During the second half of the nineteenth century, the medical profession in America began to transform itself from a motley group of practitioners—registering remarkably disparate levels of education, expertise, and credibility—into a cohesive and exclusive body, enjoying ever-increasing status and income and solidifying what social historians have termed their “professional sovereignty” within the larger culture. The concomitant appearance of numerous novels and stories preoccupied with the figure and the business of the doctor suggests that these texts from the late nineteenth and early twentieth centuries not only documented but also intervened in the professionalization of medicine. *Scientific Methods* juxtaposes literary texts with non-literary documents and with material culture in order to determine the nature and the extent of these interventions and to delineate competing narratives within the history of medicine.

By interrogating a range of professional performances represented in American fiction between 1880 and 1940, *Scientific Methods* establishes a complementary narrative to accounts of medical professionalization constructed by social historians. Although social historians have managed to destabilize the master narratives of scientific progress elaborated by the physician-historians of the nineteenth and twentieth centuries, their investigations into the history of professionalization still center on physicians in conflict with each other and in thrall to science and technology, neglecting public perceptions of the professionalization process. Literary representations of this process, on the other hand, chart the ways in which popular understandings of the figure and the business of
the physician arose and circulated, elucidating points of accord and disparity between professional ideologies and lived experience and exposing the dynamics of power between doctors and patients. These fictions of medical professionalization both reflected and produced beliefs; thus they stand as essential tools for understanding the consolidation of authority around doctors. In addition, I utilize a diverse range of archival materials—from hospital records to WPA posters—to complicate my readings of these fictional engagements with the professionalization process and to illuminate the relationship of literature to other cultural domains.

I argue that this textual sequence recasts the pursuit of professionalism and the gradual consolidation of cultural authority around doctors as a constant tension between the discipline of self—as the popularity of nineteenth-century “conduct books” for physicians demonstrates—and the discipline of Others. Lacking pervasive cultural authority at the end of the nineteenth century, doctors concentrated upon cultivating professional identity through professional “pantomimes” that simultaneously demonstrated their mastery of specialized knowledge and of middle-class social norms. Eventually, these professional “pantomimes” migrated from the stage of community practice to the arena of eminently consumable, ubiquitous popular entertainments such as radio programs and public art. This movement coordinates with an increasing amount of cultural authority and a decreasing need for individual self-discipline within the profession, and with doctors—a group overwhelmingly white, middle-class, and male—feeling freer than ever to visit spectacular and invasive violence upon the raced, class, and gendered bodies of Others. These disciplinary measures include the exclusion or
removal of nonwhite male and white female practitioners from the medical profession, elaborated in Frank Norris’s *McTeague*; human experimentation by the single-minded “microbe hunters” on southern populations during the interwar period, romanticized in Sinclair Lewis’s *Arrowsmith*; and eugenic pressure exerted on poor women by the Depression-era discourses of public health, critiqued by Tillie Olsen’s *Yonnondio* and Meridel LeSueur’s *The Girl*. Yet far from reflecting an idealized vision of the medical professional, replete with cultural authority, these narrations of disciplinary events reveal doctors threatened by incursions by nonwhite and female practitioners, defeated by their own experimental protocols, and agitated by the unlimited reproduction of the working class.
SCIENTIFIC METHODS: AMERICAN FICTION AND
THE PROFESSIONALIZATION OF
MEDICINE, 1880-1940

by
Deidre Dallas Hall

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CHAPTER I
INTRODUCTION

In a tremendously popular 1903 conduct book, Dr. D.W. Cathell urges American physicians to “make your profession the chief object of your life, and avoid extraneous pursuits and a multiplicity of callings,” including literary avocations such as “scribbling poetry” (30). Despite these cautions, The Book of the Physician Himself is a text preoccupied with the power of the sign. Claiming that “the physician’s life is like a pantomime,” Cathell attempts to school fellow practitioners in the performance art of medicine.

With extraordinary calculation, Cathell explains that developing an aura of professional authority sufficient to attract and retain patients depends not only upon medical skill but also upon the deft manipulation of rhetorical registers. Specifically, Cathell contends that doctors should cultivate an air of gentility: “the majority of people will employ a physician with a genteel appearance and manners, of equal or even inferior talent, more readily than a slovenly, rough-bearded one; they will also accord to him more confidence, and expect from and willingly pay to him larger bills” (30). This concern with the relationship between lovely manners and “larger bills” links Cathell’s text to a number of nineteenth-century conduct books, particularly those directed towards aspiring businessmen. Like the businessmen’s manuals that denounce a lack of
entrepreneurial energy as a moral failure, Cathell’s text positions the pursuit of larger bills as strategic and obligatory. Cathell deplores the gentlemen in the ranks of our profession who are perfectly acquainted with all the scientific aspects of medicine, and can tell you what to do for almost every ailment that afflicts humanity, who, nevertheless, after earnest trial, have failed to achieve reputation or acquire practice simply because they are deficient on the personal side, and lack the professional tact and business sagacity that would make their other qualities successful; and there is nothing more pitiful than to see a worthy aspirant, deficient in these respects, waiting year after year for practice, and a consequent sphere of professional usefulness, that never come. (1)

The true professional, then, must build a thriving practice by demonstrating a mastery not only of specialized knowledge but also of social nuance, lest he join the ranks of those “pitiful” practitioners obliviously squandering their “professional usefulness.”

Thus to the basic definition of “professionalism”—uniting a group of workers with similarly specialized knowledge through the institution of uniform licensing standards, exclusive professional organizations, and binding ethical codes—Cathell adds the necessity of professional “performance,” both economic and social.

Accordingly, the staging of the financially savvy physician’s office must strike an appropriately “medical tone”: “quackish displays” of grinning skulls, amputated extremities, and the “unripe fruit of the uterus” should be avoided; “coarse habits,” such as using bones for paperweights, should be abandoned (8-9). However, a working microscope within view will “not only bring fees and lead to valuable information regarding your patient’s condition, but will also give you popularity and professional respect, by investing you, in the eyes of the public, with the benefits of a scientific
reputation” (145). Strategically deployed ephemera can elaborate that reputation and suggest the practitioner’s place in a lineage of medical accomplishment and innovation. In addition to diplomas, certificates, and “anything else that tells of your mental and physical prowess in earlier days, or is especially associated with your medical studies and career,” a “galaxy of small pictures of medical celebrities—Hippocrates, Galen, Harvey, Gross, Pasteur, or whomever else you especially admire—may be grouped on the office walls by the dozens or hundreds” (9-10). The physician must manage his personal appearance with the same care, minding every detail from clothing to countenance.³ Beards, for example, can lend gravitas to younger faces, while “suitable dress” and “enforced cheerfulness” can offset a “vinegar-like visage” (70). Still, physicians must maintain a certain reserve: Cathell reminds readers not to “handshake and harmonize with the coarse, ignorant, and unappreciative indiscriminately, for undue familiarity shears the thoughtless physician of both influence and prestige” (13). Essentially, physicians should strive to mold themselves into the mirror images of their “genteel” middle-class patients by constructing complex medical mises en scène that telegraph a sense of discreet quality, of understated refinement.⁴ All of this styling and posturing, this pantomiming, unfolds for the benefit of a “foxy public” with eyes “like microscopes,” intent on scrutinizing every nuance of the practitioner’s appearance and behavior, both in and out of the office, “in order to arrive at a true verdict” of professional worth (15-16).

Cathell’s deference to that “foxy” public—as well as his mercenary attitude towards the practice of medicine—attests to the unstable situation of the medical profession in late nineteenth- and early twentieth-century America. From earliest days,
frontier life had made reliance on a nearby doctor difficult or impossible, and trained “regular” physicians had faced significant competition from untrained “irregular” practitioners touting alternative therapies; from resourceful housewives armed with reference books such as the classic Domestic Medicine (1771); and from Native healers. Later, though, a more settled but still defiantly self-reliant population refused to turn away from these competing practices. A sweeping nationwide repeal of medical licensing laws during the 1830s and 40s—a Jacksonian effort to legitimize practitioners boasting experience but lacking education—reflected this reluctance to privilege professional expertise over homespun wisdom. More importantly, these repeals enabled virtually unrestricted entry into medical practice. In this deregulated atmosphere, variously motivated “lay healers,” from local sages to homeopathic sects with national followings and organized schools, as well as opportunistic charlatans flourished. By mid-century, the profession was in chaos. Concerned physicians responded by forming the American Medical Association (AMA) in 1847, but despite their persistent lobbying, the widespread reinstatement of licensure laws, as well as the national standardization of medical education, that would initiate the long and complicated process of rebuilding public confidence in the specialized knowledge of trained physicians did not occur until the last two decades of the nineteenth century. Cathell’s text demonstrates that the struggle for professional authority—for status and income, as well as for the cultural capital necessary to shape public behavior on a wide scale—continued well into the twentieth century.
Concentrating on the years between 1880 and 1940, *Scientific Methods* uses selected works of American fiction, juxtaposed with non-literary texts and with material culture, to illuminate that struggle. It extends and contests previous work by literary critics who have concluded that for regular physicians vying with irregular practitioners for expert status, with all of its attendant benefits, “the battles were over” by 1900 (Browner 2). In particular, *Scientific Methods* responds to Cynthia Davis’s *Bodily and Narrative Forms: The Influence of Medicine on American Literature, 1845-1915* (2000) and to Stephanie Browner’s *Profound Science and Elegant Literature: Imagining Doctors in Nineteenth-Century America* (2005). Davis’s insightful readings explore the ways in which the formal conventions of the nineteenth century modified literary translations of medical and scientific beliefs. Though integral to her project, medical professionalization is not Davis’s sole concern. More problematically, *Bodily and Narrative Forms* posits 1845 and 1915 as the boundary dates of the professionalization of medicine in America, even though social historians have located the end of that process between 1930 and 1940 and have identified important moments of internal crisis throughout the era. This discrepancy cannot be ignored, especially since significant—sometimes revolutionary—experimentation in both medicine and literature continued apace between 1915 and 1940.

While Stephanie Browner’s *Profound Science and Elegant Literature* does focus exclusively upon literary representations of medical professionals, she truncates the era of professionalization even more sharply than Davis. Browner contends that by 1900, physicians were “widely venerated” and insists that monumental paintings such as
Thomas Eakins’s *The Gross Clinic* and *The Agnew Clinic* “testify to the prestige accorded the professional doctor by the end of the nineteenth century” (2). However, such totalizing statements minimize the uneven progress, particularly as shaped by regional disparities, of medical professionalization in America: even as *The Gross Clinic* offered a glimpse of medical training in Philadelphia—traditionally a national stronghold of allopathic expertise—in the 1870s, other states lacked fundamental medical practice laws establishing minimum standards for education and licensing and provided safe haven for unscrupulous operators.10 In those places, the “professional doctor” was one of many kinds of practitioners competing for patients. And as Cathell’s *The Book of the Physician Himself* attests, the professional doctor would need to continue deferentially “performing” for a fickle public well after 1900.

By interrogating a range of professional performances represented in American fiction between 1880 and 1940, my study establishes a complementary narrative to accounts of medical professionalization constructed by social historians. Although social historians have managed to destabilize the master narrative—the triumphant march of scientific progress—elaborated by the physician-historians of the nineteenth and twentieth centuries, their investigations into the history of professionalization center on physicians in conflict with each other and in thrall to science and technology, neglecting public perceptions of the professionalization process.11 Literary representations of this process, on the other hand, chart the ways in which popular understandings of the figure and the business of the physician arose and circulated, elucidating points of accord and disparity between professional ideologies and lived experience and exposing dynamics of
power between doctors and patients. These fictions of medical professionalization both reflected and produced beliefs; thus they stand as essential tools for understanding the consolidation of authority around doctors. In addition, I utilize a diverse range of archival materials—from hospital records to WPA posters—to complicate my readings of these fictional engagements with the professionalization process and to illuminate the dynamic relationship of literature to other cultural domains.

I argue that this textual sequence recasts the pursuit of professionalism and the gradual consolidation of cultural authority around doctors as marked by a constant tension between the discipline of self—as the popularity of Cathell’s guide demonstrates—and the discipline of Others. Lacking pervasive cultural authority at the end of the nineteenth century, doctors concentrated upon cultivating professional identity through professional “pantomimes” that simultaneously demonstrated their mastery of specialized knowledge and of middle-class social norms. Eventually, these professional “pantomimes” migrated from the stage of community practice to the arena of eminently consumable, ubiquitous popular entertainments such as radio programs and public art. This movement coordinates with an increasing amount of cultural authority and a decreasing need for individual self-discipline within the profession, and with doctors—a group overwhelmingly white, middle-class, and male—feeling freer than ever to visit spectacular and invasive violence upon the raced, class, and gendered bodies of Others. These disciplinary measures include the exclusion or removal of nonwhite male and white female practitioners from the medical profession, elaborated in Frank Norris’s *McTeague*; human experimentation by the single-minded “microbe hunters” on southern
populations during the interwar period, romanticized in Sinclair Lewis’s *Arrowsmith*; and eugenic pressure exerted on poor women by the Depression-era discourses of public health, critiqued by Tillie Olsen’s *Yonnondio* and Meridel LeSueur’s *The Girl*. Yet far from reflecting an idealized vision of the medical professional, replete with cultural authority, these narrations of disciplinary events reveal doctors threatened by incursions by nonwhite and female practitioners, defeated by their own experimental protocols, and agitated by the unlimited reproduction of the working class.

*Professionalization and Specialization*

Historians identify the formation of the AMA as the beginning of medical professionalization in America, but I have set the temporal parameters of my study at 1880 and 1940 for several reasons. First, although state and local medical societies had been working and lobbying for the return of licensure laws—laws that would require all medical practitioners to register with local boards and to prove competence, either by experience or education—since the 1850s, state legislatures would not begin to cooperate in numbers for another thirty years. However, the legal removal of the untrained and the unethical (and often, the uncouth) from the field catalyzed the professionalization process, while reifying class privilege by directing revenue streams towards regular practitioners. Second, the 1880s ushered in a sea change in the conceptualization of disease. During this so-called “golden age of bacteriology,” the formulation of germ theory and the isolation of pathogenic microbes responsible for many of the major diseases of the nineteenth century, including tuberculosis, cholera, typhoid, and
diphtheria, as well as the development of corollary therapies, cast a new kind of scientific legitimacy over the medical profession and enabled a powerful alliance between doctors, scientists, and the nascent apparatuses of public health. With the creation of a national Public Health Service in 1912 and the initiation of numerous “crusades” against contagious diseases, this alliance, and its influence over public behavior, only strengthened during the interwar period; by the 1930s, the professionalization of medicine—and the consolidation of its cultural authority—was largely complete.

This fundamental change in the conceptualization of disease encouraged medical specialization as the revelations of the laboratory continually suggested new areas of inquiry. Similarly, advances in medical technologies over the last half of the nineteenth century supported the growth of specialized practices. Better anesthetics freed doctors to focus on precision rather than on speed during surgical procedures, and diagnostic tools such the ophthalmoscope and the laryngoscope allowed deeper exploration of isolated areas of the body. The phenomenon of specialization itself, however, stands as “testimony to the increasing receptivity of the American public to claims to authority based on special knowledge” (Warner and Tighe 196). Although the fierce individualism that shaped American life throughout much of the nineteenth century was antithetical to the “undemocratic” notion of a privileged group (other than the clergy) holding special knowledge and proscribing behavior, Americans warmed to the notion when accelerated urbanization and economic downturns triggered a cascade of social problems during the last quarter of the nineteenth century. In this troubled climate, a new group of middle-class professionals—doctors, lawyers, social workers, teachers, engineers, businessmen,
and more—differentiated into and united within fields by their special knowledge, exclusive organizations, and ethical standards, emerges.¹³

A Question of Vital Interest

As the literary form most associated with the development of the middle class—the professional class—and with the promulgation and the naturalization of their values, novels must be considered essential participants in the discourse of medical professionalization between 1880 and 1940. The concomitant appearance of numerous novels preoccupied with the figure and the business of the doctor suggests that these texts from the late nineteenth and early twentieth centuries not only documented but also intervened in the professionalization of medicine.

In his 1901 essay “The Responsibilities of the Novelist,” Frank Norris recognized the power of the novel not only to reflect but also to infiltrate and to modify the American consciousness. Norris describes that historical moment as “the day of the novel” and imagines that critics and historians attempting to reconstruct the era in future would look “to the novelists to find our idiosyncrasy” (Responsibilities 5). Anticipating our modern notion of “cultural work,” Norris argues that the novelists have displaced the clergy and the press as social arbiters:

The Pulpit, the Press, and the Novel—these indisputably are the great moulders of public opinion and public morals to-day. But the Pulpit speaks but once a week; the Press is read with lightning haste and the morning news is waste-paper by noon. But the novel goes into the home to stay. It is read word for word; is talked about, discussed; its influence penetrates every chink and corner of the family. (10)
That “influence” is a force of illumination and inspiration: Norris claims that for “the Million, Life is a contracted affair, is bounded by the walls of the narrow channel of affairs in which their feet are set. They have no horizon. They look to-day as they have never looked before, as they will never look again, to the writer of fiction to give them an idea of life beyond their limits” (9). Even if his dual assessment of the tremendous power of the novel and of the quotidian limitations of “the Million” is skewed both by his personal investment in novel writing and by his deep reading in the pessimistic theories of naturalism, Norris underscores the importance of narrative as “an instrument, a tool, a weapon, a vehicle” for understanding past experience and for shaping future action (6).

Accordingly, the responsibilities of the novelist to “the Million” are great. Like the other realists discussed in Scientific Methods, Norris believes that the novelist has an obligation to bring social problems to the attention of his or her readership. He maintains that the “people who buy novels are the well-to-do people. They belong to a class whose whole scheme of life is concerned solely with an aim to avoid the unpleasant. Suffering, the great catastrophes, the social throes, that annihilate whole communities, or that crush even isolated individuals—all these are as far removed from them as earthquakes and tidal-waves.” Fiction miraculously opens “blind eyes” to “the sufferings of the poor, the tragedies of the house around the corner” (Responsibilities 31).

