

**Public Health, Victorian Domestic Space, and the Biopolitics of Vaccination Reform in
Bleak House and the Lampoons of George Cruikshank**

by

Lauren Elizabeth Reese

English Literature, University of Pittsburgh, 2019

Submitted to the Graduate Faculty of the
Dietrich School of Arts and Sciences in partial fulfillment
of the requirements for the degree of
Bachelor of Philosophy

University of Pittsburgh

UNIVERSITY OF PITTSBURGH

DIETRICH SCHOOL OF ARTS AND SCIENCES

This thesis was presented

by

Lauren Elizabeth Reese

It was defended on

November 22, 2019

and approved by

Dr. Jeff Aziz, Senior Lecturer, Department of English

Dr. Carla Nappi, Mellon Professor of History, Department of History

Dr. Fuson Wang, Assistant Professor, Department of English, University of California Riverside

Thesis Advisor/Dissertation Director: Dr. Amy Murray Twyning, Literature Program Director
and Lecturer II, Department of English

Copyright © by Lauren Elizabeth Reese

2019

**Public Health, Victorian Domestic Space, and the Biopolitics of Vaccination Reform in
Bleak House and the Lampoons of George Cruikshank**

Lauren Elizabeth Reese, BPhil

University of Pittsburgh, 2019

The introduction of the Compulsory Vaccine Act of 1853 marked an important moment in the crusade for public health in which the State inserted itself in the lives of private citizens in unprecedented ways. The increasing regulations seen in the 19th century succeeded in establishing a Victorian bio-political regime. The emergence of this state can be better understood through the evolution of disease concepts and preventative practices from the 18th-century's introduction of inoculation in England to the 19th-century's vaccines and their subsequent regulation. In this thesis, I will examine the gradual coalescence of the bio-political regime through Victorian public health discourses and the medical and legal measures designed to cure and prevent disease. Reviewing the gradual medicalization of everyday life, I trace the development of more and more formalized regulations of the body that came to fruition in the 19th century, especially in smallpox vaccination developments, laws, and administration. I also examine the ways in which the preoccupation with contagion in *Bleak House* rehearses a bio-political logic. To do so, I compare the famous Lady Mary Wortley Montagu's public activities to promote inoculation to Esther Summerson's private suffering and by juxtaposing Dickens' pro-regulation attitude to the resistance to bio-politics evident in the satirical cartoons of George Cruikshank.

Table of Contents

Preface.....	vii
1.0 Introduction 1.....	1
2.0 Overview of 19 th -Century Change in Disease Transmission Theory and Legal Intervention	4
3.0 Vaccination and the Emergence of a Bio-Political State	20
4.0 <i>Bleak House</i> , Contagion, and the Rhetoric of Miasma	32
5.0 George Cruikshank: Sketches of Victorian Bio-Political Resistances	39
6.0 Disease and Victorian Domestic Space in <i>Bleak House</i>	50
7.0 Bio-Politics Beyond Vaccination.....	59
Bibliography	61

List of Figures

Figure 1 <i>The Drunkards Children</i> :	41
Figure 2 Unpublished sketch:	44
Figure 3 <i>The Cowpox Tragedy</i> :.....	46

Preface

This thesis is the product of so many supportive individuals.

I would like to thank my Thesis Advisor, Dr. Amy Murray Twyning. Her support has been a vital force in this work coming to fruition.

I would also like to extend thanks to my thesis committee members: Dr. Jeff Aziz and Dr. Carla Nappi have fostered much of this work. I also extend a very special thank you to Dr. Fuson Wang of the University of California Riverside for his involvement in this process as an external examiner.

I thank the University Honor's College at the University of Pittsburgh for their research support, as well as Princeton University's Special Collections Department for the use of their archival material from the George Cruikshank Collection.

1.0 Introduction 1

Since their respective introductions, inoculations and vaccines were subject to public doubts and rife with scientific uncertainties. This thesis will demonstrate the shades of resistance to preventative immunity through the evolutions in two fields of study in disease theory, miasma and contagion theory, and how these fields of thought informed the emergence, and subsequent resistance, to bio-political public health reform laws. Resistance to vaccination that began in the 19th century has an intimate connection to the contemporary anti-vaccination movements influence, which this thesis suggests can be understood through the emergence of bio-political regulation present in the Victorian era that is deeply informed along class lines. In this bio-political orientation, science-informed regulation organizes the body into distinctively public and private forms of bodily sovereignty in an era where class distinctions were being precariously reordered. In the contemporary vein, these ideas of private and public liberties have been refigured in such a way to accommodate a new breed of anti-vaccination logic that has proffered a crisis in epidemic outbreaks of measles and mumps in both the US and Britain. To understand this emergence and the lasting significance of the Victorian regime, this introduction will work to define the class-informed bio-politics indicative of the era, how that influences notions of public and private bodily sovereignty, and the ways this configuration informs the contemporary state of vaccination to reveal the immediate significance of these public health entanglements.

According to Michel Foucault's writings on bio-politics, the state systematically begins to work to suppress life as a means to optimize that life from the 17th-century onward. It does so by orienting the body as an entity enmeshed with the political, both an object and a subject of the political order. Biopower is the mechanism which Foucault uses to describe the sovereign power

transfer of the state's ability to more intimately insert itself in the lives of its citizens. In orienting citizen bodies as this political and politicized entity, those bodies are acted upon both on an individual level, such as in the case of regulations regarding the technological advancements of vaccines, as well as a member of the larger public body, which serve as pieces to maintain (or not) through regulatory responses via the collection of data and statistics on the whole population's health. The class-informed bio-political order of the Victorian regime can thus be understood through the regulatory response to disease theories and their classed notions of controlling transmission. This becomes evident during the Victorian era's reform efforts that fortified control over lower- and working-class bodies on the issue of vaccines and disease prevention. The effect of this state and its role in shaping the Victorian domestic space is, as I will demonstrate, inexorably tied to class in ways that disease theory puts forth.

The Victorian era's configuration of public and private bodily sovereignty enforces a demarcation of class boundaries. The precarity of the middle-class station makes it vulnerable in ways that requires strict boundaries within the domestic arrangement. Middle class women are relegated to this private domestic position in which they are charged with caring for children and the home. This will be explored in relation to disease care through the smallpox narrative in *Bleak House*. The ways in which this configuration informs domestic space in the middle-class construction of Dickens' novel reveals an embrace of certain bio-political interventions that fortify this class station, particularly in regard to disease care and classed theories of disease transmission. This thesis will demonstrate how those classed theories of disease inform Victorian bio-political reforms prior to onset of germ theory in the 1880s and its impact on the domestic space.

Further, this thesis recognizes a thread in the bio-political resistances of the contemporary anti-vaccination movement that often borrows from both 19th-century middle- and working-class resistance logics. While preventative medicines have always been met with skepticism, the modern

anti-vaccination movement questions vaccines in an era where science informs a more broadly secular society that more or less accepts science as fact. The modern movement questions the net good of vaccines on a conception that chemical preservatives in vaccines cause injury and disorder. This echoes a more secular version of the Victorian middle-class resistance argument that objected to vaccination orders on moral grounds of their corrupting potential to the body. Interestingly, as this thesis will work to demonstrate of working-class resistance, these objections to vaccine orders in the Victorian era was more of an issue of the state inserting itself into the private lives of citizens in the name of the overall public good to the individual detriment. This issue of private intervention was then seen as a class-based assault on the working and poor classes by resisters, whereas the modern movement similarly feel compulsory vaccination of their children is an assault on their rights as parents. Despite modern understandings of germ theory that emerged in the 1880s, disproving both ideas of contagion and miasma theory, these resistances to medical advancement and subsequent improvements in vaccine technology, still borrow from a long line of medical resistance that is just as concerned with state overreach in the domestic and private decisions of family.

2.0 Overview of 19th-Century Change in Disease Transmission Theory and Legal

Intervention

The history of disease transmission theories and medical and legal interventions is not a linear story of progress from the benighted miasma theory to the germ theory of contagion. Nor is it the story of a steady, straight march toward a consolidated bio-political regime. Theories of disease transmission that we would deem distinct from our historical vantage point were intermingled and mutually informing. Measures to improve public health and philosophies regarding the proper role of the government do not arrange themselves in simple patterns of working-class resistance or middle-class reformism. Nevertheless, the pathologization of the impoverished urban body emerges as a common touchstone for otherwise divergent politics.

Two theories of disease transmission shared space in the medical imagination of the 19th century: miasma theory and contagion theory. Miasma theory, which can be traced back to antiquity, explains disease transmission as the result of “bad air” was often juxtaposed with contagion theory, which puts forth the notion that disease is spread through direct contact with a sick person’s body or infected object. Although these two fields of study differed in their views of disease transmission and how disease came to arise, some medical writers present logical overlaps shared between these theories. The importance of these two configurations in the 18th and 19th centuries medical realm lies in the contention that arises from the theoretical framework of these fluctuating positions regarding advancements in preventative medicine, specifically inoculation and vaccination against the small-pox virus. Putting these ideas in conversation with one another works to inform the public health discourse of Victorian England and configures mid-century vaccination reform as an important site in shaping the relationship between health and state. Yet

what is perhaps most pertinent to this thesis' examination of disease politics is the role these disease theories play in informing notions of class in relation to disease.

The evolution of these theories shapes the emergence of a class-informed bio-political regime in the Victorian era that can be traced through the fluctuations of these two fields and how regulating preventative technologies against smallpox were informed and motivated by scientific configurations of bodies in a classed orientation. To demonstrate this bio-political emergence, this thesis will outline some shifts in the broad medical conversation regarding these disease theories. Tracking those evolutions through the medical and legal interventions regarding small-pox prevention in the 18th and 19th centuries, it will attach the increasing intervention of state medicine to the class informed bio-political regime of Victorian England that distinctly shapes the domestic spaces along those class lines. Locating this bio-political culture, this thesis will then open up the smallpox narrative *Bleak House* to reveal the middle class embrace of these bio-political measures in light of vaccine reform, while demonstrating bio-political resistance present in George Cruikshank's political cartoons.

Miasmas were thought to be particulates produced by rotting organic matter and were responsible for producing pestilence and causing illnesses, particularly of the epidemic varieties. In the 19th century, miasma theory was mostly associated with the decomposition of organic matter (vegetable, animal, etc.) spreading contaminants (miasmas) through the air, circulating the idea of poisoned environments that could spread diseases. There were different 19th-century taxonomies of miasma. The following sources reveal some of the scientific debates surrounding this transmission theory, though it is of significance that these qualifications of miasma place it into a larger field of study regarding disease understanding and its subsequent impact on medical practices and later regulations. In *An Attempt to Deduce a Nomenclature of Certain Febrile and*

Pestilential Diseases from the Nature and Origin of their Remote Causes (1804), Dr. Edward Miller divides miasma into two distinct species. Miller argues that distinctive miasmas can either arise from exhalations of the soil, or the effluvia generated by filthy domestic conditions (E. Miller, 362), hinting at the affiliation of disease with urban squalor that is relevant to later public health reform efforts and how classed medical theories of disease transmission informed regulatory efforts that often targeted the lower classes, such as in the case of compulsory vaccine orders in the mid-century and beyond. This writing was significant for its time, as it “constituted the germ from which much that has since been published on the same subject originated” (Copeland, 895) and arguably set a certain kind of precedent in this field of study. This is evident through the importation of Miller’s taxonomy framework as the theory became further enmeshed with other theories of disease transmission, and although it is certainly not the only vein of thought, it proffered a strain of notable interest to this thesis’ examination of class and disease. In laying his theoretical groundwork of miasma classification, it is significance that Miller’s classed affiliation with disease remains an integral thread that can be traced through later developments in the field.

Building off the nomenclature of Miller, Dr. Joseph Mather Smith’s 1824 medical text “Elements of the Etiology and Philosophy of Epidemics,” provides further classification of taxonomic miasma that is broken down into three genera: kiono miasma, sourced from rotting organic matter thought responsible for epidemics; idio miasma, sourced from human effluvia and not epidemic; and idio-kiono miasma, a noxious mingling of species from both genera, thus inhabiting an epidemic potential. This is a significant claim within this field of medical theory, as kiono miasma sources are linked to the filth of cities, which quickly attaches to the moral character of the urban poor by attributing city conditions to their own lifestyles. This particular work of Smith’s is noted in an 1825 edition of *The United States Literary Gazette* as an important

contribution in “the deficiency in the accounts of epidemics,” further signifying this text’s significance as Smith worked to distinguish contagious disease from infection, citing “contagion is a poison generated by morbid animal secretion” whereas infection is “a ferberific agent produced by the decomposition of animal and vegetable matter” (215). This distinction is even more pertinent considering the prominence of miasma in the medical imagination at this point, with Smith’s text illustrating the difference in classification of epidemic or non-epidemic affliction with a differentiating medical response. Contagious diseases, such as yellow fever, marks a necessity to isolate or quarantine the patient or one risks contraction of the contagious disease themselves, whereas in the case of an infectious disease “they need only leave the unhealthy district and carry the sufferer with them...since the pestilential locality is usually very circumscribed” (215). This reveals a notable blending of miasmatic theories and contagion theory, an overlap which suggests the nature of infectious disease is rooted in spatial rather than bodily miasma while embracing the distinction of contagious bodily transmission.

