. The juxtaposition of the two texts, as I will demonstrate, suggests the key role of literary form in negotiating social and epistemological control over colonial medical knowledge. On Trapham's biography and the quarrel with Sloane, see M. T. Ashcroft, "Tercentenary of the First English Book on Tropical Medicine, by Thomas Trapham of Jamaica" *British Medical Journal* 2 (1979): 475-7.

⁵⁰ Thomas Trapham, A Discourse of the State of Health in the Island of Jamaica. With a provision calculated therefore from the Air, the Place, and the Water: The Customs and Manners of Living, &c. (London, 1679), 3.

⁵¹ *Ibid.*, 25, 28.

⁵² *Ibid.*, 51.

⁵³ *Ibid.*, 50-2.

⁵⁴ Sloane is in fact the first author in British medicine to provide firsthand observations "the illness of different races in a non-indigenous climate." Sloane's 128 cases treat 56 white patients, 18 black patients, and 54 patients of unknown race; 78 male patients, 43 female patients, and 7 patients of undeterminable sex. They suffer from a variety of illnesses, including dropsy, gout, fevers, venereal diseases (gonorrhea and syphilis), complications arising from pregnancy or birth, as well as unknown or unnamed maladies. Wendy Churchill, "Bodily Differences?: Gender, Race, and Class in Hans Sloane's Jamaican Medical Practice, 1687-1688," 396; and 443 (Table 1).

⁵⁵ Thomas Trapham, A Discourse of the State of Health in the Island of Jamaica, 113.

⁵⁶ Ibid.

⁵⁷ *Ibid.*, 112

Sloane's tenure as secretary of the Royal Society, and as editor of the *Transactions*, was key in the journal's history, though not without controversy. The physician's global correspondence network helped to restore what had been a moribund network of the curious, thus bringing the scientific journal back into publication after a lull. However, his interest in and openness to the wondrous made him the target of more than one satire. Sloane shared this openness—as well as a number of correspondents—with Abbe. Bignon, his friend and French counterpart, editor of the *Journal des Sacvans*. On Sloane's role in scientific publishing and his literary reputation, see T. Christopher Bond, "Keeping up the Latest *Transactions*: The Literary Critique of Scientific Writing in the Hans Sloane Years," *Eighteenth-Century Life* 22.1 (1998): 1-17; and Barbara M. Benedict, "Collecting Trouble: Sir Hans Sloane's Literary Reputation in Eighteenth-Century Britain," *Ibid*. 36.2 (2012): 111-42.

⁵⁹ "Preface," *The Philosophical Transactions* 21 (1699): 1.

⁶⁰ [William King], *The Present State of Physick in the Island of Cajamai. To the Members of the R.S.* (London, 1710), 4.

⁶¹ *Ibid*.. 2.

⁶² Ibid.

⁶³ [William King], Useful Transactions for the Months of May, June, July, August, and September, 1709. Containing a Voyage to the Island of Cajamai in America. (London, 1709), unpaginated preface.

⁶⁴ *Ibid.*, 34.

⁶⁵ *Ibid.*, 41.

⁶⁶ *Ibid.*, 47.

⁶⁷ I want to thank Cristobal Silva for his insightful commentary on my reading of the case of Emanuel.

⁶⁸ According to Brown, such satires worked "to obscure the actual depth of mutual engagement between colony and home country and to gloss over the precise nature of the relations between various peoples in their empires. It allowed them to believe that empire existed on the margins of European progress" (*Reaper's Garden*, 8).

⁶⁹ Useful Transactions, 38.

⁷⁰ *Ibid*.; emphasis added.

 $^{^{71}}$ [William King], *The Transactioneer, With Some of his Philosophical Fancies: In Two Dialogues* (London, 1700), *unpaginated preface*.

⁷² Sir Hans Sloane, An Account of a Most Efficacious Medicine for Soreness, Weakness, And Several Other Distempers of the Eyes (London, 1745) 3, 5.

⁷³ *Ibid.*, unpaginated preface, 7, 8.

⁷⁴ *Ibid.*, 13-14.

Chapter Three.

"The source of my sufferings is uncommon": The Medical Case Study and the Sentimental Novel in the Early Republic

Harvey's discovery of the circulation of the blood was a beautiful addition to our knowledge of the animal economy, but on a review of the practice of medicine before and since that epoch, I do not see any great amelioration which has been derived from that discovery.

-- Thomas Jefferson!

In mid-February of 1785, Jane Harrison, a 14 year-old servant-girl from New Haven, Connecticut threw herself from an attic window. Harrison survived the fall, but the shock left her wavering in and out of consciousness for two days. She awoke on a Saturday morning. However, as Dr. Encas Munson records in a case study he later shared with the New Haven County Medical Society, Harrison came to with her "jaws locked":

so that she was unable to receive any food or medicine; and by reason of the projection of the upper jaw, the upper teeth, which were very even and closely set, shut over the under teeth, quite down to the gums of the lower jaw, so that nothing could be introduced into her mouth but that was strained through a double row of thick set teeth.²

Thus impeded, Munson bled Harrison, applied topical medicines to her neck and spine, ordered a series of laudanum enemas, and forced her into hot baths. Nothing worked. Harrison's lockjaw persisted, and she endured a worsening series of what Munson describes as "spasms of opisthotonos & emprosthotonos," or, convulsions in the muscles of the head, neck, and back, which cause one to bend suddenly backwards (opistho) and forwards (emprostho).

Confounded, Munson resorted to the experimental treatment of electricity. He administered a pair of charges from her leg to her head—which loosened the locked jaw—and a third from shoulder to shoulder which stopped her convulsions. When Harrison's symptoms returned, as they did periodically over the following two weeks, recourse to the same treatment produced similar results. At the conclusion of the narrative, Munson declares Harrison to be "in a comfortable state of health," but does caution his audience not to extrapolate too much about the efficacy of such a treatment. "One instance is scarce of consequence enough to deserve attention," he writes. Yet, "should this communication be an inducement to farther experiments ... it will yield the most ample recompence and the highest satisfaction." Harrison, as she is throughout the case, remains silent.

Munson's case study points to certain epistemological and discursive innovations—as well as shortcomings—that characterize the medical print culture of the post-Revolutionary U.S. Although Munson's treatments appear, to a twenty-first century reader, undeniably cruel, they represent a change from the frameworks through which Harrison's affliction would likely have been understood earlier in the century. As we saw in chapter one, the constellation of symptoms displayed by the young woman—a suicide-attempt, violent convulsions, and resistance to her social betters, particularly medical authorities—would likely have been understood, as in Cotton Mather's *Brand* narratives, through the discourse of witchcraft and demonic possession. Munson's turn to electricity, therefore, emblematizes the physician's wielding of Enlightenment knowledge over superstition. Furthermore, in contrast to Hans Sloane's case studies of African slaves in English Jamaica discussed in chapter two, Munson does not seek the origin of the young

woman's distemper in her moral failings. Instead, the doctor's intellectual authority derives from his use of precise anatomical language as well as his optimistic conclusion that the publication of an unorthodox treatment will not damage his reputation, but rather encourage the circulation of similar cases, and lead to further discovery.

Such changes notwithstanding, the tensions that arise from Munson's narrative of Harrison's ordeal speak to the limitations of medicine at this historical moment. For, as Thomas Jefferson observed in the letter to Edward Jenner which forms the epigraph to this chapter, advances in medical and natural knowledge over the course of the eighteenth century did little to ameliorate patient suffering. Violent jolts of electricity may have released Harrison's jaw, but the case still ignores what drove the servant girl to the attic window in the first place. Therefore, the confrontation between Harrison's row of "thick set teeth" and Munson's electrical receivers dramatizes an epistemological impasse confronting American medicine, and medical publication, at the close of the eighteenth century.

Throughout the eighteenth century the medical case study offered colonial elites a way to leverage their geographic liminality as an epistemological advantage in the Atlantic republic of letters. Because of its brevity and its reliance on embodied witnessing, the patient history stressing the firsthand observation of symptoms, disease, and treatment was an ideal form for authors writing from the colonial periphery. Literary form signaled social and epistemological distinctions between trained physicians and empiricks, apothecaries, barber-surgeons, mountebanks, quacks, and kitchen or folk practitioners. Creoles were ideally positioned as firsthand observers of unfamiliar medical phenomenon, which they sent back to European scientific societies. Unlike its

modern descendant, however, the Enlightenment medical case functioned less as a tool of institutionally integrated, or clinical, research and more as a flexible, episodic narrative form through which an author asserted membership in an epistemic community of learned observation. Such narratives therefore attained meaning only provisionally, dependent upon their context of publication and circulation, thereby allowing elites to navigate moments of significant epistemological and social contingency in the colonial world.

In this and the following chapter I trace this colonial legacy as it carries into the new nation. The innovative representational strategies developed by authors like Cotton Mather and Hans Sloane persist in the medical literature of the early U.S. Republic as physicians struggle, both in practice and in writing, to reconcile revived hopes for the efficacy of medical knowledge with the persistent failures of medical practice. Case studies produced by learned physicians in the late eighteenth-century demonstrate a clearer understanding of the body's basic functions, but lack any truly effective way to address that functioning, thus heightening an existing tension in medical practice and literature between learned physicians advanced anatomical knowledge and stalled therapeutic understandings. This impasse in learned medicine somewhat paradoxically abets the diffusion of medical knowledge and understanding beyond the trained physician in the early Republic. Learned doctors were slow to professionalize in the United States, creating what a number of medical historians have described as a highly competitive marketplace for the management of illness in the years after the Revolution.

Not only were patients in the early Republic more likely to seek medical care from domestic or otherwise un-trained practitioners, they also asserted a surprising degree of authority over medical knowledge and the management of illness. The published case study thus served distinct epistemological and professional ends for learned physicians, but was nevertheless a genre familiar to and available for use by lay medical observers. In these final two chapters I focus on one cohort of observers—literary novelists—who assert their unique authority for contributing new knowledge to medical understandings of the role of the emotions in human health. These writers develop a form of "sentimental empiricism" in order to counteract the increasingly specialized but completely ineffective practice of medicine through the prose technology of the novel.⁴

In chapter three I address a set of professional changes impacting medicine in the new nation. American physicians in the 1780s and 90s embraced new possibilities for medical practice and medical publishing. A few physicians in the early Republic attempted to professionalize by founding local medical societies, organizations which oversaw credentialing as well as the gathering and circulating of medical knowledge. Physicians in the early Republic emphasized their observational acumen and professional credentials by incorporating pathological anatomy, or autopsies, into their case studies, thus investing professional authority in the knowledgeable description of human anatomy. The move towards the interior of the body had significant impacts on both the style and form of the case study. In addition to familiar narratives of humoral imbalance counteracted by a physician's purgative interventions, medical cases in the early Republic continue after patient death. They often detail, in precise anatomical language, the scene of the autopsy. Rather than locating the cause of an illness in connection to broader frameworks often mutually understood between doctor and patient (supernatural,

climatological, or ideological), the turn to specialized language shifts epistemological authority entirely to the physician. Just as Encas Munson does with the history of Jane Harrison, such cases effectively frustrate the collaborative understanding and narration of illness.

Concurrent with the rise of pathological anatomy, however, leading medical thinkers like Benjamin Rush encouraged physicians to look beyond the body in order to understand the complex interaction between the new social formations of the post-Revolutionary U.S. and certain endemic, nervous diseases. In his lectures at the University of Pennsylvania, Rush outlines the concept of a "tone of mind" as a way to speculate on how social-historical events, such as the American Revolution, can cause bodily illness "through the medium of the mind." However, increasingly professionalized medical case studies that place an emphasis on pathological anatomy ignore precisely the kinds of social, biographical, and psychological factors that could influence a given patient's tone of mind, and therefore be integral to understanding the cause of their disease.

In the final section of this chapter, therefore, I turn to that genre which stakes a special claim to enunciating the biographical and psychological development of an individual subject: the sentimental novel. Specifically, I recover *The Hapless Orphan* (1793), an anonymous, epistolary novel set during Little Turtle's War, a disastrous conflict with American Indian tribes on the Ohio frontier. The plot of the novel centers on a series of tragic, fictional case studies of seduced women and suffering soldiers. The novel's protagonist, Caroline, acts as a kind of sympathetic physician, circulating among her patients as they suffer emotionally, and therefore physically, through the social,

economic, and political instabilities of the early Republic. Because of its central focus on biographical and psychological factors, the novel constitutes an ideal genre through which to perform a pathological anatomy on these historical forces that impact the body through the conduit of the mind. Placing this understudied novel in dialogue with the medical case history demonstrates how literary narratives were able to expose the blindness intrinsic to medical discourse as well as how the undervalued authors of the early American republic experimented with the epistemological possibilities of literary form. However, as the novel's tragic conclusion indicates, even the innovative combination of the medical case study with the apparatus of the fictional novel cannot overcome the failures of the early U.S. Republic to realize its founding ideals.

1. Four years after Jane Harrison's case study was read before members of the New Haven Medical Society, Benjamin Rush—physician, revolutionary politician, and professor of chemistry at the University of Pennsylvania—published a short medical essay entitled, "An Account of the Influence of the Military and Political Events of the American Revolution upon the Human Body." In "An Account" Rush outlines the new field of inquiry opened to physicians by the unprecedented events of the Revolution. Changes wrought by the war extended beyond the military and the government to transform economic, religious, and broader social relations. "From the action of these causes," Rush reasons, "effects might reasonably be expected, both upon the mind and the body, which have seldom occurred; or if they have, I believe were never fully recorded in any age or country" (188). Rush gestures towards the strictly mental impact of the Revolution, a topic the he would pursue at length in his most famous work,

Medical Inquiries and Observations Upon the Diseases of the Mind (1812). In this earlier work, however, Rush narrows his focus to "take notice of the influence of these events upon the human body, through the medium of the mind" ("An Account" 188). Rush therefore divides his collection of the impacts observed by him or reported by others between those that caused directly by combat or military life, and those resulting from the altered political landscape.

Under the heading of military effects, Rush quickly glosses those derived from "actual war" (including extreme thirst, increased body heat, and hardiness under surgical operations) to dilate upon the impact of soldiering more generally ("An Account" 188). Rush considers the hardship of military life to be generally healthy. As evidence he cites an attachment of militiamen that spent six weeks exposed to the severe cold, sleeping on the ground or in barns en route from Philadelphia to Trenton. Yet, "there were only two instances of sickness and only one of death in that body of men in those winter months" ("An Account" 190). Camp life not only prevents, but also cures disease. Rush documents three cases of soldiers whose service in the Continental Army healed their chronic, pulmonary consumption. Other soldiers experienced healthfulness during the war and then fell ill upon their return home, victims of fever or other disorders. Rush includes the case of a militia captain who slept comfortably on the ground for several months during a campaign, only to suffer convulsions the first night he lay safely in a feather bed. Barring, presumably, the violent hazards to body, revolutionary warfare appears to have a decidedly salutary effect on the mind.

Such martial-medico-jingoism from Rush—a signer of the Declaration of Independence, member of the Continental Congress, and Physician General to the

Continental Army in the middle Atlantic colonies—may be unsurprising. Elsewhere, however, the early Republic's foremost physician appears less sanguine about the salubrious nature of the military and the manners of soldiers. The Revolutionary War generally was a time of intense negotiation over health in America. Smallpox raged among regular soldiers and militiamen, controversies over status arose around the authority of physicians in camps, and common soldiers generally refused to patronize learned doctors (like Rush) or follow their regimen advice, instead relying on folk remedies or less expensive alternatives. ⁷ Therefore, Rush's claim in another paper included in *Medical Inquiries and Observations* that "Hospitals are the sinks of human life in an army," attains both a scientific and a social charge. Contagious hospital diseases such as dysentery and typhus, according to Rush, "robbed the United States of more citizens than the sword" during the revolution. Military hospitals are bad and soldiers themselves are no better: "Soldiers are but little more than adult children. That officer, therefore, will best perform his duty to his men, who obliges them to take the most care of their HEALTH."8 Although Rush fervently supported the revolutionary cause, he openly criticized the management of military hospitals during the war and ran afoul of both Congress and General Washington, leading to his resignation as Physician General in the midst of the conflict.

In Rush's estimation, failures of institutional and self-management certainly deserve blame for the widespread sickness in the continental army. He further hypothesizes that geographic and social diversity in the military may breed certain illnesses, particularly typhus. Although Rush briefly observes racial distinctions in tracing the progress of typhus (e.g., "The native Americans were more sickly than the

natives of Europe who served in the American army"; and "Those black soldiers who had been previously slaves, died in a greater proportion by this fever, or had a much slower recovery from it, than the same number of white soldiers"), he is primarily concerned with the mixed "habits and manners" which characterized the continental army:

It was very remarkable, that while the American army at Cambridge in the year 1775 consisted only of New-England men (whose habits and manners are the same) there was scarcely any sickness among them. It was not till the troops of the eastern, middle, and southern states met at New-York and Ticonderoga in the year 1776, that the typhus became universal, and spread with such peculiar mortality in the armies of the United States.⁹

Rush here unwittingly describes the progress of epidemic typhus, a bacterial infection spread primarily through lice, yet ascribes the disease's proximate cause to the social and geographic diversity endemic to a national army. The health of a unified nation, via analogy, would seem uncertain.¹⁰

But, Rush insists in "An Account," despite unhygienic soldiers, mismanaged hospitals, and mixed encampments, the revolution did in fact produce noteworthy health benefits. Rush therefore proposes that the central medical novelty of interest during the revolution is the unique operation of the events, both positive and negative, on the bodies of the participants through the "medium of the mind" ("An Account" 192). Rush refers multiple times to a "tone of mind" developed during the revolution, a phrase that serves to connect the body to the mind, offering a conduit from the mental to the physical. He observes: "The patience, firmness, and magnanimity with which the officers and soldiers of the American army endured the complicated evils of hunger, cold, and nakedness, can only be ascribed to an insensibility of body, produced by an uncommon tone of mind excited by the love of liberty" ("An Account" 191). Such claims were at once conventional and contested in accounts of the Revolutionary era produced by competing

political parties in the new nation. Democratic-Republican propagandists in particular referred to a "Spirit of '76" that infused American regulars, militia, and citizens. A mood that Patrick Henry described during the Virginia Constitutional convention as, "the American spirit...which has enabled us to surmount the greatest difficulties." Sermons, orations, parades, public monuments, songs, broadsides, and other forms of public memory focused on this pervasive spirit of republicanism that credited the people, not elite army generals or individual heroes, for victory over the British. ¹³

However, by invoking the phrase "tone of mind," Rush consciously turns away from an abstracted notion of "spirit" influencing post-Revolutionary America and instead draws upon his Edinburgh medical training under William Cullen (1710-1790). 14 Along with a few other eighteenth-century Scottish physicians then studying the nervous system. Cullen developed the concept of a tone of mind as an accommodation between new physiological understandings about nerves and traditional, Galenic medicine. Longstanding medical theory addressed the influence of mental states on bodily health by relying primarily on Galen's doctrine of the non-naturals, or the external impacts on the body that could influence the circulation of the humors. Galen's sixth non-natural (after 1. air, 2. food and drink, 3. sleep and waking, 4. movement and rest, 5. retention and evacuation) was the passions of the soul and the emotions. As strict Galenism lost influence among learned physicians through the seventeenth and eighteenth century, eroded in part by the work of Andreas Vesalius (1514-1564), William Harvey (1578-1657), and Thomas Willis (1621-1675), the connection between health and the passions centered on the vast network of nerves described in these anatomical researches. Despite their importance to both medical and moral discourse, the specific form and function of

the nerves themselves remained poorly understood in European medicine into the nineteenth-century. 15

Into this vacuum, Cullen offered tone of mind as one way to describe the influence of Galen's sixth non-natural on bodily health, and thus to theorize a mind-body connection on which Rush would elaborate. In a 1770 lecture Cullen writes:

[T]here are in certain men, through the whole of life, or at least through a great part of it, manifestly dispositions [sic] on the one hand, to Courage, Joy, Gaiety, and Hope, or on the other to Timidity, Sadness, Seriousness, and Despair; and when these dispositions subsist and make a part of a temperament, we call it a certain Tone of mind, and these tones are produced by moral causes and by physical, as by states of the body. ¹⁶

Cullen elsewhere argues that the emotions "sensibly affect every fibre and function of the body," and likewise bodily health can contribute to new mental states: "intrepidity is a natural consequence of the state of vigour in the body, and ... the state of debility ... is a cause of timidity." The prevailing influence of tone demands that physicians take into account, not simply the climate or air quality surrounding a patient, but also turn their attention to the social and historical setting of an illness. Cullen's insistence upon the mutual influence of moral and physical states here broadens the purview of medical science into fields typically ascribed to philosophers or divines.

In the American context, Rush applies this concept to both the upheavals of the Revolution and to the new social milieu arising after the war. Accordingly, Rush does not reduce a soldier's tone of mind to a single, patriotic emotion. Different tones impact the body at different times and in different ways. And such tones are by no means limited to a specific political ideology. For instance, Rush discusses a specific tone that has been connected to the colonial experience more generally: that of homesickness. The tendency to desertion that plagued militiamen during the war that Rush ascribes to "nostalgia" or

"homesickness" was overcome in at least one instance by the "superior action of the mind under the influence of the principles which governed common soldiers in the American army" ("An Account" 191). 18 Additionally, Rush credits "the vigor infused into the human body by" the victory at Trenton with producing an "insensibility to all the usual remote causes of disease" among the soldiers during the subsequent winter. Conversely, however, a number of soldiers report feeling a "glow of heat" at the onset of a battle, which can account for the apparently non-violent deaths of numerous soldiers at the Battle of Monmouth. Temperatures in excess of 90 degrees Fahrenheit combined with the "heat excited in the body by the emotions of the mind" to cause such casualties ("An Account" 189). Or, in reference to the above-mentioned militia captain who suffered from convulsed insomnia after returning from the war (symptoms that today we might associate with post-traumatic stress disorder), Rush hypothesizes that "[t]hese affections of the body appeared to be produced only by the sudden abstraction of that tone in the system which was excited by a sense of danger, and the other invigorating objects of a military life" ("An Account" 190-1). For Rush, the connection between the revolution and national health in this sense is not strictly ideological or merely metaphorical, but a complex, little understood physiological phenomenon.

Rush draws this connection in "An Account" and elsewhere by citing observations of other physicians at analogous moments of significant social unrest and linking them to certain maladies. For instance, Rush quotes the observations of Giorgio Baglivi, who accounted for an increase in apoplexies (strokes) among the residents of Rome in the year 1694 as "owing to the universal grief and domestic care, occasioned by all Europe being engaged in a war" ("An Account" 192). In parallel, Rush notes that

"the winter of 1774, 5 was a period of uncommon anxiety among the citizens of America...for the event of a petition to the throne of Britain, which was to determine whether reconciliation, or a civil war ... were to take place" (192). Rush references the specific case of Petyon Randolph, Virginia planter and president of the first Continental Congress whose death by apoplexy in 1775 may have been "occasioned by the pressure of the uncertainty of those great events upon his mind" ("An Account" 192). Accounting for tone of mind in medical phenomenon will necessarily expand the scope of a physician's practice and therapies.

Rush acknowledges as much by addressing the health impact of the revolution on citizens not directly involved in combat. The second half of "An Account" turns to the role of political changes on the physical health of the general population. Rush speculates that typically non-medical factors including the increased circulation of paper money, the disestablishment of the Anglican hierarchy, and sudden changes in political influence may have been productive of medical phenomena as varied as "more fruitful" marriages, "a true melancholia," and even sudden deaths from "political joy" ("An Account" 193-4). He goes as far as to define two entirely new diseases introduced by the events of the war with Britain. "Revolutiona," a depressive fever, preyed upon loyalists and killed a number in Charleston after the British Army had evacuated that city. "Anarchia," a corresponding mania, gripped some supporters of the revolution following the Treaty of Paris in 1783. Rush characterizes "Anarchia" as an "excess of the passion for liberty, inflamed by the successful issue of the war," which, though not causally responsible for any deaths, nevertheless produced "opinions and conduct which could not be removed by reason, nor restrained by government" ("An Account" 195-6).