Though he contends that formal qualities have little effect on the relative “influence” of the novel, Norris—along with the other novelists under consideration
here—nonetheless embraces realism as an especially appropriate mode for narrating the process of medical professionalization. Norris privileges the notion of “vital interest”:

It is not now a question of esthetic interest—that is, the artist’s, the amateur’s, the cognoscente’s. It is a question of vital interest. Say what you will, Maggie Tulliver—for instance—is far more a living being for Mrs. Jones across the street than she is for your sensitive, fastidious, keenly critical artist, litterateur, or critic. The People—Mrs. Jones and her neighbors—take the life history of these fictitious characters, these novels, to heart with a seriousness that the esthetic cult have no conception of. The cult consider them almost solely from their artistic sides. The People take them into their innermost lives” (Responsibilities 8).

However, in realistic representations of medical professionalization, “esthetic interest” and “vital interest” merge. The literary realism and the professionalized medicine of the late nineteenth century have been conceived in analogous terms, with critics noting the similarities between the dispassionate diagnostic gaze of the physician and the cool appraising eye of the narrator, each “dissecting” and explicating an interior reality. Lars Åhnebrink reminds us that the French naturalist Émile Zola looked to scientist Claude Bernard’s Introduction to Experimental Medicine (1865) for guidance in formulating the tenets of “a literature governed by science”; by “substituting for the word ‘doctor’ the word ‘novelist,’ he could make his meaning clear and give to the work the rigidity of a scientific truth”—the truth that would authorize all the nascent professions (Beginnings 22-23).
Rationale and Methodology

The considerable number of novels from the late nineteenth and early twentieth centuries concerned with medical professionalization present substantial opportunities for examining the phenomenon from different theoretical perspectives and for teasing out diverse discursive strands. In addition to sharing a commitment to realism, the novels discussed in *Scientific Methods* represent and encapsulate key moments of contestation and renegotiation on the timeline of professionalization, from the initial enforcements of standards of practice, to the revolutionary advent of scientific medicine, to the eventual maintenance of cultural authority. Furthermore, the selected texts underscore how professionalization manifested differently not only according to historical moment but also according to geographic region. These texts also highlight—sometimes intentionally and sometimes inadvertently—the gender politics of medical professionalization; they interrogate the relationship of changing standards of masculinity to the necessity of professional “performance” particularly well. Finally, as these texts trace the movement of those performances from individual encounters to mass entertainments, they predict the embattled situation of doctors today.

Revisiting representations of medical authority and professional formation in American literature takes on a particular urgency in the face of recent changes not only in how the public views and uses doctors, but also in how doctors think of themselves and their profession. General practitioners in particular, overworked and underpaid relative to their specialist peers, operate under a kind of “siege mentality”; doctors across the spectrum of practice describe patients as second-guessing and non-compliant. Patients
themselves confess to self-diagnosing via the internet. These changes, triggered by the compromises of managed care and exacerbated by the availability of health information online, mark a significant erosion in the cultural authority of doctors—perhaps the first major decline since the 1930s—and an ongoing redefinition of the doctor-patient relationship. At the same time, we face unprecedented challenges in making health care accessible and affordable to raced and classed populations and in ensuring that gender bias does not influence research and treatment agendas.

As it considers literary engagements with the professionalization process, this study entertains multiple senses of “discipline” at once: here the formation of a professional discipline was assisted by the physical discipline of other raced, classed, and gendered bodies. Yet professionalization insisted on a goodly measure of self-discipline as well, with numerous doctors forced to follow D.W. Cathell’s example, meticulously molding themselves to curry favor with an unpredictable public. Obviously, the writings of Foucault provide invaluable insight into the evolution and maintenance of disciplinary formations, but my work draws from numerous fields, including history, sociology, art history, and cultural studies in order to offer the fullest measurement of the cultural work accomplished by literature. Thus I appreciate Margaret Lock and Judith Farquhar’s flexible formulation of the lived body as a complex, incompletely charted “hybrid terrain” of “practices, discourses, images, institutional arrangements, and specific places and projects” (1).
Overview

My first chapter reads Frank Norris’s *McTeague* (1899) as simultaneously justifying the removal of a raced and classed rogue practitioner from the medical field and initiating a broader critique of medical professionalization. I identify a new source for the character of McTeague in contemporaneous newspaper coverage of a notorious “criminal midwife,” but I argue that Norris’s imaginative leap from female abortionist to male dentist both acknowledges the remarkable concentration of licensed medical women in San Francisco and enables *McTeague* to register ambivalence towards the process of medical professionalization by comparing the unprofessional behavior of the novel’s only licensed practitioner to the quasi-professional efforts of the unlicensed autodidact McTeague. However, I position Norris’s next novel, the autobiographical romance *Blix* (1899), which offers a middle-class woman as the ideal medical professional, as a kind of corrective to the ambivalences of *McTeague*. I contend that the expansive hybridity of *Blix* highlights the constraints of naturalism, the formal restrictions that mirror the exclusionary movement described in *McTeague*.

After “cleansing” the field of unqualified practitioners, the medical profession concentrated upon defining themselves in relation to technological advances. My second chapter considers how Sinclair Lewis’s *Arrowsmith* (1925) provides an encapsulated history of the effect of laboratory-based “scientific medicine” on the professionalization process during the first decades of the twentieth century. Insisting on medicine as a white male domain through the relentless deployment of tropes of interwar masculinity, this novel represents women and Others as disruptive to laboratory research, a strategy which
backfires when doctor-scientists are called upon to fight plague in the tropics. I connect the imperial attitudes directing this “tropical fiasco” to some similarly unpredictable human experimentation in the American South and show how the purveyors of a disciplinary discourse might themselves be disciplined. Furthermore, I argue that just as Arrowsmith loses control of his tropical experiment, Lewis loses control of both the form and the content of his text: his satire yields to sentimentality as his attempt to construct a glorious narrative of scientific progress represents the doctor-scientist as frustrated and vulnerable. The nearly immediate appearance of *The Microbe Hunters*, co-author Paul de Kruif’s rough-and-tumble, hypermasculine “history” of scientific medicine attests to the “failure” of *Arrowsmith*.

Via two proletarian novels composed in the 1930s, my third chapter investigates the effort required by the profession to maintain the cultural authority won during the institutionalization of scientific medicine. These novels show doctors becoming essential mediators in the exchange of labor by exerting eugenic pressure on working-class women. Tillie Olsen’s *Yonnondio* suggests how contact with public health posters changes the subjectivity of poor women, leading them to redefine themselves as “unfit” mothers and limiting their own reproductivity accordingly. Meridel LeSueur’s *The Girl* describes women self-segregating from the public health system when threatened with involuntary sterilization and turning instead to untrained working-class men for reproductive care. I argue that these men are “playing doctor,” impersonating the countless doctor characters featured in 1930s radio programs. I explore the implications of representing working-class men and women as consumers as well as producers.
In the conclusion, I consider the urgency of revisiting disciplinary measures against raced, classed, and gendered bodies as we face today the formation of a “bio-underclass” lacking adequate medical care. Furthermore, we are witnessing a fundamental shift in the way that the public perceives the authority of physicians. Increasing numbers of Americans register a lack of confidence in their doctors and admit to self-diagnosing and second-guessing medical opinions by tapping online resources. As I argue in my second chapter, technology has heretofore generally served to bolster the authority of doctors. The current shift in perception wrought by information technology, uncannily evoking Cathell’s concerns about scrutinizing patients with eyes “like microscopes,” indicates a changing balance of power between doctor and patient.
The Book on the Physician Himself appeared in numerous editions and reprints from the 1880s through the 1920s. Here I am drawing from the expanded “Twentieth-Century Edition” of 1903, which Cathell revised with the help of his physician son.

Titles such as The Physician’s Business and Financial Adviser (1900) by Dr. C.R. Mabee make this connection even more explicitly than The Book on the Physician Himself. Businessmen’s manuals like Freeman Hunt’s Worth and Wealth (1856) insist that the vigorous and dauntless pursuit of financial success is a “right use of the gifts He has bestowed” (27). See Kimmel (26).

I use the pronoun “his” here because although Cathell indirectly acknowledges the existence of women in medicine (albeit as outsiders) by authorizing consultations with “foreigners, female M.D.s, colored physicians, or any other regular practitioners,” The Book on the Physician Himself is—as its title would suggest—exclusively directed towards a (white) male audience (265).

Cathell contends that middle-class patients are even more desirable than their upper-class counterparts. The former offer prompt payment and loyal patronage, while the latter tend to be more temperamental and demanding (371-2).

William Buchan’s Domestic Medicine was published in Edinburgh in 1769 and in Philadelphia in 1771. This medical reference remained a best-seller until the appearance of John Gunn’s Domestic Medicine in 1830.
“Training” assumed many forms prior to the twentieth century. As I note in my second chapter, due to the uneven quality of medical schools, completion of a medical course did not guarantee competency; at the same time, there were many skilled practitioners who had learned solely through apprenticeship. I am attempting to draw an admittedly imperfect distinction here between those practitioners who sought, through whatever method, to cultivate special knowledge and to practice in a manner that conformed (or would have conformed) to the Code of Ethics eventually adopted by the AMA, and those practitioners, whether autodidacts or charlatans, who lacked the special knowledge possessed by the rest of the field and who operated in violation of the Code of Ethics.

6 These repeals were passed on a state-by-state basis. See Baker’s comprehensive review of changes in state licensure laws.

7 In addition to the regular, or allopathic, physicians, competing medical “sects” included the homeopaths; the Thomsonians, who espoused a system of treatment featuring botanical medicines; and the “eclectic” group, which included hydropaths, who endorsed a range of water therapies. In many states, initial legislation merely removed untrained charlatans, but preserved the right of these sects to practice and established separate medical licensing boards for the allopaths and for each of the competing sects. The regulars of the AMA battled for many years over the appropriateness of consulting with sectarians. See Kett (97-164); Rothstein (125-246); and Starr (93-102).
I take my notion of “authority” from Starr’s formulation (9-17). Also see Kett (1-96); Rothstein (68-121); and Starr (30-59) on American medicine in the nineteenth century.

In his seminal *The Social Transformation of American Medicine* (1982), for example, Paul Starr traces the consolidation of authority within the medical profession between 1850 and 1930. Markowitz and Rosner argue that vast numbers of private practitioners “who clung to an individualistic, small, isolated, competitive” business model remained “in crisis” as late as 1915 as AMA reformers sought to modernize the profession (200). Warner and Tighe wonder if laypersons at times resisted medical opinion, “particularly when the health professional’s influence manifested itself as advice that had taken on the more preemptory tone of a command” during the so-called “medicalization of American life” in the early twentieth century (317-48).

Furthermore, Davis’s study is heavily weighted towards the nineteenth century. Aside from a discussion of some race novels clustered closely around the turn of the twentieth century, Davis’s study includes only one critical foray beyond 1900, a discussion of Gilman’s *Herland* (1915).

See Robert Hughes’s *American Visions* (294-5) and Amy Werbel’s *Thomas Eakins: Art, Medicine, and Sexuality in Nineteenth-Century Philadelphia* for discussion of Eakins’s complex artistic aims as well as the negative public reaction to *The Gross Clinic*.

See Reverby and Rosner’s “Beyond ‘The Great Doctors.’”
See Rothstein (207-16), who also emphasizes the role of medical societies and specialty hospitals, as well as market conditions, in the growth of specialties.

See Bledstein’s *The Culture of Professionalism: The Middle Class and the Development of Higher Education in America* and Haber’s *The Quest for Authority and Honor in the American Professions, 1750-1900*. Also see Kirschner (1-26; 53-77).

Also see Richard Lehan’s “The European Background.”

Although mid-1980s fears of legions of “crack babies” have been dispelled as scientifically unsound as well as experientially baseless, different versions of the notion of a so-called “bio-underclass,” supposedly created by prenatal damage wrought by impoverished mothers, have continued to circulate. I use this term differently to call attention to the moral and practical problems of ignoring issues of access to and affordability of health care for all populations.
CHAPTER II
DEFINING PROFESSIONAL FITNESS IN McTEAGUE AND BLIX

Frank Norris’s McTeague: A Story of San Francisco (1899) follows the rise and fall of a rough son of the California mines, from his youthful apprenticeship to an itinerant dentist to his eventual expulsion from the medical profession. Although McTeague’s credentials—a few years observing “the charlatan” at work, and a desultory reading of the seminal texts—might have sufficed during the wilder days of the Gold Rush, new medical practice laws passed by the California legislature beginning in the 1870s rendered such training inadequate (2). Abruptly barred by local officials from unlicensed practice, McTeague slides into degeneracy—a downward spiral that ends in spousal murder. In this naturalistic text, McTeague’s terrible fall, triggered by his banishment from the medical profession, dramatizes the supposed inability of a particular type of human to adapt to a rapidly changing, increasingly technological world.¹

According to the tenets of criminal anthropology set forth by the Italian social scientist Cesare Lombroso in the late nineteenth century, violence is inevitable when this incompletely evolved type—the “born criminal,” marked by so-called “atavistic stigmata”—confronts the strictures of society. Norris, familiar with these ideas, gives McTeague “the protruding jaw, square head, and alcoholic intolerance of the Lombrosian criminal” (Pizer, Novels 60).² Moreover, the novel draws liberally from the details of a notorious San Francisco murder: the brutal stabbing of Sarah Collins, a local charwoman,
by her laborer husband. In their sensational narrative re-creations of the crime, the San Francisco newspapers—freely, if perhaps unscientifically, deploying Lombrosian theory—simultaneously criminalized and racialized the accused, declaring him “born for the rope,” while locating his volatility and intemperance in his Irish heritage (“He”). Similar racialization in the novel recasts the textual expulsion of McTeague from medical practice as an exclusion not only of the inadequately credentialed but also of the ethnically suspect—a kind of “double judgment” that reflects and endorses certain exclusionary pressures within the medical profession at the end of the nineteenth century.

Critical focus on the Collins case as the primary source informing the construction of *McTeague* has largely obscured the possibility of other intertextual relationships (beyond Norris’s well-documented affinity for French naturalism). Yet I contend that contemporaneous news reports regarding the “peculiar career” of notorious abortionist Belinda Laphame exerted at least equal influence on character and plot development in *McTeague*. Reading Norris’s text with Laphame’s exploits in mind allows questions of gender, in addition to those of ethnicity and class already raised by the racialized figure of the autodidact McTeague, to complicate the novel’s commentary on professional fitness. I claim that Norris resists the easy demonization of a female irregular not only in deference to the remarkable concentration of trained and licensed medical women operating in San Francisco, but also in pursuit of a broader critique of medical professionalism. Ultimately, *McTeague* registers ambivalence towards the process of medical professionalization: even as it seems to support the removal of the inadequately credentialed from the field, the novel suggests the difficulty of accurately evaluating
professional fitness as the unseemly “performances” of McTeague’s foil, the fully licensed “Other Dentist,” narrow the conceptual gap between the two figures.

However, I argue that Norris’s *Blix* (1899), a short novel that appeared only months after *McTeague*, resolves that ambivalence; in fact, I position *Blix* as a kind of corrective to *McTeague*. In this autobiographical romance centered around a newspaperman-novelist and a society girl turned medical student, Norris redefines professional fitness, proposing a new breed of woman as the ideal physician. In addition to offering a new model of professional fitness, *Blix*’s hybrid form provides a counterpoint to the strict naturalism of *McTeague*. The formal elasticity of *Blix* exposes the limits of naturalism as a representational strategy by reminding us of the ways in which *McTeague* enacts the exclusions that it describes.

I. “An Army of Incompatibles”: Medical Practice in Early California

As the story of an autodidactic dentist operating in 1890s San Francisco, *McTeague* represents an historical moment when unspecialized medical practice, as well as the dual designation of “doctor-dentist,” was common, especially in the less developed areas of the country. Thus the professional trials of the dentist offer essential insight not only into the bureaucratic mechanics of professionalization for a range of practitioners but also into the subsequent movement towards medical specialization, particularly as inflected by regional difference. In many ways, medical professionalization in California mirrored the same process in other sections of the country, with trained doctors banding
together into medical societies and determining qualifications for professional membership, followed at some lag by state legislatures criminalizing unqualified practice; however, in California, the drama and the lucre of the Gold Rush raised the stakes of medical professionalization considerably. Among the 300,000 prospectors rushing to northern California in the late 1840s and early 1850s were a number of medical practitioners who would not only seek their fortunes but also ply their trade in the mining camps and in the new city of San Francisco—whose population increased from 400 to 40,000 between 1847 and 1849 (“Prelude”).

Like James Reed, M.D., who arrived in 1849 and carried mining implements as well as a medical kit and dental instruments with him out to the camps, many felt equally “prepared for the practice of medicine, dentistry, or mining” (191). Listings for San Francisco proper in 1852 show 57 physicians, 9 dentists, and 7 “dentist-physicians” (Harris 292). Competencies, however, varied widely: while a few possessed M.D. or D.D.S. degrees from eastern schools, many others lacked formal training.

Attempts to regulate this motley group of legitimate and illegitimate medical practitioners who had succumbed to “gold fever” and migrated to California—perhaps as many as 1,500 during the peak of the rush—quickly followed statehood in 1850 (Harris 86).

Declaring that “the time has come for medical men of the Pacific Coast to turn their attention to the elevation of the profession,” the founding members of the California State Medical Society gathered in Sacramento in 1856 (“Preamble”). With membership limited to degreed physicians, the state society denounced the rampant quackery that “like a strong tide has hitherto overflown our State” (Cooper). However, the state medical
society and similar organizations lacked any power to criminalize substandard care; they
could only try to reinforce publicly the distinction between a degreed professional and an
unqualified—and potentially dangerous—irregular.