Miasma's prevalence through the first half of the 19th century, then, is due to the fact that diseases were in part thought to be spread through putrid air that was caused by the conditions of poverty, exacerbated by the less understood effects of industrialization, and unsanitary living conditions, as Smith’s earlier distinction of idio-kiono miasma puts forth. There was also the threat of ship stores importing miasmatic disease through internationally traded goods. This is an issue of notable significance that will be discussed in the emergence of writings on contagion theory a century prior, as it further associates disease with the lower classes as commercial shipping districts coincide with dwelling spaces of the urban poor.

These medical writings of miasma theory illuminate the ways in which disease and class were not only affiliated, but how that affiliation was forged in the medical framework as a way to

explain the various ways in which disease was thought to arise. The relation between class and disease is present throughout the medical debates, and while not representative of every practitioners purview, there is a strong connection between Miller's seminal early 19th-century classification and its propping up of later notable texts on epidemic theories. These theories provide a basis in which the literary imagination of disease, such as in the case of *Bleak House*, explores the social politics of disease and class. This construction informs the text's embrace of the bio-political efforts that begin to emerge around the control of epidemic theory, informed in part by the larger constellation of medical thought that draws these connections between disease and social station.

The re-emergence of contagion theory in the early 18th century offered a competing, though often overlapping, theory in the broader field of disease transmission study. Unlike miasma theory's integration of classed logic to explain disease, contagion re-figures the blame of disease: if the disease does not arise from noxious air quality, but from bodies, it doesn't support pinning blame on sects of population and sets the political stage of disease containment through quarantine logic. Ideas of contagion can be traced back to plague era, often resembling later Enlightenment ideas that contextualize some of the medical dissent present in debates around epidemics and their causes. Contagion theory, in the context of this thesis' concern with preventative immunities and class-informed notions of disease transmission, provides an alternative explanation in its relation of bodies and disease. Differing from miasma theory's more explicit connection to poverty and squalor that is present in the 19th-century, contagion's corporeal explanation of disease transmission discounts the more prominent belief that environmental and sanitary factors spurred epidemics. Enlightenment contagion theory also works to address the lack of consistency among disease identification, process, and transmission, though in many ways it still interacts with the

concept of miasma. Contagious diseases in the early modern period were thought to be a short list, as “what made a disease categorizable as contagious related more to notions of the disease's transmission than to the specificity of the individual disease phenomena” (Carmichael 225) and that before the 17th century disease specificity, such as identical rashes appearing in cases of measles and smallpox, had yet to be clearly articulated. This began to change during the Enlightenment’s penchant for categorization of disease type, though the overlap with early modern thought that contagious diseases more closely resembled a poison (Carmichael 225), which informs theories of the disease process, remains present in the logic of contagion into the 18th-century.

Such a process is detailed in Dr. Richard Mead’s important 1720 text on contagion theory, *A Short Discourse Concerning Pestilential Contagion, and the Methods to be used to Prevent it*. A result of the lord’s justices imploring the need to prevent and stop the epidemic of plague, Mead’s study is significant in that it is the first epidemiological text produced at the State’s request. Arnold Zuckerman notes in “Plague and Contagionism in the 18th Century: The Role of Richard Mead,” the updated theory Mead puts forth informed the New Quarantine Act of 1721 regarding procedure of ship stores and the importation of goods, especially from places with known outbreaks of plague (274). Mead contends disease can be transmitted in three ways: through the air, body, or ship stores, but significantly notes that disease arises through a bodily process, as “all *Bodies* in a Ferment emit a volatile, active Spirit to agitate, and put into motion, that is, to change the Nature of other Fluids into which it insinuates itself” (“short discourse” 11; emphasis added). He continues: in “Pestilential Cases, although the Air be in a right State, will generally infect those who are very near the sick person; otherwise are soon dispersed and lost” (12). Classifying smallpox as its own unique “poison,” Mead suggests this contaminates the blood and activates the

release of bodily miasmas. Mead thereby effectively locates the body itself as the transmitter, a vessel that ferments and distributes the product of disease to those very near it, (In the case of smallpox, that occurs through the process of expelling the poison from the blood through the skin).

Often this text presents itself as a blending of contagionist and miasmatic theories, acknowledging the air as a potential transmitter of disease, though maintaining it does not generate the disease itself. Rejecting the quality of the environment as the cause of epidemic disease is a significant challenge to the reigning miasmatic ideas. This notion was deeply challenged by his contemporaries, such as Dr. George Pye who directly rebukes Mead's claim of contagion. Challenging the theory's legitimacy, Pye's anticontagionism argument asserts of Mead's writing that he, "is forced to declare that the Atoms emitted from a sick persons cannot cause the plague without the assistance of corrupted air," (60). Pointing to this blended point in the theory of transmission, he suggests contagion cannot stand on its own to explain epidemic disease phenomena. Other early responses that take on this anti contagion position were generally published anonymously, particularly following the changes to the quarantine act made at Mead's recommendations for containing and preventing plague with measures that limited the potential of the maritime trade economy (Zuckerman 294). Contagion remained challenged well into the 19th-century, as writings on miasma theory still credited noxious environments to be sources of infectious epidemic outbreaks that bodies could be removed from without posing a risk to others. Anticontagionists, such as Pye, set an important precedent that later prop up 19th-century sanitary reform efforts, which configured disease a result of environmental factors, poor hygiene, and general squalor. This logic is also deeply tied to anti-inoculation and later anti-vaccination arguments which relied heavily on the miasmatic principle that addressing the environmental conditions would eliminate diseases believed to arise from those unsanitary states.

Miasma and Contagion theory provide a basis in the constellation of medical logic that goes on to inform disease prevention and its subsequent regulation. How each informs notions of disease supports a classed response to disease that relegates bodies into a class continuum. Miasma does this most explicitly, especially through the 19th century's taxonomy, but contagion's recognition of corporeal transmission suggests the response of quarantine. Initially, this was applied to cargo ships, but quarantine of infected bodies enters contagion into a bio-political register, particularly in regards to the 19th century practices of quarantine that will be explored more closely in *Bleak House* and the smallpox narrative.

The early 18th-century ushered in a move towards standardization and professionalization of the medical practice with a focus on data and categories, and by the second decade brought with its updated theory of contagion that helped define the nature of smallpox as a distinct, individual disease. Smallpox in the eyes of contagionism was generally thought to be a type of epidemic fever that poisoned the blood and expelled its infection by forming pustules on the skin to rid the body of the noxious buildup. This subscription provides a basis for early theories of immunity that in turn inform the practice of inoculation through engrafting. In James Drake's 1727 *Anthropologia Nova Or a New System of Anatomy Describing the Animal Oeconomy* he notes that the issue of immunity, or the reason why a person is only affected with smallpox once in their lifetime, is a "famous problem much agitated with very little success" (18). He goes on to postulate that alteration to skin is the underlying cause of immunity, attributing "the distension, which the glands and pores of the skin suffer at that time, is so great, that they scarce ever recover their tone again," arguing further that "though the same fervile disposition should and may again arise in the blood... the passage through the skin being more free and open, the Matter will never be stopt so there, as to make that appearance, from whence we denominate the small-pox" (18). This is an articulation

of the theory that underpins the logic of inoculation against smallpox, suggesting a physical, material reaction provides lasting immunity to exposure of a contagious disease due to it altering the body in a similarly physical way. However, as the contact logic of contagion was challenged, inoculation anxieties were agitated by contagionists and anticontagionists alike following the technology's experimental moment, signaling another layer of debate in medical understanding not necessarily related to one's belief of disease transmission.

The 1720s saw the practice of inoculation gain public attention. While some of the credit goes to Lady Mary Wortley Montagu, whom I will discuss in a later section, the Newgate Prison Experiment, now referred to as the Royal Experiment, garnered significant publicity and notoriety. Arthur Silverstein and Genevieve Miller contend in "The Royal Experiment on Immunity: 1721-1722" that Charles Maitland, the Scottish surgeon and apothecary who inoculated Lady Montagu's children, and Sir Hans Sloane, President of the Royal College of Physicians, played a major role in encouraging the practice among polite society through their influence with the royal circle. The experiment is significant for several reasons, but my focus is on the fact that it marks an important moment when the state uses its power to support medical intervention, a movement that prefigures later bio-political measures. Wilson argues in "The Politics of Medical Improvement in Early Hanoverian London" that for this experiment to be carried out, "Sloane and his allies had to be given the power of life and death over the six prisoners. *The State handed over to the Royal Society its control over six human lives*" (Wilson 29, emphasis original).

To test Sloane's belief in the efficacy of inoculation and persuade the public, he was granted license to experiment on six condemned prisoners at Newgate in August 1721. Princess Caroline, the then youngest daughter of George II, Prince of Wales, had fallen ill during the 1721 smallpox epidemic, further spurring serious scientific interest among the royal court. Within a

month of her illness, an anonymous request had been made to the King to carry out this experiment on condemned criminals. The decision returned by King George I, following a reference to the Secretary of State to ensure the legality, granted a royal pardon to the six participants, as the Attorney and Solicitor Generals declared:

the lives of the persons being in the power of his Majesty, he may grant a pardon to them upon such lawful conditions as he shall think fit, and as to this particular condition we have no objection in point of law, the rather because the carrying out of this practice to perfection may tend to the General Benefit of Mankind (qtd. in G. Miller, *Royal Experiment* 441).

The experiment was followed with intense interest. Not one of the prisoners died as a result of their exposure and following their subsequent recovery, all six of the condemned were pardoned and released from Newgate prison on September 8, 1721. Notably, the royal exercise of what Foucault might term the “right of death” over his subjects is nevertheless also the formation of a notion of public health that is bio-political.

The conclusions of the inoculation experiment convinced much of the public that the process itself was safe, though the *efficacy* of the procedure remained challenged. Adrian Wilson argues in “The Politics of Medical Improvement in Early Hanoverian London,” the two camps of inoculation interpreted the results of the same experiment in vastly different ways: in Maitland’s pro-inoculation view, the prisoners received a mild form of the smallpox virus and recovered with the added benefit of immunity, yet those in the anti-inoculation camp saw an entirely different presentation of the disease and posited that it was perhaps not smallpox at all (Wilson 28).

In *Reasons Against the Inoculation of the Small Pox* (1724), Francis Howgrave argues:

It would have conduc’d very much to the convincing of us of the *Reasonableness* and *Necessity* of this *Practice*, if the Promoters of it had given an Account how the Matter, with which they Inoculate, affects the Blood; and shewn, how this Method must ever have in its Consequences a good Effect upon our Bodies (4).

Positing the medical opinion that there is a predisposition in the blood to this distemper caused by the presence of seminum, Howgrave doubts inoculation, “for was there no Predisposition in the

Blood to receive the Morbific Matter into it, in vain would all their attempts prove towards bringing on the *Small Pox*” (6). The danger of inoculation lies not in the Pox itself, then, but in other qualities of the blood, asserting that “while Nature is employed in discharging the Morbific matter, these other ill qualities rise and ferment at the same time, which makes the Small Pox very often prove fatal” and as a result determines “the Inoculators can no more prevent by their new Method, than if the Small Pox had come by infection” (7-8). Howgrave’s assessment suggests not only dissent on the issue of inoculation efficacy, but also puts forth a comment on the nature of bodily immunity, suggesting whether transmitted by air or direct contact, an individual body has a predisposed vulnerability to take the disease or not, which Mead also accounted for in his plague tract. Yet, this anti-inoculation argument is not rooted in anticontagionism, and at various points Howgrave praises Mead’s argument of contagion in regards to smallpox.

The Royal Experiment’s failure to convince such detractors prompted Sloane to devise a test for the long-term efficacy of inoculations. He arranged at his own expense for one of the pardoned inoculated women to stay in a small town outside London that was suffering through a smallpox epidemic. Under Maitland’s supervision, the 19-year-old woman was ordered to “lie every Night in the Same Bed [with a 10-year-old smallpox victim,] and to attend to him constantly from the first Beginning of Distemper to the very End” (qtd. in G. Miller, “Royal” 442). After six weeks, the woman showed no signs of having contracted the infection, which was confirmed by witnesses. This was followed by another public inoculation of six additional persons under royal sponsorship the following February.

Still unconvinced these results could be trusted to translate to the inoculation of children, George II’s wife, Princess Caroline of Ansbach had also requested a list to be drawn up of all the orphan children in St. James Parish in Westminster who had not contracted smallpox yet, and

offered to have them inoculated on the royal dime (G. Miller, Royal 442). It should be noted that Maitland had successfully inoculated several children in private up to this point, including Lady Montagu's son in 1718 and daughter in April of 1721, four months before the prison experiment, but a public process was deemed necessary to satisfy any sense of doubt whatsoever concerning the inoculation of the youngest Princess. Accordingly, in March of 1722 five orphan children from the parish were successfully inoculated. Details published by the newspapers indicated where those interested could view the patients following the procedure (Miller 442), further exciting public interest around this issue and making this a public medical affair. Despite these trials being successful enough to warrant the eventual inoculation of Princess Caroline of England in 1722, the procedure did not become widely practiced by those outside of elite circles until the 1740s, spiking during periods of outbreaks. This is in part due to the lack of accessibility for the general public in these early days and waning interest during periods without widespread epidemic occurrences, but firm oppositions were mounted against the practice almost immediately and calls for state medicine began to appear in writing.