People of delicate sensibility were particularly susceptible to the ebb and flow of revolutionary social change. Their transformation, surprisingly, was often for the better: "Many persons of infirm and delicate habits, were restored to perfect health, by the change of place, or occupation, to which the war exposed them." Rush singles out "Hysterical women" as among those who were strengthened by the outcome of the revolution: "when either love, jealousy, grief, or even devotion, wholly engross the female mind, they seldom fail, in like manner, to cure, or to suspend hysterical complaints" ("An Account" 193). Again, Rush finds an historical parallel for his observations in another set of medical cases, this time those produced by William Cullen himself during the Scottish Jacobite Rising of 1745/6. These parallel instances suggest the ameliorating "effects of a civil war upon the hysteria" and "may perhaps help to extend our ideas of the influence of the passions upon diseases" ("An Account" 192-3). Though not explicitly expressed as such, the influence of the passions, both positive and negative, on the physical body can be ascribed to what Rush earlier referred to as the "tone of mind" dominant during the period of the revolution.

Rush was not alone in marking the post-Revolutionary United States as a watershed in the relationship between the mind and the body. In an April 1789 address to the American Philosophical Society, Dr. Nicholas Collin classed medical enquiries as principal among the fields of natural philosophy to pursue in the new nation. ¹⁹ Collin, like Rush and Cullen, identified "nervous disorders" as among a set of ailments endemic to the new nation (others include rheumatism, intermitting fevers, loss of teeth, and colds). "[N]ervous complaints," though widespread in civilized Europe according to Collin, strike more indiscriminately and with greater force in America. In extreme cases

of such disorders, "the soul vibrates between apathy and morbid sensibility" resembling "a disordered clock, that after a long silence chimes till you are tired, and often instead of one strikes twelve."²⁰ Although Collin draws on a more conventional, and explicitly religious, Cartesian framework for such disorders, his clock metaphor suggests a mechanistic, even possibly physical, link between body and soul akin to a tone of mind.

Collin further characterizes the origin of such disorders in terms evocative of the interest in probing the relationship between historical forces and bodily illness through the medium of the mind. Alongside physical weakness and religious enthusiasm Collin speculates that historical events are a primary cause of nervous disorders in the United States. "[T]e convulsion of public affairs for a considerable time past," he writes, "occasioned many domestic distresses: the natural events of the late war are universally known: numbers of virtuous citizens have also felt the dire effects of the succeeding anarchy; especially in the loss of property." The baleful impacts of such distempers require the serious attention of not only physicians, but also "legislators, divines, and moral philosophers." Medical science in the early Republic thus stood at the forefront of assessing "domestic distresses," be they in the home or in the nation at large, and medical case histories should thus address such distresses.

Rush and Collin aim at understanding the complex relationship between the mind and the body brought to light by the transformative historical events of the American Revolution. Therefore, both physicians advocate for a systematic, collaborative intellectual project among American medical professionals. As Rush demonstrates in his own research—specifically by corroborating patients he observed with examples from other physicians at other historical moments, culled from collections of similar

observations—such a project can best be traced through individuated case studies: a brief narratives of illness experienced by an individual patient and observed by a physician. Rush therefore encourages the discursive exchange of medical cases that resist tautological resolution. He urges learned physicians to employ the case study both as a way to differentiate themselves professionally—to demonstrate their awareness of the importance of observation—and as a means by which to embrace the new epistemological possibilities offered in light of the American Revolution.

Rush adheres to this generic and professional expectation as both practitioner and professor. Case studies form the foundation of the papers collected under his Observations and Inquiries in addition to playing a major role in his other medical publications. His oeuvre embodies the primacy of practical, as opposed to theoretical, knowledge in physic, as he argues: "the improvement in medicine is not to be derived only from colleges and universities ... those facts which constitute real knowledge, are to be met with in every walk of life." In a lecture that concludes the series he delivered at the University of Pennsylvania in 1788, Rush explicitly directs his medical students to retain case studies for both personal use and as a public service. Of their "chronic cases," American physicians should "[r]ecord the name, age, and occupation of your patient; describe his disease accurately, and the changes produced in it by your remedies; mention the doses of every medicine you administer to him." Rush advises that these records of practice retained in personal casebooks will help individual physicians to regularize their diagnoses and therapies, thereby individually and collectively working towards the "improvement of medicine." Rush also courts a wider audience for the observational case study, urging practitioners to "[R]ecord the epidemics of every season" because, "[s]uch

records, if published, will be useful to foreigners, and a treasure to posterity."²² As we have seen in previous chapters, medical case studies typically circulated within a community of like-minded professionals, open to inductively collating evidence, as records of practice which privilege observation and resist dominant theoretical paradigms. In the early Republic, however, the genre becomes at once more formalized—consider Rush's editorial directives to his students—and, as I will discuss in more detail below, plays a significant role in the formation of medical societies, and therefore in the professionalization of physicians. Rush, however, wants to not only make the case study central to medical practice in the new nation but also to orient the genre towards the wider public.

Just as this specialized genre no longer aims narrowly at fellow physicians so it also addresses phenomena typically understood to exceed the purview of medical science. The American physician, attentive to the importance of tone of mind over disease in the new nation, is both scientist and historian at once: recording in his individuated observations empirical matters of medical fact that open onto the operation of wider mental, and thus historical, forces. Rush concludes his lecture at University of Pennsylvania with a rapturous description of the state of physic inaugurated by the American Revolution:

While the world, from the progress of intellectual, moral and political truth, is becoming a more safe and agreeable abode for man, the votaries of medicine should not be idle. All the doors and windows of the temple of nature have been thrown open by the convulsions of the late American revolution. This is the time, therefore, to press upon her altars... Let us preserve the unity of truth and happiness, by drawing from the same source, in the present critical moment, a knowledge of antidotes to those diseases which are supposed to be incurable. ²³

American physicians who diligently record, circulate, and publish records of their practice will not only improve physic but also "assert their prerogative and rescue the mental science from the usurpation of schoolmen and divines." Each medical case study offers an aperture onto the highest truths available to human knowledge, thus potentially inaugurating a new golden age in human health. However, as the history of medical publishing and practice in the 1780s and 90s demonstrates, physicians generally turned their gaze inward, narrowing their attention to the inside of the body. And while such a turn helped to consolidate the authority of learned physicians, it did little to alleviate patient suffering, be it bodily or mental.

2. The post-Revolutionary medico-utopia that Rush describes for his students was far from the reality they would face as medical professionals in the early Republic. The elevated social and intellectual position he imagines for the American physician stands in stark contrast to the decidedly low esteem in which they, and their art, were generally held. Instead of the yeoman philosopher kings imagined by Rush, doctors in the early Republic were generally mocked as un-trained quacks whose treatments were often as painful as they were ineffective; a stereotype that was not far off. Formally educated and university trained physicians were rare in colonial and revolutionary America. One historian estimates that at the time of the War for Independence, "about 5 to 10 percent of the 3,500 Americans who practiced medicine for a living had college diplomas." This paucity of university-trained physicians is unsurprising considering that the first medical school did not open in colonial British North America until 1765. The overwhelming majority of American medical practitioners therefore trained via the apprenticeship

model. Such regular, as opposed to learned, physicians relied on vernacular knowledge and therapies widely accessible to their patients via domestic remedy books (e.g., reprints of early modern pharmacopeia such as Nicholas Culpeper's *The English Physician* (1652) and *The Compleat Herbal* (1653); or more recent collections such as Thomas Short's *Medicina Britannica* (1751) or *The Edinburgh New Dispensatory* (1791)) as well as the health advice and remedies included in the ominpresent almanack. The few practitioners wealthy enough to study at a European medical school (as, for example, Rush did in Edinburgh) often struggled to establish a customer-base in the new nation able or willing to pay their necessarily expensive fees, and likewise were often mocked for their learned pretensions. Historian Paul Starr has summarizes this tension: "While some physicians were seeking to make themselves into an elite profession with a monopoly of practice, much of the public refused to grant them any such privileges and asserted their own rights to judgment in managing sickness."

In response to the intellectual call to arms sounded in Rush's lecture, a few

American medical practitioners in the early Republic engaged in a fitful effort to
constitute a profession. They did this largely through the formation of educational and
professional institutions scattered across the new nation. The integration and
centralization of medicine, relative to other Enlightenment sciences, happened markedly
late throughout the British Atlantic world, and especially so on the colonial periphery.

Though the Royal College of Physicians had been founded in the sixteenth century, there
were no formal licensing procedures imposed beyond London until well into the
eighteenth century. In North America in particular, no formal structures for licensing
physicians existed until after the Revolution, although medical colleges were established

at Philadelphia in 1765 and at Boston in 1783. A flurry of professional medical societies did emerge just after independence. Examples include state medical societies for Massachusetts (1780), South Carolina (1789), Delaware (1789), Connecticut (1792), and Maryland (1798). There were also a number of county societies, typically centered in larger cities such as the New Haven County Medical Society (1784) or the Philadelphia County Medical Society (1796). Philadelphia, the undisputed center of early American medicine, also was home to the young nation's most prestigious medical organization, the College of Physicians of Philadelphia (1787).

These organizations held regular meetings structured on the model of Enlightenment scientific societies (especially the Royal Society or its U.S. counterpart, the American Philosophical Society), maintained correspondences, housed medical libraries, arranged apprenticeships, and, in some cases produced local, non-binding, licenses. Some also arranged the publication of medical papers and transactions.²⁷ Unlike the kinds of institutional formation and scientific publishing discussed in earlier chapters, in which medicine was aspiring to a position among the fields of natural philosophy, the formation of medical societies in the early Republic demonstrates the fitful disembedding of medical knowledge from other fields (e.g., botany and natural history). The case study played a central, if contested, role in that process. It continued to serve as a means of demonstrating empirical acumen and of participating in polite exchanges of knowledge. However, because of the struggles of learned medicine to assert professional authority in a fervently democratic culture, the case retained a tension between consolidating elite knowledge and capturing the full possibility of the kind of medico-utopia imagined by Rush and others.

Like the Royal Society, the American Philosophical Society (APS) included medical papers in the first few volumes of its periodical, Transactions of the American Philosophical Society. The institutional and publication structure of the APS reflects the specialization of the medical profession, and its division from other, formerly related fields of inquiry. The by-laws published in the first issue of the *Transactions* divide the Society's members into a set of six committees, each charged with confining "themselves only to the subjects, for which they are appointed, and to matters referred to them by Society."28 "Medicine and Anatomy" are separated from the previously related fields of "Natural History and Chemistry" (its own committee), "Astronomy," or "Geography" (included in a capacious committee covering Natural Philosophy and Mathematics). This division is re-enforced in the body of the *Transactions*. The first volume, covering the years 1769-1771, divides the papers into four separate sections, the last of which adress medical and anatomical matters. The participation in a scientific society demonstrates an ascendance of the medical profession—it now constitutes a legitimate part of philosophical inquiry—but also circumscribes the subjects fit for consideration by such medical professionals.

The print circulation of the medical knowledge gathered and exchanged by these societies became a key tool for elevating the prestige of learned physicians. Locally produced medical titles, aimed at both professional and lay readers, proliferated in the 1780s and 90s. For instance, Rush's above-mentioned *Observations and Inquiries*, consisting both of speculative papers and excerpts from his course of lectures delivered at the University of Pennsylvania were published in 1789, re-appearing in subsequent additions throughout the 1790s. Individual physicians produced short, often punctual

works on chronic diseases or epidemical outbreaks.²⁹ Accounts advocating new therapies or medicines were also popular, especially those documenting the efficacy of mercury, calomel, and the omnipresent Jesuit's bark for treating fevers and consumptions. Finally, students at the University of Pennsylvania and elsewhere published their dissertations.³⁰

The observational case study establishes a formal and epistemological commonality across these varied entries into the res publica medica. Whether assessing a disease and its treatment or debating the nature of an epidemic, American medical authors of the early Republic stress their reliance on firsthand evidence garnered from practice, as opposed to systematic or theoretical understandings of disease derived from medical theory. By the late eighteenth century, the case study was well established as an "epistemic genre" governing medical training and practice in Europe and the colonial world. Also, as Sarah Knott's work on doctor-patient correspondence in the early Republic demonstrates, the case influenced how patients themselves narrated their experience of illness.³¹ Learned physician's confronted threats to their authority by transforming the case into a tool of institutionalization. Printed cases circulated in collections dedicated specifically to medical knowledge. Such cases typically emphasized collaboration among trained physicians and specialized knowledge through the increased incorporation of Latinate, anatomical language. They also introduced a new narrative element unavailable to domestic caregivers, quack physicians, or patients themselves: the autopsy.

The professionalization of the case study has both epistemological and narrative consequences. The *observationes* addressed earlier in this study are shaped by the long-dominant, humoral understanding of illness. Humoralism—which held that bodily health

derived from a balance among the four essential humours and could be affected primarily by an interaction with the environment—was easily accommodated to larger frameworks about the supernatural, climatological, racial, or moral etiologies for disease. Even as Galen's influence waned in universities with the rise of the New Science, the basic humoral framework was often shared by the lay and the learned, the patient and the practitioner. Therefore, individual cases ascribed the meaning of an illness to causes existing outside the body, ordering the disorder of a disease by attaching it to a larger narrative about, for example, the moral or spiritual state of an individual or a community. The medical case in the early Republic, conversely, became increasingly specialized through the addition of what is, to the non-specialist, highly abstract anatomical language and through the added scene of the autopsy. These two changes—one to style, one to form—shift the case study away from mutually understood narrative forms, marginalizing the patient experience and emphasizing instead the specialized knowledge of the physician as performed in the autopsy. The rise of pathological anatomy therefore signals a turn away from shared understandings of disease, and adds the scene of the autopsy to the case study that, ironically, reduces the meaning of illness to non-narrative forms of knowledge.³²

The New Haven County Medical Society's 1788 publication, *Cases and Observations*, demonstrates the importance of the case study form to both the epistemological community of practical medicine and the professional reputation of physicians in the early Republic. Unlike the works cited above, *Cases and Observations* consists of a miscellaneous overview of the medical papers presented by various members of the New Haven society since its 1784 founding. Each of the 26 cases is

attributed to an individual physician, and treats a unique instance of a disease, injury, or surgery. A short, anonymous preface lays out the both the history of the society as well as establishing the essentially propagandistic function of the collection. As in Rush's *Observations*, the preface credits the events of the Revolution with both practical and ideological inspiration for the formation of their society: "The late war brought many ingenious and learned physicians together from all parts of the continent, and the army formed them into a temporary society, whose unreserved communications have contributed to the improvement of medical knowledge, and the establishment of a new and important era in the healing art." The volume not only celebrates the spirit of collaboration that characterized the practice of medicine during the war, but also brings together records of similarly collaborative practice that it hopes will inspire physician's in the new nation. Accordingly, each narrative demonstrates these "liberal and generous principles" by highlighting moments of collegial consultation between physicians.³³

Aside from the dissemination of medical knowledge the preface to *Cases and Observations* proffers an explicitly propagandistic motivation for the publication of these cases. The author hopes the collection will recruit more members to the medical profession and more participants in an American *res publica medica*: "To excite others to this laudable and salutary work," the preface asserts, "is one of the principal objects of this publication." The preface proceeds to lay out in some detail the workings of the society, including the schedule and structure of regular meetings and general topics addressed, the requirements for membership and process of licensing and evaluation, the group's intentions for correspondence with medical societies in other states and in Europe, as well as a solicitation for reader communications to be directed to the secretary.

This publication is therefore as much aimed at producing converts to the medical profession as it is about elevating American "Medical literature" so that it "will soon be in as a flourishing a state in this country as in any part of Europe."³⁴ To that end, *Cases and Observations* consolidates a previously broad body of knowledge into the medical profession by including cases that address not just practical medicine, but also *materia medica*, midwifery, and surgery. Fields previously shared with apothecaries, surgeons, midwives, and kitchen or domestic practitioners thereby fall under the purview of the learned physicians who are members of the Society and therefore appear practicing in the pages of its periodical.

While many cases present scenes of disinterested, proto-clinical consultation between society doctors, a few more actively deride therapeutic practices that compete with those of a learned physician. In so doing, the cases circumscribe who can practice medicine in the new nation and who, therefore, can produce medical knowledge. For instance, Dr. Leverett Hubbard's "Case of a Gangrene of the Scrotum" depicts a patient, "Mr. S____ H____, aged forty years, a temperate man, and of a good constitution," who was stricken with an intense pain in his groin. The case begins before treatment, however, with the pointed detail noting that "a plaister was applied, formed of the oily dirt which swine leave on fences after rubbing" to the affected area before sending for the physician. The home remedy proving ineffective, Hubbard then treats H____ daily between September 20th and September 26th.

The case records in attentive detail progressing symptoms—a fever attends the swollen genitals, tumors develop on his right hand, and a severe pain develops in his abdomen. Hubbard carefully verifies those reported by the patient through the

observation of the doctor, as in, "[H]e complained of a pain in two of the fingers of his right hand, on which I observed tumors much inflamed, of a ripe cherry colour." Hubbard's treatments are conventionally humoral, involving three instances of venesection (or bloodletting) as well as the repeated administration of cathartics and emetics. But Hubbard demonstrates his learned observation by not only referencing the characteristics of fluids produced through the humoral therapies (the blood was "as buffy as is usual in a violent pleurisy") but also by employing anatomical language which makes visible to the learned reader the invisible interior of the body: "[A]fter the scrotum was sloughed off ... two other coats, the cremaster and the tunica vaginalis ... also sloughed off, leaving the tunica albuginea in a sound state." Epistemological authority over the meaning of illness here manifests in both the narrative detailing of an ineffective kitchen remedy as well as the descriptive attention to an increasingly specialized anatomical understanding. This effectively transfers authority over the meaning and progress of disease from a shared understanding between doctor and patient to the sole control of the doctor.³⁵

The increasing importance of anatomy to the medical case study manifests most clearly in the prevalence of autopsy in these cases. Though Mr. H_____ recovers—

Hubbard's narrative concludes that on December 5th he "was able to attend to his former business" as a shoe-maker and tanner—eight of the twenty-six case histories end in patient death and dissection, or autopsy. As we saw in chapter two, the mere representation of patient death stood out in earlier collections of case studies. Most cases were offered as exemplary—of the efficacy of particular course of treatment or of the skill of a physician—and therefore only presented positive outcomes, leaving no need for

representing an autopsy. In fact, though the study of anatomy, and therefore the practice of dissection, had been central to European medical education since the sixteenth century, the open practice of pathological anatomy retained a stigma as both a religious and a cultural taboo until the early nineteenth century. Autopsies were performed—although not without significant controversy—in European and American medical practice throughout the early modern and Enlightenment periods, but not until the mid-eighteenth century were they depicted in published medical case studies.

Michel Foucault cites the importance of pathological anatomy—the location and tracking of disease in dead tissue, as distinct from anatomical dissection—to the rise of clinical medicine in the early nineteenth century. He further observes the historical inaccuracy of claiming that autopsies were only performed surreptitiously before the "birth of the clinic." There existed, as he rightly notes, operating and dissection theaters in major European medical centers throughout the eighteenth century. In colonial and early national America, however, the situation was decidedly messier. Although anatomy museums and operating theaters existed in Philadelphia and New York in the 1780s, and dissection was widely practiced, no states passed laws formalizing the procurement of subjects for dissection until New York did so in 1789. Therefore, physicians and medical students typically employed the bodies of those with lesser social standing (executed criminals, for example, or the destitute interred in public burying grounds) for dissections. In response, resurrection riots targeted physicians or private medical societies throughout the latter decades of the eighteenth century, and depictions of grave-robbers and bag-men persisted in American print and visual culture throughout the antebellum period.³⁸

By the 1780s, however, autopsy was key to both medical practice and epistemology and therefore warranted representation in published medical case studies. Despite the controversies surrounding autopsy in the early Republic, Rush directed his students at the University of Pennsylvania to "open all the dead bodies you can, without doing violence to the feelings of your patients."³⁹ The autopsies included in the collection of cases published by the New Haven Society follow this directive. Those autopsied represent a cross-section of early-national New Haven, ranging from an anonymous laboring man and an unnamed adult woman, to three children under the age of seven (one of whom, Polly Edwards, is identified as the daughter of Pierpont Edwards, a prominent New Haven litigator later appointed as federal judge by Thomas Jefferson), the "deformed foetus [of] a gentlewoman" and, in the opening case, Polydore, "an Negro servant" who died from "an adhesion of the Liver to the Diaphragm." Members of the New Haven medical society, these cases collectively argue, do not snatch bodies from a pauper's grave. Rather, these records of autopsies demonstrate the willing (with the important exception of Polydore) participation of patient families, thus striving to normalize the practice as an accepted part of learned medicine and remove it from the purview of graverobbers and resurrection men.

The addition of morbid anatomy also adds a new dimension to the case study's narrative structure and descriptive protocols. Whereas the published case histories discussed in chapters one and two tended to terminate their narratives with a successful outcome, cases such as those included in the collection of the New Haven Society continue after patient death. The earlier medical cases draw upon the embedded (or implied) narrative structure of the early modern genre of *historia*, which often gestures

towards Providential or climatological causes of disease that were, at least in general terms, mutually understood between doctor and patient. The addition of the autopsy to the narrative structure of the case history, particularly with its increasingly specialized anatomical language, moves the form towards dis-articulated, classificatory, non-narrative schemes of Enlightenment medicine, thereby forestalling mutual understandings of disease. The narrative energy of a case history that ends in death derives neither from the patient's subjective, reported experience of illness, nor from the physician's translation of those symptoms into a diagnosis and assigning a course of treatment. Rather, the true meaning of the case is revealed only after death with the opening of the body, in what Foucault calls the "collective, homogeneous space" organized by "the anatomo-clinical" gaze. As

For instance Dr. Ebeneazer Beardsley appends a post-mortem dissection to the history of John Chappel, "a healthy, sprightly boy, five years of age" who died after treatment for what appeared, on first blush, to be a case of worms. Beardsley first visited the boy on a Saturday morning, having been called after the child vomited "ten large worms of the round kind." Not willing to rely on the reported diagnosis, the physician begins his case study by reporting his attentive observation of the trio of diagnostic hallmarks—"[the boy's] pulse was extremely quick, small, and unequal; his countenance pale and sunk, his respiration quick and laborious"—before determining on a course of treatment for worms. Despite an aggressive regimen of anti-emetics, enemas, and calomel (a mercury derived purgative), the boy dies late Sunday morning. After obtaining permission from the parents, Beardsley performs an autopsy in the company of another physician and his brother, a lay observer.⁴³

The familiar, and shared between doctor and patient, narrative of humoral imbalance combated by heroic intervention stops with the history, and a second narrative mode begins with the dissection:

The abdominal viscera were all found well conditioned, except about two inches of the lower part of the duodenum, or upper part of the jejunum, which was inflamed and sphacelated [gangrenous], which appeared clearly to be the cause of his death. From the dissection it appears, that the disease was originally a true enteritis, or inflammation of the bowels, and it is highly probable that the worms were not at all concerned in the production of it ... It also appears from this history and dissection that we ought not implicitly to trust those authors, and others, who are too apt to consider all diseases of the intestines in children, as arising from worms.⁴⁴

Despite rendering confident judgment at close, the language of this passage obfuscates even as it purports to lay bare the genuine seat of the boy's illness through the embodied witnessing of an autopsy. The anatomical diction asserts the physician's learned observation, yet remains penetrable only to the specialist. Furthermore, specifically at the point of revelation the physician hedges: "what appeared clearly to be the cause of [the patient's] death," the gangrenous portion of the small intestine, cannot be precisely located. It resides either in "the lower part of the duodenum, or the upper part of the jejunum." The accretive syntax ("which was inflamed ..., which appeared ...") of the first sentence is reversed in the following and the act of dissection essentially rewrites the case history that had come before. Generalization based on collective knowledge—that children with stomachaches have worms—here is waylaid through practical, inductive, and specialized knowledge.