Quacks, from uneducated persons impersonating qualified practitioners to simple
hucksters peddling questionable nostrums, posed a particular threat in California. Even as
massive amounts of gold (perhaps 300 million dollars between 1849 and 1855) flowed
out of the mines and into the cities, deadly epidemics routinely swept the population
centers and the mining camps, creating masses of indigent sick—a paradoxical situation
that led one physician to comment archly on the “the beauty of being a doctor of good
standing in this golden anomaly of a city” (Rohrbough 3; Groh 180). The nascent state
lacked the infrastructure to cope with the sudden influx of gold seekers, and San
Francisco, where migrants packed into impromptu shelter of all kinds, was soon overrun
with human waste, rotting food, and abandoned goods. During the worst days of 1849,
“thick-swarming” rats menaced sleepers in temporary tent villages; meanwhile, human
skulls accumulated on the beach, where the corpses of cholera victims were
unceremoniously dumped (Groh 168-70). City filth offered an ideal growing medium for
disease, but sickness took root easily in the mining camps as well. Although living
conditions gradually improved after the nadir of 1849, opportunistic quacks encountered
in California a people desperate for medical care and accustomed to price gouging. In a
market where gold was plentiful but goods and services were scarce—an apple could cost
five dollars—even the fee schedules of legitimate physicians, typically structured in
increments of sixteen dollars, the price of an ounce of gold dust, quickly reached
stratospheric levels: $32 for a simple visit; $64 for an ounce of quinine; $1000 for common operations. California became so glutted with doctors (legitimate and otherwise) that fees dropped dramatically within a few years, but quacks continued to prosper nonetheless.  

Finally, a medical practice law passed by the California legislature in 1876 required all physicians to either demonstrate competency or prove graduation from medical school to a Board of Medical Examiners, which granted official licenses. Each of the major medical “schools”—regular, eclectic, and homeopathic—had its own licensing board. Unfortunately, even though medical departments were forming at universities in San Francisco and Los Angeles, sham schools functioning as “diploma mills” still existed across the country, and mail-order diplomas were readily available. Furthermore, although licenses previously granted to degreed practitioners could be revoked at the board’s discretion for “unprofessional and dishonorable” conduct, outright lawbreakers—such as those impersonating physicians or falsifying diplomas—paid a relatively small fine (from $50 to $500) or served between one month and one year in jail. Light punishments, combined with the licensing boards’ initial inability to monitor the entire state for potential offenders and track the further whereabouts of past violators, failed to deter recidivists. Still, the 1876 medical practice law, its content shaped by the persistent lobbying of the state medical society, stands as a first step towards ridding California of exploitative quacks.

The state’s medical practice law did not apply to dental practice, but rapid growth in that specialty necessitated similar oversight. Following the example of physicians,
dentists established a national organization, the American Dental Association (ADA), in 1859. By the 1860s, the number of dentists in California had increased significantly, and the more professionally-minded among them began to organize, forming the San Francisco Dental Association in 1869 and the California State Dental Association in 1870. Similar organizations in smaller localities soon followed. In 1885, the California legislature passed a dental practice law, similar to the earlier medical practice law, which called for a seven-member Board of Dental Examiners, appointed by the governor, to inspect the credentials of practitioners. All dentists were required to register within six months with the Board, who would deem “satisfactory any diploma from a reputable dental college” and issue a certificate verifying the bearer’s professional fitness. Again, the consequences of violations, classified as misdemeanors, were relatively slight—a fine of between $50 and $200 or a term of six months in jail for anyone practicing without a state certificate, or pretending to possess a diploma from an approved dental college—while the task of enforcement across such a huge state was extraordinarily difficult (Deering 463).

In the interests both of displacing unqualified practitioners and of accelerating the professionalization process, members of the state dental association discussed the establishment of a dental college, the first such institution west of the Rockies. At their inaugural meeting, Dr. C.C. Knowles argued for “a college of dentistry on this coast” with “greater facilities for study and professional breadth than the times have afforded us” (qtd in Dentistry 6). However, the course of instruction at even the best eastern dental schools, upon which a California school would be modeled—tended to be
relatively brief, usually only nine months of classes and lectures. A few schools, such as Harvard, required a longer course of formal lectures, followed by a period of supervised practice, and the founders of the new Dental Department of the University of California favored a similarly expanded curriculum. For the first class, admitted without examination in 1882, graduation requirements could be fulfilled with either two years of study or one year of study combined with seven years of previous experience. In fact, most of the first matriculants had already been practicing dentistry for at least that long. Even though the Dental Department of the University of California was the eighteenth dental college started in the United States, it quickly surpassed its more established counterparts in selectivity and rigor, becoming the third college to require a preliminary examination for admittance in 1883 and the third college to extend its required course of study to three years in 1886. In addition to coursework in their specialty, dentistry students attended lectures in anatomy, physiology, chemistry, and surgery in the Medical Department and observed procedures at the county hospital.13

These legislative measures and educational initiatives stand as vital steps towards the necessary professionalization of the medical field—a process particularly urgent for a far-flung “golden state” so vulnerable to quackery—but the rhetoric of the founders of the state medical and dental societies describes an attitude of exclusivity reaching beyond the realm of professional credentials. Heavily gendered appeals to the “medical men of the Pacific Coast” and invocations of a future requiring “men educated in all that constitutes the scholar and professional man, and refined in all that makes the gentleman” deny the possibility of “medical women” in California, even though a growing number of
women had earned medical degrees—albeit against great resistance—in the East (qtd in Dentistry 6). However, these founders of the medical profession in California imagine only certain men joining their ranks. Their ideal “medical man” is both scholarly and “refined”—most likely from a (white) middle- or upper-class family with the resources to cultivate such qualities in its young. Such products would homogenize the profession that the president of the state medical society deplored in 1858 as “a heterogeneous mass, an army of incompatibles.” The doctor’s further remarks suggest that the “incompatibility” stems not only from differences in philosophy and training but also from differences in race and ethnicity: “No country in the world is supplied with physicians so diverse in character. We have all the peculiarities of all the schools in the world, coupled with all the peculiarities of all the nations in the world” (qtd in “Prelude”). Around these comments, the image of the ideal doctor—male, bourgeois, Anglo-Saxon—coalesces.

II. A Poor Professional

Is it any wonder, then, that the mere representation of dental practice by a character like McTeague—certainly male, but uncouth, uneducated, and above all, Irish—would be intolerable not only to a middle-class readership inhabiting the same milieu and espousing the same values as the doctors who wished to homogenize the medical profession but also to an ardent believer in Anglo-Saxon superiority like Norris?

Initial reaction to McTeague from the reading public was mixed, with some critics insisting on the novel’s brilliance, and other readers recoiling in varying degrees from its
transgressive qualities. Willa Cather called *McTeague* “a book deep in insight, rich in promise, and splendid in execution, but entirely without charm and as disagreeable as only a great piece of work can be” (19). William Dean Howells praised Norris’s “epical conception” of life and his precise characterizations but observed that “his true picture of life is not true, because it leaves beauty out. Life is squalid and cruel and vile and hateful, but it is noble and tender and pure and lovely, too” (15). Significantly, some of the negative reactions to the novel mingled disgust for McTeague’s native coarseness with disdain for his professional ambitions. A reader who found *McTeague* “nauseous” asserted that

> it is safe to say that so many molars, bicuspids, and alveolar processes never before decorated the pages of any novel. The scene in which McTeague proposes to a patient with the rubber dam over her mouth is certainly a novelty, and it is aided by the setting in of a fit of vomiting on the lady’s part owing to the combined effects of ether and excitement.” (“From”)

Another reader’s comments that McTeague “learned his dentistry from a faker, thanks to his mother, who spoiled a good miner to make a poor professional” underlined the latter as a reprehensible contradiction in terms (“New”).

Norris seems concerned with excluding McTeague from dental practice on the basis of both class and race. For his rogue practitioner, Norris creates a “born criminal,” drawing inspiration from newspaper descriptions of a notorious San Francisco murderer of Irish extraction. Indulging in a profound Anglocentrism that surfaces elsewhere in his oeuvre, Norris follows the newspapers’ lead and racializes the character of McTeague, emphasizing and “blackening” his Irish heritage. With this racialization, a narrative of
justified expulsion from the medical profession becomes a comment on the professional fitness not only of the questionably credentialed but also of the properly credentialed who do not happen to arise from the fraternity of the white middle class.

**Local Inspirations**

Although Norris eschewed the “teacup tragedies” of earlier realist narratives, the hyperdetailed renderings of the “well behaved and ordinary and bourgeois,” he argued that the terrible dramas of naturalistic fiction still demanded a kind of regional verisimilitude: lingering sectionalism in the United States hampered the construction of “a novel which will represent all the various characteristics of the different sections”; the novelist could only “make a picture of a single locality” (“Zola” 309-10; **Responsibilities** 87). In particular, he articulated San Francisco’s need for a writer who “shall get at the heart of us, the blood and bones and fiber of us, that shall go a-gunning for stories up and down our streets and into our houses and parlors and lodging houses and saloons and dives and along our wharves and into our theaters; yes, and into the secretest chambers of our homes as well as our hearts” (**Responsibilities** 87; “Opening” 254).

Accordingly, *McTeague* is studded with names and places from Norris’s own experiences as a resident of the city, and decoding the local references in the novel has preoccupied many Norris scholars; Norris’s thickly detailed settings coordinate almost all the businesses that the McTeagues patronize within their working-class Polk Street neighborhood with San Francisco establishments extant in the 1890s.¹⁶ Some of these local sights serve as more than just naturalistic backdrops, however. In particular, the
dental offices of Dr. Luther Teague at Kearney and Geary Streets suggested both a last name for Norris’s main character and one of the governing images of the text: Dr. Teague’s offices were marked by a large gold tooth—just like the one that so entrances McTeague—swinging from an eave.17

The San Francisco papers regularly followed Dr. Teague’s efforts to professionalize dentistry in California. Teague held office in both local and state dental societies and presided over the landmark Midwinter Fair Dental Congress in 1894. This first dental convention west of the Rockies—modeled on the World’s Columbian Dental Congress held in Chicago the previous year—attracted to San Francisco delegates from all over the United States. Although the meeting ostensibly drew practitioners together for “the benefit of association, a feature which has been absent in the civilization of the Far West,” it excluded those lacking the proper credentials; as president of the congress, Dr. Teague told the San Francisco Chronicle that “only dentists wearing the Dental League button will be permitted to enter upon the floor of the hall” (“Dentists”). It is this concern for delineating and maintaining professional boundaries that informs the official letter catalyzing McTeague’s downfall in Norris’s novel.

To launch McTeague on a trajectory from rogue practitioner to wanted criminal, Norris seems to have merged certain details associated with Dr. Teague and his practice with lurid accounts of an infamous San Francisco murder.18 In October 1893, an Irish laborer named Patrick Collins murdered his wife Sarah, a charwoman. When Sarah Collins refused to give her estranged husband—who had served time the previous year for cutting her with a razor—the hard-earned money with which she supported their two
children, Patrick Collins followed her to work at the Felix Adler Kindergarten and stabbed her to death, splattering blood all over the cloakroom. The local papers constructed sensational narratives as they covered the aftermath of the crime, including Collins’s flight and arrest, over the course of the next several days. The Examiner detailed Sarah Collins’s struggles as a single mother “working every day until she could hardly stand to support her little ones,” and offered readers descriptions (as well as drawings) of her “squalid” two rooms; Mrs. Collins had “but a single cover on the bed, and that was ragged and threadbare. There was the look and odor of abject poverty everywhere. It was more like a picture of wretchedness in London than a room in rich San Francisco.” The paper dwelled similarly on the crime scene:

The little hatroom of the kindergarten showed what a struggle there had been. The walls were splashed with blood and the floor was covered with it. Some of the hooks for the children’s hats and coats were broken. The red stain extended out into the hall and down the steps to the street, but the teachers of the kindergarten had the dreadful traces cleaned away before the children got there. (“Twenty-Nine”)

At times, these narratives adhere only loosely to the facts of the case. Within one article, for example, the Chronicle offered two disparate versions of the victim’s final moments: the writer claims that after being stabbed fifteen times, Sarah Collins managed to drag herself out onto the kindergarten steps and to hand the bloody knife to an onlooker, saying “My husband did this,” and that an autopsy revealed thirty-five (not fifteen) wounds, and a head nearly severed from its body—a finding that would of course render the dramatic sidewalk accusation scene utterly implausible (“Slashed”).19 Despite such
unbridled sensationalism, the numerous parallels between the Sarah Collins case and the Trina McTeague murder are undeniable.

The newspaper descriptions of Patrick Collins, which weave allusions to the accused’s ethnicity into a portrait of Lombrosian criminality, resurface in only slightly altered form in Norris’s novel. Not unsurprisingly, these accounts are filled with dramatic denunciations of Collins’s brutality and savagery, but the Examiner imbues the episode with a kind of evolutionary inevitability—“He Is A Type” according to one headline—and the Chronicle affirms that “Collins continues to bear himself with a stolid, brutish indifference that marks him as a type of all that is low in humanity” (“Collins”). This criminal “type,” according to the Lombrosian theory that the newspapers loosely appropriate here, is a product not of environment but of biology: Collins “is not a man who has sunk, but one who was made an animal by nature to start with” (“He”). The newspaper reports further suggest that these animalistic tendencies are not only genetically programmed, but also ethnically inscribed, by sketching a particularly Irish savagery for their readers. Asserting that “if a good many of Patrick Collins’ ancestors did not die on the scaffold then either they escaped their desert or there is nothing in heredity,” the Examiner instructs readers to “fancy a first cousin of John L. Sullivan’s in Collins’ dress and situation and you have the man”; the article is accompanied by a sketch of Collins that looks suspiciously like Sullivan, the renowned Irish-American prizefighter (“He”).20 Rehearsing stereotypical representations of the Irish as intemperate, the Examiner positions alcohol as a kind of propellant in the murder, suggesting that “The Wife’s Refusal to Give Him Money for Drink Was More Than He Could Stand”
(“He”). Ultimately, the same article destabilizes the criminal’s whiteness as it revives popular associations of the Irish and the African: here Collins’s “face is broad, the brown eyes are set wide apart, the nose is flattened at the bridge and broad as a negro’s.”

Norris’s representations of McTeague, while similar to the newspapers’ descriptions of Collins, are even more aggressively racialized. Norris begins by likening McTeague to a farm animal, “cropfull, stupid, and warm” (1-2). Although “sluggish enough and slow to anger on ordinary occasions, McTeague when finally aroused became another man”; then, the brute “that in McTeague lay so close to the surface leaped instantly to life, monstrous, not to be resisted” (133). Of course Norris attributes this latent brutality to faulty genes: “beneath the fine fabric of all that was good in him ran the foul stream of hereditary evil, like a sewer. The vices and sins of his father and of his father’s father, to the third and fourth and five hundredth generation, tainted him. The evil of an entire race flowed in his veins” (19). McTeague’s surname particularizes that “race,” and Norris is quick to establish a lineage of Celtic intemperance. For “thirteen days of each fortnight,” McTeague’s father “was a steady, hard-working shift boss of the mine. Every other Sunday he became an irresponsible animal, a beast, a brute, crazy with alcohol” (2). Alcohol teases out a more subtly sadistic streak in the son:

So far from being stupefied, he became, after the fourth glass, active, alert, quick-witted, even talkative; a certain wickedness stirred in him then; he was intractable, mean; and when he had drunk a little more heavily than usual, he found a certain pleasure in annoying and exasperating Trina, even in abusing and hurting her. (171)
Appropriating Lombrosian notions of alcohol as fuel for the “born criminal,” and of “an evolutionary scale teleologically leading towards the apex of civilization, marked by the virtues of the white, European middle classes,” Norris suggests a progressive degeneration in McTeague, from cruel sadist to quasi-cannibal to jungle animal (Gibson 21). Once McTeague abandons his dental practice, the thin veneer of bourgeois nicety built up from association with Trina quickly erodes; Trina’s fingertips grow swollen and purplish as an often intoxicated McTeague, enraged by his emasculating unemployment, gnaws away at them, “crunching and grinding them with his immense teeth, always ingenious enough to remember which were the sorest. Sometimes he extorted money from her by this means, but as often as not he did it for his own satisfaction” (174).

Increasingly, Norris describes McTeague in terms more animalistic than cannibalistic; now, however, the drunken McTeague evokes not a silent, sanguine beast of burden, but rather a screeching, excitable creature voicing “an echo from the jungle” (133). More specifically, “the alcohol had awakened in him an ape-like agility” (211). Given the popular associations of Irishness and blackness, as well as the hierarchical traces of scientific racism—which posited nonwhites as an evolutionary intermediaries between apes and whites—embedded within the theory of criminal anthropology itself, we must read McTeague’s “degeneration” as a racialized movement in which Irishness slowly dissolves to reveal the latent (African) aborigine within, the aborigine with stronger kinship to ape than to Anglo-Saxon.

Thus, McTeague’s textual expulsion from medicine emerges not only as a rejection of the professionally uncredentialed but also of the racially marked or ethnically
suspect. Certainly the Irish and some southern and eastern Europeans occupying that liminal nineteenth-century space that Matthew Jacobsen has called “probationary whiteness”—that is, a kind of conditional whiteness affirmed by physiological contrast with blacks and natives, but still vulnerable to periodic racialization, particularly in highly competitive labor markets—were not systematically excluded from the medical profession; however, Norris’s text reflects that general anxiety about “all the peculiarities of all the nations” first expressed by the California state medical society. Black practitioners, on the other hand, were systematically excluded: although by the 1870s, a growing number of black physicians had emerged from a few Northeastern and Midwestern universities, as well as from several new medical schools exclusively dedicated to training black doctors, throughout the 70s and 80s, the AMA supported the prerogative of local medical societies to deny black doctors membership. In response to the AMA’s unyielding stance, blacks created their own medical societies and professional journals. Considering these AMA-sanctioned attempts to exclude blacks from the medical profession, Norris’s banishment of the “blackened” McTeague from dental practice stands not only as the justified removal of one inexpert, unqualified doctor, but also as a double judgment on the professional fitness of both “probationary white” and black practitioners in general: a reflection of exclusionary pressures with the medical field, inflected and sharpened by his own Anglocentrism.
III. Golden Anomaly: “Doctresses” in San Francisco

Clearly, both the law-abiding Dr. Teague and the murderous Patrick Collins figured prominently in Norris’s consciousness as he composed *McTeague*, but the imaginative distance between respected doctor and degenerate criminal is great; I would suggest that another news story mediates the fantastic amalgamation of dentist and murderer. While Norris was inventing *McTeague*, the local newspapers followed the exploits of Belinda Laphame, who continued to impersonate a physician despite multiple indictments for murder when her patients died. I contend that the figure of this con artist exerted as much influence as narrations of the Collins murder on the character development of McTeague. However, I argue that Norris resists the easy demonization of a female abortionist not only in deference to the remarkable concentration of trained and licensed medical women operating in San Francisco, but also in pursuit of a broader critique of medical professionalism.