One such call for state intervention, a pamphlet on *The new practice of inoculating the small-pox consider'd, and an humble application[sic] to the approaching Parliament for the regulation of that dangerous experiment* (1722), posits a need to regulate the practice of inoculation in light of this "fatal experiment" of inoculation being performed by unchecked practitioners of physics and surgery. Without this issue being regulated through the judicial body, it claims "even when miscarriage happens, the Magistrate can inflict no punishment," taking this to be "a deficiency[sic] in our laws" (11). It goes on further in its condemnation of unregulated medical practitioners to call "the physicians and surgeons [who] have taken upon them, to judge and determine this matter for us, as it were a kind of Dogmatic authority of their own" (12), a

suggestive sentiment towards the rising authority of the medical establishment culminating through this practice. In Charles Maitland's 1722 *Account of Inoculating the Small Pox*, one of the conductors of the Royal Experiment speaks to this unregulated state as a necessary part of building experience among practitioners of inoculation. In response to those who condemn the practice and the demands for regulation or cessation of the practice, Maitland muses:

If Prudence only were to be consulted, it would perhaps be much more the Duty of the Legislature to order, than to forbid this Practice, they would, by the Method, diminish the Mortality, and encrease[sic] the Number of their people...But as that would seem too great an Encroachment upon the Natural Rights of Mankind, I should not approve of it. But on the other Hand, it would be a most Tyrannical Encroachment upon the same Rights, to debar Mankind from the lawful Means of securing themselves from the Fear and Danger of so terrible a Plague (35).

In this pre-biopolitical regime of Hanoverian England, Maitland finds himself unable to embrace the call for more concerted control in matters of medicine but does so in a bio-political register by locating the outcome of state intervention as a maximization of its human capital.

Contemporary literature on inoculation procedures indicates the need for greater state regulation of *medicine*, which will then abet the medical regulation of subjects' bodies. According to a 1766 text published by Dr. George Baker titled *Inquiry Into the Merits of a Method of Inoculating the Smallpox Which is now Practiced in Several Counties of England* it was common practice to prepare the body for the procedure by abstaining from all animal products, save for milk, for a fortnight before the procedure took place. Fermented liquors and spices were also forbidden as a means to prepare the body for inoculation. There was a purging powder that was given at bedtime, and for adults, a purging salt taken each morning afterwards from which children were staunchly excepted. These measures are bred from the understanding that smallpox fermented in the blood; the condition of the body needed to be controlled to ensure it was prepared to handle the introduction lymph derived from the pustules other smallpox patients, or better yet, from a recent inoculation site. Baker details the visceral experience of inoculation: a person is brought

into a public room amongst others at various stages of smallpox affliction and “the operator then opens a pustule of one of the company, chusing[sic] one where the matter is in a crude state” (8). He makes note that, “what is extremely remarkable [is] [the operator] frequently inoculates people with the *moisture* taken from the arm before the eruption of the small pox, nay within four days after the operation has been performed...he has attempted to inoculate by means of the blood; but without success” (9). There were liberties taken by medical inoculators, experimenting with the materials of the process.

The need to control the further spread of disease after inoculation was one factor in the development of public health infrastructure. For instance, the London inoculation dispensary in 1775 was a centralized answer to the fact that General hospitals were unable to take inoculation patients under their care. Under the Elizabethan Poor Laws structure, smallpox care of the poor was often relegated to the parishes, producing an expense many local parishes managing poor relief couldn't afford. In the dispensary plan, the issue of post-inoculation spread is detailed as “obviously so much less than in the natural, that it has even been doubted by some eminent Physicians, whether it ever propagates the Contagion unless by contact” (Lettsom 5) whereas hospital spaces produce an impurity of the air. Due to the number of bodies, the air in hospital environments “will necessarily be impure; and putrid contagion, once produced, will unavoidably spread itself” (Lettsom 7). This document reveals in its logic an intermingling of contagion and a more widespread miasma theory posing dual risks, shaping the theory and philosophy behind the dispensary's goal to service the poor and managing the disease. The document also details regulations for the management of the dispensaries, relegating inoculation patients into a more controlled medical space, though still requiring them to recover in their own homes (Lettsom 9).

John Haygarth's *An Inquiry How to Prevent the Small-pox and Proceedings of the Society for Promoting General Inoculation at Stated Periods, and Preventing the Natural Small-pox in Chester* (1784) painstakingly details "rules of prevention" that prescribes to the notion of contagious disease as a poison that arises through the bodily disease process. The rules relied upon the theory that smallpox was an "infectious distemper" or "a variolous poison (pus or scabs from a smallpox pustule) that had dissolved into the air" (qtd. in Lobo 239). Haygarth contends that "what other fluids are contained in, or discharged from, the body, may be deemed poisonous, is a question I believe has never been considered, much less determined" (Haygarth 56). This principle of pestilential effluvia, which Haygarth maintained existed in the air very near the infected matter of a smallpox patient, exhibits the interloping theories of transmission at play in the late 18th-century's medical imagination, while also illuminating the limitation in understanding still present in transmission theory. The combinational ideas of disease presented by the medical theories of Haygarth then, perhaps, illuminate why inoculation practices were so varied and seemed to prescribe to tenants of both older miasmatic theories and contagionist ideas.

As Baker's account reveals, the introduction of medical advancements brings an attendant necessity for medical regulations and forges a collaboration between medical professionals, legislators, and the public and lays the groundwork for the emergence of public health as a value. The Royal College of Physicians sanctioned the practice of inoculation in the mid-18th century, though inoculation had no independent regulatory board. As Baker's text details, there were liberties taken by inoculators and much variation in the preparatory process and the procedure. Furthermore, as the popularity of the procedure grew, amateur inoculators became increasingly common (Lobo 235). In the later 18th century, the process of inoculation was loosely regulated at best. While the inoculation procedure certainly managed to save countless lives, the combined lack

of regulation and the hybrid understanding of disease transmission accounted for deaths and injury in the process of advancement. Fears were articulated throughout the 18th-century in articles, pamphlets, and spoken word decrying the dangers of inoculation.

3.0 Vaccination and the Emergence of a Bio-Political State

The first vaccination for the smallpox virus was formally introduced in 1796 by Dr. Edward Jenner and was the only vaccine available until Louis Pasteur introduced the rabies vaccine in 1885. Jenner's success, according to Fuson Wang, is the product of what he argues is the Romantic medical tendency of experimentation did not yet differentiate illness in juxtaposing terms of "the normal and the pathological" nor amongst categories (468); Wang reminds us that "Jenner's vaccination, after all, was an act of cross-species infection" (468) as the products of immunity were derived from infected bovine lymph. This medical thought which relied on a blending of the animal-human biology is what Wang attributes to the Romantic tendency for more experimental medicines, as the period "did not yet rely on rigidly constructed borders" (468) and attributes "Montagu and Jenner's amplification of a botanical metaphor (the word "inoculation" derives from the process of plant grafting)" as leading to eventual end of this disease, as this early vaccine embraced the "physical difference across species boundaries" (471). Jenner's vaccine was attended by the emergence, at the beginning of the 19th century, of regulatory medical boards that begin to spring up, fixing a medical arm to the State's regulatory power. The Royal Jennerian Society was established in 1803; directed by Jenner, it sought to compile statistics and report on the practices and efficacy of vaccine use in England.

This hybrid board was a unique product of the intermeshing of medicine and the law, fixing a governing apparatus to the emerging medical machine. Whereas statistics on vaccinations were compiled and published by individual practitioners in the 18th century, a more centralized approach to physician data on vaccines emerged in the 19th century. Centralization would further evolve into a more fortified regulatory system through formal vaccine boards and the attachment

of reforms to the New Poor Law (1834). Yet, even in this earliest iteration, the Jennerian Society sought to quantify the problems of disease in a way that could later be utilized to support regulatory decisions. These reports not only provided hard data to illustrate the effects vaccines had on English society but provided a medico-political platform to advocate for reforms at the urging of professionals and calls on the state to act in light of their results.

The emergence of the medico-legal state of 19th-century England should be contextualized in part through Michel Foucault's medical archaeology exploration, *The Birth of the Clinic*. Foucault contends that the 18th-century's medical paradigm shifted classification of disease and treatment in line with Enlightenment thought which presented a paradox, arguing "never was the space of configuration of disease more free...than in classificatory medicine, that is to say, in that form of medical thought that, historically, just precedes the anatomo-clinical method, and made it structurally possible" (4). This emergence of the anatomo-clinical method demanded regulatory bodies, giving rise to a more categorical approach to medicine. This, in turn, gave rise to the *medical gaze* which qualifies bodies into categories dependent on concepts of normalcy fortified in 19th-century medicine. These emerging power dynamics shifted medical power into sanctioned spaces like hospitals and clinics managed by a centralized state and, as Foucault contends "could achieve full significance only if it was supplemented by constant, constricting intervention. A medicine of epidemics could exist only if supplemented by a police: to supervise..." (25). Thus, the emergence of medical regulatory bodies at the start of the 19th-century in England aided the century's shift towards establishing strict bodily and medical regulation. These diseases struck whole towns and cities and decimated populations, particularly in the poorer quarters of crowded urban centers like London and other industrialized towns. The necessity to legally regulate these

threats became more apparent as the century went on and the State began expanding its regulatory reach over citizen autonomy in the name of Public Health.

Even in the very early years following the cowpox vaccine, calls against inoculation in favor of the safer vaccination were being made and were accompanied by legislative demands. In John Coakley Lettsom's 1803 *An Address to Parents and Guardians of Children and Others*, the physician argues that despite early mistakes in vaccination practices, caretakers of children cannot plead ignorance to the "evidence of 200,000 witnesses, who have received the Cow-Pox with perfect safety" (4). Contending that the Magistrate should be just as moved to hand down justice in light of the mortality rate of smallpox as a single murder in his district, Lettsom maintains that "in a free country, you cannot legally compel your fellow citizens to save the lives of their children" yet their power might be "directed to the extension of Vaccine Inoculation" (6) in the interest of their citizens health. He also puts forth a bio-political suggestion in positing to legislators "who penetrate into all the ramifications of Finance; and whole attention is exercised in framing laws for the security of property...that in proportion to the number of inhabitants, and to their useful employment, is centered the wealth of a Nation; and that by your attention to Vaccine Inoculation, you may in a century double the population of this Kingdom" (7). This urging for promoting the newer, safer practice calls on a way to optimize life that recalls Maitland's 18th-century goal, though the tone on regulation is distinct from the earlier promoter of disease prevention. Framing this as an economic issue, as well as a public health issue, indicates the emergence of a bio-political logic. Continuing on, Lettsom suggests if "individuals in power and wealth unitedly to extend the means of Vaccine Inoculation among the lower classes of people, its success would soon induce them more universally to adopt it as a providential boon" (8). While

Lettsom is still focusing on access and encouragement, the rhetoric also tends toward a totalizing vision of public health that will culminate in the Compulsory Vaccine Act.

In the 1825 Annual Report of the National Vaccine Board presents their findings to the Secretary of State on the state of smallpox cases and vaccination practices, which details a quarter century of data following the introduction of the smallpox vaccine. Unfortunately, matters proved far from ideal: deaths from smallpox that year in England were at a much higher mortality rate than had been reported in years past, at over 1,000 deaths resulting from the disease. This is particularly striking considering that more people had been vaccinated by the Vaccine Board's own stationary Vaccinators than in any former year. The report attributes the virulence this disease, despite the states self-proclaimed efforts to make vaccination accessible, to "the lower orders of society [who] continue to be prejudiced against Vaccination, and so careless of the issue, that they still allow Small Pox to take its course" (*Report 1*). Blaming the lower classes for the spread of disease is one that the reform acts to follow relied upon.

Two decades later, the success rate was different. In the 1840 report of the National Vaccine Institute delivered 10 March, it notes that this was yet another year which "confirmed our conviction of the efficiency of Vaccination as the best security and protection against Smallpox" (Copy of the last report 126), citing that within the bills of mortality there were fewer deaths than any of the forty-three years since vaccination had been established. The report also addresses the concern of lymph source and quality, an issue that frustrates public trust in vaccines. In response to claims that some lymph supply was ineffective, or inconsistently effective in different areas where the same supply had been sent, the institute insisted that it was not an issue of vaccine efficacy but rather other environmental factors.

We have concluded, therefore, either that it had been injured somehow in its transmission, or that the patients submitted to it were not in a fit condition to receive its influence, in consequence of

some eruptive disease having pre-occupied their constitution, or of some prevailing epidemic disorder having rendered them insusceptible of another and a new excitement for a time (126).

This explanation of bodily constitution reveals the imperfect understanding of immunity, which confirms prejudices regarding the bodies of “lower orders.” Despite the insecurity around instances of seemingly ineffective materials, three months following this report the first vaccine act was passed in England.