An understanding of pathological anatomy emerges here as the true, if esoteric, knowledge of the real physician—something in which neither quack nor nurse nor patient can share. Unlike the vomiting of worms, or even the more mundane observation and

assessment of pulse, countenance, and breath—all outward signs followed in time by a progression of symptoms—the dissection ensures that only a physician can see beyond the history to ascertain the precise reason for the boy's death. Pointedly, the accurate story of sickness is really told after the person has died, by the physician alone. The patient's narrative of subjective experiences rendered as symptoms no longer anchors a shared understanding of how disease operates on the body. Instead, the doctor opens the corpse and describes the movement of illness through the body, thereby rooting the truth of illness in a story that only he can tell. The case study in the late eighteenth century thus embodies the tension over who has control over medical knowledge and how a story of disease should be told.

Pathological anatomy and its corollary, clinical medicine, may have been emergent, but, unlike in Foucault's France, they were far from triumphant in the late eighteenth-century United States. Medical practice still generally took place in the home, often an economic exchange between patient and provider. Learned physicians had to compete openly for patients, who retained significant power over, if not knowledge of diseases, then at least over who would treat them. For both pecuniary and philosophical reasons, then, Benjamin Rush advises his students to adopt the posture (and the position) of a yeoman farmer, rather than a learned gentleman. American physicians, should be like clergymen, Rush tells his students, and "reconcile the country people to the liberality and dignity of [the medical] profession by shewing them that you assume no superiority ... from your education and that you intend to share with them in those toils ... imposed upon man." More practically, working as a farmer could provide an independent income, something a physician entering the competitive healthcare marketplace of the early U.S.

could not be assured of. This Republican humility should extend to the pursuit of medical knowledge as well. "[C]onverse with nurses and old women," Rush advises, "they will often suggest facts in the history and cure of diseases which have escaped the most sagacious observers of nature." Rush's evident paternalism notwithstanding, his inductive openness here suggests that larger social forces that exist beyond the body should constitute at least part of the history of a disease.

In addition to pathological anatomy, then, the doctor needs to be attentive to society and manners, lest as medicine buries itself in the body, it leave the mind behind. Such tension is evident in the case of Mrs. Potter, a New Haven woman treated by the surgeon John Spalding. Despite the surgeon's demonstrated anatomical knowledge, the case leaves pendulously open the origin of the patient's true illness, thereby demonstrating the incapacity of medical literature to fully address the horizon of illness in the new nation. In January of 1781 Potter, aged 58, attempted to take her own life with a pair of scissors. Spalding arrived shortly thereafter and successfully treated her for a "deep and frightful wound in her throat" which required complex and repeated suturing of the trachea and esophagus. The case history demonstrates little interest in Potter's motivation beyond observing in a dependent clause of its opening sentence that she had been "much subject to melancholy, and under temptations to put a period to her life for a number of years." This rare insight into not only a patient's history but specifically her state of mind comes only after the anatomical aims of the case study. The author includes the telling detail that Mrs. Potter was "afflicted with a large scrophulous [glandular] tumour (sic) on the fore part of her neck." The attention to the tumor throughout treatment (it becomes inflamed at one point, Spalding notes) suggests, but does not

develop, a connection between the bodily growth and her mental state. The case instead narrates Spalding's treatment of the wound, and subsequent complications including a fever and infection, in abstracted, anatomical specificity. After nearly two weeks of daily treatment, including an aggressive suturing of the trachea, Potter's wound "incarned and cicatrized [scarred]," and Spalding reports that she "now enjoys her usual health." Of course, what the case leaves open is the precise state of that "usual health."

Like the case of Jane Harrison with which I began this chapter, the attention to the body through anatomical knowledge proves futile in addressing the melancholy that persistently threatens both patients' lives. These cases fail to locate the precise cause of each patient's illness in part because the privileging of pathological anatomy offers a series of opened bodies, not lived experiences. In order to, as Rush advocated, understand the effects on the body through the medium of the mind, physicians need to attend to the social forces which produce a certain tone of mind, not just their physical residue.

Therefore, what the case of Mrs. Potter seems to call for is an alternate mode of inquiry: the prose technology of the novel. The professional medical discourse exemplified by Rush and his acolytes, though sensitive to certain social events in determining health, bracketed the very content—biographical and psychological development—that the novel staked its special claim to enunciating.

3. One novel that I would like to suggest attempts to perform this work is the anonymous *The Hapless Orphan; Or Innocent Victim of Revenge* (1793).⁴⁷ The novel stages multiple scenes of both competition and consultation between physicians and the eponymous casualty, Caroline Francis. The narrative positions the protagonist as a rival

to the country quack, yet also asserts the utility of the novelistic form to aid the learned physician. In her capacity as sympathetic physician, Caroline attends to young women suffering through the emotional fallout from the nation's first public tragedy following the Revolution, a series of disastrous military defeats on the Ohio frontier known as Little Turtle's War. The novel therefore responds, in part, to Rush's call to attend to the new kinds of sickness unleashed by the formation of the new nation. If the Revolution, in its radical destabilizing of economic and social hierarchies, produced powerful tones of mind and new diseases, so the unfamiliar threats posed by Native Americans on the frontier and by precarious social formations in the early Republic would produce new illnesses, requiring new narrative attention. Accordingly, the novel registers dissatisfaction with not simply the state of American medicine, but also with medical literature. Arranged as a series of case studies, what Caroline calls her "little histories," the novelistic framework extends the epistemological capabilities of medical literature in order to account for the kinds of social and historical forces that impinge upon the body through the conduit of the mind.

After being introduced on the title page as "A NOVEL, FOUNDED ON INCIDENTS IN REAL LIFE," the plot unfolds in a series of letters from Caroline, to her friend Maria, who in turn passes the "the Memoirs" on to her sister Harriot, a conceit which bookends the narrative (*Hapless* 1; emphasis original). The Byzantine plot introduces upwards of thirty characters as Caroline critiques the post-Revolutionary social milieu as seen from boarding houses in New York, Princeton, Trenton, Philadelphia, and Havre de Grace, Maryland. Caroline's wandering dateline, ostensibly motivated by her flight from a murderous rival, Eliza, also comes to include military

installations on the frontier: Fort Pitt, Fort Washington, and Fort Recovery. Through interpolated letters from soldiers, the novel documents the events of Little Turtle's War, an ongoing struggle for control over lands in present-day Ohio and Indiana waged between the United States and a confederation of American Indian tribes. Unlike the buoyant medico-utopia projected by Rush and other learned physician's in the wake of the War for American Independence, *The Hapless Orphan* addresses the tone of mind endemic to the instability of the early 1790s, offering a dour conclusion which reflects the failure of the national imagination to realize the promise of its founding.

The Hapless Orphan has been largely overlooked by modern critics, save a small cohort tracing the influence of Goethe's *The Sorrows of Young Werther* (1774) on early American fiction. 48 What little attention the novel has received focuses on the graphic depiction of a murder-suicide involving Caroline's close friend and protégé, Fanny Gardner, and a *Werther*-inspired Romantic, Mr. Ashley. The significance of the scene (which I treat in more detail below) notwithstanding, this tendency has unfortunately relegated the text to the status of critical footnote based on the actions of a character, Mr. Ashley, who appears in only the final twenty of the novel's over two hundred pages. Anecdotal information about the novel's print history and circulation suggests its popularity at the time of publication. 49 Such readings, while attuned to the complex circulation of representational strategies during the colonial early national period, nevertheless offer an account of the early U.S. novel as an immature sub-genre of the European novel, formally derivative and aesthetically under-valued.

As opposed to studies of the British novel, scholars generally date the emergence of the novel in America to the period just following the Revolution, thus establishing the

U.S. iteration of the genre as an inherently nationalistic form. In Cathy Davidson's highly influential account, the rise of the novel in the post-Revolutionary United States extended the democratic possibilities initiated by political independence. "[T]he novel form," Davidson argues, "validated individual identities and championed equality." This critical tendency arises in part because of a tacit understanding of Anglo-colonial prose narrative development that owes a debt to influential accounts of the eighteenth-century British novel, especially those of Ian Watt, Michael McKeon, and Nancy Armstrong.

According to these critics, the rise of the novel is inextricably linked to the historical emergence of the middle class and modern individualism. Developments are assumed to follow a similar, albeit delayed, trajectory in the colonial context and thus, as Michael Gilmore has written, "The post-Revolutionary novel can be described as a prototypically 'liberal' artifact" that only comes fully into being by the Jacksonian era. 51

As a departure from this line of criticism, I would like to consider *The Hapless Orphan* within what John Bender has called an "Enlightenment knowledge system." Bender writes, "the eighteenth-century novel [was] an Enlightenment knowledge system that overlapped with those of science and philosophy in a period before the modern disciplines were marked off from one another." Bender encourages us to look at the ways the novel participated in philosophical and scientific discourses throughout the Enlightenment, beginning with the concomitant developments of literary and philosophical realism, as well as extending to the role of the novel in producing virtual experience for reader's inhabiting an increasingly mediated world. ⁵² By placing an underappreciated novel like *The Hapless Orphan* in the context of the medical case study, I think we can begin to build an understanding of the early American novel as an

epistemological, rather than solely an aesthetic, genre: a prose technology that seeks to produce knowledge about the complex interactions between the body, the mind, and the tumult of political and economic life in the early Republic.

On its face, the fictive treatment of Little Turtle's War lends the novel a measure of literary historical significance. Fought between 1785 and 1795, Little Turtle's War was part of a larger conflict between the United States and the American Indian tribes that rightfully inhabited the land chartered as the Northwest Territory. After the Treaty of Paris in 1783, British troops evacuated the sparsely populated region between the Appalachian range and the Mississippi River, only to be replaced by a woefully inadequate American force. Deployed as part of the establishment and management of the new territory, a few regular, professionally trained troops, aided sporadically by militia, suffered a series of defeats en route to a massacre near the banks of the Wabash river (on what is now the Ohio/Indiana border) in November of 1791. The battle remains the worst, single defeat in the history of the U.S. military: approximately one-quarter of the entire U.S. Army was killed in a single day.⁵³

St. Clair's Defeat, as the battle was quickly branded after the disgraced General who led the American force, prompted a series of firsts for the new nation: the first formal investigation of the executive branch undertaken by Congress; the first cabinet meeting (in response to the investigation); the first political and legal test of the separation of powers; and is among the first examples of an assertion of executive privilege. The disaster also spurred the first major, public controversy in the history of the United States. Major General Arthur St. Clair, also the Governor of the newly created Ohio Territory, was forced to resign to President Washington after the Congressional

inquiry into the disaster. An exchange of letters between the President and the General were published in eastern newspapers, sparking a public scandal that embarrassed both St. Clair and the administration. The overwhelming nature of the defeat, the dishonorable conduct of U.S. military officers (including leaving many casualties behind on the field of battle), the public scandal, and the continuing battles between settlers and Native Americans on the western frontier all contrast the valor and heroism championed in medical reflections on the Revolutionary War. The defeat not only raised questions about the ability of a central government to defend its citizens, but also produced an atmosphere of insecurity about the viability of the new nation itself.

The human toll of the disaster was memorialized in the novel *Hapless Orphan*, among other songs, broadsides, newspaper commentary, and in the memoirs of individual soldiers. While often capitalizing on the name recognition of the disgraced general with titles such as "St. Clair's Defeat: a new Song," a number of the commemorations also focused on the plight of individual soldiers in order to highlight the failure of the nation to properly support its troops. For example, "St. Clair's Defeat: a new Song" links soldiers of all ranks fighting at Fort Recovery with their predecessors at "Bunker's Hill and Quebec," making a point to mention more than 40 individual names. ⁵⁴ Two versions of a 1792 broadside published at Boston and Hartford memorialize the event with a short summary of the massacre, a list of soldiers wounded and killed, an elegiac poem, and a set of grotesque and phantasmagoric woodcuts (see Appendix vi). In what is the dominant visual feature of the page, two rows of starkly black coffins hover above the broadside's title, "The Columbian Tragedy," each inscribed with a name. At once macabre and democratizing, this attention to the suffering and death of individual

soldiers, rather than accounts of abstract heroism or the exploits of elite generals, finds a counterpart in the skeptical treatment of the war's impact on individual American women in the pages of *The Hapless Orphan*. Furthermore, the novel's borrowing from the medical case study as a thematic and formal guide, as well as a logical instrument finds a corollary in the broadside's interest in isolating the individual soldier.

Just as the treatment of suffering soldiers addresses the failure of the government to protect its citizens on the frontier, so the novel addresses the role of physicians in caring for the female citizens of the new nation. Early in the novel, Caroline satirizes both the American physician and the popular understanding of health in the nation, particularly through the figure of her adoptive guardian, the hypochondriac Aunt Noble. When Caroline, a denizen of Philadelphia, pays a visit to her Aunt, then residing in Trenton, and politely inquires about the woman's health, the latter launches into a litany of all "her mental and bodily sufferings." Aunt Noble's passionate recounting of her symptoms—"A numbness of the brain, an extreme pressure upon the eyes, and a constant irritation of the nervous system"—eventually brings on "spasms, contractions, &c." (Hapless 10; emphasis original). In a scene repeated throughout the novel, a country doctor is summoned to administer to Aunt Noble repeated doses of "camphire" (a well known, and mild, herbal derivative) dissolved in a cordial, which settles her. The novel pointedly caricatures the country doctor's learned pretensions:

The physician of my aunt was invariably called, three or four times a week, to renew his prescriptions of camphire, which he administered in various ways; sometimes in powder to "brace the debility of her delicate frame;" at others in drops, "to diffuse itself into the little vessels and cause a proper animation of the parts. The head, madam, abounds with an infinite number of fine vessels, some of which are too crowded with blood, while others are flabby and want to be wound up" (*Hapless* 11).

The physician's language here evokes Rush's and Cullen's tone of mind, particularly in the description of flaccid or tense blood vessels. Furthermore, the diction gestures towards anatomical specificity—"an infinite number of fine vessels"—but with a clear intention of pedantic obfuscation. In the hands of a quack such basic knowledge only girds a parasitic relationship between doctor and patient.

The repeated visits signal his pecuniary motivations as well as Aunt Noble's willing self-delusion. Later, while visiting Caroline in Philadelphia, Aunt Noble parrots her country physician and complains "Of stricture, tension, febrile heat; an universal affliction of the nervous system, an inexpressible irritation, and expected fits." Caroline calls a learned, Philadelphia doctor who, after observing a normal pulse and countenance, dismisses Aunt Noble with the request that she "give him no further trouble" (Hapless 52). The novel's satire of early American medical culture, then, seeks to elevate the practice of medicine in a manner similar to that of the published case studies discussed above. Observationally attained knowledge of nervous disorders or even of tonal variations in the vascular system is not dismissed outright as the fatuous pomposity of quacks and empiricks. Instead, the novel suggests the need to discern between a country and town physician and actually imagines a critical reading public, knowledgeable in medical science and practice.

Caroline, in fact, does not dismiss the possibility of an anxious disorder like that of her Aunt Noble's manifesting physically. Elsewhere she confesses that "I do not pretend to say that all my Aunt's disorders were imaginary, but am confident an attention to exercise and diet, would make her life much more comfortable" (*Hapless* 12). In fact, Caroline herself is beset throughout the novel by a series of mental disorders, owing

largely to the mounting parade of tragedies she endures. In a thematic parallel to the fledgling national army overrun on the frontier, Caroline's life is doomed from the outset. In the first letter alone she discloses her own orphaning, and the subsequent death of an uncle, and of her first adoptive guardians, the less ironically-named Dr. and Mrs. Franklin, a history she undersells as "uncommonly interspersed with gloomy scenes" (*Hapless* 2). Over the course of the novel Caroline suffers through the deaths of multiple friends, some to illness and others to violent outbursts in accordance with the conventional, if hyperbolic, machinations of a seduction plot. By the time reports of the military massacre at the westward enter the novel, the drawing rooms and bedchambers of Caroline's various boarding houses are already riddled with casualties.

Caroline, eventually beset by pervasive gloom, submits to a consultation with a physician. He "had the impudence to style [her] disorder *nervous*" and she censures the physician's reductive, self-serving diagnosis:

A pretty custom of the faculty, to class those complaints, which they have not sufficient abilities to remove under this denomination! By placing that disease upon those delicate organs, they conclude, should their applications be unsuccessful, their patients cannot censure their judgment, and they will thereby elude reflection (*Hapless* 23).

The heart of Caroline's critique lies not with medicine per se, but rather with a defensive, epistemological narrowing of the field. Elsewhere she acknowledges fully the relationship between the mind and health. "I am sensible indulgence in grief destroys the health," she observes after spending days in the "sick chamber" mourning the loss of a friend (*Hapless* 42). And, in response to a breakdown in communication with soldiers on the frontier, she offers the novel's fullest articulation of the connection between bodily health and mental states. "There is an inexpressible sympathy between the mind and

body," she writes, "they are mutually affected. Hope is the anodyne of life, a balm to the afflicted ... but fear, by depressing the spirits, brings on disease, which often terminates life" (*Hapless* 22). Caroline's anger at her diagnosis aims more at the unwillingness of a professionalizing medicine to pursue influences on bodily health that extend beyond the "delicate organs." Caroline therefore "discarded [the physician's] prescriptions," and instead endorses a "succession of entertaining, improving, studies [to] ward of dejection" (*Hapless* 23).

The collection of her letters that constitutes the novel is, in ways, the manifestation of that course of treatment. The text wavers unevenly between a sentimental plot in which Caroline travels among boarding houses ostensibly in flight from the inexplicably murderous Eliza, and a set of digressive reflections on the social, moral, and medical life of the early Republic. In these digressions the text encompasses a number of eighteenth-century literary genres, chief among them the didactic tract, the philosophical essay, and the travel narrative. Caroline frequently references her reading habits, but stresses her preference for history and philosophy, the former stated openly and the latter inferred from her chosen citations. The novel reads as an Enlightenment commonplace book, as it quotes frequently from Locke, Burke, Smith, Addison, Wollstonecraft, Young, and Hume, as well as making a number of classical allusions. In addition to drawing on this philosophical storehouse, Caroline's letters also embody an inductive method for dealing with the moral and social crises she confronts. Inspired by her uncle, the physician Dr. Franklin, she notes early on that, "Many useful lessons are to be learnt from observation" (Hapless 22). Her "observations"—a term whose dual meaning as both an epistemological category and practice of moral consideration the

novel deliberately exploits—come to focus on what she refers to as "little histories": a set of brief, inset narratives that imitate the abbreviated form and inductive logic of the observational case study and which often find Caroline tending to the emotional, and therefore physical, health of others (*Hapless Orphan* 44).

For instance, Mrs. Leason, the owner of a Philadelphia boarding house, shares with Caroline the case of her daughter's husband, Mr. Gibbins, who suffers financial ruin after engaging in financial speculation. "This unexpected event," Caroline observes, "has thrown the old gentleman into a dangerous state of ill health. His physicians give but little hope of his recovery" (*Hapless* 97). Subsequent reports detail his paralysis and eventual death. Over the course of the novel, Caroline recounts multiple, similar instances of the sudden loss of property, the perfidy of a spouse, or the treachery of a neighbor. Each casts an individual into ill health in a manner similar to how, according to humoral theory, the movement from hot to cold, or a wet to dry climate could.

The exchange of letters, or of conversation in the drawing rooms of boarding houses, parallels the structure of consultation and citationality that governs the exchange of medical cases. In fact, Caroline's striking mobility—a condition enabled by her orphaned status, the conceit that her betrothed, Capt. Evremont, is stationed on the frontier, and compelled by her flight from Eliza—enables her to gather observations. Caroline's frenetic movement between the boarding houses lends the novel an aesthetically disjunctive, but functional, structure: it leaps from location to location, often introducing plot lines or violently killing off characters with little realistic impact on the imagined world as it moves forward. What critics cite as the novel's the failed realism—an apparent lack narrative consequence, the dizzying number of characters and locales,

the un-integrated nature of the sentimental plot and the observational digressions derives, I contend, from the novel's attempt to participate in the varied medical discourse in the period, exercising a version of what Sarah Knott has called "sentimental empiricism." Knott outlines the practice of literate, as opposed to learned, medical enquirers in the early Republic who demonstrate not only significant medical knowledge but also employ the rhetorical form of the case study in their correspondence with physicians. According to Knott, these authors combined "evidence of the senses with subjective self-observation," thereby aiming to grasp "some of the epistemological authority that medical education took away. The natural knowledge of the human body was placed on a near-equal footing between the patient and the physician."55 The Hapless Orphan attaches this practice to the novel form. A combination of novelistic plot structure with the accretive logic of the medical case study allows for the collection of observations to document the social tragedy unfolding across the revolutionary generation. The novel thus imagines Caroline as a moral physician, a consultant to the learned doctor, who will introduce a more intimate, yet discerning, perspective to the cold, disembodied voice of the case history.

In Caroline's first extended case study, or "little history," she takes us repeatedly to the bedside of her friend and protégé, Lucretia. Lucretia had taken ill after her husband, Mr. Wilkins, wrongfully accused her of infidelity. In somewhat conventional, sentimental language that nevertheless draws upon the importance of bodily witnessing in learned medicine, Caroline exhorts her interlocutor, Maria: "could I take you by the hand and lead you to the chamber of Lucretia, the scene would excite your tenderest pity" (*Hapless* 33). The parallel extends over the course of her illness. Caroline embodies the

practical physician in her attentive observation and bedside note-taking. She tells Maria that "For seven nights I never left [Lucretia's] chamber." Her letters through this section write to the moment for the first time in the novel as Caroline carefully records key symptoms—"her eyes uncommonly wild, and her countenance suffused with a crimson colour"—and intersperses space breaks in her writing to attend to the patient (*Hapless* 36-37).

Caroline worriedly regards Lucretia's worsening symptoms and therefore consults with a learned physician who corroborates her assessment that the mental distress had manifest physically in a fever. The two work in concert: the physician blisters Lucretia's neck and arms to reduce the physical symptoms while Caroline tries to disabuse Mr. Wilkins of his misconceptions, the source of the mental distemper. Caroline's novelistic cases studies thus aim to supplement, not supplant, the learned physician. Lucretia's case ends in her death, as well as the murder-suicide of her father and husband. Caroline, the attending moral physician, requests to view "the breathless body" of Mr. Wilkins, but her male counterpart "pleads impropriety" (*Hapless* 43). The discourse of the novel here endeavors to situate itself alongside pathological anatomy, thereby suggesting its facility for locating the true seat of a disease that killed three people. As such, the novel offers as an alternate narrative technology to the increasingly non-narrative techniques of medical science, particularly when addressing a "complicated affliction" like that confronted by Caroline (*Hapless Orphan* 36).

A similar dynamic unfolds in another extended case study: that of Caroline's next acolyte, Fanny. Close attention to Fanny's persistent, yet confounding, illness constitutes the final third of the novel. Caroline notes that Fanny suffers from a "disorder which ...

baffled the skill of our physicians" (*Hapless* 89). Fanny's physicians are attentive and, in Caroline's estimation, correct in their chosen therapies for what they label a consumption. In accordance with best practices of the day Fanny is ordered to ride frequently through the open country around Philadelphia. The symptoms persist, however, and Caroline determines that "[t]he watchful eye of friendship shall be exerted to render her happy" (*Hapless* 103). Caroline maintains case notes and shares her observations with Maria, hopeful that a *res publica medica* of women treating other women can arrive at not only the origin but also the treatment for such an illness. Letter XCVII in particular reads as if drawn from Caroline's casebook: "Fanny is now sleeping by me. I flatter myself she rests more serenely than she has for some time past. Her cough is obstinate; nor are her other symptoms less alarming. You, my dear, who have been called to attend the dying pillow of tender friend, can feel for my sufferings" (*Hapless* 94). Caroline functions here as an observing friend to Fanny, the affective counterpoint to the sterile, professional gaze of anatomical pathology.

And the subjects made visible to such a gaze suggest the broader field of inquiry the novel can offer to medical science. When Fanny relapses after a period of recovery, Caroline attributes the change in her condition "to the anxiety of her mind ... at the sentiments of Mr. Ashley," the *Werther*-toting romantic whose actions will bring the raw violence of Little Turtle's War into the novel (*Hapless* 103). Despite Caroline's best effort to steer Fanny's romantic and literary critical sensibilities away from Ashley and the German romance he repeatedly quotes, Fanny falls victim. Caroline's own reading one evening is interrupted by a gunshot. She rushes to find the "bleeding, mangled shade of the amiable Fanny ... leaning back in an arm chair; the blood profusely poured from

her wound ... Mr. Ashley had fallen upon the floor by her side, and was also covered with the crimson fluid." This bloody tableau corrects Caroline's lack of access to the autopsy of Lucretia, although investigating Fanny's "bleeding, mangled" body offers no new information about the true seat of her illness (*Hapless* 105). This conclusion calls into question the ability of pathological anatomy to accurately locate the true sources of the kinds of diseases prevalent in the new nation. It furthermore asserts the novel's ability to keep you healthy, suggesting that, perhaps, a novel a day can keep the doctor away.