Immediately adjacent to continuing coverage of the Collins case in the *San Francisco Examiner* is the fascinating case of “Dr.” Belinda Laphame, arrested for a third time on suspicion of murder (see figure 1). The *Examiner* reminds readers that Dr. Laphame, now using the alias “Dr. Gregory,” was but “recently acquitted of the charge of having murdered the infant daughter of Lottie Watson, a Contra Costa girl, the prosecution—although proving that the babe died from laudanum poisoning—being unable to directly connect the self-styled ‘doctress’ with the crime.” This time, sixteen-year-old Amelia Donnelly, placed in an “unfortunate condition” by a married man, died after treatment at the hands of Dr. Gregory. The *Examiner* reporter supposedly caught
HER DEATH DUE TO A CRIME

Another Girl Shares A Fate Like That of Clara Mathews

DR. BELINDA LAPHAM AGAIN

It is Mrs. D. Collins' news, and it reflects on the character of the patient. The details are as follows: Clara Mathews, a well-known woman, was found dead in her home on October 11, 1893. The police were called, and an investigation was conducted.

The coroner's jury found that Clara Mathews had committed suicide by ingesting a poisonous substance. The cause of death was asphyxiation from carbon monoxide gas. The jury's verdict was suicide.

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The coroner's jury found that Clara Mathews had committed suicide by ingesting a poisonous substance. The cause of death was asphyxiation from carbon monoxide gas. The jury's verdict was suicide.

Figure 1. Laphame and Collins in the Examiner of October 11, 1893.
Donnelly’s mother, who admitted taking her daughter to “the doctress,” in possession of some surgical instruments, of “such a character that I was startled to see them in the mother’s hands”; Mrs. Donnelly “declined to tell me where she got them, but said she herself had used them on the girl.”

When confronted by the same reporter, Dr. Laphame explained that she was recently married and “was again conducting a ‘maternity hospital,’” but denied treating Amelia Donnelly (“Her Death”). Nonetheless, Dr. Laphame was eventually tried—and acquitted—for Donnelly’s murder.

Investigative reporters covering the earlier Lottie Watson case revealed that although Dr. Laphame claimed then to be newly arrived from Australia, she had operated an O’Farrell Street fortune-telling parlor in 1891 as “Mrs. Bell”—although patrons referred to her as the “Gypsy Queen.” However, by 1892, Mrs. Bell had turned to the far more lucrative business of “baby farming,” as the Chronicle termed it. A former landlady recalled that a child “born to a young woman in Mrs. Bell’s rooms disappeared very suddenly”; it remained unclear “whether it died or was sent to a foundling asylum.” Soon, Mrs. Bell would professionalize her “baby farming” operation, becoming “Dr. Laphame.”

When questioned in the Lottie Watson case, she attempted to justify her use of the title:

“Are you a graduate in medicine?”
“No.”
“Then why do you place the prefix ‘Dr.’ to your name?”
“My husband was a physician, and I simply take his name. What I know about medicine I learned from him.”
“Do you know much?”
“I know enough to care for a woman in confinement.” (‘She’)
Dr. Laphame did not know “enough,” however. Later reports in the Call indicate that by 1895, Dr. Laphame had used at least one more alias (“Dr. Goodwin”) and been arrested and acquitted twice more for performing an abortion, a “criminal operation,” that resulted in the patient’s death (“Mrs. Belinda”). Yet after each acquittal, Dr. Laphame would adopt a new alias and re-establish her “maternity hospital.”

Dr. Belinda Laphame, the “doctress” with the appalling record, the “baby farmer” even willing to rent her instruments to her patients for the right price, serves as the missing link between Dr. Teague, the respected dentist, and Patrick Collins, the brutal killer, in the logic of character development in McTeague. The parallels between Dr. Laphame and Dr. McTeague are clear: both are “self-styled” practitioners, unlicensed and uncredentialed—although to his credit, the dense but earnest McTeague applies himself with integrity to his work. Dr. Laphame, on the other hand, blithely reinvents herself as the body count mounts. Her facility with aliases and alibis describes a hustler, adept at putting on and taking off a medical persona at will, unbound by professional training or ethics. As a resident and a journalist of San Francisco, Frank Norris would have certainly been aware of Dr. Laphame. Although coverage of Amelia Donnelly’s death and of Sarah Collins’s murder appeared side-by-side in the Examiner, Dr. Laphame was already well-known in San Francisco, and she continued to make headlines—both for her medical malpractice and for her social life—for several years. For example, an 1895 item in the Call retraced Dr. Laphame’s drunken high jinks with a Dr. Lord (a “congenial spirit” who identified her as the “Gypsy Queen”) and some variety actresses—an evening of revelry which resulted in a minor lawsuit. The paper refers to Dr. Laphame as a
“notorious” person “of wide note in unsavory circles,” making public another chapter in her “peculiar career” (“Celebrates”). Thus reportage concerning San Francisco’s infamous “self-styled doctress” must be considered a primary source for McTeague, a source that implicitly complicates the professional exclusions represented in Norris’s text with questions of gender.

**Anti-Abortion Discourses**

In creating a rogue practitioner, Norris could have easily demonized a figure like the ghastly Dr. Laphame, who continued to provide “inspiration” while he was working on McTeague. Norris’s restraint is even more surprising in light of the volume and the vitriol of contemporary rhetoric surrounding the figure of the “midwife,” who might help a woman to deliver or to abort, depending upon the situation. These irregular practitioners were excoriated by an outraged public “shocked” by late nineteenth-century newspaper exposés of the “abortion underworld”—even though in reality women from all walks of life sought abortions—and by regular physicians irritated by the competing practices. Despite the AMA’s official anti-abortion stance, a number of regular physicians routinely performed the operation. In general, immigrant and low-income patients “called upon midwives to perform abortions, while more affluent residents visited physicians for this service” (Frazier and Roberts 65). Although “midwives and doctors had comparable safety rates for abortions” and midwives registered lower maternal mortality rates than physicians for deliveries, regular physicians resorted to sketching the “criminal midwife” as a profoundly unskilled, unsafe, and uncaring
character in their efforts to colonize and to monopolize the gynecological-obstetrical business (Reagan 77).\textsuperscript{33}

Examining an organized campaign by Chicago physicians in 1904 to prosecute abortionists, Frazier and Roberts show that these physicians tapped stock images of the criminal midwife as ignorant and coarse, slovenly and repellent, and compared the midwife to the “‘proverbial bull in the china closet’” (67). Midwives, the physicians argued, haggled with patients over the price of services and schemed to extort money from their victims, who received only the level of “care” that they had paid for, regardless of emergent conditions. The typical victim was “‘the young girl in the small town who is led from the straight and narrow path and to hide her shame is compelled to come to a large city….She either leaves the house of the midwife a physical wreck or finds a resting place on a marble slab in the Cook County morgue’” (69).

Such rhetoric demonstrated incredible staying power. As late as 1917, Edith Wharton’s Summer would pick up this discursive thread with its description of Dr. Merkle, the abortionist that Charity Royall seeks out after becoming pregnant by Lucius Harney. Of course, Charity herself fits the description of the country girl “hiding her shame” in the city. Although Dr. Merkle’s operation appears more sophisticated than the crude practices of Dr. Laphame or some of the Chicago culprits—Merkle actually “smells of carbolic acid,” the best disinfectant of the day—her “office” still betrays an unrefined sensibility. As Charity enters, she sees “a stuffed fox on his hind legs” offering a brass tray for calling cards; there are “plush sofas surmounted by large gold-framed photographs of showy young women,” images that might suggest the patronage of
prostitutes (149). Most importantly, Dr. Merkle haggles mercilessly, pressuring Charity to give up a valuable piece of jewelry as a “deposit.”

Wharton’s physical description of Dr. Merkle corresponds in fine detail to the newspaper portraits of Dr. Laphame. Both Merkle and Laphame are similarly dressed: Merkle, in addition to her “immense mass of black hair,” wore “a rich black dress, with gold chains and charms hanging from her bosom” (149); the newspapers dwelled on the way Laphame entered the courtroom “becomingly arrayed in a black silk dress” and observed that “on her dark brown, almost black, hair, rested a stylish hat trimmed with olive-green feathers and ribbons.” And like Dr. Merkle, who sports false teeth and false hair, Dr. Laphame’s physiognomy seems to manifest her duplicitous nature. The newspapers claimed that “her cold blue eyes…gave no evidence of the feelings animating her, but the two fever spots on the face that ordinarily knows no color told a story of veins hot with suppressed excitement” (“Midwife”). Certainly, Wharton would not have been familiar with the Laphame case, but the similarities between these two representations of female abortionists suggest the energy that this anti-midwife discourse retained well into the new century.

**By Women, For Women**

I maintain that Norris’s imaginative transformation of Dr. Laphame into Dr. McTeague, of female abortionist into male dentist, of outré unprofessional woman into aspiring pseudo-professional man—and the corollary refusal to activate decidedly anti-feminist anti-abortion discourses—reflects his deference to the medical women of San
Francisco, including some “doctresses” drawn from his own social and family circle. Dr. Laphame’s “peculiar career” outside of medicine belies the unusual situation of female practitioners within the profession in late nineteenth-century San Francisco: the city and environs actually supported an inordinately high concentration of medical women. In 1893, the year of the Collins murder and the Donnelly case, 40 women constituted 11.9 percent of the medical students enrolled in “regular” coeducational medical schools in San Francisco; only Boston, traditionally a stronghold of medical training for women, could count a few more female medical students, while New York and Philadelphia had none at all (Walsh 183). After the creation of the University of California’s Medical Department in 1873, the regents adopted a resolution allowing women to enroll, and over the next fifty years, women represented 10 percent of each graduating class, exceeding the national average of 4 percent (“Prelude”). By 1890, although only 4 percent of the nation’s doctors were women, 14 percent of the practicing physicians in San Francisco were female. The city maintained a strong force of medical women well into the twentieth century, even as the percentages of female physicians in other major cities across the nation fell: as late as 1930, 12.7 percent of physicians in San Francisco were women, while only 8.7 percent of doctors in Boston were female.

(Considering that during the 1890s, nearly one in five doctors in Boston were women, that city’s decline is particularly significant.) Nationally, the percentage of women in the medical profession remained virtually flat from 1890 to 1930, ranging between 4 and 6 percent (Walsh 185). Yet San Francisco remained seemingly “immune” to these negative trends.
The reasons for such a sudden and sustained concentration of medical women in San Francisco are complex, particularly considering the overall dearth of Anglo-European women in California throughout the Gold Rush and beyond. In 1850, women accounted for only 7.5% of the state’s population; even in 1890, 58% of Californians were men (“Historical”). Nonetheless, California’s first medical women—several apprentice-trained women established practices as early as 1850, and the first university-trained female physician arrived in 1857—entered the field at a moment of organizational plasticity. California’s first medical schools were founded just as some of their older counterparts around the country were beginning to admit women into their programs on a limited basis; California schools may have moved to accept women almost immediately because they lacked deeply entrenched traditions of gendered exclusion. In contrast, the California state medical society, nearly twenty years old when the UC Medical Department moved to admit women, followed the example of many Eastern medical societies and voted to exclude women in 1870. As one member of the state society insisted, “I have been engaged in the study and practice of medicine for a third of a century, and think I know whereof I speak,” before casting women as “both physically and mentally disqualified for some of the duties of the profession” (Crane 23-4). But in 1876, after persistent lobbying by medical women and a few supportive male practitioners, the state society reversed its earlier decision. Only then did local societies, such as the San Francisco Medical Society, relent and admit women to their ranks.

Despite the eventual supersaturation of doctors (trained and otherwise) in California, the need for competent medical care remained great, even after the spectacular
public health crises of the Gold Rush era. An unceasing flow of westward migration, combined with recurrences of cholera and plague, created a new set of health challenges in the developing cities. Yet late nineteenth-century San Francisco—indeed, much of California—advertised itself as a refuge for the ill, and convalescents flocked to the state to bask in the sunshine. In fact, “by 1900, one-fourth of all migrants to California were tuberculars who had come for their health and settled permanently” (Craddock 23). Of course, bright sunshine and beautiful scenery were no match for virulent microorganisms, and ailing migrants needed care.

Furthermore, San Francisco’s ethnic diversity, and particularly its large Chinese community, created unique professional opportunities for female practitioners. Chinese men would not allow white men to touch their women, but this prohibition did not extend to white women (Harris 214). Female doctors attended Chinese patients at the missions and in their neighborhoods. Although coinciding with the peak of anti-Chinese sentiment in nineteenth-century California, an 1883 article by San Francisco physician Charlotte Blake Brown in the Pacific Medical and Surgical Journal suggests that the Chinese were hardly considered patients of last resort by the city’s Anglo-European medical women; rather, in “Obstetric Practice Among the Chinese,” Brown cites Chinese contributions to her own work.39 While issues of racial and ethnic “incompatibility” stemming from “all the peculiarities of all the nations of the world” had troubled the state medical society from its beginnings, Brown appreciates that from “so cosmopolitan a people as our city affords one can learn peculiarities of different nations” (15). Brown goes on to explain a certain Chinese pre-natal practice that “seemed to me so admirable that I have borrowed
it or more truly modified it from them” (18). Brown’s willingness to incorporate traditional Chinese practices into her own treatment plans stands as a radical departure from the exclusionary—and latently nativist—stance first articulated by the president of the medical society in 1858.

In “this golden anomaly of a city,” medical women could foster groundbreaking institutions like Children’s Hospital. Co-founded in 1875 by Charlotte Blake Brown and Martha Bucknell as the Pacific Dispensary for Women and Children, this hospital was one of only six nationwide established by women for women, and the first clinic in San Francisco to offer completely free care to the city’s poor. The primary mission of the Pacific Dispensary was “to provide for women the medical aid of competent women physicians and to assist in educating women for nurses and in the practice of medicine and kindred professions” (Brown, “History”). The Dispensary was not only staffed by but also governed by women; the founders convinced ten of the city’s socially prominent women—peers of the wealthy Norises—to serve on the “Board of Lady Managers.” At the close of the first year, one of the Lady Managers reflected that “what seemed at first an experiment, starting an institution of this kind for women, controlled by women, with women physicians, is in our minds no longer an experiment, but an indispensable necessity, meeting a want long since felt by the poor of the city” (Staples). When Emma Sutro, daughter of mining magnate and influential mayor Adolph Sutro, entered medical school and joined the Dispensary as a full-time attending physician in the 1880s, the move doubtless translated into a lucrative public relations coup for the hospital, and inspired young women all along the social strata to study medicine—perpetuating San
Francisco’s undimining wealth of medical women.\textsuperscript{43} In fact, by the late 1890s, Frank Norris’s eventual wife, society girl Jeannette Black, had declared her desire to become a doctor; when educational disruptions spoiled her plan, she decided to train for a career in nursing at Children’s Hospital instead.\textsuperscript{44}

From the beginning, the founders had imagined a training school for nurses attached to the hospital. The training school—the first west of the Rockies—opened in 1880 and the first three students graduated in 1882; an 1887 photograph in which “Training School for Nurses” positively dwarfs “Hospital for Children” on hospital signage illustrates the importance of the new school to the founders (see figure 2). The two-year program (later increased to three years) attempted to address a lack of professionalism in the nursing field, but also proved “like similar schools in other cities, one of the most practical of modern methods for benefitting women who desire self-supporting employment, and at the same time directing their steps in a vocation where great need exists for skilled and intelligent labor” (“President’s”).\textsuperscript{45} Benevolent and innovative, Children’s stands as emblematic not only of the rich tradition of “doctresses” in San Francisco but also of the new phenomenon of medical women creating institutional apparatuses to train their female successors.

\textit{Notable Absences}

Despite the abundance of female practitioners at work in San Francisco, medical women, legitimate or illegitimate, are seemingly absent from the text of \textit{McTeague}. Except for the brief period when Trina serves as McTeague’s assistant on certain
Figure 2. Children’s Hospital and Training School for Nurses, San Francisco. From *Children’s Hospital of San Francisco, 1875-1975: A Century of Service* in the Children’s Hospital of San Francisco Records (BANC MSS 89/87c, Carton 10, Folder 24). Courtesy of the Bancroft Library, University of California, Berkeley.
procedures, rapping “in the gold fillings with the little box-wood mallet as he had taught her”—a moment that for me evokes Dr. Laphame’s fatal loan of obstetrical instruments in the case of Amelia Donnelly—there are no female practitioners in the novel (107). I claim that despite the inspiration provided by Dr. Laphame’s exploits, Norris excludes female practitioners, licensed or unlicensed, from his novel not only to deny the imaginative association of legitimate medical women with illegitimate medical frauds but also to pursue a broader critique of medical professionalism. By placing McTeague at the center of his novel, Norris can indulge his own Anglocentric and classist sensibilities while reinforcing the exclusion of both uncredentialed rogues and credentialed Others from the profession—and perhaps even tacitly affirming the progress of white, middle- and upper-class medical women. But more importantly, the comparison of the rogue practitioner McTeague to the fully licensed “Other Dentist,” a comparison uncomplicated by gender difference, enables a critique of the process of professionalization itself by emphasizing the similarities between their professional “performances.”

Even as he naturalizes the expulsion of an unlicensed irregular from dental practice, Norris indicts the novel’s only licensed practitioner with the antics of the Other Dentist, who repeatedly fails to comport himself according to the standards of professionalism described by D.W. Cathell. Like McTeague, the Other Dentist covets and obtains the vulgar gold tooth sign, although Cathell recommends that office signage should be “modest” and expresses particular disdain for flashy swinging models (35). Similarly, the Other Dentist seems unaware that the medical professional should never be
a leader or patronizer of loud or frivolous fashion, as though your egotism and love of sporty clothes had overshadowed all else; avoid glaring neckties, flashy breastpins, loud watch-seals, brilliant rings, fancy canes, perfumes, attitudinizing, and all other peculiarities in dress or actions that indicate overweening self-conceit, or a desire to be considered a fop of fashion or a butterfly swell. (29)

In fact, the Other Dentist is “the debonair fellow whose clients were the barbers and the young women of the candy stores and soda-water fountains, the poser, the wearer of waistcoats, who bet money on greyhound races” (156). Attending the races, along with “loitering around drug-stores, hotel bars, saloons, club-rooms, cigar-stores, billiard-parlors, barber-shops, or corner-groceries, with aimless fellows who love doing nothing” are precisely the kinds of “dissipations” that Cathell warns against (13). In this working-class neighborhood, the Other Dentist is able to capitalize on the closing of McTeague’s practice, but if we subscribe to Cathell’s logic, the dandyish appearance and brash demeanor that appeals to the indiscriminate shopgirls would fail to inspire the confidence of middle- and upper-class patients—the clients so desired for their reliable payments and return business—elsewhere. The Other Dentist may have the diploma that proves specialized knowledge, but McTeague features no examples of the kind of righteously productive middle-class professionalism, marked by the modeling of the professional self into the mirror image of bourgeois patients, espoused by Cathell.