The first bill to extend the practice of vaccines was passed in June 1840, in the process making the practice of inoculation or the willful infection of another person with the smallpox virus a misdemeanor offense. It also extended the practice of vaccination under the law through the Poor Law Guardians and their Medical Officers in addition to anyone legally qualified to administer vaccination through private practice. This bill worked to regulate the process of data on vaccines administered through the Poor Law Guardians, requiring them to submit reports on their work to the Poor Law Commissioners, setting up a tiered system of accountability and public medical monitoring through state functionaries. This differs from the 18th-century’s embrace of disease and inoculation data, relying on individual practitioners who collected their own reports and published them, or parishes who kept records of illness and death. Instead, the 1840 act channeled information through the State itself, blurring the relationship between medical and State prescriptions. The following May, an extension of the vaccine bill was passed into law to amend an act of the initial legislation, providing a minor but highly significant alteration in State administered medical management.

Under the amendment, the 1841 bill most significantly distinguishes itself from previous vaccination and inoculation practices by denying that the new vaccination system was a form of poor relief, citing “any person or resident in any Union or Parish, or of any of his family under the said Act, shall not be considered to be parochial relief, alms or charitable allowance” (*Bill to amend*

304). The amended act also defrays the cost of vaccination through the Guardian system, making vaccination a free service funded by the State rather than church or charity. Medical care is thereby lodged with the State, making this act a significant piece of the bio-political potential of vaccination administration.

The Poor Law's Guardian system also utilized the Registration Act of 1836, which centralized records of births, deaths, and marriages and superseded the poorly kept parish records. The General Registration Office also kept records of public health concerns, such as infant mortality, fertility, and even literacy rates through districts assigned via poor law unions, providing the state with the necessary informatics to enforce a public health policy on a nationwide scale. The implementation of a public vaccination service was entirely bureaucratized through these establishments, allowing the medical system to optimize its care through a central State system.

The vaccine reform act passed on 5 May 1853 was another extension of the previous acts, making the practice of vaccines compulsory for every child born after 1 August of that year within the first three months of life. Sanctioned spaces were designated for these vaccinations to take place in, along with stipulations regarding record keeping were detailed in the bill. Within seven days of the registration of the birth of a child, the mother, father, or legal guardian of the child is to be issued in writing of a notice to vaccinate by the Registration Office; failure to comply outside of sanctioned medical exceptions postponing vaccination on the advice of a doctor would result in the, "forfeit [of] a Sum not exceeding One Pound upon the First Complaint, to be afterwards increased at the Discretion of the Justices imposing the Penalty" (*An Act Further* 4). This move marks a distinct shift from the 18th century attitudes towards prevention, as even Maitland, an orchestrator of the Royal Experiment and promoter of inoculation determined a State mandate enforcing this practice for the betterment of mankind was still a violation of an individual's natural

rights. The emergence of this State insertion marks the blossoming bio-political nature of the Victorian era, optimizing life through a systematic entanglement of medicine and legislation.

The public response to this vaccination system, though, was not universally favorable. Between the unpopular and notoriously cruel Poor Laws and anxieties over the potential of “bad lymph” being used for vaccinations, general mistrust ensued, and particular dissent arose from the working class who felt targeted by the increasing regulations. Nadja Durbach contends in “They May As Well Brand Us: Working Class Resistance to Compulsory Vaccination in Victorian England” that most historians of anti-vaccination have focused their attention on middle- and lower-class oppositions and posits the vibrant resistances among working-class populations against the compulsory issue. She contends the anti-vaccination movements and the leagues set up through the efforts of middle-class reformers thrived in parts of England with strong labor unions representing these working populations. Liberal reformers, taking up the part of the working class, opposed the compulsory clause on various religious, moral, and scientific grounds with a focus on the principles of personal liberty being violated by the state. A key example is vaccination opponent John Gibbs’ 1854 pamphlet *Our Medical Liberties*. Gibbs expresses a deep concern over the growing State overreach in the private and domestic spheres. Writing that, with the passage of the compulsory extension bill, Parliament imposed a “bill of pains and penalties,” drawing parallels between the Medical Registration Bill that “likewise, is a similar encroachment upon the liberties of the subject” (“Our Medical Liberties”5). He declares these measures to be working in tandem to “steal away our medical liberties, one by one...so to render us--the intelligent people of this free realm--abject slaves to the medical profession” (“Our Medical Liberties” 5). Two years later he wrote a direct attack on the compulsory vaccination act in *Compulsory Vaccination Briefly Considered in its Scientific, Religious, and Political Aspects*, in which he declares that the act

“invades in the most unexampled manner the liberty of the subject and the sanctity of home. It not only unspeakably degrades the free-born Briton by depriving him of liberty in a personal matter, but denies him the possession of reason” (“Compulsory Vaccination” 4). Gibbs went on to establish *The Vaccinator Inquirer* in 1879, a publication that emerged in the latter half of the century with the mission of abolishing the compulsory clause. The issue of compulsory vaccination spurred an intense reckoning with the power of the medical state, inciting concern not only over liberty, but the increasing surveillance of medicine through State apparatuses like the registration acts.

While the middle-class reformers were instrumental in the anti-vaccine movement in terms of the organization of various anti-vaccination leagues and publications, the resistance from the working-class took on a different tone. Durbach contends, indeed, that working-class resistance contributed significantly to the formation of a working-class identity in which “working people expressed a shared experience of the body—in this case an extremely vulnerable body—and clearly voiced their grievances in the political language of class conflict” (46). Intervention that not only sought to regulate how the bodies of their children were managed but also impacted the precarious finances of working-class families through the fines for failure to comply. Through the unification of a political class identity, resistance to compulsory vaccine measures united the Victorian working class not only through moral or personal objection on the vaccination front, but through the shared threat this biopolitical measures posed to the livelihoods of working men and their families.

The vaccination act’s attachment to the Poor Law system entrenched it in the language of State run poor relief despite it not being classified as a form of parochial relief under the 1841 amendment law which not only differentiated this services from relief, but contended “that no such

person shall by reason of such Vaccination or assistance be deprived of any right or privilege, or be subject to any disability or disqualification whatsoever” (*A Bill to Amend* 304). Still, this affiliation with the relief system served to alienate the poor and working-classes who were most subjected to the full extent of the law for non-compliance. An 1853 letter to the editor details this phenomenon, claiming:

the placing of the Vaccination Act under the control of the Poor Law Commissioners, and the Poor Law Guardians, instead of the medical corporations, or medical men, was most iniquitous and degrading to the profession. People will not bring their children to be vaccinated at the beck of the Poor Law Commissioners: there is something revolting in an Englishman’s mind to having his child pauperized. (King 224)

This affiliation, regardless of the legal constitution of the service, was taken as a system that targeted the poor and forced them into a position in which they had no autonomous power over their children’s medical care. A further distinction between non-compliance and conscientious objection reveals class fissures that further alienated the working class as further amendments in 1867 and 1871 amped up the flames of resistance.

There was also resistance from doctors. In an April 1853 article in the *Association Medical Journal*, it details the failing mechanics of the compulsory reform bill as it “attempts tyrannically to impose onerous gratuitous services upon the medical profession” and that “the poverty of some and the thoughtlessness of others make many of our body accept poor-law appointments at non-remunerative rates” (“Compulsory Vaccination Not Necessarily” 313). The medical establishment indicted the poor law system for lacking proper structure in administering effective vaccination protocol. It also charges the State’s failure to consult reports of the Epidemiological Society, or the “two thousand medical men able and willing to assist in your deliberations” (“Compulsory Vaccination Not Necessarily” 314). At the same time, the article targets the “apathy of the poor, and the prejudices of the ignorant” (“Compulsory Vaccination Not Necessarily” 314), further illuminating the issues that the disenfranchised pose in the eyes of the establishment. The poor and

working classes were made most vulnerable to these state measures as they undermined what Durbach asserts are “working-class ideals of independence and respectability” (52).

Furthermore, the fines instituted for non-compliance were stringent. Under the 1871 reform, vaccinator officers who were civil servants rather than medical professionals were assigned to each district with the job of tracking and compelling non-compliant parents. The fines made commitment to convictions against vaccination practically impossible as they would eventually lead to financial ruin. One Chatham man was “sentenced to fourteen days imprisonment for the same offense” and reports that he had lost “most of my work by hiding myself on the first occasion [of arrest]” (Rothery 16). This man’s stance on vaccination was further confirmed during incarceration when a chaplain who claimed to have contracted smallpox following vaccination, contending that he “believes that vaccination lightens it, but that a great deal of mischief is done by careless vaccination” (Rothery 16). The belief still persisted around vaccination that in its transmission of smallpox, a variety of illness could arise due to the continual anxiety around bad and ineffective lymph. Coupled with these fears, mistrust was furthered by the concern that these public vaccinators were entitled to a payment of eighteen pence which “the guardians of the poor were legally obligated to give to the vaccinators for each successful case” (“Compulsory Vaccination Not Necessarily” 314) of vaccination, adding a monetary motivation among to the tracking down and enforcement of the compulsory clause that economically forced working-class families into a corner.

Not only was fine and imprisonment a potential threat to the working-class family, but the men themselves were also subject to an unofficial extension for compulsory vaccination in some areas during periods of outbreak. Durbach details how the working men were threatened in instances in which “employers demanded that all their employees be vaccinated or else forfeit their

jobs during the Sheffield smallpox epidemic of 1887” which also meant that “thousands were vaccinated and revaccinated in workshops under the covert threat of dismissal on non-compliance” (48).

Moreover, the desperately poor were still seen as sources of contagion and disease. In an 1879 article in the *Anti-Compulsory Vaccination Reporter*, ideas of contagion and transmission of smallpox are detailed by a doctor who declares from his own experience that, “for contagion to spread there must be communication between persons either by exhalation from the body or actual contact,” yet, paradoxically in cases where infants of the poor contract smallpox, “would in their parents cottages becomes sources of infection and danger...to the vaccinated thousands in their roomy and well-ventilated houses” (Hume-Rothery 61). While a propagandist publication, the recognition of classes disease persists despite the more accepted medical understanding that transmission of these epidemic fevers occurs through contagion principles. The persistent link between disease and the conditions of poverty deepened working-class resistance to compulsory vaccination, which was seen as a direct incursion on their domestic autonomy.

While compulsory vaccination infringed on the liberty of all private citizens in its optimizing mission, the specific machinations of the poor law’s compulsory enforcement system held the poor and the working-class financially hostage. The 1853 introduction applying to children seeped into the familial infrastructure through its monetary penalties. Twisting the arm of the working-class through the 20s fine plus court costs, Durbach contends this overwhelmed the average weekly wages of working men of 15-20s, so “even if one could pay the fine the first time, the cat and mouse nature of the 1867 and 1871 Acts, which allowed for repeated fining for non-compliance, meant penalties could be repeated almost indefinitely for each child, forcing penniless parents into prison” (53). In addition to the financial threat this law imposed upon the domestic

economy, Distraint sales quite literally re-shaped the working-class domestic space. If one did not pay their non-compliance fees, either through inability or plain refusal, their goods and property could be seized and sold at auction, as an 1883 article in *The Vaccination Inquirer* details those who refuse to pay and comply not only “lost their goods to the extent of the penalties and cost, but have had to meet extortionate auctioneers’ charges from the proceeds of the sale” (151). The increasing coercive pressure on the poor and working class and their organized resistance would eventually lead to the passage of a conscientious objection clause in 1898.

4.0 *Bleak House*, Contagion, and the Rhetoric of Miasma

The disparity in vaccination politics and its impact on the Victorian domestic economy is not aided by the fact that vaccine reform was intermeshed with the New Poor Laws, bolstering the argument that this state reform targeted poor bodies and led to a pathology of the poor and working class as inherently diseased and sources of contagion. Despite its Poor Law affiliation, Charles Dickens was a strong advocate of compulsory vaccination. In an 1860 article published in *All the Year Round*, Dickens himself penned a scathing critique of the failures of the English state to properly enforce vaccination protocol in the early days following compulsory laws, as so many other European nations had. Laying out the multistage failures of the compulsory act, Dickens asserts in the years before this second reform was passed, “more than five thousand persons, chiefly infants and children, perished of the disease every year,” further arguing that, “for this reason, in fifty-three, an act was passed to compel every child to be vaccinated within four months of its birth...at first, the act was readily obeyed, and deaths from small-pox fell to one-hundred and fifty two in the million. Then it was found that nobody was charged with the enforcement of the law, or with the recovery of penalties” (“An Important Matter” 273-4). As with many of Dickens’ critiques of Victorian legal and social institutions, this one attributes failure to venality, corruption, and poor application and thereby stresses the need for tighter control.

The need for a perfected form of bio-political control is dramatized in *Bleak House*’s disease narrative. The smallpox narrative in *Bleak House* is just as importantly a tale of transmission, one that transgresses the boundaries of the comfortable middle class both through literal and metaphorical disease. I begin from the premise that the disease suffered by Jo, Charley, and Esther is the smallpox virus. Some critics have argued against this diagnosis. Gillian West

asserts in “*Bleak House: Esther’s Illness*,” points out that the novel never explicitly states that the disease is smallpox. She argues, likewise, that Dickens’ usually acute medical awareness render a mistake regarding the incubation period unlikely. Because the average incubation period for smallpox is twelve days, West argues that “Dickens would hardly mislead us by having Charley taken ill only four days after contact if her disease was smallpox” (30). West’s arguments are countered by stronger consensus that the disease is smallpox.