The text therefore registers frustration not only with the closed epistemology of medical literature, but also the generic limitations facing U.S. novelists in the late eighteenth century. Specifically, the novel makes a literary critical argument with the introduction of *Werther* as a key plot point in the final pages. Like the events of Little Turtle's War, *Werther* was a topical sensation in the early Republic. First appearing in England in 1779, the translated novel made its way to the U.S. shortly thereafter and quickly became a cultural touchstone for hyperbolic moralists deriding the deadly effects of novel-reading, a popular pastime in the early Republic. ⁵⁶ Therefore, the novel's placement on the table of Mr. Ashley just prior to his imitative murder-suicide of Fanny and himself seems to indict the very discursive technology that *Hapless Orphan* employs.

And the novel does, like many of its early Republican counterparts, at times argue against novel reading.⁵⁷ For example, Caroline chastises a younger acquaintance who "neglects those writings which would be beneficial and instructive, and with avidity seizes every romantic volume" (*Hapless* 15). However, Caroline's extensive treatment of Fanny leading up to her tragic demise suggests the power of a certain kind of novel to address the etiology of distempers which, though they begin mentally, threaten to

manifest physically. While *Werther* and other sentimental novels produce an overabundance of sympathetic identification through their engaging realism, the *Hapless Orphan*'s apparent aesthetic shortcomings—an episodic plot, unrealistic character actions, and digressive moralizing—attempt to keep such identification at bay, inculcating powerful lessons through snapshots of realism without overwhelming its readers. Thus conceived—that is, as decidedly un-realistic, and deliberately disjointed—the novel form has an ability to not merely diagnose, but also can be instrumental in treating the kinds of mental, and therefore physical, disorders plaguing the citizens of the new nation.

In a conclusion that one critic has derisively labeled as "without parallel in literary history" Caroline's narrative is taken over by Maria, the original recipient of the letters, after the protagonist has disappeared. Presumably, Caroline's abduction is the culmination of her battle with Eliza, the omnipresent enemy whose furtive tactics throughout the novel seem a deliberate echo of the depiction of American Indian military strategy on the frontier; both are "An enemy, whom, from their method of battle, it is almost impossible to subdue" (*Hapless* 56). Caroline dies mysteriously and in a moment reminiscent of the post-mortem depredations befalling soldiers in the wilderness, her corpse is surreptitiously recovered on the point of being made the object of an experimental autopsy. In order to prevent the suspicion that would be aroused by a new grave, Caroline's corpse had been interred in the same plot as the "subject" the young physicians had intended to "dissect" (*Hapless* 110). Unlike the broadside commemorating the "Columbian Tragedy," therefore, the novel concludes not with a

row, but with a stack of coffins, symbolizing the deliberate attempt to efface the contributions of the sympathetic physician.

As we saw above, the expanded sense of the relationship between the body and the mind advocated by Benjamin Rush and other medical professionals in the early Republic would require a more expansive sense of who treats an illnesses and how. Professional physicians in the period turned to pathological anatomy as a way of monopolizing medical knowledge and treatment, an epistemological and social shift that took literary form in the case study. By borrowing both thematic and formal elements from the medical case study, *The Hapless Orphan* suggests that a certain kind of novel may be able to offer sound consultation and salutary treatment to those whose illnesses have their origin in the mind, but nevertheless manifest in the body.

Appendix vi: The Columbian Tragedy, Boston: Ezekeil Russell, 1791.



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¹ "To Doctor Edward Jenner," *The Portable Thomas Jefferson* (New York, 1975), 501. Jefferson wrote a brief letter to Jenner in 1806 congratulating the English physician for successfully vaccinating smallpox.

² Munson's case study was read before the society in April of 1785 and published in *Cases and Observations by the Medical Society of New-Haven County in the State of Connecticut* (New Haven, 1788), 25.

³ *Ibid.*, 28.

⁴ Sarah Knott, "The Patient's Case: Sentimental Empiricism and Knowledge in the Early Republic," *The William and Mary Quarterly* 67.4 (2010): 645-76. Knott's work focuses on patient-authored case studies shared in correspondence with doctors, particularly those shared with Philadelphia-based physician Benjamin Rush. Her work astutely demonstrates the diffusion and sentimental inflection of medical knowledge as it circulated in literate, as opposed to learned, circles. This chapter elaborates on that distinction by tracing the medical case study as it informs the ubiquitous instrument of sentiment in the early Republic, the novel. On the shared understandings of illness and the competition among learned and domestic medical practitioners in the early Republic, see Richard H. Shyrock, *Medicine and Society in America*, *1660-1860* (New York, 1960); Charles Rosenberg, "The Therapeutic Revolution: Medicine, Meaning, and Social Change in Nineteenth-Century America," *Essays in the Social History of American Medicine* (Philadelphia, 1979), 1-25; Paul Starr, *The Rise of a Sovereign Profession and the Making of a Vast Industry* (New York, 1982); Linda Myrsiades, *Medical Culture in Revolutionary America* (Madison, NJ, 2009); and Elaine Breslaw, *Lotions, Potions, Pills, and Magic: Health Care in Early America*, (New York, 2012).

⁵ Benjamin Rush, "An Account of the Influence of the Military and Political Events of the American Revolution upon the Human Body," *Medical Inquiries and Observations* (Philadelphia, 1789), 188.

⁶ Rush included "An Account..." in his first major, printed contribution to the *res publica medica*, *Medical Inquiries and Observations*. Subsequent references will be cited parenthetically within the chapter as "An Account."

⁷ On the tensions surrounding medical care in the Revolutionary War, see Elaine G. Breslaw, *Lotions, Potions, Pills, and Magic: Healthcare in Early America* (New York, 2012), esp. 77-94.

⁸ "The Result of Observations made upon the Diseases which Occurred in the Military Hospitals in the United States, During the Late War," *Medical Inquiries and Observations* (Philadelphia, 1789), 184, *emphasis original*.

⁹ *Ibid.*, 183-4.

¹⁰ A number of critics have productively illuminated Rush's medico-political project, tracing analogies between the physical body and the body public across his writings. See particularly Colleen Terrell, "Republican Machines: Franklin, Rush, and Manufacture of Virtue in the Early Republic," *Early American Studies* 1.2 (2003): 100-32; Jason Frank, "Sympathy and Separation: Benjamin Rush and the Contagious Public," *Modern Intellectual History* 6.1 (2009): 27-57; Knott, *Sensibility and the American Revolution*, esp. 195-210; and Sari Altschuler, "From Blood

Vessels to Global Networks of Exchange: The Physiology of Benjamin Rush's Early Republic," *Journal of the Early Republic* 32.2 (2012): 207-231.

¹¹ Rush is not alone in his use of this the phrase, but I do contend that his usage is unique. The OED defines the phrase as "A state or temper of mind; mood, disposition," delimiting its usage to roughly 1750-1800.

¹² Qtd. in Max M. Edling, A Revolution in Favor of Government (New York, 2003), 125.

¹³ According to Sarah J. Purcell, for early Americans "[R]epublicanism went beyond just a form of government to encompass an entire set of values in American life. Self-sacrifice, military heroism, love of liberty, benevolence, fear of a centralized power, and a reverence for the common good merged to form a republican ideology that helped to organize American thought and action." See *Sealed in Blood: War, Sacrifice, and Memory in Revolutionary America* (Philadelphia, 2002), 2. Debates over how the Revolutionary era was remembered were key to the development of this ideology. On Early American Republicanism, see also Gordon Wood, *The Radicalism of the American Revolution* (New York, 1991) and Joyce Appelby, *Inheriting the Revolution: The First Generation of Americans* (Cambridge, 2000).

¹⁴ Cullen's work was hugely influential over not just Rush, but also the burgeoning medicopolitical culture in Philadelphia. For more on Rush, Cullen, and the role of nerves in both learned and popular discourse around sympathy and political action, see Sarah Knott, *Sensibility and the American Revolution*, esp. 74-82.

¹⁵ On the role of the nervous system in the Scottish Enlightenment see Justine Murison, *The Politics of Anxiety in Nineteenth-Century American Literature* (Cambridge, 2011); esp. pp. 19-27. On Cullen in particular, see Gunter B. Risse, *New Medical Challenges During the Scottish Enlightenment* (New York, 2005), esp. 153-6; and Julius Rocca, "William Cullen (1710-1790) and Robert Whytt (1714-1766) on the Nervous System," in *Brain, Mind, and Medicine: Essays in Eighteenth-Century Neuroscience*, Harry Whitaker and Stanley Finger, eds. (New York, 2007), 85-98. On the waning of Galenic doctrine in European medicine, see Roy Porter, *The Greatest Benefit to Mankind* (New York, 1999), 229.

¹⁶ Quoted in John Thomson, *An Account of the Life, Lectures and Writings, of William Cullen, M.D.*, vol. 1, (Edinburgh, 1832), 360.

¹⁷ Quoted in Risse, New Medical Challenges, 154.

¹⁸ In addressing British soldiers stationed in the West Indies during the same period, Cristobal Silva writes, "nostalgia thus acted as a reminder of the immeasurable cost of colonialism displaced onto the soldier's mind and body in the late eighteenth century. Put another way, it marked the physiological reaction to colonial displacement." Such a reading, I contend, is not out of place in understanding one of the affective responses to war among soldiers and militiamen of the Revolutionary U.S. See "Nostalgia and the Good Life," *Eighteenth-Century Theory and Interpretation* 55.1 (2014), 125.

¹⁹ Collin, a physician and senior minister serving the Swedish Lutheran Church in Philadelphia, published his comments as the introductory essay to the third volume of the Society's *Transactions*. See "An Essay on those inquiries in Natural Philosophy, which at present are most

beneficial to the United States of North America," *Transactions of the American Philosophical Society*, vol. 3 (Philadelphia, 1793), iii-xxvii.

²⁰ *Ibid.*, vii.

²¹ *Ibid.*, vii, iv.

²² Observations of the Duties of a Physician and the Methods of Improving Medicine. Accomodated to the Present State of Society and Manners in the United States (Philadelphia, 1789), 9-10.

²³ *Ibid.*, 11.

²⁴ *Ibid.*, 10.

²⁵ Finger, *Dr. Franklin's Medicine*, 4. See also Whitfield J. Bell, Jr., "A Portrait of the Colonial Physician," *The Colonial Physician and Other Essays* (New York, 1977); and Richard H. Shyrock, *Medicine and Society in America*, *1660-1860* (New York, 1960).

²⁶ Starr, *The Social Transformation of American Medicine*, 31. On the wide accessibility of medical knowledge in the early Republic see Thomas Horrocks, *Popular Print and Popular Medicine* (Amherst, 2008), and Sarah Knott, "Patient's Case: Sentimental Empiricism and Knowledge in the Early Republic," 645-76. On the competition among learned, regular, and domestic medical practitioners throughout the eighteenth-century, see Porter, *The Greatest Benefit to Mankind*, esp. 266-302.

²⁷ On the efforts at consolidating medical knowledge and practice in the early Republic, see Porter, *The Greatest Benefit to Mankind*, esp. 290-300; Linda Myrsiades, *Medical Culture in Revolutionary America*, esp. 34-59; and Elaine Breslaw, *Lotions, Potions, Pills, and Magic*, esp. 95-112.

²⁸ Transactions of the American Philosophical Society, Held at Philadelphia, For Promoting Useful Knowledge. Vol. I (Philadelphia, 1771), xii.

²⁹ Examples include Hall Jackson's, *Observations and Remarks on the Putrid Malignant Sore-Throat* (New Hampshire, 1786); David Nassy's, *Observations on the cause, nature, and treatment of the epidemic disorder, prevalent in Philadelphia* (Philadelphia, 1793); and Calvin Jones' *A Treatise on the Scarlatina Anginosa* (Catskill, NY, 1793).

³⁰ E.g., David Ramsay's A Dissertation on the Means of Preserving Health, in Charleston and the Adjacent Low Country (Charleston, 1790) or James Norcom's An Inaugural Thesis on Jaundice (Philadelphia, 1799).

³¹ On "epistemic genre" see Gianna Pomata, "Sharing Cases: The *Observationes* in Early Modern Medicine," *Early Science and Medicine* 15 (2010), 197. On patient authored case studies, see Knott. "The Patient's Case."

³² On the wide persistence of humoral understandings of disease, particularly in the eighteenth-century U.S, see Rosenberg, "The Therapeutic Revolution: Medicine, Meaning, and Social

Change in Nineteenth-Century America;" and Porter, *The Greatest Benefit to Mankind*, esp. 256-302.

³³ Cases and Observations by the Medical Society of New-Haven County in the State of Connecticut (New Haven, 1788), iv.

³⁴ *Ibid.*, iii-iv.

³⁵ *Ibid.*, 21-4.

³⁶ *Ibid.*, 21.

³⁷ Foucault, *The Birth of the Clinic* (New York, 1973 [1994]), 125-48. On the advent of dissection in the Renaissance, see Wootton, *Bad Medicine* (Oxford, 2006), 73-94.

³⁸ On the cultural history of autopsy, see Ruth Richardson, *Death, Dissection, and the Destitute* (Chicago, 1987 [2000]). For the context in the early Republic, see also Myrsiades, *Medical Culture in Revolutionary America*, 60-76.

³⁹ Observations on the Duties of a Physician (Philadelphia, 1789), 9.

⁴⁰ Cases and Observations, 38, 9.

⁴¹ As Kelly Wisecup argues that "colonial medical writing is characterized by rhetorical discontinuities: shifts from historia to non-narrative literary strategies and finally to classificatory forms," a transition she reads as systematically marginalizing native medical knowledge and practice. While I do not dispute Wisecup's account of the general development of forms over the course of the eighteenth century, my interest aims less at the ideological function of colonial medical discourse and more at the tentative modes of apprehension employed at discrete moments of social and epistemological instability. See *Medical Encounters*, 32.

⁴² The penetrating omniscience of what Foucault labels the "anatomo-clinial" gaze is attended in his French-focused account by a host of social and institutional transformations, including the emergence of state run hospitals and subsequent removal of medical practice from the home, the combination of medical education with in-patient treatment (or, the clinic), and the (somewhat later) emergence of the medical laboratory as an experimental space. While Foucault's highly influential account provides a general framework for the epistemological transition unfolding in medical science in the late eighteenth-century, as with his history of autopsy cited above, the continental focus fails to account for the complexities of provincial scientific culture. See *The Birth of the Clinic* (New York, 1973 [1994]), 139, 196, and *passim*.

⁴³ Cases and Observations, 36.

⁴⁴ Ibid.

⁴⁵ Observations on the Duties of a Physician, 3, 10.

⁴⁶ Cases and Observations, 75, 77.

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⁴⁷ The Hapless Orphan; Or, Innocent Victim of Revenge (Boston, 1793). The novel is not currently in print, although a digital typescript has been prepared by Duncan Faherty and Edward White. My citations are drawn from this copy. Hereafter, all references are cited parenthetically within the essay as *Hapless*.

- ⁴⁸ See Orie William Long, "English and American Imitations of Goethe's *Werter*," *Modern Philology*, 14.4 (1916): 18; G. Harrison Orians, "Censure of Fiction in American Romance and Magazines 1789-1810," *PMLA*, 52.1 (1937): 205; and Robyn L. Schiffman, "A Concert of Werthers," *Eighteenth-Century Studies*, 43.2 (2010): 13.
- ⁴⁹ The extent of *The Hapless Orphan's* circulation in the period can be attested to by its presence in the reading diary of Jacob Norton, a rural Massachusetts preacher, and the novel's 1795 republication in Dublin by P. Wogan. See Mary Kupiec Cayton, "The Expanding World of Jacob Norton: Reading, Revivalism, and the Construction of the 'Second Great Awakening," *Journal of the Early Republic* 26.2 (2006): 221-48.
- ⁵⁰ Davidson, *Revolution and the Word: The Rise of the Novel in America* (New York, 1986 [2004]), 118.
- Gilmore, "The Literatures of the Revolutionary and Early National Period," *The Cambridge History of American Literature*, ed. Sacvan Bercovitch, (Cambridge, 1984), 620. Recent historiography and literary criticism have done much to de-center a strictly national teleology by illuminating the circum-Atlantic nature of cultural exchange in the colonial and post-Revolutionary periods. The emergence of the novel in America, though implicated in these Atlantic or even global frameworks continues to be treated as a national phenomenon. For important, recent departures from this critical tendency, See Edward White, "Captaine Smith, Colonial Novelist," *American Literature* 75.3 (2003): 487-514; Stephen Shapiro, *The Culture and Commerce of the Early American Novel: Reading the Atlantic World System* (University Park, Penn., 2008); and Paul Giles, *The Global Remapping of American Literature* (Princeton, 2012). For the influential European-inflected accounts of the history of the novel, see Ian Watt, *The Rise of the Novel* (Berkely, 2001 [1957]); Michael McKeon, *The Origins of the English Novel*, 1600-1740 (Baltimore, 1987); and Nancy Armstrong, *Desire and Domestic Fiction: A Political History of the Novel* (New York, 1987).
- Bender, *Ends of Enlightenment* (Stanford, 2012), 4. Jason Tougaw situates the rise of the British novel and the medical case study within a similar framework: "The case study is medicines answer to the Enlightenment's call for empiricism, and the novel is literature's." He astutely observes the parallel dynamics of sympathetic identification and critical judgment which both literary forms enable their readers to exercise. "The approach of [late eighteenth-century British novels of sensibility] is analogous to the clinical approach of physicians," he writes, "the narrator outlines a set of narrative and characterological problems and then uses the story to diagnose and 'treat' the pathologies it represents." While Tougaw's account makes the two forms analogous, my analysis of the novels of the early U.S. Republic brings the two close together, suggesting that a novel such as *The Hapless Orphan* is not simply analogous to the diagnostic and therapeutic labor of a physician, but rather aims to perform that work through impacts on the mind. See *Strange Cases: The Medical Case History and the British Novel* (New York, 2006), 2, 27.
- ⁵³ According to Wilbur Edel, a total of 632 of 920 soldiers and officers were killed and 264 were wounded in the battle, resulting in an American casualty rate of 69%. Nearly all of the 200 camp

followers were slaughtered, for a total of 832 Americans killed. American Indian casualties were about 61, with at least 21 killed. See Edel, *Kekeonga!: The Worst Defeat in The History of the US Army* (Westport, Conn., 1997), 88-92. For more on St. Clair's Defeat, see Sarah J. Purcell, *Sealed With Blood: War, Sacrifice, and Memory in Revolutionary America (Philadelphia*, 2002), 121.

⁵⁴ "St. Clair's Defeat – a New Song" is an anonymous broadside in the possession of the American Antiquarian society. There is no publication information for it.

⁵⁵ Knott elaborates this argument based on her survey of the correspondence between Benjamin Rush and a number of his patients. Significantly, she identifies this as a uniquely U.S. phenomenon, tracing its origins to the colonial era dependence of creole elites on Native or African knowledge for participation in Atlantic scientific networks. See Knott, "Sentimental Empiricism," 648.

⁵⁶ On the reception of *Werther* in the early Republic, see G. Harrison Orians, "Censure of Fiction in American Romance and Magazines 1789-1810," *PMLA*, 52.1 (1937); and Robyn L. Schiffman, "A Concert of Werthers," *Eighteenth-Century Studies*, 43.2 (2010).

⁵⁷ For example, William Hill Brown's *The Power of Sympathy* (1789) and Tabitha Tenney's *Female Quixotism* (1801) both prominently feature characters whose minds and morals are degraded by the reading of novels and romances.

⁵⁸ Orie William Long, "English and American Imitations of Goethe's *Werter*," *Modern Philology*, 14.4 (1916): 18.

Chapter Four.

"Where similar cases are stated": The Medical Case Study and Provisional Knowledge in Charles Brockden Brown's *Wieland*

We must...in every reasoning form a new judgment, as a check or controul on our first judgment or belief; and must enlarge our view to comprehend a kind of history of all the instances, wherein our understanding has deceiv'd us, compar'd with those, wherein its testimony was just and true.

--David Hume, A Treatise of Human Nature¹

Charles Brockden Brown's first published novel, *Wieland; or The Transformation: An American Tale* (1798), opens with a medical accounting of the death of Clara Wieland's father. Though the entire novel is framed as a letter to an inquiring friend about the violent tragedy that had befallen Clara's family—her brother, Theodore, following commands from disembodied voices, kills his wife, two children, and then himself—Clara appends a brief biography of her father as prelude. Clara's recounting of her father's case focuses on the events leading to his mysterious death by an apparent lightning strike or spontaneous combustion: the novel, and subsequent criticism, remain unresolved. The pertinent details of the elder Wieland's case include not only the return of his evangelizing zeal and portentous references to divine judgment, but also more strictly medical observations on his pulse, breath, and countenance. After the elder Wieland is burned during intense prayer at his private temple, he is brought into the house and treated for injuries consistent with a lightning strike: "his skin, throughout the

greater part of his body, was scorched and bruised. His right arm exhibited marks as of having been struck by some heavy body." Fever gives way to delirium, including a vision of a "person bearing a lamp," and Clara's father expires.²

Clara concludes the case with a series of questions inspired by her father's case:

Was this the penalty of disobedience? this stroke of a vindictive and invisible hand? Is it a fresh proof that the Divine Ruler interferes in human affairs, mediates an end, selects and commissions his agents, and enforces, by unequivocal sanctions, submission to his will? Or, was it merely the irregular expansion of the fluid that imparts warmth to our heart and our blood, caused by the fatigue of the preceding day, or flowing, by established laws, from the condition of his thoughts (*Wieland*, 18)?

Clara's reflections animate the epistemological conundrum of the subsequent novel, coloring her brother's actions as much as offering insight into the events that befell her father. Such questions frame the novel as an attempt to adjudicate authority over realms of knowledge—the spiritual and the material, the divine and the earthly, the body and the soul.

Modern critics have followed Clara's lead, reading Brown's novel as allegorizing a struggle over social and cultural authority in the early U.S. Republic. Critics often point to the crisis produced by the foreign interloper, Carwin, the true source of the disembodied voices heard by Theodore Wieland as well as other residents of Mettingen, as Brown's skeptical meditation on the possibility of grounding epistemological, and therefore political, authority in a modern republic. While varying their emphases from the domestic, to the legal, and the pedagogical spheres, these critics generally agree that the novels resists a determined conclusion regarding the questions posed by Clara. Therefore, the indeterminacy which hangs over the events that transpire at Mettingen

points to Brown's skepticism that Enlightenment knowledge will produce human happiness.

Critics have overlooked that such questions, Clara acknowledges, were developed in consultation with her maternal uncle, "whose profession was that of a surgeon." "It was from him," she admits," that I have frequently received an exact account of the mournful catastrophe" of her father's death (*Wieland* 13). That uncle, Mr. Cambridge, plays an instrumental, if quiet, role throughout the novel. After first shaping Clara's recollection of the night of her father's death, Cambridge returns to the family estate of Mettingen following the tragic violence committed by the younger Wieland, attends to his niece through her shock and convalescence, and prescribes her eventual expatriation to Montepelier. His medical expertise, therefore, shapes the plot as well as coloring the kinds of questions that Clara poses in response to the case of her father. Reasoning as proper physician, Clara appends her father's mysterious case to that of her brother in order to probe the meanings the two may offer to one another. Her father's case bears a "resemblance to recent events, revived them with new force in my memory, and made me more anxious to explain them" (*Ibid.*). Unlike the alternative realm—the "unequivocal sanctions" mediated by divine interference—such medical explanations, Clara acknowledges, are always temporary, always subject to revision are, in a word, provisional.