Indeed, despite possessing the essential diploma, the Other Dentist not only fails to meet Cathell’s definition of professionalism but also fails to observe minimum standards of ethical behavior. By the late nineteenth-century, national and local medical and specialist societies had adopted behavioral codes modeled upon the AMA Code of
Ethics. The Code demands that every practitioner, charged with maintaining the “dignity and honor” of the profession, refrain from “all contumelious and sarcastic remarks relative to the faculty” (Davis, History 196). Yet when the McTeagues are forced to liquidate their household, the Other Dentist is there, not only scavenging through their possessions with everyone else on Polk Street, but also taunting McTeague with the offer of a dental diploma for sale. Although technically McTeague is not part of “the faculty,” such antagonism from the Other Dentist is hardly dignified. Clearly, a diploma does not instantaneously “professionalize” the bearer.

The narrator’s earlier characterization of the Other Dentist as a “poser” is signal. Even if the narrator is sympathizing with McTeague, ventriloquizing his aggrieved tone, the moment reinforces the problem of differentiating between “professional” and “unprofessional” performances in this text. An unlicensed irregular may approach his practice with integrity and provide satisfactory service—though a slow and awkward worker, McTeague eventually gets the job done—while a properly credentialed medical “professional” may make an uncollegial spectacle of himself. Ultimately, this confusion within McTeague underscores how narrow the conceptual distance between the unlicensed McTeague and the Other Dentist where professional credentials do not align with professional behavior.

Thus the novel that at first seems simply to reflect and to reinforce the exclusionary pressures directed by the medical profession towards uncredentialed practitioners emerges as a larger critique of the authentication process so central to medical professionalization, and by extension, of the middle-class ideology privileging
specialized knowledge and expert opinion. In *The Book on the Physician Himself*, Cathell paraphrases and tailors this compensatory ideology, which obscures the gap between the incomprehensible wealth of the owning class and the modest salaries of the middle class with reassurances that physicians have special value. Physicians are the

earnest, studious men, with scientific tastes, literary attainments, and correct habits, who have been singled out and set aside for a lofty purpose, and as socially, mentally, and morally worthy of an esteem not accorded to....average persons engaged in the ordinary vocations of life. (15)

The Other Dentist’s antics expose this ideology as such. And although Cathell predicts professional doom for those practitioners who refuse to style themselves according to his recommendations, to commit completely to the performance of middle-class status, the Other Dentist exposes Cathell’s rhetoric as yet another arm of the profession’s exclusionary apparatus. This vulgar character, seemingly uninterested in embracing Cathell’s version of middle-class professionalism, survives the training and the examinations that filter out the “unqualified” and—although his clientele may be less desirable—prospers. Clearly, there is more than one “rogue practitioner” on the loose in this text.

IV. Redefining Professional Fitness

As *McTeague* exposes the lack of professionalism in both unlicensed and licensed practitioners and the faultiness at the center of the middle-class ideology of professionalism, the performance of dentistry becomes an analog to the performance of
class. Middle-class status is less a birthright than a performance, particularly for recent immigrants or racialized Americans like the McTeagues attempting to ascend from the ranks of the working class. Norris’s total absorption with the naturalistic unraveling of McTeague and Trina, with their inability to gain a foothold in this illusory structure, precludes the suggestion of alternatives to middle-class professionalism. As Hamlin Garland noted, Norris “rejoiced in McTeague and Trina as terms in a literary theorem”; accordingly, McTeague “is one of the most masterly studies in our literature, but the reader is forced at the end to ask ‘Of what avail this study of sad lives?’ for it does not even lead to a notion of social betterment.”

However, I find Norris offering “a notion of social betterment” almost immediately in his next novel. At virtually the same moment that McTeague appeared in 1899, Norris’s autobiographical romance Blix was serialized in the Puritan Monthly before later publication as a short novel by Doubleday and McClure. This radical departure from the grisly McTeague details the romance between Frank Norris and his eventual wife, Jeannette Black; the book was designed in part to dispose the author’s disapproving mother more kindly towards his unconventional fiancée (McElrath 327). Although from a fairly prominent San Francisco family, by the late 1890s Jeannette Black had withdrawn from the social whirl and from conventional expectations, intent on studying medicine. Accordingly, the heroine of Blix decides to become a doctor, complicating her future with her newspaperman-novelist beau. I suggest that Blix, a text consumed with exploring the lingering questions of expertise and professionalism raised by McTeague, be read as a companion piece to the earlier novel. Functioning in part as a
kind of supplement and corrective to *McTeague*, *Blix* offers a redefinition of professional fitness, its inclusive hybrid form enacting the kind of expansion it describes.

**All Manner of Indiscretions**

Although seldom read today, *Blix* was well received in 1899. Reviewer Willa Cather enthused:

Last winter that brilliant young Californian, Mr. Norris, published a remarkable and gloomy novel, *McTeague*, a book deep in insight, rich in promise and splendid in execution, but entirely without charm and as disagreeable as only a great work of art can be. And now this gentleman, who is not yet 30, turns around and gives us an idyll that sings through one’s brain like a summer wind and makes one feel young enough to commit all manner of indiscretions. (19)

*Blix* centers on the developing romance between boisterous newspaperman-novelist Condy Rivers and society girl Travis Bessemer. After agreeing that their romantic relationship feels forced, the two decide to be pals. Meanwhile, Travis resolves to leave the superficiality of San Francisco social life behind, which frees her to accompany Condy on newsgathering missions around the city and sporting expeditions in the country. Eventually, by allowing their friendship to grow over time, Condy and Travis end up falling in authentic love. The only problem is Travis’s determination to go to medical school in New York, a dream which she will not abandon, even for her newfound love. Fortunately, Condy receives a last-minute offer from a New York publisher to edit a literary magazine, enabling the pair to relocate together.
Although ultimately—albeit unrealistically—resolved, this central complication underscores the novel’s fascination with issues of professionalism and authority, particularly as inflected by gender politics. Throughout much of the nineteenth century, the ideal man was the so-called “self-made” man, achieving primacy in the business world; the ideal woman ruled the domestic realm, turning the home into a center of moral instruction and a refuge from public pressures—although much recent work has emphasized the raced and classed nature of nineteenth-century ideal masculinity and femininity and has explored the disparity between cultural ideal and lived experience. However, Blix appears at the historical moment when masculinity and femininity take on new attributes as the dividing line between separate spheres begins a slow dissolution. Accordingly, Norris relies on an initial schematic reiteration of nineteenth-century gender roles before undertaking their remodel. With characterizations that subvert late nineteenth-century notions of masculinity and femininity, Blix launches Condy and Travis on career tracks that eventually converge, enabling Norris to interrogate and to redefine professional fitness.

This subversion of gender begins with the main characters’ names. We learn that “Condé,” the young newspaperman’s given name, has been simultaneously anglicized and feminized over time to “Condy,” and sometimes to “Conny.” The diminution of “Condé” accords with his maturity level: he is truly a “cub” reporter, given to self-indulgence and play, sometimes at the expense of his work. Although theorists of masculinity such as Michael Kimmel and Anthony Rotundo have articulated the late nineteenth-century shifts in conventional masculinity that legitimized spending less time
at work and more time at play, the always broke Condy is not quite an independent, self-supporting man.⁵⁰ (Thrifty Travis covers their restaurant tabs and streetcar fare on several occasions.) In addition, Norris feminizes Condy by making his physicality manifest his mental turmoil. For example, when Condy and Travis unexpectedly encounter a man upon whom they’ve played a benign prank, Condy’s wits “scattered like a flock of terrified birds”; later, he admits that the episode made him “faint” (230, 235). Diminutive and dependent, physically vulnerable to overwhelming emotion, the character of Condy incorporates several of the (least flattering) hallmarks of middle-class femininity as imagined by patriarchy in the nineteenth century.

Conversely, Travis displays certain qualities associated with conventional masculinity as well as some novel traits untethered to gendered connotation. In addition to assuming the “provider” role when the spendthrift Condy cannot, Travis displays a hale and hearty physicality; she quickly masters outdoor pursuits like fishing, routinely besting Condy. And while Travis freely registers emotion, she is never overwhelmed by or debilitated by her feelings, physically or mentally. Certain quirks, however, such as the St. Bernard’s collar she wears as a belt—an innovation which the narrator deems totally chic—are more difficult to classify. That unconventional habit anticipates Travis’s readiness to move away from conventional nineteenth-century femininity into uncharted territory, a movement confirmed when Condy gives her the seemingly genderless nickname “Blix,” a name that seems to have no real referent:

“Blix,” he murmured, staring at her vaguely. “Blix—you look that way: I don’t know, look kind of blix. Don’t you feel sort of blix?” he inquired anxiously.
“Blix?”
He smote the table with his palm. “Capital!” he cried; “sounds bully, and snappy, and crisp, and bright, and sort of sudden.” (84)

Here Condy seems to be reaching for the right terms to describe the vibrancy and the potential of a woman like Travis, who has renounced social convention for professional opportunity. The renaming of Travis signals the arrival of a novel being.

Indeed, as that “brightness” allows her to solve the numerous dilemmas created by Condy’s immaturity, Blix’s handling of Condy’s greatest problem—a gambling addiction—reveals her to be a kind of unique amalgam of (cusp of) twentieth-century New Womanhood and nineteenth-century true womanhood. Instead of berating Condy for bad behavior, Blix devises a plan by which she becomes in effect Condy’s “sponsor.” She asks her father to teach her to play poker so that any time Condy feels the urge to gamble, he can seek refuge at her house rather than at his club. Blix hopes that once the aura of vice is stripped away from the game, Condy will lose interest in gambling, which he gradually does, electing to spend more time on country outings with Blix and or on solitary work on his novel. Along the way, Blix shows such aptitude for poker that she wins every time. However, in a sequence that seems an inversion of Trina’s compulsive hoarding in *McTeague*, Blix keeps all of her considerable winnings and returns them to Condy just the as he needs to leave his newspaper job in order to work full-time his novel. Drawing Condy into the sphere of the home—which she runs with aplomb in the absence of her deceased mother—Blix’s unique incarnation of womanhood “reforms”
and matures him, imbuing him with greater self-discipline, even if she has to become a card shark to accomplish her goal.

Blix’s reforming influence extends beyond the home and into the office as she involves herself not only in the management of Condy’s career but also in the composition of his texts. Norris anticipates this encroachment by the future doctor early on by likening inspiration to infection: the narrator reveals that short stories had become Condy’s “mania. He had begun by an inoculation of the Kipling virus, had suffered an almost fatal attack of Harding Davis, and had even been affected by Maupassant” (19). It seems that the symptoms of this creative “infection” include intermittent negativity and an inability to get work mailed promptly, but Blix’s sound advice and motivational speeches provide the antidote. Eventually, Blix becomes an active participant in the composition process. After one session of listening to a draft of Condy’s latest story, Blix not only “approves” the work but also offers a suggestion about plot development; in response, “Condy choked back a whoop and smote his knee. ‘Blix, you’re the eighth wonder! Magnificent—glorious! Say!’—he fixed her with a glance of curiosity—‘you ought to take to story writing yourself’” (112). Blix demurs, but insists on a marketing plan: “‘Remember that story don’t go to The Times supplement. At least not until you have tried it East,—with the Centennial Company, at any rate’” (112). Blix’s powerful influence is capable of guiding and maturing Condy personally and professionally.

Most importantly, Norris claims that Blix’s sharp professional instincts, emerging from that foundation of true womanhood enlivened with New Womanhood, position her particularly well for a future in medicine. In Blix, Norris is even more critical of medical
professionals than in *McTeague*. When Condy bounces back in one day from a supposed case of ptomaine poisoning that was predicted to incapacitate him for two weeks, he dismisses the clear misdiagnosis: “‘Pshaw! That’s what the doctor says. He’s a flapdoodle; nothing but a kind of a sort of a pain. It’s all gone now. I’m as fit as a fiddle…’” (125). (In addition to invalidating the doctor’s authority, the moment reminds us that inexpert practitioners operated in the better neighborhoods as well as the Polk Streets of the city.) Nonetheless, the narrator fully approves of Blix’s plan to study medicine, noting that before leaving San Francisco for New York, she had been “reading far into her first-year text-books, underscoring and annotating, studying for hours upon such subjects as she did not understand, so that she might get hold of her work the readier when it came to class-room routine and lectures” (304). Here the socially unconventional, intellectually curious, professionally savvy Blix—her “temperament admirably suited to the study she had chosen”—emerges as the *ideal* as opposed to the *exception* (304). In Blix, Norris offers a model of medical professionalism nowhere in evidence in *McTeague*. Furthermore, although Blix herself is thoroughly middle class, her brand of professionalism, based upon sincerity and study rather than upon show, deviates markedly from Cathell’s model.

The notion of woman, “naturally” empathetic and nurturing, as specially suited to the practice of healing had been revived and circulated at certain moments throughout the nineteenth century as female medical pioneers had struggled to infiltrate the profession; however, that strategy only tended to reinforce cultural perceptions of gender difference, further distancing women from the realm of rational scientific inquiry that would become
increasingly more important to medical practice. Norris seems to be making a different case. It is Blix’s freedom from conventionality, her unique blending of all the best qualities traditionally associated with both genders, that particularly suits her for a career in medicine.

**Thoroughly Original and Thoroughly Natural**

Despite the transgressive aspects of this vision, Norris seems to have succeeded in his efforts to present a female doctor as the ideal rather than the exception. One reviewer called Blix

an American girl at her best. She is a blossom of San Francisco gardens, but she might have grown in Chicago, Boston, New Orleans, or New York and varied but slightly from the type. There is nothing phenomenal or abnormal about her. Her traits are possessed in some degree by thousands of charming girls all over this land; and yet she is an individual; one could never mistake her for anyone else. (“California” 17)

Indeed, future doctor Blix comes across as “thoroughly original and thoroughly natural” (“California” 17). This popular love story enchanted scores of other readers as well. While *McTeague* sold well, establishing Norris as a writer of national repute and guaranteeing that the first run of his next major novel would sell out in four days, I maintain that Norris deliberately shaped *Blix* into an even more appealing form in order to advance his discussion of professionalization. In fact, Norris follows the advice that a publishing house gives Condy in a rejection letter: “‘The best-selling book just now is the short
novel—say thirty thousand words—of action and adventure”’ (45). In Blix, Norris produces exactly that. Although Blix and Condy’s rambles around San Francisco are fairly tame, Norris embeds outrageous adventures related by a sea captain they befriend—including “a wild, fiery tale,—of fighting and loving, buccaneering and conspiring; mandolins tinkling, knives clicking; oaths mingling with sonnets, and spilled wine with spilled blood”—within the larger frame (226). Although Norris likely had other goals for this project, including convincing his mother of his fiancée’s worth, nearly every plot point raises new questions about professionalism and expertise; ultimately, career matters become more important than the developing romance—remember that Blix plans to move to New York and to begin medical school regardless of Condy’s situation. In addition to tracing to the development of Blix’s ambitions, the novel follows Condy’s waverings about his work: even as the text draws a sharp line between newspaper “hack work” and “real” literary efforts, Condy wonders in a moment of frustration over the “hard, disagreeable, laborious work” of novel writing “‘what do I do it for, I don’t know’” (263).

The novel abounds with more playful, even farcical interrogations of authority and expertise as well. Blix is full of amateurs and impersonators, from Blix’s father, who dabbles in homeopathy, to a sea captain they befriend, laying low after “a scrape” in Mexico, who has been everything from a deep-sea diver to the manager of a minstrel troupe. The captain’s wife is a former “costume reader”—“I’d do ‘In a Balcony’ first, and I’d put on a Louis-Quinze-the-fifteenth gown and wig-to-match over a female cowboy outfit. When I’d finished ‘In a Balcony,’ I’d do an exit, and shunt the gown and
wig-to-match, and come on as ‘Laska,’ with thunder noises off. It was one of the strongest effects in my repertoire, and it always got me a curtain call”—who holds forth authoritatively on a stunningly wide range of subjects, including bacteriology, until Blix and Condy figure out that she is memorizing encyclopedia entries in order to appear educated (293). And in fact, the captain and his wife had been brought together by Blix and Condy, who play matchmakers by writing fake responses to newspaper personal ads. Yet readers readily accepted this atypical romance that seems almost more concerned with expertise than with love, deeming it “full of ideality and high thought, without being sentimental or metaphysical, and the vein of drollery which runs through it gives life, vivacity, and a certain careless strength and abandon to the whole” (“California” 18).

Juxtaposed with McTeague, so tightly constrained by its naturalistic focus on an inevitable downfall, Blix does seem an “abandoned” text. Norris plays freely with the conventions of the romance by allowing Condy to explore formal devices and narrative strategies as he works on his own novel (strongly) inspired by the sea captain’s tales, aptly titled In Defiance of Authority. For example, Condy debates the role of realistic detail in his swashbuckling romance:

“What do I know about ships?” Condy confessed to Blix. “If Billy Isham is going to command a filibustering schooner, I’ve got to know something about a schooner—appear to, anyhow. I’ve got to know nautical lingo, the real thing, you know. I don’t believe a real sailor ever in his life said ‘belay there,’ or ‘avast.’ We’ll have to go out and see Captain Jack; get some more technical detail.” (285-6)
In addition to supporting unsentimental romance, high adventure, farcical comedy, and realistic vignettes simultaneously, *Blix* features numerous such metaconscious moments that call attention to the vagaries of the composition process itself. This hybrid form feels endlessly elastic, as Norris allows—encourages—questions of professionalism and expertise, authority and authenticity to reverberate off of each other. In effect, the stretching and hybridizing of this literary form mimics the expansion of the medical profession that the text recommends.