In “Disease as Device: The Role of Smallpox in *Bleak House*,” Michael Gurney argues that the ambiguity regarding the diagnosis allows the disease to stand in for a myriad of public health issues facing Victorian England. Gurney argues that “communicability was important in Dickens’ choice of smallpox as the central disease in *Bleak House*” (82) and concludes that Dickens employed the uncertainty to spawn fear and penetrate the imagination of the public. He also points out the *duality* of smallpox as a disease thought to be communicated both via miasma and physical contact. Similarly, Graham Benton’s “And Dying Thus Around Us Every Day”: Pathology, Ontology, and the Discourse of the Diseased Body,” Benton argues the presences of diseases posits the entire novel as a document searching for a cure. Positioning the power of disease lies in its undetectability before infection occurs, this allows the transmission to transgress spheres of public and domestic, and boundaries of class distinctions, like in the case of Jo’s infection with smallpox that spread in an upwardly mobile direction. As the text plays with concepts of contagion, both social and pathological, not explicitly naming the affliction forces the reader to make their own diagnostic conclusions, illuminating the way contagious disease is enmeshed within the social imagination.

I add to these readings a specific consideration of how the presence of both miasma and contagion theories serve the single purpose of the narrative to promote a greater bio-political

solution for middle-class security. In *Bleak House*, Dickens employs miasmatic rhetoric to link persistent failure of the State to control urban conditions with the literal instances of disease. Dickens employs the rhetoric of miasma to call for regulation of the body politic, such as poverty, sanitation, and other issues of public health and pins this to the vulnerabilities of middle-class bodies through the contagion plot.

The contagion plot and miasma rhetoric are pinned together through the presentation of Tom-all-alone's, the epitome of the squalor of the London poor and destitute. Dickens first introduces us to Tom-all-alone's as a "ruinous place":

these tumbling tenements contain, by night, a swarm of misery. As, on the ruined human wretch, vermin parasites appear, so, these ruined shelters have bred a crowd of foul existence that crawls in and out of gaps in walls and boards; and coils itself to sleep, in maggot numbers, where the rain drips in; and comes and goes, fetching and carrying fever, and sowing more evil in its every footprint. (239)

The conditions described imply close bodily contact amongst the "human wretch[es]" who live there, but the language relies on the public understanding of miasma as beginning in the filth of urban poverty and spreading outward. Tom-All-Alone's is a place where "life burns...heavily, heavily, in the nauseous air" (556) and "Tom's corrupted blood... propagates infection and contagion somewhere" (557). The imagery suggests that the human body that does carry contagion, that of Jo the crossing-sweeper, is merely an embodiment of miasma.

When Esther and Charley discover Jo suffering through some terrible fever in the home of the brick maker's wife, he is emanating "an unhealthy and very peculiar smell" (403). Later in the century, Dr. Julius Althaus will cite odor as an important diagnostic tool, asserting that physicians "recognized measles, scarlet fever, and small pox by their peculiar smell on first entering a home and before having seen the patient" (Diagnostic Importance 21-2). The smell is the first sign that this is a particular type of epidemic fever and serves both a miasma and contagionist paradigm. After encountering the smell, however, Esther details a contagionist theory of transmission to

explains the eventual contraction. Esther notes she keeps her veil on longer than Charley, who “with her premature experience of illness and trouble, had pulled off her bonnet and shawl” (404) as she approached the suffering Jo. This direct, unadulterated contact with Jo’s illness exposes Charley to the contagion first, and more directly. This particular transmission pattern is significant, as Jo passes his smallpox to Charley, Esther’s maid, who then infects Esther herself as she nurses Charley through her affliction. The infection has an upward mobility, afflicting members of a higher social order with more virulence each time it strikes. The implication is that the unaddressed conditions epitomized by Tom-all-alone’s will eventually permeate London and England like a particularly noxious miasma even though the specific transmission of smallpox is understood as the result of direct contact.

Jo’s story is a sentimental plea for the optimization of life through greater control. Jo is an inhabitant of Tom-all-alone’s in the first place because of the failure of public institutions to take care of Jo. Jo is repeatedly instructed to “move along” by authority figures in the text and so his potential impact on the security of the middle class is multiplied with each deferral. Finally, Jo is turned out by the brick maker’s wife, Esther and Charley realize they can’t leave the boy to die in the street and have him brought back to Bleak House, literally transgressing the middle-class domestic spaces, where his sickly presence quickly divides the inhabitants. The argument between John Jarndyce and Harold Skimpole, who interestingly represents a version of pre-Victorian medical practitioner, illustrates Dickens’ condemnation of the lapses in institutional control. Jarndyce takes pity on this desperately ill boy, noting Jo’s state “is a sorrowful case,” Skimpole suggests yet another abdication of intervention, telling Jarndyce that “he’s not safe, you know. There’s a very bad sort of fever about him” and that Jarndyce had “better turn him out” (406). Perverting the intent of Esther’s observation that the boy is getting worse, Skimpole coolly suggest

Jo just be put back where he came from. Noting that if Jarndyce simply, “put him on the road, you only put him where he was before. He will be no worse off than he was,” even going as far to propose Jarndyce give the boy a few shillings to “even make him better off” (406) that he had been. As Skimpole flippantly declares the burden of responsibility to ultimately fall on Jo, and no one else, to mend himself, Jarndyce snaps back with a sentiment that echoes Dickens’ own concerns for children. Asking the indifferent Skimpole “if this wretched creature were a convicted prisoner, his hospital would be wide open to him and he would be well taken care of as in sick boy in the kingdom?” to which Skimpole callously returns, “why isn’t he a prisoner then?” adding, “it seems to me that it would be wiser, as well as in a certain kind of way more respectable, if he showed some misdirected energy that got him into prison” (407). Dickens means to highlight through the irony of Skimpole’s proposal the fact that the State will always eventually have to deal with its own lapses and arranges the scene to show how the magnitude of trouble increases in the deferrals and delays. In his interaction within Bleak House, the failures of the State materialize, eventually infecting this middle-class space with tangible disease. This consequence is part of a series of failures brought on by the insufficient regulatory measure to manage destitute population, with Jo serving as a cipher for all of these State failures.

Skimpole’s understanding that there could be places to contain the incubator of disease that is Jo, but that it is certainly not in the comfortable middle-class of Bleak House stands in for the ultimate shrugging of responsibility that plagues Jo and disturbs Dickens. In an 1846 article in *The Daily News*, Dickens wrote of his experience at a Ragged School:

The name implies the purpose. They who are too ragged, wretched, filthy, and forlorn, to enter any other place: who could gain admission into no charity school, and who would be driven from any church door; are invited to come in here, and find some people not depraved, willing to teach them, and show them some sympathy, and stretch a hand out, which is not the iron hand of Law, for their correction. (“Crime and Education” 4)

Dickens praise in favor of Ragged Schools is simultaneously an indictment of the failures of other institutions. Jo could certainly fit in among the ranks of a Ragged School class and epitomizes the Victorian failure to properly care for its most vulnerable and instead police it. Dickens continues:

I found in this Ragged School, of the frightful neglect by the State of those whom it punishes so constantly, and whom it might, as easily and less expensively, instruct and save; together with the sight I had seen there, in the heart of London; haunted me, and finally impelled me to an endeavour to bring these Institutions under the notice of the Government. (4)

Publicly and explicitly calling out the State to address the institutional failures of these children, Dickens' upset at these neglects towards its most vulnerable children is debated in this narrative exchange between Jarndyce and Skimpole. Jarndyce, recognizing the reality of how things stand, relays to Esther that while he could "ensure his admission into the proper place by merely going there to enforce it...it's a bad state of things when, in his condition, this is necessary" (407). This realization that no one else has been willing to vouch for Jo, and that it is even necessary to do so for this child, is a distressing fact of life in Victorian England.

The notion that health is a public issue, and that should be the state's legal responsibility to regulate, is a contemporary concept at the time of the publication of *Bleak House*. The Public Health Act was passed in Parliament in 1848, less than a decade prior to this text's serialization. The bill's passage into law was prompted by the publication of Edwin Chadwick's *Report on the Sanitary Conditions of the Labouring Population of Great Britain* in 1842, as well as various state investigations into the broad range of issues regarding public sanitation sanctioned by the Royal Commissions throughout the 1840s. Dickens shares Chadwick's interest in State intervention:

Much mighty speech-making there has been, both in and out of Parliament, concerning Tom, and much wrathful disputation how Tom shall be got right. Whether he shall be put into the main road by constables, or by beadles, or by bell-ringing, or by force of figures, or by correct principles of taste, or by high church, or by low church, or by no church... In the midst of which dust and noise, there is but one thing perfectly clear, to wit, that Tom only may and can, or shall and will, be reclaimed according to somebody's theory but nobody's practice. And in the hopeful meantime, Tom goes to perdition head foremost in his old determined spirit. ("Bleak House" 557)

Left alone, the narrator warns, Tom's "slime" and "pestilential gas" "shall work its retribution, through every order of society, up to the proudest of the proud, and to the highest of the high" (557), suggesting the issues of poverty should be a call to action for the middle class but specifically in the form of support for greater public intervention.

5.0 George Cruikshank: Sketches of Victorian Bio-Political Resistances

The work of Dickens' contemporary and one-time collaborator, George Cruikshank, serves as an example of resistance to the bio-political tendencies of Victorian culture. Like Dickens, Cruikshank probed at the conditions of destitution and disease in 19th-century England, though his politics and agenda different significantly from that of Dickens. Like the middle-class reformers working on the anti-vaccination front whose "occupational and social identities resembled those involved with the spiritualist movement, temperance, and alternative medicine," (Durbach 47) Cruikshank was an avid teetotaler deeply involved in the temperance movement. Raised in a family of political cartoonists, Cruikshank's work as a characteristic spans an impressive amount of the century: from the first decade to the 1870s, Cruikshank worked and produced satires that illuminated the ills of Victorian society. The personal and professional relationship between Dickens and Cruikshank took the form of collaboration on Dickens' *Oliver Twist*, perhaps the most salient portrait of the destitute children in Victorian society he produced, with Cruikshank providing the illustrations in the original serialization. Both men were highly attuned to the issues facing the most vulnerable of England's population, though Cruikshank tended towards a politics Dickens found more or less insufferable.

Further, his involvement in the teetotaler movement eventually dissolved their relationship. Despite their falling out, Cruikshank's work continued to probe at many of the same issues Dickens' work was concerned with but without concluding the need for State intervention. Cruikshank's cartoons represent the rationale of those who resisted the increasing regulation of public health. In Cruikshank's work, we can see how the backlash towards the compulsory laws had just as much to do with the fact that "they are class laws, insomuch as they only benefit the

doctor class” as they did their administration was carried out by “the despicable class of spies who sell themselves to the inhuman work of prosecution under these anti-Christian and merciless enactments” (Rothery 15). Vaccination was seen by many in the movement as a theory “that would justify every description of wickedness” and must therefore be “indefensible on any Christian or rational ground” (Rothery 2). The moralizing notion that vaccination was introducing an impure poison to the blood was both unchristian and immoral, polluting the body whilst it at the same time communicates every other disease to the blood of those vaccinated” (Fraser 11). This unrest around the introduction of impurity to the body is interconnected with the goals of temperance, offering another vector of resistance to biopolitical encroachment.

In *George Cruikshank: Life, Times, and Art*, Robert Pattern points out that:

Disease runs rampant: gout, scrofula, starvation, frostbite, venereal disease, dropsy. There is in George’s prints, as in no others of the period, an insistence on the ways accidents and malevolence mould the human clay, deform it into grotesque ignoble parodies of the ideal. Whereas Gillray and Rowlandson could depict beautiful women and handsome men, Cruikshank typically makes his figures knobby and knuckles; they crouch rather than stand, caper rather than walk...he etches a rhythm of swollen and attenuated anatomies: Edenic ideals grossly distorted by character and circumstance. (89)

This employment of disease then can be used to antagonize and, in the case of smallpox prevention via vaccines, sow seeds of doubt. This questioning and anxiety over medicine thus manifests in Cruikshank’s political renderings, often commenting on the medical establishment’s embrace of certain techniques and technologies, such as vaccination.

Cruikshank’s work appeared in the *Scourge: or, Monthly Expositor of Literary, Dramatic, Medical, Political, Mercantile, and Religious Imposture and Folly* (1812-1816). Though much shorter lived, the *Scourge* shared cultural space with social reformer Henry Mayhew’s satire publication *Punch*, which can be understood as an example of 19th-century activist journalism (Lewis 535). The earlier and much shorter-lived publication, the *Scourge*, was an early adopter of the approach of blending satire and politics through commentary positioned next to cartoons.

Initially, all the topics cited in the publication's subtitles were included in every issue printed, and each issue included foldout colored plates that illustrated an article or other piece of writing. By 1815, these plates were being sold separately as independent, self-explanatory political works.