Clara's thoughts on the mutable character of knowledge and judgment echo those of Brown in his preface to the novel. Asserting the realism of the actions of the younger Wieland the novelist appeals neither to divine truth nor to aesthetic unity, but instead to the expertise of medical science. For readers skeptical that an apparently stable man like

Wieland could be driven to murderous madness, Brown refers to the authority of "Physicians and to men conversant with the latent springs and occasional perversions of the human mind," who can attest to similar, if rare, instances. Brown also claims utility for his novel in part by borrowing from the serialized logic of the case study. "The following Work is delivered to the world," his preface begins, "as the first of a series of performances, which the favorable reception of the this will induce the writer to publish" (Wieland, unpaginated preface). Just as he assumes skepticism of the events described in the novel, so he sets high criteria by which the reader should judge the work before them: produced by an unfamiliar author working in a trivial (or worse) genre. He hopes Wieland will elevate the genre above the "ordinary or frivolous sources of amusement" and "be ranked with the few productions whose usefulness secures them a lasting reputation" (*Ibid.*). Such a high bar, however, will be attained, or perhaps fully realized, contingent upon the appreciation of the work as one in a series—not as an aesthetic totality or unity within itself. Brown concludes the preface by alluding to the "memoirs of Carwin," the prequel to the novel which was itself eventually serialized in the *Literary* Magazine (1803-5). What can be construed as a canny publishing move—courting a skeptical, intelligent reader for a still maligned genre, yet asking that such reader's withhold judgment until having read further in the "series of performances"—also hints to Brown's debt to the case study as an epistemological and formal instrument.

By placing his explicitly fictional work in conversation with medicine and medical literature, Brown situates his first novel within what John Bender has recently termed the "crosscurrents of experimental natural philosophy" in the eighteenth-century. Bender argues that certain eighteenth-century novelists—along with natural philosophers,

experimental scientists, and physicians—were exploring the "relationship of novelistic fictions ... to hypothesis- and knowledge-making." In elaborating the relationship between novelists and physicians in particular, Bender points out that both engage in "structured observation and description," but that novelists could exceed the physician in the realm of experimentation: "the novelists can employ the experimental method to reveal the inner workings of living beings interacting in society, whereas analytic medicine has to deal with individuals, and largely with dead ones." In this way, novelists are able to produce what Bender terms "novel knowledge"—that is, a knowledge gained by a reader through "surrogate experience," abetted by the highly empiricist prose style of the realist novel, and the "staging of the act of assessment as ongoing probabilistic judgment"—which Bender claims as the novel's contribution to Enlightenment epistemology, and that eighteenth-century moralists found so threatening. In *Wieland*, Brown assesses the utility of the novel for producing such "novel knowledge,"

In this chapter therefore I trace more fully *Wieland*'s debt to early U.S. medical culture, arguing that Brown's novel, rather than resolving into skeptical indeterminacy in response to Clara Wieland's set of questions, instead advocates a provisional, hopeful mode of reasoning borrowed from medical science. Brown was intimately connected with professional medicine early in his career as a writer. He maintained close personal and literary friendships with a set of New York-city-based physicians. This coterie of medical and literary observers was at the forefront of changes in the field which inspired a utopian hope for the healing power of medicine in the new nation.⁵

The final decade of the eighteenth-century witnessed a shift towards a professional medical practice that was more institutionally integrated, in part via the continued founding of medical societies as discussed in chapter three, but also due to the proliferation of hospitals and dispensaries. Elite physicians took advantage of the kind of controlled collection of medical data made possible via such institutions. Medical observers, previously limited to the gathering of evidence via individual cases amassed in reading and in practice, began to maintain cases at the hospital and dispensary. This institutional consolidation was abetted by the founding of the first national medical periodical, The Medical Repository, which redacted medical data from hospitals into charts and tables. Medical historians, following Foucault, have argued that these changes inaugurate a move away from narrative understandings of illness. However, as my reading of *The Medical Repository* will demonstrate, the introduction of synoptic devices into medical literature does not marginalize the case study, but situates it within a new, more flexible, epistemological framework. Medical periodicals collect and publish both new and old cases, constantly revising the knowledge produced by an individual case. At the dawn of statistical medicine, case studies train physicians to seek truth only provisionally, as temporary knowledge, reliable in practice, yet always open to amendment by the next case.

In *Wieland* Brown makes this provisional mode of reasoning key to Clara's education via her uncle, Dr. Cambridge, and makes her deployment of it central to her survival. Clara repeatedly juxtaposes her own, hesitant approach to judging the mysterious events at Mettingen with what she terms the "precipitate" judgments of others. Through her medical education Clara also learns of the likelihood of a hereditary

mental illness that plagues her family. Her training in medical knowledge and medical reasoning thus enables her to reject supernatural solutions for the events at Mettingen—to respond correctly to the questions she poses about her father's demise—and overcome the dual threats posed to her by her brother, as well as by the hereditary illness lurking inside her. However, such knowledge comes only via the manifestation of Theodore Wieland's own sickness, and the subsequent death of his wife and children. Brown hopes that medical reasoning, deployed widely in society through the technology of the novel, could open avenues for human healing and flourishing, but recognizes the necessity of confronting horrific tragedy.

1. Brown refers his reader to medical literature at multiple points in *Wieland*. In addition to the prefatory reference to a similar crime to that of the younger Wieland, he also references "A case, in its symptoms exactly parallel to" that of the elder Wieland published in a Florentine medical journal, as well as "similar cases reported by Messrs. Merille and Muraire, in the 'Journal of Medicine,' for February and May, 1783. The researches of Maffei and Fontana have thrown some light upon this subject" (*Wieland*, 18fn). Brown here refers the reader to a famous 1776 case of an Italian priest who had reportedly burst into flames while praying. Joseph Battaglia, a surgeon and author of the original case, recounts treating the elderly Bertholi for gruesome burns: "the teguments [skin] of the right arm were almost entirely detached from the flesh, and hanging loose, as well as the skin of the lower parts of it. In the space contained between the shoulders that the thigh, the teguments were as much injured as those of the right arm." The

delirium, while particularly noting the rapid, and remarkable, gangrenous putrefaction of his flesh. After four days the priest dies from his injuries and the surgeon speculates the cause of this "fatal accident" to be "lightning ... kindled within the human."

Despite the wondrous, if not miraculous, overtones of the case—an apparent spontaneous combustion reported from the rural precincts of Catholic Italy, the archetypal setting for the Radcliffean gothic—the U.S publication where Brown likely encountered the case emphasizes the generalizable medical knowledge to be gleaned from the particulars of the history. Accordingly the case itself was re-printed and recontextualized repeatedly in medical journals, scientific journals, and literary magazines. Rather than standing out for its wondrous individuality, however, the Bertholi case's republication allows for it to be situated alongside other, similar cases, thereby probing the kind of knowledge arising from such an apparently anomalous event. The U.S. reprinting, for instance, revises the attending physician's claim that his case represents a clear instance of spontaneous combustion through reference to other cases alongside that of Bertholi. To that end, the anonymous authors writing in the American Museum append a reference to the case of Countess Cornelia du Bandi, a Veronese noblewoman who combusted in her sleep in 1731, as well as calling the reader's attention to "similar facts" published in the French *Journal de Medicine* for the months of February and May, 1783.

The *American Museum* adds a more recent case to the growing literature, medical and otherwise, addressing aberrant phenomena such as apparent spontaneous combustions. Specifically, the U.S. journal contributes the case of Bocquet, a French soldier who fell ill and died after marching at length in excessive heat. The young Frenchman's legs presented an appearance and advanced putrefaction similar to those of

Bertholi. The new case is "subjoined" to the history of the Italian priest in order to probe a potentially new source for the cause of such phenomena. Unlike the assumptions about spontaneous combustion derived from ancient theories—"that the material principle is an internal fire"—and deductively ratified through a case like that of the Countess du Bandi, the editors of the American Museum use the Bertholi case to revise previous assumptions and make a provisional truth claim about the nature of such apparently wondrous events. After demonstrating symptoms in the Bertholi case that parallel those of encounters with a "highly electric atmosphere," rather than consumption by internal flame, the authors in the American Museum couch their speculations in the defensive terms of a series of rhetorical questions. "Are there then fulminating atmospheres," they ask, "or lightning without detonation, and noise, as formidable in their effects as ordinary thunder?" If so, this "scourge of a new kind" is a problem which "dr. Franklin ... one of the grand conductors of the glory and liberty of his country" could have solved. Unlike previous examples addressed in this study, wherein the colonial periphery had been the site of observation and inquiry, but not of theory-building, the compilers of the Bertholi case as it appears in the American Museum offer their own, provisional judgment of the case. Brown himself adds to this cycle, positioning his novel as a genre participating in the attempt to produce knowledge from such a particular case. Such confidence in U.S. scientific inquiry represents a shift in the role of provincial science in Atlantic power structures and points to the increasing importance of who produces medical knowledge, and where—in print—such knowledge gets disseminated.

Abetted by the consolidation of medical institutions, American physicians of the late eighteenth century engaged in a concerted effort to coordinate and systematize the

production of medical knowledge. The emergence of hospitals and dispensaries in urban centers such as Philadelphia and New York in particular allowed for more disciplined encounters with disease. These institutional settings facilitated the maintenance of running medical records, and learned physicians responded to this development by turning to non-narrative modes of record-keeping. The synoptic devices of chart and table abetted collections of case studies as the currency of medical knowledge. The capacity for on-going record keeping expanded beyond the walls of hospitals and dispensaries through the advent of medical periodicals.

The Medical Repository of Original Essays and Intelligence, Relative to Physic, Surgery and Chemistry, the first issue of which appeared in August of 1797, marked a watershed in the history of U.S medical literature and culture. Unlike the kind of publications addressed in the previous chapter, which sought to elevate the field of medicine and streamline the practice through the inclusion of essays and observations in the annals of more general scientific societies like the Transactions of the American Philosophical Society, The Medical Repository was the first periodical journal published in the United States dedicated solely to medicine and its allied fields of surgery and chemistry. The inclusion of the latter, laboratory science within the purview of medical practitioners demonstrates a key change in the field: the move towards what some historians of science have called the medicine of glass and wood, or the emergence of controlled, experimental medicine. The complex function of the case study has been marginalized in this historical arc, which charts a move from narrative to non-narrative forms of medical knowledge. Although the beginning of more quantitative approaches to medicine will eventually displace the authority of the case study, nevertheless the form

persists through the later decades of the eighteenth-century, signifying anew alongside the wider medical accounting made passible via the tools of evidence-based medicine. Therefore, the unpacking of a relationship between the case and the chart in a publication such as the *Medical Repository* points us to the unique mode of reasoning made available via medical science at the time, a mode of reasoning which Brown borrows from in *Wieland*.

In addition to endeavoring to control the epistemological content of the medical field, The Medical Repository also aims to both elevate and coordinate the practice of medicine in the United States beyond the atomized local societies, like the New Haven Society discussed in chapter three, or the epicenters of university and hospital practice in Philadelphia or New York. As such, the format, form, and content of *The Medical* Repository all embody the Janus-faced pull of professionalization. On the one hand its pages present a burgeoning, yet defensive, science and profession closing ranks through the advocacy of medical practice and medical knowledge in institutions such as dispensaries or hospitals. The periodical simultaneously broadens the field's reach through a national publication and the recruitment of medical observations from across the new nation. The individual patient history proves invaluable in its ability to accommodate these changes in medical knowledge production and publishing in the late 1790s. 10 That is, its ability to distill knowledge that is authoritative, yet open to modification in practice. Such knowledge is always provisional, pointing us towards an epistemological stance shared between medical and literary culture in the early Republic.

Before compiling their first issue, the editors of *The Medical Repository*—Samuel L. Mitchell, Edward Miller, and Elihu Hubbard Smith, all New York-based physicians

affiliated with Columbia College and close friends as well as correspondents of Brown's—disseminated a circular address summarizing their aims for the periodical. Similar to Benjamin Rush's address to medical students at the University of Philadelphia discussed in chapter three, the proximate motivations for the new publication are the recent social and medical upheavals in the United States. 11 The authors reference certain "distressing events" which have "awakened the curiosity of others, as well as of physicians; and while they have quickened the zeal and observation of the latter, have excited the eager apprehensions of all." Such "distressing events" are the yellow fever outbreaks that ravaged major U.S cities in the 1790s. In addition to the well-known epidemic that rocked Philadelphia in 1793, New York suffered a smaller outbreak of yellow fever in 1795, and the disease surfaced again in Philadelphia in 1797. 13 Such repeated—and deadly—outbreaks threatened the social fabric and governmental functioning of the new nation, thereby creating, in the words of the editors of *The* Medical Repository, "an uncommon interest, in respect to medical opinions." ¹⁴ Bryan Waterman observes how the tumult surrounding the fever outbreaks produced a dangerous kind of information overload as journalistic and other non-medical accounts of the fever proliferated. Founders of the *Medical Repository* responded to this spread of "unmanaged information" in order to assert professional authority and to model a mode of medical reasoning appropriate for physicians as well as laymen approaching the kinds of social disturbances attendant to medical unrest. 15 In its pitch to potential subscribers and contributors, therefore, the new periodical, addresses itself "not to physicians only, but to men of observation, and to the learned, throughout the United States."16

And, as the founding editors of the *The Medical Repository* observed, there was a paucity of medical periodicals in the new nation. Although European medical periodicals, including the Medical Observations and Inquiries by a Society of Physicians in London (1757-84) and Medical Essays and Observations Published by a Society in Edinburgh (1733-44), had been available in the United States since before the Revolution, first the British blockade and later an emergent print nationalism inspired a call for domestically produced medical knowledge. As we saw in the previous chapter, medical knowledge, often in the form of case studies, circulated widely in a variety of genres and formats. Despite, or perhaps because of, the increasing number of medical titles produced by individuals and local societies, the continued circulation of medical information as part of natural histories, in general scientific journals, almanacs, and newspapers, the lack of a domestic periodical dedicated explicitly to medicine caused frustration for learned physicians. In 1791, Benjamin Waterhouse, a Boston-based physician, captured this sentiment in an address to the Middlesex Medical Association: "A country so completely independent in other respects as the United States...should blush to be indebted to foreign seminaries for the first principles of professional instruction" in medicine. 17 Although occasional medical treatises were produced in the wake of the Yellow Fever outbreaks—perhaps most notably Noah Webster's A Collection of Papers on the Subject of Bilious Fevers, prevalent in the United States for a few years past (1796)—Mitchell, Miller, and Smith, founding editors of *The Medical Repository*, cannily recognized the epistemological, ideological, and financial opportunities of a periodical targeting a national audience of physicians and other enlightened observers. 18

Judging by the lifespan of the journal, the editors were correct in their estimation of a wide audience for such a periodical. *The Medical Repository* appeared roughly quarterly between 1797 and 1824, long outlasting other U.S. medical journals produced in the late eighteenth and early nineteenth centuries. From its inception, the journal courted a wide audience. The contours of such an audience is embodied by the list of subscribers appended to the journal's first issue. The extensive list spans eight pages, groups individual subscribers by state (14 of then 16 U.S. states are represented—all save newly admitted Kentucky (1792) and Tennessee (1796)), and appeals to a circum-Atlantic reading public by including a separate category for foreign subscribers in Halifax, London, and Martinico.

In accordance with the claim to address "men of observation," the subscriber base, though overwhelmingly populated by physicians, also includes lawyers, judges, divines, political officeholders, and merchants. The list references individual medical students alongside nationally renowned figures, including Timothy Dwight, then president of Yale College, and Noah Webster. The editors mention booksellers among their initial subscribers, careful to indicate the number of copies ordered by each (e.g., "Mr. Ebenezer Larkin, bookseller, 36 copies, Boston," or "Messrs. Freneau and Paine, Booksellers, 12 copies, Charleston [South Carolina]). The editors were careful to demonstrate both the wide-reach and profitability of a previously unproven publishing venture while also expanding the readership of the journal beyond elite, learned physicians.

Such a wide group of subscribers is necessary for the kind of philosophical project pursued by the editors of the journal, an inductive mode of observation uniquely

important, the authors of the "Circular Address" claim, to medical science in the United States. The field of physic has long fought to dispel the mists of superstition and the "absurd systems of ancient physicians," thereby arriving at an accepted truth about the correct procedure for producing and disseminating medical knowledge: "though conjecture may precede experiment, facts are the only rational basis of theory." As in other scientific fields, those pursuing medical knowledge are "no longer permitted to descend from generals to particulars … but are expected to proceed a rigid examination and cautious assemblage of particulars to every general inference." Therefore, collections of medical particulars, or case histories, retain currency in the medical literature of the late Enlightenment.

The compilers of *The Medical Repository* explicitly solicited contributions from their readers of medical case histories. In addition to essays and observations of natural phenomena relevant to medical knowledge and practice—accounts of insects, vegetation, and atmosphere—they also request "Useful histories of specific cases" which address the general character of illness in a given place or season, or which are of isolated interest. The authors invoke the long history of collecting and circulating case studies, as well as a revived interest in consulting the existing collections of patient histories that Renaissance and early modern physicians termed *observationes* and *curationes*. Thomas Sydenham, the so-called English Hippocrates whose highly influential description of the "epidemick constitution" manifest in three-year periods between 1661-76, *Observationes medicae* (1695), was discussed in chapter two, serves as a model for the kind of inductive, distributed observation made possible in a collection of case studies.²¹ Collections of cases, including those of Sydenham or new collections produced according to his model

(itself borrowed from the *Epidemics* of Hippocrates), are still relevant for medicine, according to Mitchell, Miller, & Smith:

as they are free from the incumbrance [sic] of systematized hypothesis, the opinions they contain, for the most part, ... are thus less likely to mislead, and even though erroneous, as they maintain no intimate connection with an extensive scheme, still leave us, in the facts themselves, with the surest guides amidst the intricacies of practice. ²²

The collection of medical particulars here is productive of knowledge precisely because of its status as a record of an inductive practice. Contrary to the defense that Hans Sloane mounted in response to critics of his *laissez-faire* editorial practice in the *Philosophical Transactions* discussed in chapter two, or to the kind of confidence in pathological anatomy asserted by authors contributing to the collections of cases published by medical societies we saw in chapter three, here the editors of the *Medical Repository* embrace the not merely the possibility but in fact the likelihood of incorrect inferences as an aid towards the progress of medical knowledge.²³

As we have seen, disease's capacity for wide signification earlier in the eighteenth century had been anxiously, but rarely successfully, policed by learned physicians through the rhetorical form of the case. Now, precisely such inductive openness is transformed into an epistemological advantage for medical science. This study has, up until this point, argued that the observational case study brought a form of epistemological rigor to the practice of medicine, particularly on the colonial periphery. In multiple instances we have seen how the production and circulation of case studies enabled learned physicians to distance themselves from quack, religious, or folk approaches to the management of health and sickness, thereby navigating moments of particular epistemological and social instability that plagued the colonial world. The

rhetorical form of the case study, in the earlier era, signaled an author's participation in an Atlantic republic of observers, announcing the value of their contribution to a European knowledge system as well as their membership in an elite cohort of Enlightened virtuosi.

Yet, as we have seen, such elevated aspirations did not produce advancements in medical treatment. As the recurrence of yellow fever made tragically clear, medical practice was not significantly more efficacious in 1790 than it had been in 1690. Late eighteenth-century doctors, be they learned or quack, generally relied on the same heroic therapies of bleeding and blistering as their predecessors in the older collections of case histories, often with the same unpredictable outcomes. Regardless of the ignorance of previous eras or of contemporary practitioners, the editors of *The Medical Repository* were buoyed by their hope that the existence of volumes of observational case studies offered a unique possibility for the longitudinal study of disease as well as a model of collection going forward. A primary advantage that collections of cases have over more systematic medical treatises, they argue, is that the former, "employ a greater number of observers, over a wider field, admit of minuter details, ampler discussions, and more various opinions and recondite investigations." Case studies are particularly valuable as records of medical practice, the most enduring form of knowledge in the field: "By [medical case's] instrumentality, facts are preserved or rescued from oblivion, which, without them, had been wholly lost."²⁴ Systems and theories may come and go, but individual patient histories, even those based on erroneous understandings of disease or anatomy, offer the late Enlightenment physician a fertile resource for practical medical knowledge and a wealth of data to mine when confronting new outbreaks of disease. The case thus retains a latent, potential knowledge extractable via a particular mode of reasoning characterized by the suspension of previous judgment and the ability to repeatedly amend conclusions according to new information.

The contents of the first issue of *The Medical Repository* demonstrate this attention to the new meaning to be found in older collections of medical observations. The first two articles included in the August, 1797 issue of the publication are translations of and commentary upon older medical treatises. For the journal's first medical essay, Smith produced a survey and discussion of the various histories of the plague of Athens, ranging from Thucydides through Gibbon. Additionally, the authors published a translation from the Latin of a more recent work, "Doctor Morton's *Summary of the History of the continued Fever in England, from 1658 to 1691*." While the former essay provides an original synthesis and extraction of medical knowledge from non-medical texts, thereby extending an emergent, late Enlightenment scientific discipline backwards into classical history, the translation of Morton's *History of the continued Fever in England* appears with little additional commentary from the editors beyond recommending his model of "sagacity and diligence of observation" to those who should and would produce a similar history of diseases in the United States.²⁵

The inclusion of classical or continental histories of disease serves a pragmatic function in the print-poor and geographically extensive United States. In the preface to the first issue of the periodical the editors declare an intention to redact medical texts, thereby broadening access to the extensive libraries housed in New York or Philadelphia medical societies. With this periodical venture, therefore, the medical profession is at once narrowing its field of inquiry by claiming certain bodies of knowledge as its

exclusive purview, while also widening access to that specialized knowledge beyond the urban centers of medicine.

Not only the form but also the format of the periodical is central to the widening of such access. The editors couch their motivations in not simply the unique state of medicine in the United States but also in changes in printing and bookselling. "The art of book-making, as it is now practiced in Europe, and especially in Great-Britain, with the increasing necessity for books, and the increasing charges upon them," they write in the "Preface" to the first issue, "must leave men of moderate fortunes in absolute despair of forming any considerable library of medical works." The *Medical Repository* can fill that gap, allowing physicians on the geographic or pecuniary periphery to benefit from the progress in medical knowledge happening in the urban centers of the Old and New World: "The frequency of publication ... will give the Repository a manifest superiority over works of the same kind, in the opportunity it affords of speedily circulating new improvements and discoveries."²⁶ The periodical—with its ability to excerpt and redact, its progressive punctuality, its poly-vocality, and its affordability (subscribers had the option to pay by issue or by volume)—provides an ideal format for medical knowledge distribution for working physicians in the United States.²⁷

In a sly marketing ploy likely aimed at booksellers as much as it as at individual readers, the editors emphasize the literal and figurative economy of not only their journal's form, but also its format. In contrast to European medical journals—a number of which, as Brown's citations in *Wieland* suggest, were then available in the United States—*The Medical Repository* employs tightly-packed lines of text and smaller page margins than were conventional at the time. Because of "the difference in the mode of

printing," the editors stress, "a hundred pages of the Repository will comprehend not less than three hundred of any similar work in Great-Britain, and at one fourth of the expence." Practical U.S. physicians evidently responded well to the perceived value of a higher word to page ratio: the periodical's long run (27 years) and the repeated reprintings of its initial volumes far outstrip the success of similar ventures in the era.

The format of the journal has epistemological, as well as economic, consequences. Unlike the authority implied in weighty, theoretical tomes or voluminous collections of individual *observationes* (in the Renaissance and early modern period bound in *centuriae*, or individual volumes of one hundred patient histories), or the expense of medical knowledge contained within elaborate natural or ecclesiastical histories (like those of Sloane or Mather) the medical periodical as envisioned by the editors of *The Medical Repository* is oriented towards the accretive nature of medical practice, rather than the permanence of the medical library. ²⁹ While general medical knowledge circulated widely (as it had throughout the century) in almanacs, health regimens, and kitchen handbooks, the medical periodical was both aimed at a wide audience and oriented towards the progressive accretion of new medical knowledge. Therefore, the reaching backwards in time to older cases and ancient epidemics, as in Smith's account of the plague at Athens, suggests a latent potency in the medical case study: it can repeatedly offer knowledge anew.