Although in some sense the naturalistic novel, with its ostensibly “democratic” breadth of subject matter and its thick detail—and in this case, even the massive scale of its central character and his breathtaking violence—should register as the more expansive form, *McTeague* feels close and restrictive. Notions of possibility and choice, concentrated at the beginning of the narrative, prove illusory as Norris’s preoccupation with the predestination of his “born criminal,” his focus on fateful choices, enclose his characters in a narrowing circle, bereft of options and ideas. The ending is ironic not only in the fatal joining of McTeague to Schouler but also in their transformation into human pinpoints disappearing in the vastness of the alkali desert. With its strict adherence to the principles of naturalism, *McTeague* enacts the exclusion that it describes—capable of exposing a social problem but prohibited from suggesting a remedy. In contrast, the deceptively breezy *Blix* interrogates problems of expertise and authority from multiple angles, proposes and naturalizes the (white, middle-class) female doctor as the new ideal practitioner, and stands as an essential corrective to the ambivalence *McTeague* evinces towards the process of professionalization.
Both Alfred Litton and Paul Young discuss McTeague’s resistance to technological advances within the “Dental Parlors” and in the world.

Donald Pizer notes that Norris likely became acquainted with Lombroso’s theories indirectly through Max Nordau’s Degeneration (Novels 58).

Norris discovered French naturalism while a student at Berkeley, and McTeague bears certain similarities to Émile Zola’s L’Assommoir and La Bête Humaine. See Lars Åhnebrink’s The Influence of Émile Zola on Frank Norris and Donald Pizer’s The Novels of Frank Norris (53-6; 64).

Gold Rush migration statistics are necessarily estimates; however, most historians agree that by the mid-1850s, some 300,000 people had migrated to California in search of gold. Similarly, population estimates for San Francisco pre- and post-Gold Rush vary slightly. Still, these discrepancies do not diminish the cataclysmic impact of mass migration on the little village formerly known as Yerba Buena. See Groh (4, 293) and Rohrbough (1).

Estimating the number of medical practitioners migrating to California during the Gold Rush is problematic. Historian Henry Harris, M.D., says that “from 1,300 to 1,500 practitioners of medicine came to California with the gold seekers” (86). However, UCSF historians claim that 2,000 dentists, physicians, and pharmacists were serving San Francisco (then a city of 60,000) by 1855 (“Prelude”).

A number of local societies, including the Medico-Chirurgical Association of Sacramento and two incarnations of the San Francisco Medical Society, had formed in
advance of the state organization, but most of these local groups, prey to the same sort of internecine squabbling that divided the profession nationally, dissolved almost immediately. See Chapters 9 and 10 in John L. Wilson’s *Stanford University School of Medicine and the Predecessor Schools: An Historical Perspective*.

7 Conditions were similarly vile in Sacramento. One physician estimated that one in five migrants died within the first six months of arrival in California (“Prelude”). Also see Harris (72-82).

8 See Groh (167-69, 178, 316); Harris (81); and Rohrbough (17, 70).

9 Eventually, all applicants had to produce a diploma to secure a license (Harris 184).

10 San Francisco’s Toland Medical College became the Medical Department of the University of California in 1873. Nearby Cooper Medical College—founded in 1858 as the Medical Department of the University of the Pacific—eventually became part of Stanford University.

11 For a national overview of physician licensure laws, see Baker.

12 The page number in this citation and all others hereafter referring to *Dentistry and the University of California* is my approximation; this volume lacks page numbers.

13 For the history of dentistry in nineteenth-century California, see *Dentistry and the University of California: The Early Days*. Also see Harris (291-5) and Perrine. In addition, the Henry Cogswell papers at the Bancroft Library include notes towards a history of California dentistry.
Mary Walsh reminds us that as the first woman to earn a medical degree from a “regular” (allopathic) school in 1849, Elizabeth Blackwell is frequently recognized as the first female doctor in the United States, but other medical women preceded her. Walsh cites the example of Harriot Hunt of Boston, who began a long and successful practice in 1835 after completing a medical apprenticeship—training identical to that of many of her non-degreed male contemporaries who called themselves “Doctor” without hesitation (xiv). In addition, Richard Shyrock points out that homeopathic and eclectic schools, “struggling for existence, were more open minded about accepting women” as early as the 1840s (375).

For example, Norris romanticizes the subjugation of the American West as the fulfillment of a particularly Anglo-Saxon destiny (Responsibilities 65). Biographers McElrath and Crisler consider Norris’s racism unexceptional for his day and for his class, and note that Norris occasionally discussed “the negative characteristics of the Anglo-Saxon that came along with the positive” (30-1).

In particular, Charles Kaplan (84), Robert Lundy (146-51) and Jesse Crisler (39-47) carefully retrace McTeague’s steps around San Francisco. They take their cue from Charles Norris’s Frank Norris 1870-1902.

Alfred Litton argues that images of the golden tooth may also have been inspired by an early Edison film for kinetoscope called “Dentist Scene.” Stills from this short scene show a large tooth in the lower right corner (109).

See Kaplan (83-4), Lundy (121-5), and Crisler (49-51).
Adding to the confusion, the Examiner reports twenty-nine wounds ("Twenty-Nine").

Hugh Dawson points out this comparison between Collins and Sullivan in "McTeague as Ethnic Stereotype."

In addition, the headline anticipates the judgment that Collins had “ceased to feel that he was in any degree bound to be the bread winner. His wife’s industry had accustomed him to the view that she was a money-maker who needed no help from him”—a dynamic which of course plays out to a deadly end in McTeague as well ("He").

For the racialization of the Irish, see Noel Ignatiev and Perry Curtis. Hugh Dawson discusses the similar deployment of Celtic stereotypes in Norris’s novel and in newspaper reports of the Collins murder, but does not recognize the further associations of Irishness and blackness in these texts, even as he notes the Evening Bulletin’s description of Collins’s face as “of the bull-dog character, flat nose, thick lips, heavy jaws, and small fierce-looking eyes” (38).

Here I rely on Mary Gibson’s synthesis of Lombrosian philosophy: Criminal Man grew from 250 pages in its first edition (1876) to 2,000 pages in its fifth edition (1897); according to Gibson, these volumes together constitute “a rambling and often contradictory set of observations” (22). Still, Norris’s changing representations of McTeague correspond generally to Lombroso’s idea of “degeneration” due to alcoholism.

According to James Curtis, “by 1860 at least nine medical schools had admitted one or several Negroes: Bowdoin, the Medical School of the University of New York, the Caselton Medical School in Vermont, the Berkshire Medical School in Massachusetts,
the Rush Medical School in Chicago, the Eclectic Medical School in Philadelphia, the Homeopathic College of Cleveland, the American Medical College, and the Medical School of Harvard University” (10). Historically black Howard University in Washington, D.C., opened its medical school in 1868. Tennessee’s Meharry Medical College began operation in 1876, although as a school designed for southern blacks with “only marginal preparation to pursue medical studies,” it was some years until Meharry received full accreditation (14). Also see Morais (59-74).

25 Where white physicians supported their black peers, a few integrated medical societies arose as well. See Morais (57-8).

26 “Her Death Due to a Crime,” a report on the Laphame case, ran adjacent to “Surly and Insulting,” an update on the Collins murder, in the Examiner on October 11, 1893.

27 The first subheadline attached to this article claims that “Another Girl Shares a Fate Like That of Clara Matthews,” but does not offer details of the Matthews case. Also see “The Midwife’s Trial.”

28 The Chronicle corroborated that the day after Amelia Donnelly told neighbors she was going to visit a midwife, a pile of bloody clothes, along with a pair of forceps and a speculum, were visible to callers at the Donnellys’ tenement rooms (“Mrs. Laphame”).
In light of her constant dissembling, one doubts Dr. Laphame’s explanation here, but the phenomenon of a widow taking the title of a deceased physician husband was not uncommon during this era.

Thus between 1892 and 1895, Belinda Laphame was officially implicated in the deaths of four women and the death of one infant, although we can easily imagine other, undiscovered victims. Ultimately, she was tried unsuccessfully three times for murder. Also see “Acquitted of Murder”; “The Laphame Case”; and “Verdict of Murder.”

The movements of the wealthy Norrises, owners of a wholesale firm, were regularly reported in detail in the local newspapers. In addition, Norris began contributing pieces to the San Francisco weekly The Wave in 1895 and became a staff writer and associate editor there in 1896. He wrote for the San Francisco Chronicle as well. See McElrath and Crisler (49; 66; 72; 128; 199-239).

Although there has been much debate about the start date for McTeague, most scholars agree that by 1894, Norris was working on sketches that develop into a larger work (McElrath xx; 153-69).

Physicians recognized that providing gynecological and obstetrical services eased entrée into continuing care for the entire family. As Leslie Reagan points out, “medical practice embedded physicians in family life and female lives” (68).

In addition to the rhetoric demonizing midwives who were no more unsafe than physicians performing the same operation, when regular physicians were caught performing illegal abortions, they claimed to have been coerced by manipulative female
patients into performing the abortion “innocent victims of conniving women who sought the operation” (Frazier and Roberts 75).

35 In Boston, 52 women enrolled in medical schools constituted 23.7 percent of all medical students citywide in 1893 (Walsh 183). The city was the home of the Boston Female Medical College, the world’s first medical college for women, which opened in 1848.

36 While acknowledging the presence of native and Mexican women in California, I focus on the dearth of Anglo-European women as problematic because educated middle- and upper-class Anglo-European women stood the greatest chance of success in entering the medical field—or any profession—in general during the latter part of the nineteenth century.

37 In 1860, women accounted for 29.4% of the population; in 1870, 37.6%; and in 1880, 40% (“Historical”).

38 See Read and Mathes’s The History of the San Francisco Medical Society, 1850-1900.

39 The Chinese Exclusion Act had been passed the previous year.

40 Brown expressed admiration for traditional Chinese neo-natal routines as well. She writes that “according to their custom the child is bathed only two or three times in the first month. I have watched this mode and feel sure that we make a great mistake in allowing the daily ablution of the new born child” (19). The Chinese example led Brown
“to establish the rule that the babe must not be bathed too often; to bathe on the first, third, and fifth days is my instruction to the nurse” (19).

41 The others included the New York Infirmary, founded by Elizabeth and Emily Blackwell; New England Hospital; Woman’s Hospital of Philadelphia; Mary Thompson Hospital in Chicago; and a hospital founded in Minneapolis by Dr. Mary Hood (Brown, “History”).

42 Although there was also an all-male Board of Directors, meeting records of the Lady Managers show that their positions were more than nominal (Children’s Hospital Records).

42 As the affluent owners of a wholesale firm, the Norrices were integral to the San Francisco social whirl, and their social activities were reported in detail by the newspapers. See McElrath and Crisler (49; 72).

43 See de Ford (38-9) as well as Emma Sutro’s biographical file in the Children’s Hospital Records at the Bancroft Library.

44 McElrath and Crisler (361).

45 Supposedly, Charlotte Blake Brown—although a wife and a mother herself—suggested that these first matriculants sign “an agreement not to marry for five years after graduation in order to continue in their profession and show their loyalty to the Hospital,” although this idea was never implemented (Stephenson).

46 The comparison is similarly uncomplicated by differences in class or in race, despite Norris’s relentless attempts to racialize McTeague.
The AMA Code of Ethics was adopted in 1847; the ADA code in 1866.

For example, one reviewer referred Blix “THE book of the year” (“In the Literary World”); another stressed that Blix is “totally dissimilar” to McTeague and opined that the short novel “will take nothing from the reputation Mr. Norris’ other stories established for him, and we incline to the belief that it will rather add to that reputation” (“New Books”). John Barry called Norris “one of the most brilliant as well as one of the most serious of our younger novelists” and asserted that Blix “has given fresh proof of his surprising versatility and considerably increased his reputation.”

See Rotundo (247-283).

See Kimmel (81-155) and Rotundo (6).

Although the late nineteenth-century abounded with representations of female doctors, details like the dog collar seem to be emphasizing the sheer novelty of Blix.

See Morantz-Sanchez (4-5; 28-46; 154-5; 209-10) and More (42-94).

In the next chapter, I discuss the advent of scientific medicine in relation to medical professionalization.

Similarly, another reviewer simultaneously acknowledged Blix’s unconventionality and her “naturalness” (“New”).

The Critic noted that “everybody is talking about this strange and impressive story” by “Mr. McClure’s latest discovery” (“Lounger”). McTeague was added to lists of essential books about American life (“Novels”); at the same time, some libraries banned it, only enhancing its notoriety (“Western”). Later ads included McTeague on lists of
“Specially Successful Recent Books” and “books are so well known as to need no description or commendation by us” (“Advertisement 14”; “Advertisement 60”).
CHAPTER III
LOSING CONTROL: SCIENTIFIC MEDICINE AND HUMAN EXPERIMENTATION
IN ARROWSMITH

Having very nearly rid the profession of untrained interlopers, as well as having significantly reduced competition from trained white female and nonwhite male practitioners, the “regulars”—a group of men drawn almost exclusively from the white middle and upper classes—turned to debates regarding the direction of the profession after the advent of so-called “scientific medicine,” or clinical practice based on experimental research instead of empirical observations or rationalistic theories. Although the configuration and the passage of laws regulating medical education and licensing in the nineteenth century had varied dramatically by state and by region, by the first two decades of the twentieth century, state laws had become tougher and more uniform. Such moves were an attempt to reduce the number of small, “proprietary” medical schools turning out badly trained practitioners: in 1906, the nation had 162 medical schools; by 1915, that number had dropped to 95, and by 1922, to 81. The remaining schools conformed to the stringent new accreditation guidelines established by the AMA and accepted by state medical boards as authoritative. With the field “cleansed” of inept and dangerous practitioners, medical professionals could focus on perfecting therapeutics.¹
Sinclair Lewis’s *Arrowsmith* (1925) narrates the major advances in the treatment of infectious diseases during the first decades of the twentieth century by following the medical career of Martin Arrowsmith, an idealistic young Midwesterner determined to find a “magic bullet” to kill disease-causing microbes. Arrowsmith’s journey, from medical school to private practice, and from a local health department to an elite research institute, describes the increasing overlap between clinical practice, laboratory research, and public health during this “golden age of bacteriology.” During the first four decades of the twentieth century, the revelations of the laboratory bolstered the authority of clinical practitioners by shaping therapeutic protocols that yielded predictable results. I contend that *Arrowsmith* complicates that accumulation of authority by representing white women and nonwhite women and men as active threats to both the experimental controls essential for scientific research and to the self-control essential to the preservation of the professional and personal identity of the doctor-scientist. In fact, the novel offers a plague-ravaged Caribbean island as a testing ground for a new antibiotic, but then casts the population of that island as “pre-scientific,” entirely resistant to the principles at the heart of scientific medicine and laboratory experimentalism.

Ultimately, I argue that *Arrowsmith*, initially conceptualized by Lewis as a heroic tale of scientific triumph, a romance of medicine, inadvertently exposes the ways in which the purveyors of a disciplinary discourse—exclusionary rhetoric fundamental to the definition and the formation of the profession—might themselves be “disciplined” as
their experimental protocols and research projects are troubled or defeated by the very raced, classed, and gendered populations they have reviled. I maintain that Lewis loses control of both the form and the content of his text even as his heroic researchers lose control of their subjects. Moreover, in a kind of doubling that speaks back to the relationship between McTeague and Blix, I position the 1926 publication of The Microbe Hunters, a swashbuckling “history” of scientific medicine by Lewis’s collaborator Paul de Kruif, as a kind of corrective to the failures of science and of masculinity, to the ragged, undisciplined professional performances exposed by Arrowsmith.

Recent readings of Arrowsmith have interrogated the relationship of American medicine to a nascent imperialism. I extend those readings by arguing that in Arrowsmith, the Caribbean island stands for the American South, with the novel’s tropical episode calling attention to similar ideologies informing medical research and pharmaceutical testing in a number of Southern states during the 1930s and 40s—an imaginative substitution corroborated by accounts of anti-syphilis campaigns waged in Alabama and Georgia and related by de Kruif in his autobiography The Sweeping Wind.

I. The Advent of “Scientific Medicine”

The career of Martin Arrowsmith stands as a kind of encapsulated history of epistemological and ontological conflict within the medical profession during the last
decades of the nineteenth and the first decades of the twentieth century as physicians debated the proper role of laboratory science in medical practice. Should increasingly sophisticated laboratory experimentalism merely explain or actually direct clinical practice? The prospect of a therapeutic protocol based on laboratory discoveries issued uncomfortable challenges to the physician’s professional identity by minimizing “the exercise of judgment upon which his identity was partly based” (Warner, “Ideals” 219). Accordingly, Arrowsmith’s turn-of-the-century medical training features mentors on either side of the professional divide created by the advent of scientific medicine. However, the young doctor’s subsequent movements in and out of the adjacent realms of clinical medicine and laboratory science—as well as through their ultimate intersection in public health—not only suggest the blurring of boundaries between these fields but also demonstrate how the clinical deployment of the revelations of the laboratory ultimately enhanced the professional authority of American physicians.

During the nineteenth century, American medical thinking and practice registered three major shifts, from rationalism to empiricism to experimentalism. The physicians of the early Republic were “therapeutic activists” influenced by the Scottish rationalists, who sought to construct a unified theory that attributed all disease to the same pathogenic process. A corresponding range of indiscriminate treatments simply attempted to interfere with that process. Increasingly, though, doctors “tended to regard the therapeutic certainty systems seemed to offer as a seductive illusion belied by the complexity of bedside experience” (Warner, Therapeutic 41). Between the 1820s and the 1850s, American physicians, a few of whom had acquired at least part of their training in Paris,
turned from Scottish rationalism to French empiricism. The French stressed direct observation of the ailing body and correlation of specific symptoms with autopsy results. In a growing corpus of medical literature, American physicians elaborated this movement towards observation and specificity with theories of pathological distinctiveness based in part on environmental factors, including regional variables such as meteorology and topography. Ultimately, the limits of specificity—namely, that the requisite consideration of limitless variables precluded the formation of any sort of universally applicable diagnostics and therapeutics—were exposed. Soon, however, the meticulous experimental laboratory science emerging from places like Berlin and Vienna in the 1860s promised a revolution in diagnostics and therapeutics: through experimentation based on the so-called “scientific method,” researchers were able to identify pathogens responsible for many of the world’s deadliest diseases and to develop anti-toxins and antibiotics to combat them.