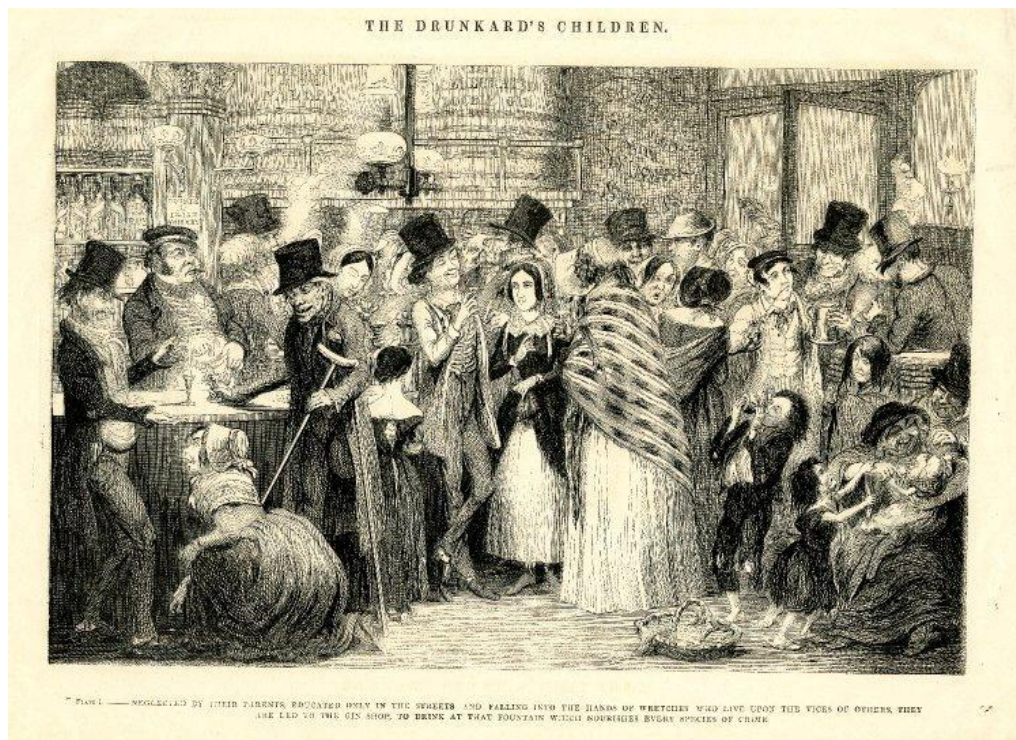


Figure 1 *The Drunkards Children* : Credit: Wellcome Collection.

One of the eight illustrations done for *The Drunkard's Children*. The image depicts a gin house full of shady characters and the children who follow their way into these spaces. The accompanying text read: *Neglected by their parents, educated only in the streets and falling only into the hands of wretches who live upon the vices of others, they are led to the gin shop to drink at that fountain which nourishes every species of crime.*

One later example of Cruikshank's use of illustration for political aims, is his series called *The Drunkard's Children*: 8 sketches published in a foldout book in 1848 tell a cautionary tale of

alcoholism's effect on children in Victorian society. The *Drunkard's Children* series is the most obvious example of Cruikshank's concern for children in the Victorian domestic economy and the social consequences of drunk and negligent parents. Much like Dickens' concern for the well-being of children, Cruikshank's series depicts trials of children under these conditions of neglect with accompanying descriptions of the scene. The series of eight scenarios depict the intermingling of drink, violence, crime, eventually building into a murder and climaxes with the Drunkard's daughter committing suicide as a result of her wretched station. This series is one that can be linked to Cruikshank's own conservative politics and his deep involvement in the Temperance movement which began in the 1840s.

A member of several societies in the movement before eventually becoming the Vice President of the National Temperance Society, Cruikshank began to shift his work and produced several series for the moral cause of abstinence. These images use the themes of destitution as a way to comment on the corrupting influence of ills in society, not unlike Dickens' rhetoric of miasma: the gin shops, the neglect, the education of these children which comes "only in the streets and falling into the hands of wretches who live upon the vices of others" are the result of sick society that needs to embrace clean and sober living in Cruikshank's purview. Producing works like these for the cause of Temperance is certainly a political attempt to elicit a response from this unwell society, calling on the parents, rather than the State, to address these issues that lead to such destitution. Some sects of the movement did call on the state to address the issue, though most organizations in England preferred moral persuasion to calls for an outright ban of alcohol.

On June 1st 1853, the year of the Compulsory Reform Act and the serialization of *Bleak House*, the United Kingdom Alliance (UKA) was formed in Manchester to take anti-drink a step further by promoting prohibition of alcohol through legislative bans. In the inaugural address of

the alliance, 100 members unanimously agreed to the principals put forth in its articles. Declaring in its first article “that it is neither right nor politic for the State to afford legal protection and sanction to any Traffic or system that tends to increase crime, to waste the national resources, to corrupt the social habits, and to destroy the health and lives of the people” (Address 2), the intent of alcohol prohibition reveals a sensibility that this is, at least to some in Temperance movement, an issue for the State to address, as other States and nations had begun to do. Further detailing in the address that “the greatest evils under which our nation suffers, including *Crime, Pauperism, Ignorance, Insanity, and Disease*, are induced and fostered by the common use of Intoxicating Drinks” (3) reveals just how deeply these issues are intertwined with the culture of contagion and classed notions of Victorian society. The larger calls for State regulation during this period, and during this year specifically, demonstrate the increasing biopolitical relationship of the Victorian State and its people.

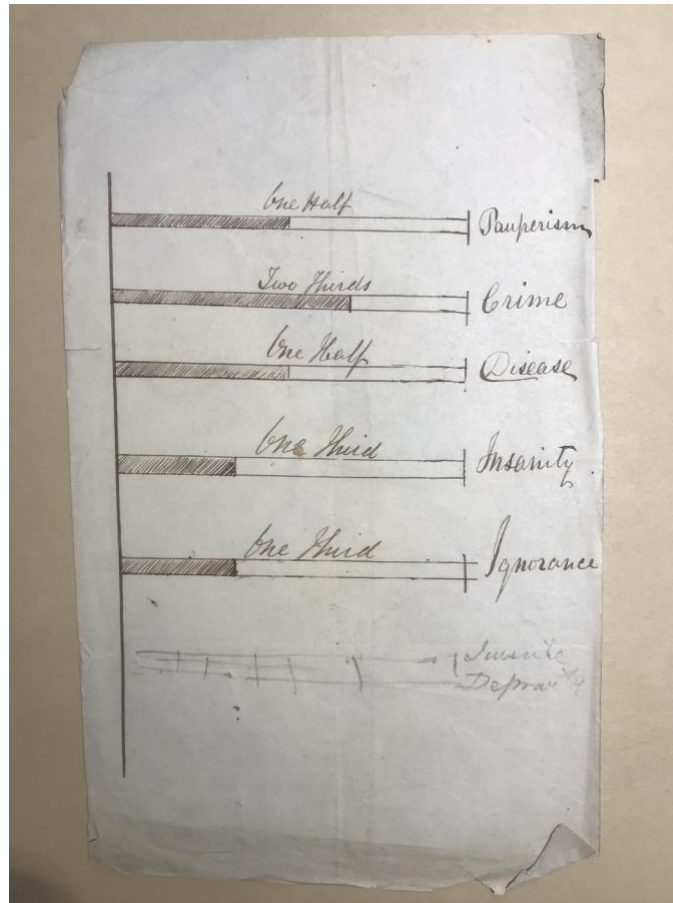


Figure 2 Unpublished sketch:

Reproduced courtesy of the Department of Special Collections, Princeton University Library.

Series 7: Printed Matter; George Cruikshank Collection, C0256, Manuscripts Division, Department of Special Collections, Princeton University Library.

While Cruikshank was not formally affiliated with the UKA, Ian Gately posits in *Drink: A Cultural History of Alcohol* that in light of the success of alcohol prohibition in the US, the UKA so greatly enthused the movement that “the plethora of British temperance and abstinence societies had paused their turf wars to throw their support behind United Kingdom Alliance (UKA)” (323), which in 1857 did in fact present the Permissive Act before the House of Commons to limit the

sale of alcohol. Cruikshank's lack of formal involvement with the UKA, though, does speak to his penchant for social or moral influence on the issue of temperance, rather than through State interference and control. From an October 1864 issue of *The Temperance Spectator*, this power is confirmed in an article suggesting, "we are not to listen to the speeches of the excellent George Cruikshank, but to look to his pencil. His "Drunkard's Progress" is a more effective warning than all the speeches he ever made or will make, or for that matter than the speeches of hosts of far more pretentious orators," submitting further in regards to the Permissive Act that "men cannot be made sober by Act of Parliament" (147). While Cruikshank doesn't seem to embrace the Permissive Act put forth by the UKA, he plays with the exact language from the UKA's address in an unpublished sketch. Recalling the language of *Crime, Pauperism, Ignorance, Insanity, and Disease* as vectors on a chart, he seems to be teasing out the degrees to which these problems play a role in this sickly society. This sketch at the very least reveals the continuity of language through the Temperance movement even while there may have been divided on the issue of State regulation. His ability to flush out and influence these ideas of Temperance through his work in a social vein positions Cruikshank as resistant to the biopolitical arm of Victorian England, even in regards to the cause he so vehemently came to embrace.

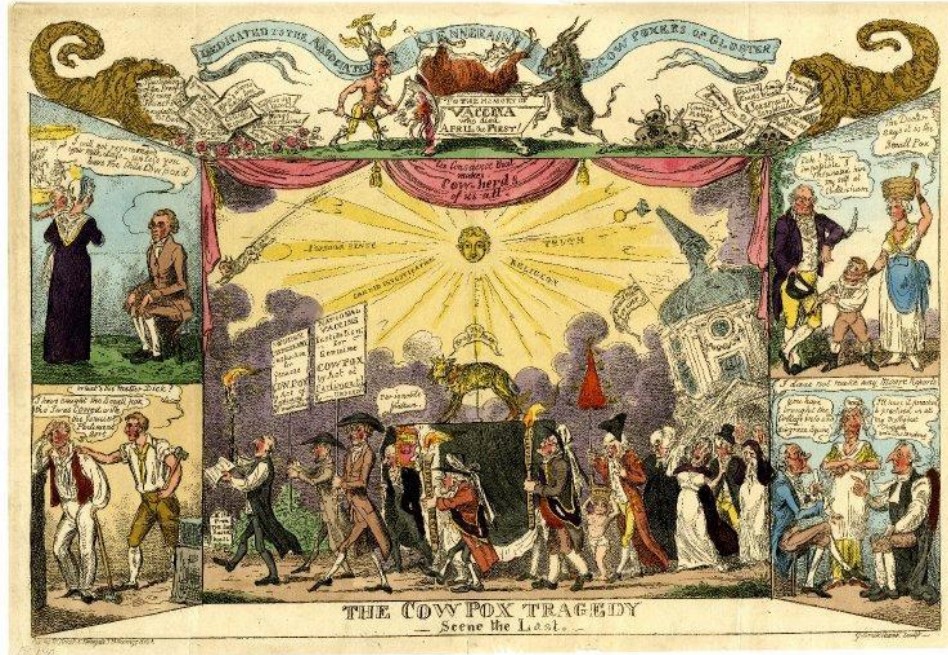


Figure 3 *The Cowpox Tragedy*: Image from the Wellcome Collection

In *The Cowpox Tragedy* (1812) published in the *Scourge*, Cruikshank's use of bodies and death are ghastly comical. This fold out image was published alongside a letter titled "Vaccine Quackery," espousing an anti-vaccination stance and denouncing the Royal Jennerian Society as a corrupt institution peddling lies in on the dangers of vaccines. The six related illustrations that make up the print feature portraits of the tragic circumstances brought on by the smallpox vaccine and the institutional embrace of it.

Across the top, a sacrificial cow, surely suffering from the cowpox, is lying on an altar which reads *to the memory of Vaccinia who died April the first* while its head is being scythed off. The figure doing the scything has a sharp, exaggerated profile that borrows from the physiognomy playbook to assign a negative or evil character of those performing this work. On its head, an hourglass with wings is bestowed representing the time running out. The movement of the cow on

the altar is spastic and chaotic, its saucer-like eyes and limp tongue making this grim scene grotesquely comical as blood pours from its neck. On either side of the altar two cornucopia overflowing with documents frame this scene. To the left, there are press write-ups lauding the miraculous reports of vaccine results spilling onto a bed of roses; to the right, there are reports of the dangerous side effects of the vaccine, one reading *Jennerian Scrofula*, overflowing onto skulls and bones. This imagery of life and death surrounding this scene is wrapped in a banner that reads *Dedicated to the Associated Jennerian Cow Poxers of Gloster*, quite like a bow that wraps the entire piece. These conflicting positions reveals that fissure present in medical efficacy and validity, while the rest of the piece works to reveal a microcosm of vaccine culture and the biopolitical implications of state dictated medicine emerging in society.

In the center there is the most direct attack on the medical establishment itself. Featuring the Royal College of Physicians publicly advocating Jenner's vaccine while marching in a funeral procession, presumably for a victim of vaccinia, the image reads as a stage, complete with theater curtains. The cow in the center appears to be a play on the golden calf, an Old Testament false idol figure alluding to the ineffectiveness of the vaccine, which several of the other panels deal with as well. This functions both to appeal to religious sensibilities, as well as to critique and insult the Royal College's decision to embrace vaccination. This illustrated critique of the Royal College, genuinely derived from Cruikshank's personal politics or not, illuminates a particular animosity present in the culture of contagion and its relationship to the budding biopolitics of the early 19th-century. Prodding at the embodiment of the medical establishment presents the social relationship to the medical as strained decades before there are any reforms passed into law regarding vaccines. This inherent distrust of potential medical overreach, even in their simply advocacy, is rooted in the earlier Enlightenment trials with inoculation efficacy during the Royal Experiment and even

Maitland's own words that warned against state enforcement of medicine. Yet, this illustration is working to antagonize fear surrounding the public's relationship to this technology in a way that suggests the medical establishment is nefariously militant in its advocacy. Those marching in this procession are carrying signs, one reading "National Vaccine Institute for Genuine Cow Pox by Act of Parliament," suggesting the establishment of medicine and government are working together to distribute disease (and judging by the procession, death) through its supposed cure. This conforms to Wang's read on Romantic medicine's experimental nature giving rise to Jenner's vaccine through an almost paradoxical "connection between immunity and contamination," (468) though this lampoon's take on that experimental task reveals the present fears encapsulated by Cruikshank and the emergence of the Victorian biopolitical paradigm he goes on to suggest is more eugenically purified. Even here in this Romantic vein (1812), the resistance to that medico-legal paradigm is present and suggestive of the eventual rise of that Victorian affinity for fortified control and regulation over health and home alike.