The format of the *Medical Repository* bears this out in a number of ways. The rapidity of publication lends the journal an air of provisionality—medical knowledge is repeatedly updated and revised, cases typically end with a series of questions, and articles are often revisited in subsequent issues—all tending towards the on-going, progressive,

amendable nature of medical knowledge. The first issue includes a prefatory *Errata*, not of printing errors, but instead of references which revise some of the conclusions made in the initial essay. Before they even begin reading the body of the periodical, the audience for *The Medical Repository* is encouraged to hold the knowledge gleaned from its pages as provisional. Situated within the medical periodical, therefore, the medical case, in this sense, carries the capacity to produce knowledge anew, to produce it provisionally, such that it can be returned to repeatedly, placed in new contexts or in light of new understandings.

The editors do betray a defensiveness about the lack of new medical knowledge included in the first issue, and the balance changes accordingly as the periodical continues publication. The first issue lacked a wide variety of cases and essays from across the country, the editors contend, because "[m]uch time, as well as the concurrent exertions of many observers, were indispensable" to the collection of new medical knowledge for the periodical. Despite such delays, the United States nevertheless offers unique advantages for medical observation, particularly from its vast territory, varied topography and climate, and diverse population. The editors conclude their "Circular Address" with a patriotic call for contributions that transforms the reproach offered to U.S. physicians by Benjamin Waterhouse into an intellectual and publishing opportunity. "These are privileges," they write, "which should inspirit [sic] the exertions of physicians to give that importance, in a professional view, to their country, which, fertile as she is in occasions, she loudly calls for their hands." "30"

And *The Medical Repository* answers its own call by bringing together particular observations and general essays on the history of illness unfolding in the new nation and

into the Atlantic world beyond. As is to be expected, the editors' home state of New York is disproportionately represented in both the subscriber list and in the articles published.³¹ However, the first volume of the journal includes discussions of medical phenomena ranging from those close at hand in New York city and its environs (e.g., Valentine Seaman's "An Inquiry into the Cause of the Prevalence of the Yellow Fever in New-York,"32 and "Case of an Extraordinary Disease, in a Child, apparently Scrophulous" by Phineas Hedges of Newburgh, New York³³), to New England and the Middle Atlantic states (e.g., William Buel's "An Account of the Bilious Fever and Dystentery, which prevailed in Sheffield, Massachusetts, in the year 1796,"34 and "A Singular Case of Difficult Parturition Successfully Treated"³⁵ by Thomas Archer of Hartford-Town, Maryland), to the West Indies (e.g., "Some Account of a Pestilential Fever, which prevailed in the Island of Jamaica, in the years 1793, 1794, and 1795,"³⁶ by James Walker; and Elihu Smith's essay "On the Origin of the Pestilential Fever, which prevailed in the island of Grenada, in the years 1793 and 1794"37). In addition to providing U.S. readers with affordable access to the growing medical libraries of coastal cities and beyond, *The Medical Repository* also participates in the organized pursuit of medical observations and experience, thereby contributing to the journal's intellectual project of elevating the esteem of the profession and seeking new knowledge in the field.

Such nationalistic motivations notwithstanding, the editors and contributors to *The Medical Repository* responded to the changing role of the case study, and of observation more generally, in Enlightenment medical science. The case transitions in the late eighteenth century from being an epistemic genre maintained and exchanged by individual physicians, often without the directive of a centralized scientific authority, to

the rhetorical unit of a more systematized mode of scientific inquiry, what J. Andrew Mendlesohn has called the pursuit of a "general observation." According to Mendlesohn, the "general observation" occupied a middle ground in Enlightenment science between the individual observation (in the case of medicine, embodied in the *observatio*, or patient history) and a universal law or system, an Aristotelian construct of which late eighteenthcentury scientists remained skeptical. "Midway between universal laws of nature and the particulars of things and cases, times and places," Mendlesohn argues, "a general observation could concern a kind of natural object or a phenomenon extended in time and space over many and varied particulars." As a unit of knowledge, therefore, the "general observation" stands somewhat apart from the dividing, classifying, and ordering impulse long associated with Enlightenment science. The "general observation" aims instead at synthesizing a wide variety of information, culled from individual observers acting across time and space, into a description or statement that was empirically founded, carried potentially predictive power, but, unlike a universal law, was not considered an inviolable truth applicable to all times and place.³⁹

One example of such observations is the spate of projects aimed at collecting climate and health data in the final decades of the eighteenth-century. Such projects developed across Europe, spearheaded by scientific societies such as the Royal Society in London and the Royal Society of Medicine in France. These intellectual authorities collected observations from a number of individuals in order to assess a region's seasonal or annual "constitution," that is, the dynamic interplay of geography, topography, weather patterns, and bodily health that predominated in a given place at a given time. For instance, the first volume of the medical periodical of the Edinburgh medical society,

Medical Essays and Observations ... (1733), included articles on the topographic and climatological description of Edinburgh, a meteorological register for the previous year, and an "Account of the Diseases that were most Frequent last Year in Edinburgh." General statements about such annual constitutions required the collective observation of meteorological and medical phenomena by both amateurs and professionals spread across a given geographic space and coordinated by a central authority. 41

The Medical Repository, as evident from the titles cited above, actively sought such data and frequently published articles that made such general observations. The first volume of the periodical published, in table form, the raw materials from which one could draw observations about the constitution of New York City. Each individual issue included a trio of sets of tables: one set tracking "Meteorological Observations" for six months (divided monthly), a second of "Patients admitted to the New York Hospital" in the same six month period, and a third listing those treated at the "New-York City Dispensary," over the same time. The weather observations include twice-daily measurements of temperature, wind (speed and direction), sky quality (clear or cloudy), and barometric pressure, all recorded "by Gardiner Baker at the Cupola of the Exchange in the City of New-York." The disciplined and practiced observation evidenced in the weather table corresponds to the medical tables. Each organizes the visitors to the New York hospital or dispensary in a given month by disease (e.g., "Pneumony," "Fever," "Pulmonary Consumption") and by outcome ("Cured," "Relieved," "Died," and "Remains [under care]"). The final table includes a summary which totals the outcomes for each month, thereby offering a statistical depiction of the state of health in the city for the six-month period covered by the issue. Presented in tandem with the meteorological

tables, the medical data suggest—but do not explicitly state—a correlation between weather patterns and the prevalence of certain illnesses, thereby maintaining a potentially useful record that can be used to build towards a general observation about the seasonal or annual constitution. And although such tables are limited to the illnesses appearing in one city (and presenting at that city's hospital and dispensary), the editors extend the collective observational impulse by publishing or re-printing similar accountings from other parts of the country (e.g., Hanover, New Hampshire (site of Dartmouth College) in Vol. 1, Issue 2) in the regular "Medical News" section of the periodical.

The appearance of tables and charts in *The Medical Repository* appears to correspond to Kelly Wisecup's longer arc for New World medical narrative. She contends that "colonial medical writing is characterized by rhetorical discontinuities: shifts from *historia* to non-narrative literary strategies and finally to classificatory forms."43 However, such tables hardly constitute the majority of the medical knowledge communicated in the periodical. In fact, narrative accounts—particularly the case study not only persist through the late Enlightenment medical discourse but actually gird the systematic accounting of the kinds of "classificatory forms" represented by the tables. Furthermore, as Bryan Waterman has shown, medical information and knowledge was communicated with a distinctly literary sensibility in the early U.S. Republic. During public debates over the yellow fever outbreaks in the 1790s, the editors of *The Medical* Repository actively sought to extend their cultural authority not only within a newly consolidating field of professional medicine, but to more broadly assert the importance of medical professionals to the wider functions of the U.S. Republic. In an effort to do so, Mitchell, Smith, and Miller published articles, essays, private correspondence, and even

poetry that addressed medical knowledge, both in *The Medical Repository* and elsewhere. Smith summarized this impulse in his diary, referring to the importance of "medical eloquence" in presenting medical knowledge to the public. ⁴⁴ Concern for the literary character of the essays published in *The Medical Repository*, I contend, contributed to the persistence of the fundamental unit of medical narrative—the individual patient history—particularly as the journal aims at a broader audience. Including individual cases alongside, or within, more abstract discussions of a particular outbreak or a seasonal constitution provided a lay reader with a sympathetic figure through which to engage with the medical information that is the primary focus of a given article. ⁴⁵

For instance, the above cited articles on localized fevers in New York City,

Sheffield (Connecticut), Grenada, and Jamaica each attempt to make a general observation about the character of not simply an isolated outbreak of illness in the given places but to coordinate repeated instances of sickness with weather patterns and key features of the surrounding landscape, both natural and human-made. Valentine Seaman, a physician and author of "An Inquiry into the Cause of the Prevalence of the Yellow Fever in New-York," carefully plots cases of Yellow Fever on a map of the docks, garbage dumps, and low-lying areas along the East River. Seaman tries "to trace the history and progress of the disease, for the purpose, if possible, of ascertaining its true cause, as it has occurred to my observation, in this city for several years." The confident universality of "true cause" is quickly undermined by the geographic ("in this city"), temporal ("for several years past"), and subjective ("as it has occurred to my observation") limitations placed on the "general observation" which Seaman eventually provides. His claim—that Yellow Fever was actuated in the city by a combination of

"putrid effluvia," or noxious air produced by animal and vegetable waste and low-lying, swampy ground, and the introduction of an infected individual into such an area, likely from a ship originating in Savannah—relies on a series of closely tracked, individual patient histories (some of which he observed himself, others collected from fellow physicians) as well as the specific topography of the area depicted on the map. Because of these particulars, Seaman describes the "true cause" of Yellow Fever in somewhat more flexible terms. "The general cause of the Yellow Fever, as it happened in this city," he concludes, "is what chemists call a tertium quid, neither one thing nor the other, but a result of the junction of certain matters emitting from a human body, laboring under such a disease, with the effluvia rising from animal and vegetable substances in a state of putrefaction."47 Seaman's conclusion is at once particular because it is backed by a collection of case studies and close description of the New York City architecture, streetscape, and shipping patterns, but it's also flexible enough to take into account the variations within the individual piece of data. Seaman thus offers a specialized and nuanced argument about the origin of yellow fever, yet through the inclusion of individual cases frames it as a comprehensible narrative traversing lived lives and spaces.

The editors of the journal aspire to this kind of broader generalization, that which charts and tables will make available, but is nevertheless digestible by an individual reader. In a moment of grandeur, they write:

when thus completed, the volume of every year will form the history of the health of the United States for the year preceding: a single glance of the eye will be equal to perceive what diseases prevailed at the same time, in all the intermediate situations, from St. Mary's to St. Croix, and from the Mississippi to the Atlantic; and individual experience, as well as new discoveries, will be propagated with unexampled benefit and celerity, to every part of the United States.⁴⁸

While the claim that the reader of the periodical will be able to take in at a "single glance" the entire history of disease in the United States is a grandiose and no doubt poetical sentiment, it does retain a degree of earnestness. The mass of information contained in the meteorological tables, in-patient charts, and bills of mortality combined with that which is condensed into narratives in the essays about a single epidemic or the constitution in a given season lends *The Medical Repository* a panoramic scale. However, for such information to be useful it needs to be translated into a recognizable and retainable form that can be employed by the practicing physician. That is, something that can be taken in in "a single glance."

The case study serves this function. As noted above, the individual case girds the kind of quantitative information recorded in the tables and charts of patients admitted to the New York Hospital or seen at the Dispensary. The emergence of such quantitative medicine, what Foucault calls "clinical" medicine, was abetted by regularized patient logs and note-taking occurring in institutional settings. In the late eighteenth century, hospital-based physicians (or, more likely, clerks) maintained regular casebooks, often employing charts to record the basic narrative structure from a case history: patient symptoms, course of treatment, and outcome. Such individual cases could then be gathered into a table or chart re-produced by, for instance, *The Medical Repository*, and aimed at collating the number and character of illnesses in a given place over a given period of time. Furthermore, the rhetorical unit of the individual case history also formed the basis of a narrative, epidemic constitution such as that summarized by Seaman (his essay contains ten individual cases, each demonstrating the characteristic symptoms of Yellow Fever and corresponding to the map which accompanies his essay). Despite its

apparent marginalization in the movement towards quantitative medical knowledge represented by charts, tables, and general observations, themselves made possible by the institutional settings of dispensary and hospital and disseminated in periodicals like *The Medical Repository*, the narrative case history persists as the fundamental unit of medical logic in the late eighteenth century.

In fact, the individual case study serves not only as building block but also capstone to the kinds of general observations valued by the medicine of chart and table. Such observations aspire to a vast scale, as demonstrated by *The Medical Repository*'s boast of offering a history of disease from "from St. Mary's to St. Croix, and from the Mississippi to the Atlantic," yet insist that such a history be apprehensible in a "single glance." Such aspirations to totalizing knowledge characterized the late Enlightenment. The late eighteenth century was the age of the *Encyclopdie* (1751-1772), Buffon's Naturelle Histoire (1749-1788), or, more locally, Charles Peale's "Philadelphia Museum," which opened in 1801. The popularity of national magazines such as *The* Columbian Magazine, or Monthly Miscellany (1786-92); Matthew Carey's off-shoot American Museum (1787-92); and Brown's own Literary Magazine and American Register speak to this panoramic impulse. 50 Though such vast collections aspired to the collection of universal knowledge, they were necessarily, in the terms of John Bender, "scaled to the human being ... capable of grasping diverse fields of inquiry." In the field of medicine, such scaling happens in the individual case history: the unit of understanding most functional for a practicing physician. The case study therefore continues to signify not only as the source unit but also is exemplary of the general observation made of an epidemic constitution. Such observations generally end with an individual case or brief set of cases that are typical or representative of the fevers observed in a given place over a given period of time.

The practicing physicians reading and contributing to *The Medical Repository* demonstrate the functionality of the case study for rendering observations on a pragmatic, human scale. Contributors to later issues of the periodical often stage their recalling of case studies in their own records of practice submitted to the journal. For instance, in his article, "A Case of diseased Os Innominatum successfully treated," E.A. Holyoke recalls having read of a successful, if un-orthodox, course of treatment employed in a similar case. "It occurred to me," the Salem, Massachusetts based physician writes, "there was an analogy in the two cases, sufficient to induce us to a trial of his remedy." Another writer to *The Medical Repository* more forcefully dramatizes the practical importance of sharing not simply the kind of medical data included in general observations, charts, or tables, but the practical knowledge of individual cases across a wide variety of observers. In treating a woman whose life is threatened during a difficult birth, Philadelphia-based Dr. William Dewees "began to be very much alarmed":

What to do I did not well know. I was ten miles from the city, and no one near me on whose judgment I could rely. In this dilemma I had nearly resolved on dividing the parts [or, performing a cesaerean], thinking this preferable to letting the head force itself through, which I began to consider as inevitable, when, fortunately, Dr. Physick's case of luxated humerus occurred to my recollection, and determined me to try the effects of bleeding. 53

The published case study serves here as a form of virtual consultation between physicians, enabling such practical knowledge to extend across a wide group of observers. To embody this, many such individual cases conclude—similar to Clara's conclusion of the case of her father—with a series of questions, rather than rendering a definitive judgment. In this way, the journal repeatedly enacts the epistemological project

that it proscribes: the collective accretion of practical, provisional knowledge among a far-flung group of medical observers and practitioners. And the case study is pivotal in this work. The case—although sublimated within the quantitative form of medical knowledge abetted by publications such as *The Medical Repository* and an interest in creating broader, more generalized observations—persists as a form of information scaled to the human, particularly to the practicing physician.

The combination of observation and action that Dr. Dewess performs in the above-cited case has been described by Loraine Daston as not merely a practice of Enlightenment scientific culture, but as a "way of reasoning." While early modern physicians and medical thinkers such as Sloane or Mather had prized firsthand observation as a form of truth "divorced from foolhardy conjecture and system spinning," by the late eighteenth century, Daston writes, "manuals of scientific observation insisted that observation was a way of reasoning about, not just collecting, experience."54 Such reasoning involved the geographically and temporally dispersed observation of, for instance, meteorological, natural historical, and medical phenomenon of the kind we have seen included in *The Medical Repository*. Observation, in each of these instances, combines the varied intellectual labors of reading observationes from historical medical volumes, collating and evaluating eye-witness accounts of disease patterns or weather events, and the careful scrutiny of an individual patient's symptoms. Dewess' case study—included in a journal which also published essays on classical disease outbreaks, close descriptions and drawings of botanical specimens, and synoptic devices such as meteorological and medical charts and tables—demonstrates the premium that medical science placed on varied practices of observation. He exercises the kind of trained

looking which enables a practicing physician to first recall a generalization—that venesection can, given certain conditions, alleviate difficult births—in order to make it useful in practice. The flexible case study is the tool that enables a physician to mediate between an individual instance that is specific enough to be reliably true, but also general enough to be extractable to other contexts and settings.

This kind of observation—dispersed, communal, ongoing, and conjectural—offers a version of truth that is useful, but not dogmatic. The fundamental truth-value of a medical case study in the late Enlightenment inheres not in its reliable depiction of what did happen, but instead in its ability to predict what might happen, and to train its readers in how to hold truth in suspension. And such a truth, I would like to suggest, is the kind aspired to in Brown's novel. From the medical case study Brown's novel borrows a mode of reasoning that addresses the basic conundrum confronting the human sciences at the dawn of the statistical age: how to draw reliable judgments in a world of ongoing, probable assessments of truth?

2. Brown was well acquainted with these developments in medical publishing and medical reasoning in the early Republic. His close friendship with Elihu Hubbard Smith, New York City-based physician, Columbia College professor, and founding editor of *The Medical Repository* placed him at the center of a collegial and active intellectual network. Brown's literary pursuits and Smith's medical practice were mutually understood as shared interests. Brown himself considered a career in medical practice as Yellow Fever appeared in New York and Philadelphia in the summer and fall of 1797 and Smith actively pursued a publishing and literary career that extended beyond the *Medical*

Repository. Smith edited American Poems (1793), the first anthology of American poetry, wrote and produced a comic opera, and maintained a scrupulous diary of his life and sketches of the other members of the "Friendly Club." He also was instrumental in Brown's short-lived career as a literary novelist, publishing the Philadelphian's Alcuin: A Dialogue (1798). As Bryan Waterman has written, Brown, Smith, and other members of New York's "Friendly Club" envisioned "a utopian collapse of literary, medical, and state authority, with poet-physicians holding the reins of government."⁵⁵

The two men's mutual interest in and understanding of the worlds of medicine and the literary overlapping in the early Republic is quite evident in the letters they exchanged before Smith's death from Yellow Fever in September of 1798. In January of that year, for instance, Smith wrote to Brown a letter which alternates among comments on Brown's literary productions, Smith's own poetry and work in the theater, and the launch of *The Medical Repository*. Of the latter, Smith writes: "Medicine engrosses my attention. Have you seen the Medical Repository? You will find it at Poulson's [Philadelphia bookseller]. I could wish you to look it over, & give me your opinion as to its literary character. In particular, I am anxious to learn your judgment on my Acct. of the Athenian Pestilence." 56 Smith's appeal betrays Brown's close attention to the world of medical knowledge and publishing. Earlier in the same letter Smith chastised Brown for a delay in correspondence. Smith claims he had begun to worry that Brown had "had put into execution [his] wild project of devoting yourself to the care of the sick & that my simple question [in a previous letter] had been directed not to the living but the dead."⁵⁷ In the same period when he was composing his first (now lost) novel, Sky-Walk; Or, the Man Unkown to Himself—An American Tale, and embarking on a three year experiment

in novel writing, the man regularly cited as the first successful American novelist was seriously considering turning sawbones.⁵⁸

Brown's interest in medicine derives, in part, from his firsthand experience with the rayages of Yellow Fever. His shuttling between his native Philadelphia and New York City during 1797 and 98 was motivated in part by the outbreaks of the disease that were later analyzed by writer-physicians such as Valentine Seaman in the pages of *The* Medical Repository. Brown had close, firsthand experience with the disease. The appearance in print of *Wieland*, his first published novel, in September of 1798, was shadowed by the death of Smith at the hands of the disease. Brown nursed his friend closely and eventually fell ill of the fever himself, although the novelist recovered fully. Brown would translate the traumatic experience of losing an intimate friend and being under the sway of an epidemic into both Arthur Mervyn and Ormond. Wieland, however, captures an earlier hope for, and then despair in, the role of medical knowledge in the new Republic. Brown expressed such a sentiment in multiple letters written following Smith's death. "The die is cast," Brown wrote to his brother on September 18th, 1798. "E.H.S. [Smith] is dead. O the folly of prediction and the vanity of systems." The death of his friend ravaged Brown, body and soul. He fell physically ill while also having his confidence in Enlightenment knowledge systems to produce bodily, mental, and social health deeply shaken. As Brown put it a September 21st letter to his close friend and eventual biographer, William Dunlap, "I do not understand my own case, but see enough to discover that the combination of bodily & mental causes have made ... deep inroads on the vital energies of brain & stomach."59

Brown's response to the death of Smith and his own subsequent sickness registers sadness at the loss of a close friend and also his frustration with the state of medical knowledge and therapies. Smith's project, *The Medical Repository*, embodies in print a utopian hope for advances in medical practice to be made via the dissemination of medical knowledge in the early Republic. The collection of case studies—discrete instances of experience, diligently recorded and maintained, circulated with or without explanatory framework, among physicians and more broadly—can and will provide new knowledge, and hopefully, new therapies. Such utopian schemes are evident in not only the format of the periodical but also in the shift to more disciplined, or clinical, approach to medical research evident in its pages. As institutions like the hospital and the dispensary made quantitative medicine a possibility for physicians in the early U.S., and synoptic devices such as the chart and table proliferated to record the data, physicians like Smith, or Philadelphian Benjamin Rush, rapturously conceived of the progress that medicine could and would make in the early Republic.

While we have seen some of Rush's philosophical schemes in chapter three,

Smith also produced an unpublished document—*The Institutions of the Republic of Utopia*—that captures the hopeful spirit of medical science in the early Republic. Smith's text, a brief description of the "state of Utopia, lately admitted into the Union," includes a section on "Medical Institutions," among the description of the natural as well as political systems of the ideal member of United States. ⁶⁰ In this section, Smith describes a rich intellectual culture organized around medical knowledge production. "Utopia" has county-based medical societies that hold monthly meetings and each produce a quarterly periodical culled from those meetings. Much like Smith's own *Medical Repository*, each

periodical in Utopia includes individual case studies of interest, meteorological records, and an accounting of the illnesses treated by society members. Each medical society in "Utopia" also maintains two sets of records: first, a "Register of Facts ... composed of solitary facts, verbally communicated or in writing"; and second a "Register of Hints, Doubts and Inquiries." The censor of each society draws from these registers in order to produce the periodicals ("These publications," Smith notes in a rueful reflection on the state of his own publishing ventures, "are reckoned useful"). In addition to the production of periodicals, each society submits a monthly health report to the "College of Physicians," which in turn redacts this information in order to produce semi-annual reports to the legislature. These reports include "every circumstance of Meteorology &c. necessary to convey precise ideas of the Public Health." Smith's vision of the perfect society places a highly systematized and horizontally integrated medical science at the center of state function. 61

Brown felt deeply and personally—both emotionally and physical—the failure of medical science to advance therapeutically. His response to Smith's death and his own sickness proffers a rejection of the kind of system-building and predictive power imagined in *Utopia* and instantiated in a publication like *The Medical Repository*. Like Smith, Brown did, of course, produce his own vision of utopia: the "six years of uninterrupted happiness" which prevailed among the society gathered on the bucolic banks of the Schuylkill at Mettingen (*Wieland* 33). With *Wieland*, I contend, Brown explores how better knowledge, medical and otherwise, could be produced. The novel juxtaposes differing realms of knowledge competing for social authority in the early Republic, specifically the religious, the legal, and the medical. Through Clara's

relationship to her uncle, Dr. Cambridge, and her subsequent navigation of the tragedy at Mettingen, Brown models a mode of reasoning adopted from medical science, and embodied by the medical case study. Through Clara's position as both physician and patient, the novel aims to produce demonstrate the proper exercise of the kind of "novel knowledge" made possible in the fusion of the case study with the literary form. However, the text also registers the tragic failure of the medical science and medical reasoning to produce human flourishing, without attendant suffering.