Although a “germ theory” of disease had been gradually coalescing since the time of van Leeuwenhoek’s first sighting of bacteria in 1676, germ theory was not proven definitively until the second half of the nineteenth century. In prescient writings, Marcus Plenciz, an Austrian physician, suggested in 1762 not only that diseases could be caused microscopic agents, but also that each disease stemmed from its own unique pathogen. Early nineteenth-century scientists and physicians attempting to trace patterns of contamination—for example, during outbreaks of cholera—further bolstered that contention. Finally, Louis Pasteur demonstrated in 1861 that fermentation was caused not by spontaneous generation but by microorganisms. Pasteur’s work anticipated Robert
Koch’s development of a series of postulates that proved germ theory in 1890. During the 1880s and 90s, researchers in the new field of bacteriology were able to identify and isolate the bacteria responsible for tuberculosis, typhoid, diphtheria, dysentery, cholera, and tetanus in quick succession. Treatments for these diseases were much slower in coming, although some anti-toxins—substances that do not kill bacteria, but neutralize their sickening toxins—were available fairly soon. The first true “antibiotic,” the anti-syphilitic drug Salvarsan 606, became available around 1910. Following the model of the Pasteur Institute in Paris, a number of newly established research centers, such as the Rockefeller Institute in New York, raced to make the next life-saving discovery. Just as microbes were now visible to researchers, the immediate and predictable results of experimentally-derived therapies were now visible to an enthusiastic public.

In Lewis’s double bildungsroman, young Arrowsmith and modern medicine come of age simultaneously, with the young doctor’s mentors and nemeses representing the numerous factions contesting the direction of the profession and the image of the physician around the turn of the twentieth century. At fourteen, Arrowsmith becomes an informal apprentice to Doc Vickerson, a country doctor partial to Jamaican rum and afternoon naps. The Doc’s office seems drawn from D.W. Cathell’s nightmares:

The central room was at once business office, consultation room, operating-theater, living-room, poker den, and warehouse for guns and fishing tackle. Against a brown plaster wall was a cabinet of zoological collections and medical curiosities, and beside it the most dreadful and fascinating object known to the boy-world of Elk Mills—a skeleton with one gaunt gold tooth” (5).
Nonetheless, it is the uneducated country doctor so often defeated by his patients’ conditions, the unreconstructed relic from nineteenth-century frontier medicine, who urges his young apprentice to get the academic training that he himself lacks. Vickerson’s urgings propel Arrowsmith to study medicine at the University of Winnemac, where he encounters the lingering divide between empirical clinical medicine and experimental laboratory science. This divide is personified by mentors and archenemies Dean Silva, professor of internal medicine and devotee of William Osler—“his religion was the art of sympathetic healing, and his patriotism was accurate physical diagnosis”—and Max Gottlieb, the German Jewish immunologist whose devotion to laboratory experimentation is total (86). Ultimately, Arrowsmith follows the example of Dean Silva and sets up practice in his wife’s hometown of Wheatsylvania, North Dakota.

Arrowsmith quickly transitions to new challenges, however. Bored with the mundane practice and the provincial town, and intrigued by emergent issues in public health, Arrowsmith becomes the Assistant Director of Public Health in Nautilus, Iowa. Unfortunately, Director Pickerbaugh, a natural showman whose medical knowledge is “rather thinner than that of the visiting nurses,” is more interested in style than in substance, composing jingles that “jazz up the Cause of Health” for his eight daughters—the Healthette Octette—to perform, staging health fairs that promote eugenic reproduction as patriotic duty, and gladhanding his way to a seat in Congress (219, 204). Again disillusioned, Arrowsmith leaves the bureaucracy of public health for the Rouncefield Clinic in Chicago, a medical “factory” that “did, perhaps, give over-many roentgenological examinations to socially dislocated women who needed children and
floor-scrubbing more than pretty little skiagrams” (281). Arrowsmith is “never able to
rise to the clinic’s lyric faith that any portions of the body without which people could
conceivably get along should certainly be removed at once” and joins the McGurk
Institute—a thinly veiled Rockefeller Institute in this roman à clef—in Manhattan (282).
With this move, Arrowsmith returns literally and figuratively to the tutelage of
immunologist Max Gottlieb, now a McGurk researcher; availing himself of the Institute’s
limitless resources, Arrowsmith discovers a miraculous new antibiotic agent that he will
eventually test on the victims of a Caribbean plague. Although his Caribbean trials go
awry because of indiscriminate distribution of the new drug, the newspapers “reported
wonders” about the antibiotic and hail Arrowsmith as a conquering hero (418).

Arrowsmith’s extraordinarily fluid movements between the areas of clinical
medicine and laboratory research, and through their convergence in the area of public
health, suggests an increasingly reciprocal and interdependent relationship amongst these
fields during the first decades of the twentieth century. This disciplinary overlap blurred
the boundaries of professional identity as well: regular physicians successfully deploying
new treatments unearthed by laboratory researchers were bathed in the reflected glow of
scientific discovery. Contrary to early fears, the advent of scientific medicine did not
render the physician and his judgment redundant, but rather recast the physician as the
sought-after administrator of therapeutics ever more exact and efficacious.¹²
II. Control Freaks

The cultural authority of doctors, powered by highly publicized laboratory breakthroughs, was beginning to crest as Sinclair Lewis was starting to write *Arrowsmith* in 1922. Yet I find the novel continuing to register certain anxieties about the constitution of the profession. Since the high-water mark of 1910, the number of female physicians in America had been steadily declining, but this novel nonetheless compulsively underscores medicine as a male domain. Furthermore, in representing men of science and rituals of the laboratory, *Arrowsmith* reveals an *impasto*-like layering of the tropes of masculinity holding currency in the first decades of the twentieth century to elaborate the image of the physician-scientist—a relentless effort to make the medical man seem tough and sexy. (Here we see the novel’s eventual attraction for director John Ford, king of the classic Westerns.) At the same time, the text entwines notions of experimental control and of self-control, with women emerging as a threat to “control” both in and out of the laboratory. Ultimately, however, these representational strategies backfire: the strict homosociality of the laboratory begins to assume homoerotic overtones and Lewis’s hypermasculine hero reveals a decidedly sentimental streak. I maintain that both of these slippages violate Lewis’s original plan for *Arrowsmith*.

Working on *Babbitt* in 1921, Lewis told his publisher that his next project would not be “satiric at all; rebellious as ever, perhaps, but the central character heroic” (qtd. in Hutchisson 49). Then a chance meeting in 1922 with microbiologist Paul de Kruif, formerly of the Rockefeller Institute, in the office of an associate editor of the *Journal of the American Medical Association* reignited an idea for a novel about a heroic young
doctor-scientist. De Kruif had lost his position at the Rockefeller Institute for writing a series of articles in the *Century Magazine* critical of the commercial interests that he felt tainted the integrity of American medicine. Lewis enlisted the unemployed de Kruif to provide him with “the *vitae* for his principal characters, with the details of laboratory procedure and with a plausible scientific setting for Arrowsmith’s exploits” (Rosenberg 449). Together, they imagined a sweeping narrative in which the integrity of “pure” scientific inquiry triumphs over the lure of lucrative commercialized medicine. In his 1962 autobiography *The Sweeping Wind*, de Kruif recalled that they planned this narrative around a “handsome, stubborn-minded” hero, a “hard, cold, accurate” man—in short, an embodiment of ideal interwar masculinity (85).

*Arrowsmith* positions the laboratory as an exclusively masculine province via a virtual parade of conventionally masculine images. From the first scene, which establishes Arrowsmith as the descendant of hardy pioneers, nineteenth-century “trailblazers,” the text works diligently to erase the traditional divide between physical labor and intellectual work. During summer vacations from medical school, Arrowsmith becomes a kind of techno-cowboy, “a lineman in the wire-gang,” rough work that Lewis somehow manages to sexualize: “It was his job to climb the poles, digging the spurs of his leg-irons into the soft and silvery pine, to carry up the wire, lash it to the glass insulators, then down and to another pole” (33). Arrowsmith, who looks “like a farm-hand” in his overalls and flannel shirt, enjoys the camaraderie of the roving wire-gang and the routine of bunking in a new town every night, rolling up in a horse-blanket to sleep (33). Later, temporarily suspended from medical school for rude conduct,
Arrowsmith becomes a vagabond, a “lone prowler” (350). Lewis might be describing an outlaw:

Always in America, there remains from pioneer days a cheerful pariahdom of shabby young men who prowl causelessly from state to state, from gang to gang, in the power of the Wanderlust….He wandered by freight trains, on blind baggages, on foot. To his fellow prospectors, he was known as “Slim,” the worst-tempered and most restless of all their company. (100)

Echoes of this Western motif surface even in the hyperintellectual Gottlieb’s medical school demonstrations. Although a certain demonstration only involves a guinea pig, in the overwrought scene Gottlieb might be a cowboy too, slaughtering and branding livestock. Students are already anxious when Gottlieb infects some guinea pigs with anthrax (rumors abound surrounding a student who had died from anthrax contracted in the laboratory); at the necropsy, Gottlieb slits one of the infected pigs “from belly to neck, and cauterized the heart with a red-hot spatula—the class quivered as they heard the searing of the flesh” (39). The scene suggests that science can effect a kind of imaginative masculinization as the intellectual worker momentarily morphs into the ranch hand.19

As Arrowsmith completes his medical training, the cowboy yields to the superhero—and eventually to the soldier—with disease the archenemy.20 Here Lewis begins to showcase Arrowsmith’s physicality in medical contexts. When flood waters menace his town, the young resident abandons the hospital proper: arriving by boat at the second floor of a tenement house and delivering a baby on the top floor; binding wounds for a line of men; and “swimming the flood to save five children marooned and terrified
on a bobbing church pew” (123). Later, as a new practitioner in Wheatsylvania, Arrowsmith sets off for a neighboring town at breakneck speed for diphtheria antitoxin; afterwards, “he was no longer the embarrassed cub doctor but the wise and heroic physician who had won the Race with Death” (166). Even within the ultracivilized halls of the McGurk Institute, an excited Arrowsmith, impatient to begin an experiment, breaks into the glass storeroom by “shattering” the lock (321). With that experiment—an attempt to unravel the workings of the mysterious “bacteriophage”—Arrowsmith’s work takes on militaristic overtones. Waiting for the results, Arrowsmith felt like “an escaped soldier in the enemy’s country, with the same agitation and the same desire to prowl at night” (325); his wife meets the news that Arrowsmith will be leaving for a plague-stricken Caribbean isle “with the age-old wail of the soldiers’ women” (364). Ultimately, elements of these hypermasculine images—cowboy, outlaw, superhero, soldier—converge in Arrowsmith’s most important “role”: the microbe hunter, who races to a faraway land to tame a raging epidemic with his secret weapon.

This convergence shows Lewis activating many of the key images of ideal masculinity during the interwar period at once, deploying the lingering products of the “fin de siècle mission to thwart feminization and revirilize boyhood—and by extension, manhood” (Kimmel 181). Concerns that (white, middle-class) American men were becoming too “soft,” too heavily influenced by women, had surfaced periodically throughout the second half of the nineteenth century. However, as women (and Others) “invaded” the workplace and as technology and bureaucracy robbed men of control of
their own labor, that rhetoric gained even more currency. Michael Kimmel has argued that as

turn-of-the-century American men had confronted social and economic limits to their ceaseless struggles to prove themselves, they had sought to preserve their workplaces as sites of self-making, shaped their bodies as disciplined instruments of their will to succeed, worked to rescue their sons from feminization, created parallel institutions of nurture and solace for themselves, and occasionally escaped to a more pristine earlier world where men were men and women virtually nonexistent. (187-88)

Indeed, we see Arrowsmith utilizing nearly all of those strategies: resisting authority in medical school, dropping in and out at will; testing and honing his body with difficult labor in the great outdoors; and roving remote areas with the all-male wire-gang. These episodes merely serve as preparation for microbe hunting; braving rough conditions on the tropical island, quarantined from his wife, Arrowsmith makes professional decisions that contradict his employer’s instructions. By retaining control of his “secret weapon,” his intellectual property, he leaves the island a savior, a figure larger than life to the islanders. With these tireless reiterations of ideal masculinity, *Arrowsmith* insists that the realm of scientific medicine belongs to men—more precisely, to a certain kind of man, rough and ready for his close-up.

Furthermore, with narrations of laboratory research that entwine notions of experimental control and male self-control, the novel suggests that women are not only fundamentally incompatible with but also actually disruptive to scientific progress. Critical to the scientific method is the principle of experimental control, which the young Arrowsmith embraces with religious fervor. At Winnemac, Arrowsmith learns
from Gottlieb the trick of using the word ‘control’ in reference to the person or animal or chemical left untreated during an experiment, as a standard for comparison; and there is no trick more infuriating. When a physician boasted of his success with this drug or that electric cabinet, Gottlieb always snorted, ‘Where was your control? How many cases did you have under identical conditions, and how many of them did not get the treatment?’ Now Martin began to mouth it—control, control, control, where’s your control? where’s your control?—till most of his fellows and a few of his instructors desired to lynch him. (43-4)²¹

The rigor of the control accords well with Gottlieb’s asceticism. Gottlieb’s “Gott” is science; he insists that “the scientist is intensely religious—he is so religious that he will not accept quarter-truths, because they are an insult to his faith” (290). Frequently referring to Gottlieb as a priest and as a German Jew who loves “Father Koch and Father Pasteur and Brother Jacques Loeb and Brother Arrhenius,” the text nominates Gottlieb to a kind of scientific “order” (and yet another homosocial grouping) (41).²² Like a monk, the scientist, living “in a cold, clear light,” must deny himself, “must be heartless” (290). Arrowsmith demonstrates that he has fully internalized this rhetoric when leaving for St. Hubert, swearing “by Jacques Loeb that he would observe test conditions; he would determine forever the value of phage by the contrast between patients treated and untreated, and so, perhaps, end all plague forever; he would harden his heart and keep clear his eyes” (361). Without self-control, there can be no experimental control; without experimental control, there is no (scientific) self to control.

Keeping in mind this belabored entwinement of male self-control and experimental control, we must consider female incursions on male self-control as simultaneous disruptions of experimental control, and vice versa. In Arrowsmith, women
are at best distractions, and at worst predators—capable of transforming the hunters into the hunted. When young resident Arrowsmith starts dating affluent and cultured Madeline Fox—“a dead shot” capable of hitting “a smart young M.D. at ninety paces”—one of his colleagues predicts the end of his research: “Oh, you’ll have one fine young time going on with science after that skirt sets you at tonsil-snatching….She’ll have you all dolled up in a Prince Albert and a boiled shirt, diagnosing everything as rich-widowitis. How can you fall for that flour-flushing dame—Where’s your control?” (48-9). (In turn, Madeline Fox frets over possible competition from “man-hunting” nurses.) When female predators interfere with male self-control, experimental control dissolves. Conversely, when Arrowsmith first meets nurse Leora Tozer, his future wife, she stands between the doctor and his experiment. Sent by Gottlieb to culture a strain of meningococcus at a nearby hospital, Arrowsmith becomes enraged when Nurse Tozer ignores his request for directions. “I am Dr. Arrowsmith,’ he snorted, ‘and I’ve been informed that even probationers learn that the first duty of a nurse is to stand when addressing doctors! I wish to find Ward D, to take a strain of—it may interest you to know!—a very dangerous microbe, and if you will kindly direct me—’” (57). Leora’s indifference to his status and to his science—indifference that at least momentarily blocks the progression of the experiment—triggers a breakdown in self-control.

Despite—or perhaps because of—this relentless masculinization of medical men, a two-pronged strategy that renders men the rightful owners of scientific medicine and women the insidious threats to male self-control and to experimental control, Arrowsmith frequently slips from Lewis’s control as homosociality verges on homoeroticism.
Contravening the heterosexist norms underpinning conventional masculinity, the novel’s homosocial dynamic becomes energized enough to exceed its own boundaries. Early on, Arrowsmith compares the comfortable homosociality of the wire-gang, and the pleasures of their routine, to his relationship with his mentor, holding “for them an affection such as he had for no one at the University save Max Gottlieb” (34). Describing that developing relationship, Lewis makes strange use of an ellipsis as Arrowsmith begins

in youthful imitation of Gottlieb, to work by himself in the laboratory at night….He was excited and a little proud; he had stained the germs perfectly, and it is not easy to stain a rosette without breaking the petal shape. In the darkness, a step, the weary step of Max Gottlieb, and a hand on Martin’s shoulder. Silently Martin raised his head, pushed the microscope towards him. Bending down, a cigarette stub in his mouth—the smoke would have stung the eyes of any human being—Gottlieb peered at the preparation.” (39-40)

Although Lewis and de Kruif clearly conceived of the Gottlieb-Arrowsmith relationship as one of father and son, mentor and mentee, the moment carries an erotic charge. On one side of the ellipsis, Arrowsmith is “working” alone in darkness; on the other side, he emerges “excited” and “proud”—language that evokes the taboo of masturbation—primed for the eventual touch of Gottlieb, who extends an invitation. “‘I shall have,’ said Gottlieb, ‘a little sandwich in my room at midnight. If you should happen to work so late, I should be very pleasit if you would come to have a bite’” (41). Clearly, that strange ellipsis marks an unmonitored space across which the tenor of the relationship between mentor and mentee changes from homosocial to homoerotic—violating the norms of conventional masculinity that this text works so hard to reify.
Indeed, Gottlieb begins to register a passion for more than scientific inquiry. Arrowsmith’s growing attachment to Leora first annoys—“Arrowsmith, you are a moon-calf! My God, am I to spend my life with Dummköpfe? I cannot always be alone, Martin! Are you going to fail me?”—and then alienates an increasingly jealous Gottlieb (63). Encountering the couple on the street, Gottlieb “did not look back when they had passed him, but all that afternoon he brooded on them. ‘That girl, maybe it was she that stole Martin from me—from science!’” (136). Years pass, however, and Gottlieb convinces the leadership of the McGurk Institute to recruit Arrowsmith, to whom he writes, “‘I have spoken about you to Tubbs. When are you coming to us—to me?’” (286). This jealousy and possessiveness, simmering over a span of years, suggests a relationship that exceeds homosociality, despite recurring fears within American culture that too much male-male social contact could be a breeding ground for the dreaded homosexuality. These aspects of the Arrowsmith-Gottlieb relationship do not fall within the culturally sanctioned limits for men at work or at play.