The four remaining images to the left and right feature exchanges that range from the failure of vaccinations, to the failure of the medical institution, the top right of which features Jenner himself who will hear nothing of the vaccine's failure. These work together to present the social aspect of the medico-legal consequences of this culture of contagion. To the bottom-left, there's an exchange between friends that reveals one, who had just been "cowed with the genuine parliament sort" had nonetheless caught the smallpox. This, once again, questions the efficacy of this newer experimental practice, while also toying with the notion of the medico-legal agenda of vaccines being negligent. The top left image features a male midwife telling a mother he will not recommend her milk *unless you have the child cow pox'd*, suggesting an emerging biopolitical control presenting itself through this budding state of medico-legal relations. This also speaks to

the way women, as mothers, are uniquely figured in this debate. The compulsory acts mandate of infant vaccination is alluded to here through Cruikshank's musing over the impact these biopolitical factors could force into the domestic economy of Victorian motherhood.

6.0 Disease and Victorian Domestic Space in *Bleak House*

Women's role as mothers in pro- and anti-vaccination discourse marks a subtle shift in the women's history with smallpox. Feminine disfigurement, David Shuttleton notes, is a shifting issue through the 16th-18th centuries, evolving from a moral blight, to grounds for abandoning your scarred wife, to a true test of a lover's commitment in the western imagination. I am interested in examining the way that Esther's private suffering and motherly concern as compared to Lady Mary Wortley Montagu's public work to promote inoculation marks a decided shift toward a Victorian domestic ideal that is bound up with bio-political logic.

While the Sloan and Maitland and their various publicized tests of inoculation represent that medical establishment's role in promoting the practice, some credit goes to Lady Mary Wortley Montagu, who, following her return from Turkey in 1719, used her position as a public figure and victim of the disease to influence. However, in "Putting Lady Mary in her Place: A Discussion of Historical Causation," Genevieve Miller contends that Lady Mary's influence on the issue has been greatly over exaggerated in the annals of history. Miller's argument provides a compelling account of the historical perversion of Lady Mary's true contribution to the history of inoculation, arguing "the introduction of smallpox inoculation in the west was not a simple *post hoc, propter hoc* event" and maintaining, "it would be more accurate to state that the great threat of smallpox and the court supported investigative actions and promotions of members of the Royal Society of London were responsible for adding inoculation to medical practice in Britain and her colonies, just as today we credit the World Health Organization for eliminating smallpox from the world and not the individual who first proposed it" ("Putting Lady Mary" 14). Miller contends that even if Lady Mary had no relationship to inoculation, the practice would have still been introduced

(“Putting Lady Mary” 14). Nevertheless, Lady Mary’s particular angle on the horrors of smallpox is important to consider.

Montagu, who herself suffered with and survived smallpox at 27, engrafted her daughter publicly in England in 1721 during a period when smallpox epidemics were ranging. As a prominent woman of polite society, Diana Barnes argues in “The Public Life of a Woman of Wit and Quality: Lady Mary Wortley Montagu and the Vogue for Smallpox Inoculation,” that Montagu was in a unique position to wield her social power in a political way. This opportunity was newly emerging for elite women of the time, allowing them to enter the masculine world of politics with their own, uniquely feminine positions. Arguing that women had a unique importance in the eighteenth century’s popular understanding of smallpox, Barnes asserts that the disease was singularly devastating for women. While smallpox was an indiscriminate affliction, transgressing boundaries of race, class, and sex without consideration, the social effects were more damaging to women whose looks were an important part of social capital. This is an issue Miller also accounts for, noting as inoculation became more widely practiced “fathers reported on the inoculation of their children, and mothers were often the chief encouragers of such actions,” (G. Miller, “Putting Lady Mary” 10) citing a 1725 account of parental motivations from a Royal Society report that details, “both father and mother have suffer’d very much in the small pox which made them more willing to save the girl’s beauty” (qt. In G. Miller, “Putting Lady Mary” 10). Inoculation, with all its risk, was very much worth it to a woman like Lady Montagu whose own beauty was thought lost to her ordeal. What is important to consider is the way that the loss of beauty is linked to social death, whether it is the mother’s or the child’s beauty. In *Bleak House*, on the other hand, Esther’s loss of her “old face” becomes the means by which she achieves her status as ideal figure of middle-class domesticity. Esther is positioned in *Bleak House* as the Victorian middle-class answer

to the biopolitical mechanisms at play, differing significantly from Lady Montagu's earlier position of public feminine advocacy. Both women scarred by the disease, these figures provide two distinctive feminine realities in light of the emerging biopolitical state of disease regulation in the Victorian era.

Fuson Wang's reading of the bio-politics of *Bleak House* places it at an advanced point in the consolidation of the medico-legal State. Wang's essay "Romantic Disease Discourse: Disability, Immunity, and Literature" is mostly concerned to interrupt the narrative that draws a direct line from Enlightenment medicine to Victorian bio-politics and to recover the importance of Romantic discourse. I am focusing on only a small portion of his essay that concerns *Bleak House* and the way that Esther's disease relates to Victorian bio-politics.

Positing the Romantic era as a more experimental, yet vital, mode in medical thinking, Wang asserts this diversion from a more definitional constructs of enlightenment medical thought comes from romantic practitioners who "tended to resist the easy absorption of the abnormal body into an organized gaze of institutionalized medicine because they did not yet rely on rigidly constructed borders between the normal and the pathological" further suggesting "Romantic medicine and literature depend instead on a porous disease discourse" (468). While the 18th-century experienced a process of mass centralization in the majority of western Europe, it also saw a rise in epidemic outbreaks of smallpox and plague, which DeLacy contends in "Nosology, Mortality, and Disease Theory in the Eighteenth Century" prompted a transformation in disease thought and a small revival of contagion theory. Determining in the early half of the 18th-century contagionists were a small faction, by the middle of the century "physicians both expanded the list of contagious diseases and constructed new diseases out of symptoms previously noted but not grouped in this manner" (DeLacy 227). This is distinctive from the Victorian era's eventual

fortification of medical uniformity, yet this increasing categorization of the body as politics, and an embrace of regulation evolved out of the experimental tendency of the Romantic age.

Wang suggests *Bleak House* can be read as an example of the sterilizing cultural shift, arguing that Esther's eventual marriage to Dr. Alan Woodcourt provides the controlled treatment of doctor and patient, uniting them in regulatory matrimony that "privileges a normative and rigidly-defined diagnosis" ("Romantic Disease Discourse" 478) indicative of the Victorian configuration of the pathological. Wang asserts that Esther is redeemed from disease through her marriage to Dr. Woodcourt, suggesting that "Dickens ultimately manages to clean up all this corruption and filth with the tightly plotted comic ending" (478). I agree that Esther's marriage marks the triumph of bio-politics but contend that it is because of her disfigurement and that her ability to contain and manage the disease that enters the confines of the middle-class domestic sphere is what allows Esther to fully enter the biopolitical idealized Victorian middle-class domestic configuration, which is eventually formalized in her marriage to Woodcourt.

When Charley first falls ill, Esther describes the quick onset of symptoms and laments, "I was very sorry to think that Charley's pretty looks would change and be disfigured, even if she recovered--she was such a child, with her dimpled face--but that thought was, for the greater part, lost in her greater peril" (Dickens, *Bleak House* 411). Esther is still expressing a concern related to the loss of looks but the emphasis has shifted and the lament is for Charley's childish features. The concern for beauty as social capital is subtly re-articulated as an issue of domestic security. Charley's childishness preserved originally by Esther's protection when she is "given" to Esther by Jarndyce is threatened. This distress as a reader is intensified by the fact that this circumstance could potentially have been prevented with regulation. Charley, like Jo, is a child whose illness is one degree of separation removed from the direct failure of State intervention. The alignment of

middle-class domestic ideals with bio-political regulation is evidenced by the fact that Charley, unlike Jo, survives this ordeal and eventually forms part of a secure family unit of her own.

Esther's own disease narrative similarly involves concern for her its effect on her beauty (though she never sees her own looks as beauty) and similarly embeds the concern in a domestic resolution. Unlike her mother, Lady Dedlock, a woman of society and the old aristocracy akin to Lady Montagu, Esther embodies the idealized Victorian domestic response. Chiding herself for her vanity in private moments, Esther "went on to think, as I dressed my hair before the glass, how often I had considered within myself that the deep traces of my illness, and the circumstances of my birth, were only new reasons why I should be busy, busy--useful, amiable, serviceable, in all honest unpretending ways" (Dickens, *Bleak House* 545). Esther folds her own personal concern into the same will to do her domestic duty, to serve and aid, quietly and without personal motivations. Continuing she asks aloud, "'Don't you remember, my plain dear' I asked myself looking at the glass, 'what Mr. Woodcourt said before those scars were there, about your marrying--'" (Dickens, *Bleak House* 545). Lamenting her prospects, Esther's narrative post-affliction becomes much about keeping up face while mourning that face behind closed doors. This mourning, though, is one also taken up by Lady Mary's prominent, if not political, poem "Saturday, The Small-Pox" about a woman's loss of beauty to the disease, and what that does to her prospects. Often read as a self-reflective work on her own trials, the poem, whose protagonist Flavia leaves the city following her affliction to take shelter in the pastures away from where she will surely be mocked, also offers a satirical comment criticizing the patriarchal expectations of feminine beauty being inconsistent with this existence. This reality, though, is one Esther also feels she must come to grips with following her recovery, reckoning with the impact this trial will have

on her marriage prospects and configuration in the feminine domestic economy that relegates women to the private sphere of wife and mother.

Coming to a head when she realizes her love interest must feel differently about her altered face as well, Esther laments her lost love that never was upon learning of his presumed death, crying “what should I have suffered if I had had to write to him and tell him that the poor face he had known as mine was quite gone from me and that I freely released him from his bondage to one whom he had never seen!” (Dickens, *Bleak House* 59). This understanding that her altered appearance was not simply her sole burden to bear, but that of any prospective partner, echoes early sentiments of writings on smallpox. It was the post-restoration smallpox narrative’s penned by women that Shuttleton contends worked to reject the idea of disfigurement as, “being accelerated into a socially meaningless old age, if not a spectral form of premature death” (Dickens, *Bleak House* 136). The social death of women following a smallpox recovery, while an issue Esther’s narration feels she must contend with, is also read as a point of personal and political empowerment by some critics, as Nussbaum contends disfigurement “ruined women’s prospects while offering escape from traditional femininities...enabling compensatory expression in their lives and work” (qt. In Shuttleton, 134). This is certainly a way to read the critical take on Lady Mary’s own poem rejecting her ruined state as being so, and does much to explain her letters on the subject through her lifetime. Although this couldn’t be more unlike Esther’s attitude and quiet Victorian lamentation of domestic incompatibility.

The public advocacy of Lady Mary on the issue of inoculation in the early Enlightenment age is, perhaps unsurprisingly, a sharp distinction from that of Dickens’ idealized Victorian heroine, Esther Summerson. Montagu used her influence in elite society through her written correspondences to individuals of note articulating her convictions on the treatment. Montagu's

was a very public engagement on the issue of smallpox prevention, whereas Esther's strife was an incredibly private affair. Esther embodies the idealized Victorian domestic woman in her care and desired prospects for a middle-class domestic bliss. This is certainly a product of Dickens' own middle-class configuration of femininity, which relegates women to the domestic sphere to achieve the idealized state of being the "angel of the house," or the wife and mother whose dominion is entirely comprised of the private domestic sphere and its care. This configuration of the ideal Victorian woman plays into the biopolitical goals of quarantine that inform the middle-class domestic economy. To optimize life is the State's duty, as Dickens makes mention in many of his writings on public issues, yet the domestic sphere provides a private space for middle-class women to inhabit their own biopolitical orientations in their caretaking. Esther's ability to exert control over the protection of beauty *and* health is a biopolitical measure that, distinct from the general State goal of optimizing life, works in the feminine domestic economy to optimize beauty.