Recent critics of *Wieland* have charted the novel's entry into a public debate over cultural authority in the early Republic. Frank Shuffleton argues that *Wieland*, like Brown's later novels, enacts a "form of ... public reasoning" by modeling failures of judgment among its principal characters. ⁶² To Shuffleton, Brown productively blurs the realms of law and aesthetics, marshaling the form of the novel as a tool through which readers practice the necessary skills of legal judgment that will form part of their civic life in a democratic republic. Thomas Koenigs pursues the pedagogical function of Brown's novel further, contending that *Wieland* specifically critiques the mode of Lockean education dominant in the early Republic. Koenigs argues that Brown wants to replace the exemplary model of education then dominant in the U.S. with a new mode of reasoning, one that is embodied by the reader's engagement with fiction itself. ⁶³

My reading of *Wieland*, while departing from these critics in key ways that I will trace out below, also understands the novel as deliberately staging a competition among fields of knowledge. Beginning with the set of questions that concludes Clara's recounting of her father's case, the novel places forms of scientific understanding in contrast with revealed, religious truths. Recall that, of her father's death, Clara asks: "Is it

fresh proof that the Divine Ruler interferes in human affairs ... ? Or, was it merely the irregular expansion of the fluid that imparts warmth to our heart and our blood ...?" (Wieland 18). We, as readers, understand from the preface that the novel's central mysteries will not be resolved via recourse to the supernatural: "the solution will be found to correspond with the known principles of human nature" (Wieland 3). The divine revelations of both the elder and younger Wieland are therefore repeatedly juxtaposed with Clara's more plodding, provisional knowledge, a mode of reasoning she derives, via her uncle, from medical science. As we saw from the *Medical Repository*, the lateeighteenth-century medical case study embodies a kind of loosely-held, practical knowledge. For physicians and other, lay medical inquirers, the truth-value of the medical case study no longer resides solely in its ability to reliably depict what did happen. Instead the genre orients towards what will happen by aggregating, redacting, and predicting a pattern of some kind. The case, and its ideal readers, aspires to potential knowledge that can and will reveal itself once properly paired elsewhere, but also that is ready—via periodical publication—to be adjusted and amended.

This function finds a corollary in Brown's novel. As noted above, the presence of the surgeon Mr. Cambridge, Clara's uncle, and a surgeon, narrows the realms of knowledge primarily available to Clara to the medical. As it was for Rush and Smith, in *Wieland* the possibility of human society flourishing, and it's eventual fall, via Enlightened knowledge is oriented through medical science. Cambridge is not only key to the opening case of the elder *Wieland*, offering the original report on which Clara relies for her re-appraisal, but also returns during Clara's convalescence after the murder of her sister and nieces. Cambridge returns to Philadelphia after a decade as a surgeon in

the British army, his arrival timed to the return of tragedy at Mettingen. Clara, at this point unaware of her brother's actions, pursues her uncle, anxious to consult with him about her suspicions of Carwin as the agent of death among her family.

Cambridge quickly dispels Clara's misapprehensions, revealing to her the truth about her brother's actions. He does so by allowing Clara to read the transcript from Theodore's trial, containing the latter's full confession to the murders as well as the divine revelations that inspired him to commit them. Cambridge introduces the transcript, significantly, by treating Clara as an intellectual equal. "Thou art a being of no vulgar sort" Cambridge addresses Clara just before leaving her to read Theodore's confession, "Thy friends have hitherto treated thee as a child. They meant well, but, perhaps, they were unacquainted with thy strength. I assure myself that nothing will surpass thy fortitude" (Wieland 151). As such, Cambridge invites Clara into a version of what Bryan Waterman describes as a "primary social form" of the early U.S. Enlightenment: "the gentleman's conversation club." According to Waterman, Brown, Smith, and other members of New York's Friendly Club, enacted "on a miniature scale their ideal principals for public debate," what Shuffleton sees manifest in Brown's fiction as "a "'juridical public sphere' in which readers would converse about morals and knowledge in relation to the material they voraciously read."64 For Waterman, and other critics, Brown and the members of the Friendly Club cultivated a "republic of intellect" in which visible literary and intellectual personas exercised public judgment in competition with members of the clerical class. The juridical model, therefore, provides the Friendly Club, an arena in which to resist, as in *Wieland*, the dictates of religious authority. Clara's encounter with her brother's crime through the trial transcript, however, introduces a

legal resolution to the events at Mettingen. In the eyes of legal authority, the case is closed: Theodore confessed to the murder and lies in wait for his execution. But like two physicians, Clara and Cambridge return to the case, consulting the extra-legal evidence which surrounds Theodore's descent into murderous madness, thereby superseding Shuffleton's "juridical public sphere." ⁶⁵

Cambridge, though correct in the long run about Clara's strength, estimates poorly in the moment of revelation. Upon reading her brother's confession she swoons, and Cambridge proceeds to nurse Clara through another phase of what she repeatedly refers to as her "disease":

The images impressed upon my mind by this fatal were paper were somewhat effaced by my malady. They were obscure and disjointed like the parts of a dream. I was desirous of freeing my imagination from this chaos. For this end I questioned my uncle, who was my constant companion. He was intimated by the issue of his first experiment, and took pains to elude or discourage my inquiry. My impetuosity some times compelled him to have resort to misrepresentations and untruths (*Wieland* 162).

Though Cambridge mistakenly introduced the information too soon, "[h]is skill as a reasoner, as well as physician, was exerted to obviate the injurious effects of this disclosure" (161). The pedagogical effort of Cambridge, a figure who stands in as the primary educator of Clara throughout the novel, is framed squarely within a medical tradition.

Furthermore, Clara's description of her own state, as well as Cambridge's interventions, are both in concert with mental illness and its treatment in the period.

Benjamin Rush, in his *Medical Inquiries and Observations Upon the Diseases of the Mind* (1812), defined the grade of madness from which Clara suffers as "*manalgia*." Rush divided his analysis of madness, an ailment rooted in the circulatory system and

producing a derangement of the understanding, into three primary types: "mania," or tonic madness characterized by high energy; "manicula," similar to mania, but in a lessened, albeit chronic, state; and "managlia," or a general madness characterized by torpor. ⁶⁷ For "manalgia," as for the other forms of madness, the best "mental" cure is to "divert the ruling passion." While discussing particular cases of "manalgia," Rush analogizes treating the deranged mind to setting a broken bone:

We render a limb that has been broken, and bent, straight, only by keeping it in one place by the pressure of splints and bandages. In like manner, by keeping the eyes and ears of mad people under the constant impressions of the countenance, gestures, and conversation of a man of a sound understanding and correct conduct, we should create a pressure nearly as mechanical upon their minds, that could not fail of having a powerful influence, in conjunction with other remedies, in bringing their shattered and crooked thoughts into their original and natural order.⁶⁹

Rush's extended metaphor here is more than mere metaphor, however. Akin to the concept of "tone of mind" which was discussed in chapter three, *Medical Inquiries* elaborates an understanding of mental illness as seated both in the blood vessels and the mind. Therefore, Rush divides the treatments into those that should be applied "to the mind, through the medium of the body" and those that should applied to "the body through the medium of the mind." The latter should be "heroic" venesection, while the former consist of restraints, eye contact, and, especially, the calm, yet authoritative, use of the voice. The state of th

Cambridge's treatment of Clara, complete with his "misrepresentations and untruths," rather than serving to deny her access to the knowledge she seeks, actually accords with medical practice. Subsequent to Cambridge's treatment, Clara is able to finish reading her brother's testimony, and enters into "gentlemanly conversation" about her brother's case with the physician. Their consideration of Theodore's confession

transforms the legal case into a medical one, and the novel shifts the mode of judgment from the juridical to the medical. In their first discussion, Clara's insistence that the "agency [in her brother's madness] be external and real, but not supernatural" impresses Cambridge, and the two commence consultation. Cambridge draws upon both family history and practical experience to evince similar instances of madness to that of Theodore. "In the course of my practice in the German army," he explains, "many cases, equally remarkable, have occurred ... They are all reducible to one class, and are not more difficult of explication and cure than most affections of our frame" (*Wieland* 165).

In addition to referencing his military experience, Cambridge includes the case of his father, Clara and Theodore's maternal grandfather, who killed himself in what was apparently the sudden onset of mania. Cambridge's father lost his brother at a young age, an event painful from his deep grief as well as a persistent belief that "his own death would inevitably be consequent on that of his brother" (*Wieland* 165). The man survived his grief, eventually regaining a hopeful disposition, marrying and embarking upon a happy life. However, in his twenty-first year, with the family gathered on the coast at Cornwall, the elder Cambridge was beset by illusions, and killed himself. As Cambridge tells it to Clara:

Suddenly, however, his limbs trembled and his features betrayed alarm. He threw himself into the attitude of one listening. He gazed earnestly in a direction in which nothing was visible to his friends ... then turning to his companions, he told them that his brother had just delivered to him a summons, which must be instantly obeyed. He then took an hasty and solemn leave of each person, and, before their surprise would allow them to understand the scene, he rushed to the edge of the cliff, threw himself headlong, and was seen no more (*Wieland* 165).

^{· &}quot;Mania Mutabilis. See Darwin's Zoonomia, vol. ii. Class III. I. 2 where similar cases are stated" [Brown's footnote].

Similar to the case of Clara's own father, as well as that of her brother, the death of her maternal grandfather here betrays evidence of a sudden madness producing auditory illusions and resulting in premature death.

These three cases, considered collectively, suggest a family line beset not by divine wrath, but rather with a pre-disposition to the sudden onset of mental derangement. The new knowledge produced through the consideration of multiple cases in consultation among medical inquirers offers Clara insights into the mechanism not only acting within the body of Theodore, but also the combination of medical and social factors that could produce the same outcome for her. The heritable arrangement of blood vessels which make one susceptible to a circulatory illness could combine with an exciting cause such as the death of a brother, for instance, or the return of religious zeal, or the presence of disembodied voices to trigger the onset of madness.⁷²

The new knowledge produced through the consideration of multiple cases in consultation among medical inquirers offers insights into the mechanism not only acting within the body of Theodore, but the combination of medical and social factors that produced the tragedy at Mettingen. Clara brings her suspicions to Cambridge, claiming that "All is wilding conjecture," and yet she "cannot forget Carwin. I cannot banish the suspicion that he was the setter of these snares. But how can we suppose it to be madness? Did insanity ever before assume this form?" (*Wieland* 164). Considering the cases through a medical lens, as opposed to the legal framework, provides Clara's "wildering conjecture" about the actions of Carwin with a plausible means through which Wieland becomes an instrument of Carwin's agency (164). Carwin's culpability, though perhaps not legally verifiable, becomes decidedly more possible with the knowledge of a

hereditary disposition to an illusion-producing madness on both sides of Theodore's family.

Clara and Cambridge's struggle to arrive at an initial understanding about the events which led to the murders at Mettingen parallels what John Bender describes as the challenge of knowledge-making in the Enlightenment. A broad epistemological paradigm predicated on induction, that is, one in which "experience was diffuse, anecdotal, and scattered," required disciplined strategies for reliably producing truth about the world. While the experimental method could serve this function for certain physical sciences (e.g., chemistry or physics), in other realms, such experiments could not be reliably or ethically performed. Medicine and morals were two such realms. In a canny conflation of these two realms, Brown has Clara attain her "novel knowledge" by reasoning like a practicing physician: by consulting multiple cases spanning multiple contexts and arriving at a provisional understanding which holds conclusions loosely enough to act upon them, but not so strongly that they color judgments moving forward.⁷³

Furthermore, Clara's own mental and physical health can now be cast in a different light. Knowledge of a history of what Rush would call "intellectual derangement" on both sides of her family necessarily elevates the likelihood that such a mania could strike Clara herself, transforming her "wilding conjectures" about Carwin into the ravings of madwoman. The novel thus becomes a case in itself. That is, a document of Clara's experiencing the exciting causes of mania, and her strategies for fending them off. After her final encounter with Wieland and Carwin, Clara resists the directives of her caregivers and turns to writing, producing the epistolary narrative we encounter. "My uncle dissuaded me from this task," she reflects in the final chapter,

which a parenthetical note tells us was "[written three years after the foregoing, and dated at Montpeilier]." "They would have withheld from me the implements of writing," she continues, "but they quickly perceived that to withstand would have been more injurious than to comply with my wishes" (Wieland 218-9).⁷⁴

Her narrative complete, Clara falls into a feverish swoon, convinced of her imminent death. In a nightmarish sleep she conjures "fantastical incongruities," eventually dreaming that she is "transported to some ridge of Aetna, and made a terrified spectator of its fiery torrents and pillar of smoke." The scene evokes evident parallels to the fiery death of her grandfather, a fact that critics haves read as Clara's failure to have learned, thus underlining the novel's ultimate skepticism of Enlightenment knowledge. Clara, however, retains lucidity throughout this scene: "I was conscious, even during my dream, of my real situation" (*Wieland* 220). The wakes in time to, with the help of her uncle and other spectators, escape the real fire that destroys Mettingen. Clara's cognizance and her overcoming of the fate of her brother and her father and grandfather speaks to the triumph of her medical learning, a triumph that nevertheless would not have been possible without the tragedy that befell the family.

Clara's recovery through the act of writing echoes the confidence expressed by trained physicians, be they the fictitious Cambridge, or Rush and Darwin. Cambridge claims that, although madness from a "hereditary disposition" may be particularly dangerous, it is, like most "affections of our frame," capable of explication and cure (*Wieland* 165). Rush more explicitly assesses the hope of collecting and consulting individual cases. In writing about mania in particular, he includes cases in order to "encourage us to persevere for years in the use of remedies for this disease, or to wait for

a cure from the hand of time, founded upon those spontaneous changes that are always going forward in the human body."⁷⁶ The kind of hope that Rush places in the physician, or at least in the power of medical science to render clear for human understanding aspects of the human experience—the workings of the mind, the unexplained interventions by the divine, the kinds of evils committed by individuals—that had previously stood outside the ken of human understanding drives the kind of medical science that the novel engages. Such science treads necessarily upon the supernatural not cleanly to debunk it but instead to demonstrate the powers residing in the body that are not yet fully understood, such as the hereditary passing of madness or the ventriloquism of Carwin.

Clara's narrative embodies this kind of hope—the hope that the knowledge produced through her recounting of the tragic events at Mettingen will provide an understanding of both what transpired and also how she escaped the same fate as that of her ancestors and brother. That is, if her particular case can be distinct from the general experience of madness in her family. The novel itself then allows us to live in the world, to order it, as Clara does—we see her working through such a world, first in isolated events that challenge her senses, then those that challenge how she is held in the mind of another, and finally the shock to her psychological system that is the revelation about Wieland: in each, repeated element of the plot, we, as readers, accompany Clara through the navigation of this provisional universe. Through her character, and the novel more generally, Brown therefore strives to articulate how such provisional knowledge can help shape epistemological and ethical judgments beyond the narrowing field of medical science.

Brown's novel repeatedly stages the exercise of a kind of provisional knowledge. The novel is made up of repeated, nested scenes of witnessing, recounting, weighing, and attesting. For instance, the characters ponder the meaning of a mysterious incident: Clara's brother Theodore heard his wife, Catherine's, disembodied voice call to him while outside, and yet the other characters were with her in the house. Pleyel, Catherine's brother and Clara's love-interest, confidently asserts that the voice heard by Theodore was nothing more than an "auricular deception," something to be dismissed quickly and easily. Catherine, characterized as sensible yet given to "wonder and panic," is swayed to worry by Theodore's disordered countenance following the event. Clara marks a middle ground between the two, a stance taken by drawing on the logic of parallel cases:

As to myself, my attention was engaged by this occurrence. I could not fail to perceive a shadowy resemblance between it and my father's death. On the latter event, I had frequently reflected; my reflections never conducted me to certainty, but the doubts that existed were not of a tormenting kind. I could not deny the event was miraculous, and yet was invincibly averse to that method of solution (*Wieland* 33).

At the inception of the strange events that will lead to the downfall of Mettingen, Clara stakes out a position of judgment inspired by her own familiarity with medical reasoning. Not only does she go on to suggest that, of chief concern is Wieland's response to the events, rather than their source—"It argued a diseased condition of his frame, which might show itself hereafter in more dangerous symptoms"—but she carefully articulates the kind of suspended, practical judgment that characterizes the medical case study (*Ibid.*). Her frequent reflections on the case of her father, her refusal to arrive at "certainty" in those reflections, her dismissal of ultimate (i.e., supernatural causes) in favor of the proximate meaning for Wieland's health, and her attention to the new consideration brought about by the parallel instance: all of these characterize the kind of

provisional, practical knowledge which the case study embodies in Enlightenment medicine.

Clara's willingness to suspend certainty compares with what she repeatedly terms the "precipitate" knowledge asserted by other characters in the novel. She brings her approach not only to the case of her brother, but also to her effort to defend her own character against the accusations of Pleyel. In addition to manipulating Theodore, Carwin employs his ventriloguism to poison Pleyel's opinion of Clara by leading him to assume that she has been seduced. En route to defend herself against Pleyel's subsequent accusations, Clara weighs her own situation. Pleyel's "opinion was not destitute of evidence," but, she reasons, "mimicry might still more plausibly have been employed to explain the scene." Knowing her accuser's disposition, however, she laments: "Alas! it is the fate of Clara Wieland to fall into the hands of a precipitate and inexorable judge" (Wieland 105-6). The moment of trial unfolds accordingly: Pleyel condemns Clara, assured in his stance that a surreptitiously overheard midnight conversation is evidence of Clara's fall. Clara defends herself, however futilely, by taking particular aim at Pleyel's rush to judgment. "You were precipitate," she emphasizes, "and prone to condemn. Instead of rushing on the impostors, and comparing the evidence of sight with that of hearing, you stood aloof, or you fled" (Wieland 109). In a parallel to the kinds of observation that parallel cases in medicine makes available, the knowledge pursued here by Pleyel relies on a single instance and a single sense, that of hearing, rather than the kind of dispersed, embodied witnessing emphasized in the medical case study. Pleyel's precipitate reasoning arrives at judgment too quickly, settles on its certainty with too much weight, and Clara's mental and physical health, suffer accordingly.

In this way, Pleyel's judgments are akin to those of Theodore, the figure whose certainty stands in most stark opposition to the provisional approach to knowledge exercised by Clara. Shortly after the initial incident in which Theodore hears disembodied voices, Clara holds a consultation with her brother. Their brief conversation in the temple juxtaposes each Wieland's approach to knowledge. Clara inquires about his response to the mysterious voices, striving to assess the degree of derangement in his understanding. "How almost palpable is this dark," Clara begins, "yet a ray from above would dispel it.' 'Ay,' said Wieland, with fervor, 'not only the physical, but moral night would be dispelled" (*Wieland* 34). As the conversation continues Clara teases out not specifically what Wieland considers to be the source of the disembodied voices, he references "twenty suppositions" that are plausible explanations, but emphasizes his desire for absolute knowledge of their source. Elsewhere, Wieland declares his fervent longing for certainty most directly in his court confession:

My days have been spent in searching for the revelation of that will; but my days have been mournful, because my search failed. I solicited direction: I turned on every side where glimmerings of light could be discovered. I have not been wholly uninformed; but my knowledge has always been short of certainty. Dissatisfaction has insinuated itself into all my thoughts (*Wieland* 152).

While Pleyel's failure of method—his precipitate reasoning—produces errors in judgment regarding Clara, Wieland's failure of motivation produces more impactful, affective errors, with much more tragic results. Both characters demonstrate the importance of living provisionally in a modern world, a position that Clara, unlike her brother, struggles with, but ultimately succeeds in occupying.

Clara's final, return journey to Mettingen, made after her brother's horrific actions have been revealed to her through consultation with Dr. Cambridge, demonstrates

the fullest expression of the provisional knowledge she has acquired from medical reasoning. She returns to her home, despite the painful memories and the violent threat of her brother, like a physician returning to an older case study, even one clouded by superstition, in order to discover new knowledge. Upon arriving in her chamber, Clara struggles with the debilitating mental and physical effects of revisiting these painful memories. Confronting the place in which her family and happiness had been taken from her proves too much, and an initial swoon is replaced by a vigorous energy:

At that moment, my despair suddenly became vigorous. My nerves were no longer unstrung. My powers, that had long been deadened, were revived. My bosom swelled with a sudden energy, and the conviction darted through my mind, that to end my torments was, at once, practicable and wise (*Wieland* 179).

The pendulum swing from inaction to action, from torpor to mania, bespeaks a shift from the kind of provisional knowledge that has characterized and guided Clara's navigation of the events in the novel to this point. And her decision becomes quickly actionable: "I knew how to find way to the recesses of life," she asserts. "I could use a lancet with some skill, and could distinguish between vein and artery" (*Ibid.*). She seizes a lancet that she kept in her closet along with other "small instruments," but before she is able to exercise her anatomical knowledge and medical skill on herself, her "purpose was suspended" by the sound of Carwin's entrance (*Wieland* 180).

The lancet, like Clara's intention to kill herself, hangs in suspension throughout the encounter with Carwin. And in this suspension Carwin confesses to using his biloquism (or, ventriloquism a plot point which Brown annotates at length, referencing various medical cases as well as anatomical writings to demonstrate its plausibility) to harmlessly manipulate her brother Theodore, evidently triggering a descent into madness which led him to hear the further voices which directed his murderous rampage.⁷⁷ The

disembodied voices which drive the plot are thus revealed to have a source that can only be pieced together through the anatomical knowledge provided by Carwin, the family medical history offered by Dr. Cambridge, and Clara's firsthand experience. Clara's lancet hangs limply in her hand as a symbol not of the futility of medical knowledge but instead as a hopeful synecdoche for the mode of reasoning that will provide the answer to the mysteries she encounters.

Such hope, however, cannot be realized without tragedy. The conflict between Clara's provisional, medical approach to truth and the destructively dogmatic comes to a head via her final confrontation with her murderous brother. Theodore refuses to bend when the evidence of Carwin's deception is presented to him, releasing Carwin and intending to follow the divine mandate to kill his sister. Clara, dismayed at her brother's behavior, questions her own approach to truth. "Carwin had acknowledged his offences, and yet had escaped," she worries. "Did I place the a right construction on the conduct of Wieland? Was the error that misled him so easily rectified? Were views so vivid and faith so strenuous thus liable to fading and to change? Was there not reason to doubt the accuracy of my perceptions?" (Wieland 205). With this final question Clara lays bare the epistemological dilemma of Brown's novel. That is, she approaches the despairing stance of absolute skepticism. Wieland on the other hand persists in his vision of revealed truth, a fact which, ironically, provides Clara with another case study as evidence in favor of her provisional truth: his madness makes clear the hereditary nature of the disease which haunts the Wieland family line.

A penknife replaces Clara's lancet as the scene plays out and Brown conflates the instrument of the practicing physician with that of the sentimental heroine. "In a fold of

my dress an open penknife was concealed," Clara narrates. "It lurked out of view; but now I see that my state of mind would have rendered the deed inevitable if my brother had lifted his hand. This instrument of my preservation would have been plunged into his heart" (Wieland 207). Brown's drop into the conditional—"would have been" underlines the provisional nature of Clara's state here: she was prepared to amend her actions based upon the presentation of new information. She hesitates repeatedly, unable to murder her brother despite his evident intentions and her multiple opportunities. The almost supernatural perambulations of the penknife itself similarly model this mutable, provisional stance. The knife first drops to the floor, then passes into Wieland's possession, and back to Clara, who relinquishes it one final time. In so doing, however, she defers agency, making the knife itself an actor in the scene: "my fingers were stretched as by a mechanical force, and the knife, no longer heeded or of use, escaped from my grasp, and fell unperceived to the floor" (Wieland 215). The syntactic deferral of agency from Clara to the knife itself ("the knife ... escaped ... [the knife] ... fell unperceived") is counterbalanced by Wieland's decisive action: "His eye now lighted upon it; he seized it with the quickness of thought ... He plunged it to the hilt in his neck; and his life instantly escaped with the stream that gushed from his wound" (*Ibid.*). Clara's willingness to defer action, to suspend judgment, a position derived from her medical education, ultimately saves her life. While its opposite destroys the lives of her brother, Catherine, and their children.

As I noted in the introduction to this chapter, a number of modern critics have read an indeterminacy into the conclusion of the novel: Wieland's suicide, Carwin's escape, and Clara's flight to Montpelier all point to the utter failure of the utopian

experiment arranged at Mettingen. Such indeterminacy, they contend, augurs Brown's overall skepticism of human progress via the epistemological tools of the Enlightenment. While I would not challenge such an argument over the course of Brown's short career as a novelist, his first published novel projects a more sanguine view of the dissemination of human knowledge. In the end we get not indeterminacy, but a recognition of the limited utility of medical knowledge, as well as the necessary structure of it. For, while Clara's engagement with medical reasoning produces a hopeful future in which she manages the hereditary disease and learns to navigate the vagaries of a probabilistic universe, such progress was only made possible through the tragedy recounted in the novel's plot. Medicine may advance, and knowledge may be gained, as Brown learned through his experience with outbreaks of yellow fever, but illness will still rage, understanding will still be deluded, and innocents will still die.

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¹ David Hume, A Treatise of Human Nature: Being an Attempt to Introduce the Experimental Method of Human Reasoning into Moral Subjects (London, 1738), 180.

² Charles Brockden Brown, *Wieland; Or, the Transformation, An American Tale*, (New York, 1998), 16. Hereafter, Brown's novel will be cited parenthetically within the essay as *Wieland*.

³ For such readings, see Michael Warner, Letters of the Republic: Publication and the Public Sphere in Eighteenth-Century America (Cambridge, 1990); Shirley Samuels, Romances of the Republic: Women, the Family, and Violence in the Literature of the Early American Nation (New York, 1996); Christopher Looby, Voicing America: Language, Literary Form, and the Origins of the United States (Chicago, 1996). A pair of recent critics have revisited this line of argument, locating in Brown's novel a similar, if more nuanced, consideration of the operations of private and public judgment in the early U.S. See Frank Shuffleton, "Juries of the Common Reader," Revising Charles Brockden Brown: Culture, Politics, and Sexuality in the Early Republic, Eds. Phillip Barnard, Mark. L. Kamrath, & Stephen Shapiro (Knoxville, 2004); and Thomas Koenigs, "Whatever May be the Merit of my Book as a Fiction': Wieland's Instructional Fictionality," English Literary History 79.3 (2012): 715-45.

⁴ See John Bender, "Novel Knowledge: Judgment, Experience, Experiment," *Ends of Enlightenment* (Stanford, 2012), 21, and *passim*.

⁵ Bryan Waterman has provided an invaluable history of Brown's participation in the medicoliterary culture of the early Republic. In turning to Brown's literary productions, however,

Waterman traces the influence of medical science on the author's "fever novels," *Arthur Mervyn* (1799) and *Ormond* (1799), both of which were written subsequent to Brown's own experience with devastating outbreaks of yellow fever in New York City. By focusing instead on *Wieland*, a novel whose medical content is subtle, yet pervasive, I highlight a fleeting moment in the novelist's career when both fiction and medical science could inspire a not uncomplicated optimism. See Bryan Waterman, *Republic of Intellect: The Friendly Club of New York City and the Making of American Literature* (Baltimore, 2007), esp. 189-229.

⁶ Qtd. in *Wieland* and *Memoirs of Carwin the Biloquist*, ed. Bryan Waterman (New York, 2011), 282. Waterman also contributes the brief circulation history of the Bertholi case, much re-printed in American and European medical literature, on which I rely here. Waterman's source for the Norton Critical Edition, and Brown's likely venue of encounter with the case, is the anonymous [A Case of Spontaneous Combustion], in *The American Museum, or Universal Magazine*, 11.4 (1792): 146-9.

⁷ Otd in *Wieland*, ed. Waterman, 284.

⁸ *Ibid.*, 285.

⁹ On the move to a medicine of glass, wood, and metal, or towards the experimental laboratory, see Stanley Joel Reiser, *Medicine and the Reign of Technology* (Cambridge, 1978). For the persistence of the case study through this history, see Volker Hess and J. Andrew Mendlesohn, "Case and Series: Medical Knowledge and Paper Technology, 1600-1900" *History of Science* 48 (2010): 287-314.

¹⁰ On the publication history of *The Medical Repository*, see Richard J. Kahn & Patricia G. Kahn, "*The Medical Repository*—The First U.S. Medical Journal (1797-1824)", *The New England Journal of Medicine* 337.26 (1997): 1926-9. On the consolidation of the American medical profession, see Paul Starr, *The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry* (New York, 1982), esp. 30-60.

¹¹ On the history of *The Medical Repository* and Brown's intimacy with the project, see Waterman, *Republic of Intellect*, 188-230.

¹² Samuel L. Mitchell, Edward Miller, & Elihu Hubbard Smith, "Circular Address," *The Medical Repository* 1.1 (1797): *unpaginated prefatory material*. The authors published the "Circular Address" as part of the prefatory material to the first issue of the journal. My quotations are drawn from this version.

¹³ On the multiple outbreaks, see Simon Finger, *The Contagious City: The Politics of Public Health in Early Philadelphia* (Ithaca, 2012); and Bryan Waterman, *Republic of Intellect*.

¹⁴ Mitchell, Miller, & Smith, "Circular Address," unpaginated prefatory material.

¹⁵Waterman, *Republic of Intellect*, 193. On widely shared, but contested, understanding of medical knowledge, see also Sarah Knott, "The Patient's Case: Sentimental Empiricism and Knowledge in the Early Republic, *The William and Mary Quarterly* 67.4 (2010): 645-76.

¹⁶Mitchell, Miller, & Smith, "Circular Address," unpaginated prefatory material.

¹⁷ Benjamin Waterhouse, *The Rise, Progress, and Present State of Medicine: A Discourse, Delivered at Concord, July 6th, 1791. Before the Middlesex Medical Association*, (Boston, 1792), 28.

¹⁸ Kahn and Kahn ascribe Smith's motivation for the periodical to Webster's decision to abandon his project. They quote Smith's diary from August of 1796: "I think, as Mr. Webster has relinquished his plan of continuing his collection, of taking it up myself...& publishing an annual volume; the principal object of which will be the preserving and collecting of the materials for a History of the Diseases of America, as they appear in the several seasons." See "*The Medical Repository*—The First U.S. Medical Journal," 1927.

¹⁹ According to Kahn, although there was a rise in the number of titles produced in the period, the average U.S. medical periodical lasted just 5.4 years compared to 27 years for *The Medical Repository*. See "*The Medical Repository*—The First American Medical Journal," 1929.

²⁰ Mitchell, Miller, & Smith, "Circular Address," unpaginated prefatory material.

²¹ Sydenham's *Observationes Medicae*, better known as "Sydenham's Observations," went through multiple editions and re-printings throughout the eighteenth century. Mitchell, et al., cite the 1788 translation by George Wallis. The source for my citations is the first English translation after his death, *Compleat Practice of Physick;* trans. John Pechey, (London, 1695). For a fuller discussion of Sydenham, see above, Ch. 2, 20-3.

²² Mitchell, Miller, & Smith, "Circular Address," unpaginated prefatory material.

²³ As we saw above, Sloane writes in the preface to the *Transactions* for 1699: "There is no doubt but the more discerning will make a great difference between what is related in [the transactions] as Matter of Fact, Experiment, or Observation, and what is *Hypothesis*. The first sort of Relations…are, and must always be useful, and the latter may be pass'd over by such as dislike them." "Preface," *The Philosophical Transactions* 21 (1699): 1.

²⁴ Mitchell, Miller, & Smith, "Circular Address," unpaginated prefatory material.

²⁵ "Article III. [Recommended to all who have read the Treatises on Epidemical Diseases written by Dr. Sydenham]," *The Medical Repository* 1.1 (1797): 51. Waterman discusses the allegorical significance of Smith's historical essay, locating in Smith's analysis of the Greek republic a warning to the new U.S. Republic: "modern republics will suffer the same way if appropriate measures are not taken or if the wrong authorities are granted the public's trust" (*Republic of Intellect* 195).

²⁶ "Preface," The Medical Repository 1.1 (1797): unpaginated.

²⁷ My reading of the early U.S. periodical here is indebted to Jared Gardner, *The Rise and Fall of Early American Magazine Culture* (Urbana-Chapmaign, 2012). Gardner locates a particular resonance between the multi-vocal format of the magazine in the politically fractious 1790s and the notoriously unstable political allegories of Brown's fictions.

²⁸ "Preface," The Medical Repository 1.1 (1797): unpaginated.

²⁹ On the collecting of cases into *centuriae*, see J. Andrew Mendlesohn, "The World on a Page: Making a General Observation in the Eighteenth Century," *Histories of Scientific Observation*, Eds. Lorraine Daston and Elizabeth Lunbeck (Chicago, 2011), 399; and Gianna Pomata, "Observation Rising: The Birth of an Epistemic Genre, ca. 1500-1650," *Ibid.*, 45-81.

³⁰ Mitchell, Miller, & Smith, "Circular Address," unpaginated prefatory material.

³¹ For a statistical breakdown of the over-representation of New York (as well as Connecticut and Delaware) among both subscribers and articles published, see Kahn & Kahn, "*The Medical Repository*—The First U.S. Medical Journal," 1928 (fig. 2).

³² *The Medical Repository* 1.3 (1798): 315.

³³ *Ibid.*, 1.2 (1797): 172.

³⁴ *Ibid.*, 1.4 (1798): 453.

³⁵ *Ibid.*, 1.3 (1798): 333.

³⁶ *Ibid.*, 1.4 (1798): 495.

³⁷ "Medical Essays.—No. II," *Ibid.* 471.

 $^{^{38}}$ J. Andrew Mendlesohn, "The World on a Page: Making a General Observation in the Eighteenth Century," 397.

³⁹ On the importance of synthesis to observational practices, see also Lorraine Daston, "The Empire of Observation, 1600-1800," *Ibid.*, 96-7.

⁴⁰ Medical Essays and Observations, Published by a Society in Edinburgh, Vol. 1 (4th ed.), (Edinburgh, 1752), xxiii.

⁴¹ "Constitution," though a central concept in European medicine since Hippocrates, was revived and systematized following the work of Thomas Sydenham in the late seventeenth century. As Mendlesohn demonstrates, improvements in paper and print technologies, as well as the widespread use of instruments including tables, charts, and questionnaires, in the latter half of the eighteenth century allowed European scientists to pursue Sydenham's goal of annually tracking the various "epidemic constitutions" in England and beyond through highly developed correspondence networks. On such networks, see Mendlesohn, "The World on a Page," 397-9. On the role of constitutions in shaping social and political change in the New World, see Simon Finger, *The Contagious City: The Politics of Public Health in Early Philadelphia* (Ithaca, 2012).

⁴² "Meteorological Observations for January, 1797, made by Gardiner Baker," *The Medical Repository* 1.1 (1797): 98.

⁴³ Kelly Wisecup, *Medical Encounters: Knowledge and Identity in Early American Literatures* (Amherst, 2013), 32. Katherine Montgomery Hunter complicates such an arc, contending that medical knowledge is always, fundamentally, narrative knowledge. "Medicine is an interpretive activity," Hunter asserts, "a learned inquiry that begins with an understanding of the patient and ends in therapeutic action on the patient's behalf." While objective, in Hunter's account,

classificatory forms contribute to the necessary stages of interpretation and therapy, narrative understandings frame the movement between the two. See *Doctor's Stories: The Narrative Structure of Medical Knowledge* (Princeton, 1991), xx, and *passim*.

- ⁴⁴ Qtd. in Waterman, *Republic of Intellect*, 206. Waterman attaches the proliferation in "medical eloquence" to public debates over the nature of the yellow fever outbreaks plaguing eastern cities in the 1790s. While not disputing these motivating events, I am interested in the wider epistemological context for the unique mode of medical narrative and reasoning to emerge in the early U.S. Republic.
- ⁴⁵ On the centrality of sympathy to the eighteenth-century medical case study, see Jason Daniel Tougaw, *Strange Cases: The Medical Case Study and the British Novel* (New York, 2006).
- ⁴⁶ "An Inquiry into the Cause of the Prevalence of the Yellow Fever in New-York," *The Medical Repository* 1.3 (1798), 16
- ⁴⁷ *Ibid.*, 31.
- ⁴⁸ Mitchell, Miller, & Smith, "Circular Address," unpaginated prefatory material.
- ⁴⁹ On the rise of clerks in medical institutions, see Volker Hess and J. Andrew Mendlesohn, "Case and Series," esp. 291-5.
- ⁵⁰ On the history of early U.S. magazines, see Frank Luther Mott, *A History of American Magazines*, 1741-1850, vol. 1 (Cambridge, 1930); and Gardner, *The Rise and Fall of Early American Magazine Culture*.
- ⁵¹ Bender draws a comparison between the volume of data accessible in our own era of electronic Enlightenment and that aspired to in the era of Diderot and Brockden Brown. *Ends of Enlightenment* (Stanford, 2012), 11.
- ⁵² *The Medical Repository* 2.1 (1798): 2.
- ⁵³ "A Case of Difficult Parturition, Successfully Terminated by Bleeding," *Ibid.*, 25.
- ⁵⁴ Daston, "The Empire of Observation," 104.
- ⁵⁵ Republic of Intellect, 206.
- ⁵⁶ Smith's letter included in *Collected Writings of Charles Brockden Brown: Vol. 1 Letters and Early Epistolary Writings*, Eds. Phillip Barnard, Elizabeth Hewitt, & Mark L. Kamrath (Lewisburg, 2013), 399.
- ⁵⁷ Ibid.
- ⁵⁸ Sky-Walk was lost, although there are multiple references to the manuscript in diaries and letters of Brown's associates, including Smith. Between 1798 and 1801, Brown published six novels. In addition to Wieland (1798), Brown published Ormond; or, The Secret Witness (1799), Arthur Mervyn; or, Memoirs of the Year 1793 (1799), and Edgar Huntly; or, Memoirs of a Sleep-Walker (1799, 1800), his most critically significant Gothic novels. He would produce two more—

Clara Howard; In a Series of Letters (1801) and Jane Talbot: a Novel (1801)—before abandoning longer fictions for a career as magazine editor and essayist. Though long disputed, the claim that Brown is the first successful novelist in the U.S. holds strong. For a recent reiteration, see Philip J. Gura, Truth's Ragged Edge: The Rise of the American Novel (New York, 2013), 24-37.

⁵⁹ Collected Writings: Vol. 1, 435, 438.

⁶⁰ Catherine Kaplan, "Document: Elihu Hubbard Smith's *The Institutions of the Republic of Utopia*," *Early American Literature* 35.3 (2000): 325. Smith's *Utopia* was included in his voluminous personal writings. Though Smith's diaries and sketches of his many influential friends have long been a source for information about the "Friendly Club," the text of *The Institutions of the Republic of Utopia* was not published until Kaplan's edition.

⁶¹ *Ibid.*, 326.

⁶² Shuffleton, "Juries of the Common Reader," 100.

⁶³ Thomas Koenigs, "Whatever May be the Merit of my Book as a Fiction."

⁶⁴ Waterman, *Republic of Intellect*, 6-10. According to Waterman, for the Friendly Club the juridical does not equate to the political. A lack of overt political dispute by the members is essential to both their model of gentlemanly sociability as well as a their desire to attain a broader cultural and intellectual authority. For this reason he sees the clergy, not a Federalist or Republican divide, as their primary interlocutor.

^{65 &}quot;Juries of the Common Reader," 88-114.

⁶⁶ Benjamin Rush, *Medical Inquiries and Observations Upon the Diseases of the Mind*. 5th Ed., (Philadelphia, 1835).

⁶⁷ *Ibid.*, 139.

⁶⁸ *Ibid.*, 202.

⁶⁹ *Ibid.*, 240.

⁷⁰ *Ibid.*, 182.

⁷¹ Rush particularly stresses the role of the physician's voice in the treatment of madness. The voice is effective, he reasons, "from its wonderful effects upon the mind of man, whether employed in simple tones, music, or in speech. Even brutes feel and obey it," See *Ibid.*, 175.

⁷² Both Darwin (to whom Brown directs the reader's attention with his footnote) and Rush address a mania similar to that described in the case of the elder Cambridge, as well as the possibility of certain types of mania running in a family line. "A peculiar and hereditary sameness of organization of the nerves, brain and blood-vessels," Rush writes, "on which...the predisposition to madness depended, sometimes pervades whole families, and renders them liable to this disease, from a transient or feeble operation of its causes." As evidence of this claim, Rush cites the parallel cases of a pair of brothers who each suffered the onset of madness at the same

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age as a result of their participation in the Revolutionary War. Rush, *Medical Inquiries* (Philadelphia, 1835), 46.

⁷³ See Bender, "Novel Knowledge," 25-6. Catherine Gallagher also identifies this type of provisional knowledge as central to the development and utility of the novel form in the modern world. What Gallagher terms "cognitive provisionality," required of individuals in a relativistic, modern world and was developed, in part, by reading novels. See "The Rise of Fictionality," *The Novel, Volume 1: History, Geography, and Culture*, ed. Franco Moretti (Princeton, 2006), 347. Thomas Koenigs makes a parallel claim about the mode of reasoning developed by Clara throughout the novel. It is precisely this kind of possibilistic engagement with the fiction, Koenigs argues, that constitutes the meta-didactic critique offered by Brown. While I concur with Koenigs' insightful reading of Brown's strategic deployment of fictionality, I contend that another source of such possibilistic reasoning derives from the medical public sphere, evoked in the novel via Dr. Cambridge. See Koenigs, "Whatever May be the Value of my Book as Fiction," 738-9.

"Madman" in the Pennsylvania Hospital: "In conversing with him, he produced a large collection of papers, which he said contained his Journal. 'Here (said he) I write down everything that passes in my mind, and particularly malice and revenge. In recording the latter, I feel my mind emptied of something disagreeable to it, just as a vomit empties the stomach of bile. When I look at what I have written a day or two afterwards, I feel ashamed and disgusted with it, and wish to throw it in the fire." Rush speculates on the salutary effect of writing for mental illness: "putting their envious, malicious, and revengeful thoughts upon paper...would form a mirror that would...[point] out and remedying the evil dispositions of the mind" (*Ibid.*, 341-2). Shuffleton, in parsing the culpability for the murders at Mettingen, contends that Clara's turn to writing comes to resemble Carwin: "[S] he too becomes a biloquist of sorts, a mimic of other people's voices...in writing her narrative that is simultaneously an explanation and an attempted expurgation of Carwin's plots" ("Juries of the Common Reader," 103-4). This reading overlooks the medical context of her turning novelist.

⁷⁵ Koenigs, in reading Clara as a revision of female education as modeled on Richardson's Clarissa, also finds Brown's heroine to be less than exemplary. What Keonigs calls the "pure contingency of a fire" allows Clara to escape a repeat of Clarissa's own misguided act of self-destruction, the ultimate signal of Brown's meta-critique of the exemplary educational mode embodied in the Richardsonian heroine ("*Wieland's* Instructional Fictionality," 722). I contend that Clara's medical condition, as well as the parallels she draws between this moment and the deaths of her father and grandfather, speak not to a contingent deferral of agency but rather to an overcoming of an hereditary mental illness through medical science.

⁷⁷ In a footnote to Carwin's explanation, Brown adds: "The art of the ventriloquist consists in modifying his voice according to all these variations, without changing his place. See the work of Abbe de la Chappelle, in which are accurately recorded the performances of one of these artists... This power...may, possibly, consist in an unusual flexibility or exertion of the bottom of the tongue and the uvula. That speech is producible by these alone must be granted, since anatomists mention two instances of persons speaking without a tongue. In one case the organ was originally wanting, its place was supplied by a small tubercle, and the uvula was perfect. In

⁷⁶ *Ibid.*, 230-1.

the other, the tongue was destroyed by disease, but probably a small part of it remained" (183-4n).

Coda.

"No Pain—I am dying"

For what really occurred, however, it is quite impossible that any human being could have been prepared.
--Edgar Allan Poe, The Facts in the Case of M. Valdemar¹

Medical observers in eighteenth-century America encountered new illnesses, new patients, and new sources of medical knowledge. They documented such novelties in the form of Hippocratic case studies: brief narratives of illness experienced by an individual patient and observed by a physician. This dissertation has drawn together a portion of the vast archive of such case studies from the published and personal writings of learned and lay physicians, as well as the writings of ministers, natural historians, and novelists. Cases were maintained across a variety of discourses and contexts: by New England ministers facing outbreaks of demonic possession; by natural historians reckoning with the violence—both corporeal and mental—attendant to the West Indian slave system; by early U.S. physicians struggling to comprehend the etiology of epidemic disease sweeping through eastern cities; and by literary novelists probing the influence of Revolutionary and early national politics on bodily health. By attending to a series of discrete moments, I have endeavored to situate this widespread traffic in medical case studies at the center of an eighteenth-century, British Atlantic republic of science and letters, demonstrating the genre's previously unrecognized importance to colonial and early national scientific as well as literary culture.

These case studies address new illnesses, new racialized bodies, and new medicines circulating within new and tenuous social formations, as well as aberrant spiritual, moral, and mental phenomena that mimicked the morphology of diseases, yet challenged the epistemological capacities of medicine in the empirical age. Each author addressed in this project saw great possibility for human flourishing in the colonial and early national world. Those possibilities, however, were repeatedly undermined by the precise mechanisms that ostensibly were meant to bring about such flourishing. The case study thus offers the elite colonial and early national author a literary form through which to manage the affective experience of life on the periphery, a form in which both optimism and tragedy can be held together, however briefly. Rather than announcing the triumphant expansion of human flourishing and freedom through the colonial and into the early national period, therefore, reading eighteenth-century American literature through the medical case study affords us glimpses of the tragic realities of disorder, disease, and death, which marked a colonial and early national present. By focusing on that present, this dissertation has aimed at telling a history of stasis, of suspension.

By way of conclusion I will resist projecting such suspension forward into literary and intellectual history, instead pointing briefly to one site where this eighteenth-century genre, and the implications of its affective structure, is horrifically captured in the antebellum era. Edgar Allan Poe's 1845 short story "The Facts in the Case of M. Valdemar" takes the form of a medical case study. The narrator, addressed only as P____, recruits the terminally ill M. Valdemar to assist in an illicit experiment in mesmerism. Valdemar agrees to be placed in a state of mesmeric suspension "in articulo mortis," or at the point of death. Despite the meta-physical possibilities of such an experiment, the

narrator's interest does not aim at occult knowledge from beyond the grave. Instead P____ hopes to alleviate the most pervasive form of human suffering: the "encroachments of Death" (833).

The narrator, much to his own surprise, succeeds. Through the mesmeric arts, P arrests the death throes of M. Valdemar and places the man in a state of suspended animation for "an interval of nearly seven months." Drs. D and F , as well as a medical student, Mr. Theodore L l, attend at the bedside. All are witnesses to, as well as careful recorders of, the extraordinary events of the case, complete with M. Valdemar's famously impossible statement: "Yes; — no; — I have been sleeping — and now — now — I am dead." Rather than offering new knowledge about the afterlife, or optimism for the human effort to overcome death, M. Valdemar's only communications are pleas for release from his suspended state. "For God's sake!" he exclaims at one point, "quick! — quick! — put me to sleep — or,— quick! — waken me! — quick! — I say to you that I am dead!" (841). P eventually responds to M. Valdemar's entreaties, and, in a scene noted for its horrific imagery, records the body's instantaneous decomposition: "his whole frame at once...shrunk, — crumbled —absolutely rotted away beneath my hands. Upon the bed, before that whole company, there lay a nearly liquid mass of loathsome—of detestable putridity" (840-2). Unlike their colonial and early national forbears, the medical inquirers in Poe's case respond to their patient's pain, acknowledging the failure of human ingenuity to alleviate present suffering. However, due in part to their tragic delay in doing so, "the whole company" is forced to bear witness to the loathsome horror they created.

¹ "The Facts in the Case of M. Valdemar," *Poetry and Tales* (New York, 1984), 842. Hereafter all references will be cited parenthetically within the coda.