Thus, Esther's strict adherence to the practice of quarantine suggests two things: she held the understanding that bodily exposure was the chief cause for the transmission of this disease, while the practice of protecting Ada through Charley and her own quarantine calls attention to the political motivations for controlling the impact of the illness on the middle class. The fact that her quarantine is successful, in that the illness stops at Esther, is one of the ways in which her character is an embodiment of Victorian biopolitics, as she manages to exert control over the outcome through her practice. This containment is a key factor in Esther's private political exertions within the domestic economy of the middle-class home, though the containment is also suggestive that the middle-class should be privy and more sympathetic to the myriad public health issues that threaten all levels of Victorian social wellness, as this narrative demonstrates through its upward mobility. This political quarantine is also in play when Skimpole begrudgingly relegates the dying

Jo to the stables, protecting the house and its middle class inhabitants from the illness essentially brought in off the streets. This employment of quarantine can thus be read not only as the way the middle-class figures fortify their positions in regards to health, but also in the way Esther embodies a Victorian biopolitical ideal that shapes the middle-class domestic economy of feminine beauty in her care of Charley. Esther power is thus garnered, protected, and maintained within the middle-class domestic sphere.

Esther's recovery is quiet and fraught. In meeting her new face in the looking glass Charley hesitates to hand to her, Esther relays that "It matters very little, Charley. I hope I can do without my old face very well" (Dickens, *Bleak House* 451). From the start, Esther maintains public composure about her state, adding to her station as a domestic ideal who is elevated through her angelic sufferings. This Victorian iteration of Esther's angelic suffering is further opened up when, following her recovery, she meets with Lady Dedlock, a relic of the old ways, like Lady Montagu, and so deeply incongruous with the Victorian re-orientation of social roles and a threat to Victorian middle-class domesticity and its private feminine organization. In their meeting, Lady Dedlock discloses that she is, in fact, Esther's mother, prompting Esther to conclude, "through all my tumult of emotion, a burst of gratitude to the providence of God that I was so changed that I never could disgrace her by any trace of likeness; and that nobody could ever now look at me, and look at her, and remotely think of any near tie between us" (Dickens, *Bleak House* 465). Esther's scarred state provides her with a social grace, recasting her curse of public disease as a domestic blessing.

Her disfigurement makes her middle-class status safer as it provides the occasion for Jarndyce's proposal. Reflecting before she agrees to be his wife, Esther notes "that when my old face was gone from me, and I had no attractions, he could love me...his generosity rose above my disfigurement, and my inheritance of shame" (Dickens, *Bleak House* 544). In this domestic

configuration, it is Esther's scars that again redeem her and allow her to enter a middle-class domestic arrangement despite her shameful origin. Her scars, severing her resemblance to Lady Dedlock, also render her a domestic object, rather than a public beauty. This biopolitical configuration thus allows her to enter a middle-class existence, while the public figure Lady Dedlock represents must be destroyed in death.

In Esther's ultimate marriage to Dr. Alan Woodcourt, she fully attains the Victorian biopolitical ideal, as Wang suggests, both in her private domestic assignment following her illness, as well in her marrying a doctor. Her illness has made her angelic in her status, as well as regulated in her marriage's doctor-patient dynamic as she embodies the Victorian bio-political ideal that is private domestic femininity. Yet it is her containment of the disease through care and quarantine, tinged with middle-class politics, that rectifies her status in the Victorian biopolitical configuration of the feminine domestic economy. Through her ordeal, she is not only released from the bondage of social shame in her illegitimate status, but is elevated in her middle-class power by taking control of and manage the scourge of smallpox. This privileges her to enter an idealized arrangement of middle-class domestic existence because of, not in spite of, her permanent disfigurement.

7.0 Bio-Politics Beyond Vaccination

Vaccination reform in the 19th-century was simply one of many ways in which a concerted biopolitics emerged and impacted the domestic economy in the Victorian era, though as this thesis demonstrates, it was instrumental in the State's ability to intervene in matters of public health and the management of sovereign bodies that informed that economy, perhaps unsurprisingly, along class lines. This was structurally possible due to the reform's attachment to the Poor Laws, enforcing and exaggerating an existing class line through the biopolitical mandates of compulsory medicine. Before the passage of the Vaccine Reform Acts, the power with which the State could medically dictate the lives of its citizens saw nothing on par with this system of medicalized control and monitor. Foucault describes biopolitics as a means to "ensure, sustain, and multiply life, to put this life in order," which is exactly what the series of Vaccination reform set out to do, but that order does come at a cost: later acts regulating disease began to emerge in the second half of the 19th century, such as Contagious Disease Act of 1864.

Not unlike the Vaccination Reforms two decades earlier, these series of acts were the result of a committee formed in 1862 to manage venereal disease in the armed forces. This legislation expanded into the control and policing of female bodies, allowing law enforcement to arrest women suspected of prostitution near military ports and bases to compulsory checks for venereal disease. Positive findings subjected these women to medical confinement in Lock Hospitals under military control, with the reform of 1869 extending this legislation into other subjected districts. This confinement was a political quarantine just as well as a medical response, not unlike the political duality of Esther's quarantine in *Bleak House*.

This increasing immersion of the medical with the legal and its relationship over bodies sought to, as Foucault posits, ensure and sustain life, but the extent to which the policing of public health was subjected to perversions through the law in the late 19th century reveals a concerted effort that emerges as a biopolitical goal. The public became increasingly subjected to a medical paradigm that seeks to pathologize life as a means to regulate it, impacting the domestic economy at all levels through its goals. Vaccination in light of *Bleak House* provides an answer to the Victorian relationship between health and state within the literary imagination, rhetorically classifying the nuances of existence and disease as vectors for State intervention. Conversely, Cruikshank exemplifies the Victorian rejection of State control through his works personal and political orientations, preferring the route of social and moral influence over state insertion. Both of these orientations reveal the ways in which the emergence of a Biopolitical State informed the Victorian domestic economy through their engagements with the culture of contagion present in vaccination and disease politics in 19th-century England.

As pathological categories emerge and solidify throughout the 19th-century, the relationship to disease in all the vectors of the culture of contagion becomes a part of a biopolitical orientation that is both essential to the success of Public Health, and shaping the domestic economy through these instances of State management. The politics of medicine, thus, break down the social body into categories deemed positive or negative, healthy or unhealthy, compliant or deviant, inserting these social categories into the regulation of health, medicine, and disease.

Bibliography

“Address of the United Kingdom Alliance (formed June 1st, 1853), to procure the total and immediate legislative suppression of the traffic in all intoxicating liquors.” Knowsley Pamphlet Collection. Contributed by The University of Liverpool, UK. JSTOR, <https://www.jstor.org/stable/60100291>.

Baker, George. *Inquiry into the Merits of a Method of Inoculating the Smallpox which is now Practiced in Several Counties of England*. London, 1766.

from Falk Library Rare Book Room at the University of Pittsburgh.

Barnes, Diana. “The Public Life of a Woman of Wit and Quality: Lady Mary Wortley Montagu and the Vogue for Smallpox Inoculation.” *Feminist Studies*, no. 38, vol. 2, pp.330-362, 2012.

Benton, Graham. “And Dying Thus Around Us Every Day”: Pathology, Ontology, and the Discourse of the Diseased Body. A Study of Illness and Contagion in *Bleak House*”. *Dickens Quarterly*, vol. 11, no.2, 1994, pp. 69-79.

Carmichael, Ann E. “Contagion Theory and Contagion Practice in Fifteenth-Century Milan”. *Renaissance Quarterly*, vol. 44, no. 2, 1991, pp. 213-256

Copeland, James. *A Dictionary of Practical Medicine*, vol. 1, 1855, pp. 895-96.

“Compulsory Vaccination Not Necessarily Efficient Vaccination.” *Association Medical Journal*, vol. 1, no. 15, 1853, pp. 313-314. JSTOR, www.jstor.org/stable/25494548.

DeLacy, Margaret. “Nosology, Mortality, and Disease Theory in the Eighteenth Century.” *Journal of the History of Medicine*, vol. 54, April 1999, pp. 261-284.

“The Diagnostic Importance of Odors.” *American Observer Medical Monthly*, vol. 9, no. 3, 1882, pp. 21-22. *Nineteenth Century Collections Online*, <http://tinyurl.galegroup.com/tinyurl/BNKU50>.

Dickens, Charles. *Bleak House*. Ed. Patricia Ingham. Broadview, 2011.

Dickens, Charles. “An Important Matter.” *All the Years Round*, June 30, 1860, p. 270-74.

Dickens, Charles. “Crime and Education.” *The Daily News*, February 4, 1846, p. 4.

Durbach, Nadja. “‘They Might as Well Brand Us’: Working-Class Resistance to Vaccination in Victorian England.” *Social History of Medicine*, vol. 13, no 1, p. 45-63, April 2000.

Foucault, Michel. *The Birth of the Clinic*. Vintage, 1994.

Gately, Iain. *Drink: A Cultural History of Alcohol*. Gotham Books, 2008.

Gibbs, John. *Compulsory Vaccination Briefly Considered in its Scientific, Religious, and Political Aspects*. London, 1856.

Gibbs, John. *Our medical liberties, or the personal rights of the subject, as infringed by recent and proposed legislation*. London, 1854.

Gurney, Michael S. “Disease as Device: The Role of Smallpox in *Bleak House*.” *Literature and Medicine*, vol. 9, 1990, pp. 79-92.

Howgrave, Francis. *Reasons against the inoculation of the small-pox. In a letter to Dr. Jurin. Being a full answer to every thing which Mr. Maitland and others have advanced upon that subject. With a particular account of the late Miss Rolt's case, as attested under the hand of the honourable Mrs. Rolt, her mother*. London, 1724.

Hume-Rothery, Mary C. "The Exceeding Wickedness of the Compulsory Vaccination Law and of other Medical Legislation Connected to it." *The Anti-Compulsory-Vaccination Reporter*. January 1, 1879, vol. 3, no. 2.

King, George. "Compulsory Vaccination." *Association Medical Journal*, vol. 1, no. 10, 1853, pp. 224. JSTOR, <https://www.jstor.org/stable/25494466>

Lettsom, John Coakley. *An address, to parents and guardians of children, and others, on variolous and vaccine inoculations*. J. Nichols and Son for J. Mawman, London, 1803.

Lewis, Michael. "Pictures of Revolutionary Reform in Carlyle, Arnold, and *Punch*." *Nineteenth-Century Contexts*, vol. 34, no. 5, Nov. 2012, p. 533-552.

Lobo, Francis M. "John Haygarth, Smallpox and Religious Dissent in Eighteenth-Century England." *The Medical Enlightenment of the Eighteenth Century*. Eds. Andrew Cunningham and Roger French. Cambridge University Press, 1990, pp. 217-235.

Maitland, Charles. *Mr. Maitland's ACCOUNT OF Inoculating THE SMALL POX*. J. Downing, London. 1722.

Mead, Richard. *A Short Discourse Concerning Pestilential Contagion, and the Methods to be used to Prevent it*. London, 1720.

Miller, Edward. *An Attempt to Deduce a Nomenclature of Certain Febrile and Pestilential Diseases from the Nature and Origin of their Remote Causes*, p. 362. New York, 1804.

Miller, Genevieve and Arthur Silverstein. "The Royal Experiment on Immunity: 1721-1722." *Cellular Immunology*, no 61, 1981, pp. 437-447.

Miller, Genevieve. "Putting Lady Mary in Her Place: A Discussion of Historical Causation." *Bulletin of the History of Medicine*, vol. 55, no. 1, 198, pp. 2-16.

The new practice of inoculating the small-pox consider'd, and an humble application [sic] to the approaching Parliament for the regulation of that dangerous experiment. T. Crouch & A. Dod, London, 1722.

Pattern, Robert. *George Cruikshank: Life, Times, and Art vol. 1 1792-1835.* Rutgers, 1992.

Pye, George. "A Discourse of the Plague Wherein Dr. Mead's Notions are Consider'd and Refuted." London, 1722.

Rothery, William. *Vaccination and the Vaccination Laws: a physical curse and a class-tyranny.* United Kingdom, W. Tolley, 1872.

Smith, Joseph Mather. "Elements of the Etiology and Philosophy of Epidemics." *Medico-Chirurgical Review*, vol. 3, no.5, 1825, pp. 62-87.

The Temperance Spectator, vol. VI. January-December, 1864. Job Caudwell, London.

U.K. Parliament. *An Act to extend the Practice of Vaccination.* House of Commons, 24 March, 1840.

U.K. Parliament. *A Bill to Amend an Act to Extend the Practice of Vaccination.* House of Commons, 7 May, 1841.

U.K. Parliament. *An Act further to extend and make compulsory the Practice of Vaccination.* House of Commons, 5 May, 1853.

The United States Literary Gazette, vol. 1. "Elements of the Etiology and Philosophy of Epidemics. In two Parts. By Joseph Mather Smith, M.D., Fellow of the College of Physicians and Surgeons of the University of the State of New York. New York. 1824. Pp. 223". Cummings, Hilliard, and Co., Boston, 1825, pp. 215-217.

The Vaccination Inquirer and Health Review, vol. 4, no. 46, January 1883, pp. 151.

Wang, Fuson. "Romantic Disease Discourse: Disability, Immunity, and Literature." *Nineteenth Century Contexts*, vol. 33, no.5, Nov. 2011.

West, Gillian. "Bleak House: Esther's Illness." *English Studies*, vol. 73, no. 1, pp. 30-34, 1992.

Wilson, Adrian. "The Politics of Medical Improvement in Early Hanoverian London." *The Medical Enlightenment of the Eighteenth Century*. Eds. Andrew Cunningham and Roger French. Cambridge University Press, 1990, pp. 4-39.