Lewis has similar trouble wrangling generic conventions. With Arrowsmith, the satirist allows himself to be swept away in a romanticized vision of scientific medicine, although his signature caricatures—Dr. Pickerbaugh, the opportunistic public health official, for example—and sharp criticism—this time, of the growing commercialism of American medicine—are still there. But Arrowsmith’s romanticism often shades into sentimentalism. While its geographic sweep and its “masculine” concern with science and rationality distance Arrowsmith from the typical settings and problems of sentimental literature, the novel does include a number of problematic emotional outbursts. Although
Arrowsmith insists—with a declaration that in itself raises suspicions—“I’m not a sentimentalist; I’m a scientist,” the microbe hunter has an alarming proclivity for dissolving into tears (395). For example, in the midst of chastising Leora for her sloppy dress and her dull conversation at a work-related dinner party, he suddenly breaks down, “sobbing” for the “poor, scared, bullied kid, trying to be grown-up with these dollar-chasers!”—obviously a projection of his own neuroses (285). Tears are an understandable response when Leora eventually succumbs to plague on St. Hubert, but the burial scene offers a prime example of how easily Lewis’s “romanticism” can morph into an overwrought display:

By evening he strode to the garden, the high and windy garden looking toward the sea, and dug a deep pit. He lifted her light stiff body, kissed it, and laid it in the pit. All night he wandered. When he came back to the house and saw the row of her little dresses with the lines of her soft body in them, he was terrified. Then he went to pieces. (405)

Several night later, he returns “in panic” to fling himself on her grave dramatically (409). (It must be said that all this cathartic carrying-on does not prevent Arrowsmith from lining up a date with a rich widow within several days of Leora’s death.) Lewis seems unable to control Arrowsmith’s tendency to enact the melodrama he decries. Under the extraordinary narrative pressure created here by the relentless rhetorical masculinization of medicine—the building up, the tearing down, the reigning in—the tears seep out, even though a sentimental(ized) novel is neither a form devoted to the exploration and celebration of conventional masculinity nor the text Lewis originally had in mind.
III. Tropical Fiasco

Ultimately, Arrowsmith ends up experiencing what Lisa Lynch has called an “imperial breakdown” on St. Hubert, abandoning his experiment and failing to verify the efficacy of bacteriophage against plague (203). Arrowsmith returns to New York, retires from the McGurk Institute, and retreats to the Vermont woods to conduct “pure” research in a makeshift lab in a tool shed. Intoxicated by the tropics, the novel and its author(s) seem to have veered off course.24

This new course betrays profound anxieties about the involvement of nonwhite populations in scientific experimentation, even when those natives are fulfilling the ostensibly subordinate roles of test subjects. When news arrives of an outbreak of plague on a Caribbean island, the scientists of the McGurk Institute urge Arrowsmith to test his new “bacteriophage” on the island’s inhabitants.25 In particular, Gottlieb insists that Arrowsmith withhold treatment from a control group to verify the efficacy of the new preparation. Ultimately, however, the island and its people seem to defeat the control and to derail the experiment, compromising Arrowsmith’s identity as a scientist and as a man. Echoing its earlier treatment of white women, the novel figures the nonwhite natives as disruptive to scientific progress.

The fictional island of St. Hubert, situated roughly between Barbados and Trinidad, had cast off nineteenth-century French domination via a slave revolt; in the intervening years, however, the English have retaken the island. The delegation from the McGurk Institute finds the usually bustling tourist destination desolate as death tolls rise. Despite the meddling of an ineffectual and uninformed Surgeon General, Arrowsmith
attempts to conduct the controlled test of bacteriophage with the assistance of local physicians, including Oliver Marchand, a black doctor trained at Howard University. In the most plague-ravaged areas of the island, Arrowsmith dispenses his bacteriophage freely, but when he encounters a cane plantation yet untouched by the spreading epidemic, he quickly establishes a control group by inoculating only half of the cane workers. The experiment ends abruptly, however, when Arrowsmith learns that his wife, who insisted on accompanying him to St. Hubert, has died from plague after failing to follow the dosing instructions for the bacteriophage. Heartbroken, he abandons the experiment and gives bacteriophage injections to anyone who asks. Although celebrated upon his return to New York, Arrowsmith—shattered by the tropical fiasco—resigns from the McGurk Institute and retreats to an isolated cabin in the Vermont woods.

The overwhelming majority of *Arrowsmith* criticism pays little attention to the tropical fiasco and to the abortive experiment—a significant omission considering that this section forms the narrative climax of the novel—focusing instead on the subsequent pastoral retreat as the logical conclusion to a pitched battle between scientific integrity and American commercialism. As one critic argues, Arrowsmith “has climbed to the pinnacle and has found it too corrupted by America’s materialistic standards. There is nowhere else for him to go…” (Conroy 355). Only a few critics have considered the tropical escapade as a problematic intersection of scientific medicine and American imperialism. Lisa Lynch claims that the ruined experiment seems “to represent the failure of Western reason in the tropics,” a failure implicitly attributed to the lingering “sinister” influence of St. Hubert’s colonial past (194). Lynch contends that Arrowsmith’s “sense of
disorientation in the exotic tropics, his state of exhaustion and overwork, and his experience of forcing natives to do his bidding are classic ingredients for an imperial breakdown” (203).

Clearly, Lewis means for Arrowsmith, described as “the savior” of St. Hubert, to experience a racial “awakening” there, noting that “like most white Americans, Martin had talked of the inferiority of Negroes, but knew nothing whatever about them” (382). After meeting Marchand, the Howard-trained black physician, and discussing bacteriological theory with him, Arrowsmith marvels at the doctor’s intellect and competency: “I never thought a Negro doctor—I wish people wouldn’t keep showing me how much I don’t know!” (383). However, at the same time, the narrator describes the departing Marchand as “a beautiful young animal,” rendering this scene of epiphany ambivalent at best. Later, Arrowsmith, recalling the narrator’s jocular suggestion that his colleagues wanted to “lynch him” over his tiresome obsession with experimental control, shows that he has already internalized the colonizer’s deepest fears of violent revolt; when nearly everyone tries to persuade him to save lives with mass inoculations, he boasts that “nothing can make me do it, not if they tried to lynch me” (405). Arrowsmith’s racial awakening fails even more spectacularly than his bacteriophage experiment.

But the novel seems to suggest that neither failure is Arrowsmith’s fault by figuring the island and its natives as “pre-scientific” and thus resistant to the kind of controlled experimentation he requires. From the very beginning, the island resists the most basic plague-fighting measures, and Lewis represents island culture—both English
and native—as benighted: plague-ravaged corpses pile up because the Surgeon General is afraid “to cremate the bodies—some religious prejudice among the blacks—obee or something” (377). And significantly, native ineptitude exposes Leora Arrowsmith to fatal contagion. Isolated and lonely in a supposedly plague-proof hideaway (Penrith Lodge, the English governor’s home), Leora takes refuge in the makeshift laboratory Arrowsmith had set up, which seems filled with her husband’s jerky brimming presence. She kept away from the flasks of plague germs, but she picked up, because it was his, a half-smoked cigarette and lighted it.

Now there was a slight crack in her lips; and that morning, fumbling at dusting—here in the laboratory meant as a fortress against disease—a maid had knocked over a test-tube, which had trickled. The cigarette seemed dry enough, but in it there were enough plague germs to kill a regiment. (404)

Of course Leora’s death marks the end of any pretense of controlled experimentation. However, the maid’s infiltration of the laboratory “fortress”—and her indiscriminate spillage of experimental material—points to Arrowsmith’s more fundamental problem: the island itself emerges as a “pre-scientific” realm, represented with language that predates scientific medicine. As the McGurk Plague and Bacteriophage Commission to the Lesser Antilles first approaches the capital, Lewis’s description of the landscape alludes to earlier theories of disease. Both the name and the picture of Blackwater, the capital, evoke the miasmas, or “bad air” thought to contain particles of disease-causing decomposed matter, blamed for outbreaks of illness prior to the establishment of germ theory; the commission sees “low flimsy barracks on a low swampy plain stinking of slimy mud” (377).²⁷ As they navigate the “uneasy water” off of St. Hubert, the narrator
names the problem: “the steamer waited, rolling in a swell, while from the shore seemed to belch a hot miasma” (375). The miasma even seems to pursue them. Just before her death, Leora sits on the porch of Penrith Lodge, “staring at the shadowy roofs of Blackwater below, sure that she felt a ‘miasm’ writhing up through the hot darkness” (402-3). The evocation—and acceptance—of outmoded, discredited miasma theory here, in association with one of the world’s most advanced research institutions, is remarkable. On this Caribbean island, where “bad air” from the colonial past lingers, Arrowsmith’s science doesn’t work.

**Into the Woods**

Not surprisingly, the wrecked experiment signals a simultaneous breach of science and self. Returning to New York, Arrowsmith is hailed a hero, but he considers the bacteriophage “trial” a failure. Although the epidemic slackens after widespread distribution of bacteriophage, without a control group a positive correlation is impossible. Furthermore, even as Arrowsmith’s experiment is collapsing in St. Hubert, Gottlieb, the master of the control, is losing his mind in New York. In a mere six months, Gottlieb has been inexplicably debilitated by sudden dementia—as if the foul “miasma” had drifted all the way to Manhattan. For Arrowsmith, even a quick remarriage to the rich widow, Joyce Lanyon, proves an exercise in emasculation. Joyce adds a kind of miniature laboratory, a scientific playhouse, to their mansion and brings friends and relatives over to watch Arrowsmith work with those “darling bacteria”; after all, “Mart is so cute with all of
those lil vases of his” (451). Arrowsmith’s research, once so definitive of professional and personal identity, has devolved into a party piece.

Accordingly, Arrowsmith retreats from society in order to regain control of science and self. He leaves wife and child and moves to an isolated cabin, owned by a McGurk colleague, in the Vermont woods, where “they snowshoed and shot rabbits, and all the long dark evenings while they lay on their bellies by the fire, they ranted and planned” (433). The colleagues decide to work on quinine therapies in an improvised lab in a tool shed. Meanwhile, Arrowsmith rebuilds his masculinity with the familiar tests of physical strength and Gottlieb-inspired exercises in self-denial:

He had become soft. To dress in the cold shanty and to wash in icy water was agony; to tramp for three hours through fluffy snow exhausted him. But the rapture of being allowed to work twenty-four hours a day without leaving an experiment at its juiciest moment to creep home for dinner, of plunging with Terry into arguments as cryptic as theology and furious as the indignation of a drunken man, carried him along, and he felt himself growing sinewy. (460)

As far away as possible from emasculating women and from mystifying natives, the doctor-scientist begins to feel “very, very pure” (459).

IV. The Microbe Hunters

Despite all this “manly” posturing, Arrowsmith is a bundle of nerves for most of the novel, often on the verge of either bursting into a rage or into tears. Arrowsmith’s science doesn’t work on St. Hubert, but it may not work in the Vermont woods either: the last lines of the novel are Arrowsmith’s weirdly discordant prediction—in which he
remains blithely optimistic about a negative outcome—that “this new quinine stuff may prove pretty good. We’ll plug along on it for two or three years, and maybe we’ll get something permanent—and probably we’ll fail!” (464). Even so, readers and critics were seemingly unfazed by these problematic representations and the bizarre ending: an immediate best-seller, *Arrowsmith* was awarded the Pulitzer Prize in 1926 and transformed into an Academy Award-nominated movie in 1931.\(^{28}\) Radio and television adaptations followed over the next three decades. Contemporary reviews tended to be uncritical of Arrowsmith’s professionalism: although one *New York Times* review, for example, bore the title “Lewis Assails Our Medicine Men,” the critic focused instead on the Arrowsmith-Leora relationship, “the great story of married love for which the world has been waiting.”

Nonetheless, I argue that the immediate appearance (and the tremendous popularity) of de Kruif’s *The Microbe Hunters* (1926), a rough-and-tumble “history” of scientific medicine, suggests a need for a corrective to the confused professional performances of *Arrowsmith*. Undoubtedly, *The Microbe Hunters* was in part an exercise in vindication. Initially, de Kruif had been promised collaborator credit on the title page of *Arrowsmith*; however, the publisher quickly decided that such an arrangement would diminish Lewis’s reputation by suggesting that his creative powers were declining. Critics agree—and Lewis freely admitted—that de Kruif’s role in the development and the composition of *Arrowsmith* was significant, so the bitterness that de Kruif nurtured for some years, as well as the desire to write his version of the story of scientific medicine and to receive proper credit for his work, is understandable. However, as a
“plain history” of “bold and persistent and curious explorers and hunters of death,” *The Microbe Hunters* deserves serious consideration as a kind of corrective to *Arrowsmith* (3).

Unambivalently committed to its ideologies and to the simultaneous masculinization and glamorization of the doctor-scientist, *The Microbe Hunters*—also extremely popular with 1920s audiences—goes where *Arrowsmith* fears to tread. In prose even less subtle than Lewis’s, de Kruif establishes an almost exclusively male lineage of “microbe hunters” from van Leeuwenhoek to Ehrlich, recasting their discoveries as high adventure. De Kruif tries to sculpt several of these researchers into hypermasculine figures, rebellious and tough, who delight in demonstrating their physicality in the outdoors; meanwhile, chapter titles like “Massacre the Guinea Pigs” attempt to virilize even the most hopelessly lab-bound of his subjects. In “Trail of the Tsetse,” de Kruif describes British scientist David Bruce, searching for the microorganisms responsible for sleeping sickness, in terms that remind us of a less conflicted Arrowsmith. We learn that “it was in the nature of David Bruce to do things his superiors didn’t want him to do” (252). Those superiors, the “natural enemies of David Bruce, the High Authorities,” awed by his physical presence, “looked at him; they secretly trembled at his burliness and his mustaches and his air of the Berserker” (258-9). In Africa, this fierce figure welcomes the “chance to do something else than sit at a microscope. He forgot instantly about the more patient, subtle jobs that demanded to be done—teasing jobs, for a little man, jobs like tracing the life of the trypanosomes in the flies” (261). Instead, attempting to confirm the role of big game in the of sleeping sickness, Bruce “buckled on his cartridge belt and

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loaded his guns. Into the thickets he went, and shot Burchell’s zebras; he brought down koodooos and slaughtered water-bucks. He slashed open the dead beasts and from their hot hearts sucked up syringes full of blood, and jogged back up the hill with them” (261). De Kruif maintains that this remarkable physicality “is the secret of those fine discoveries Bruce made. It was because he was a hunter. Not only with his mind—but a bold everlastingly curious snouting hunter with his body too” (268). In de Kruif’s graphic portrait, Bruce is the über-Arrowsmith, a more physical and less emotional version of Lewis’s character.

Not surprisingly, this hypermasculine microbe hunter experiences no doubts about human experimentation, particularly on a raced population. When Bruce needs spinal fluid to verify the presence of trypanosomes in humans afflicted with sleeping sickness, the ends justify the means. Unable to persuade African natives to submit to painful spinal taps,

Bruce hit on a crafty scheme. He went to the hospital, where there was a fine array of patients with all kinds of diseases—but no sleeping sickness—and then, flimflamming them into thinking the operation would do them good, this liar in the holy cause of microbe hunting jabbed his needles into the smalls of the backs of negroes with broken legs and with headaches, into youngsters who had just been circumcised, and into their brother and sisters who were suffering from yaws, or the itch; from all of them he got spinal fluid. (265)

Although the mention of the “holy cause” of scientific progress recalls the rhetoric of Gottlieb, unlike Arrowsmith’s plague sufferers, Bruce’s native subjects do not frustrate or foil his experiments: de Kruif represents them as absolutely gullible and docile.
But if audiences seemed to embrace *Arrowsmith* and *The Microbe Hunters* with nearly equal enthusiasm, why would an immediate corrective to the textual chaos of Lewis’s novel be needed? From the safe distance of 1962, de Kruif admitted in his autobiography *The Sweeping Wind* that there was something amiss at the very heart of scientific medicine during its supposed “golden age”: a seemingly interminable lag between the discovery of pathogenic microorganisms and the perfection of strategies for eradicating them. De Kruif claims that despite the discoveries of the microbe hunters, “against almost every major disease, doctors remained helpless at the start of the twentieth century” (17). And even “in the opening years of the 1920’s citizens went on dying like flies from the great majority of maladies” (19). Before antibiotics, serums and antitoxins reduced mortality rates with varying success, but despite the creation of well-financed institutes, “the hoped-for scientific offensive against multiple deaths can hardly have been said to have achieved a break-through; on wide fronts it can indeed have been said to have fizzled out” (20).

However, de Kruif points out that “the public did not think so” (20). Perhaps because even if new cures were limited in number, the predictability of the therapeutics generated by scientific medicine was so much more reassuring than the medical guesswork of previous decades, or perhaps because Americans were increasingly enraptured by the notion of scientific progress and technological miracles in every sector of their lives, the public remained wrapped up in the romance of medicine: a *New York Times* reviewer asserted that “as for the dark picture drawn of certain aspects of medicine, this will be easily lightened and corrected from experience” (“Lewis”). Still,
De Kruif’s admission of substantial pressure within the field to produce effective cures recontextualizes both Arrowsmith’s “blaming” of women and nonwhites for experimental failures and The Microbe Hunter’s rush to shore up the ragged professional performances in Lewis’ novel.

V. Southern Experiments

Earlier I mentioned that some interesting recent work on Arrowsmith has treated the tropical fiasco as a problematic intersection of scientific medicine and American imperialism. While persuaded by these arguments, I wish to suggest that the tropical fiasco points back to the American mainland in other ways as well, with St. Hubert standing in for the American South. Although Lewis and de Kruif dreamed up Arrowsmith’s plague epidemic and the bacteriophage trials, The Sweeping Wind includes representations of actual 1930s anti-syphilis campaigns waged in Alabama and Georgia that reiterate the ideologies of gender and race elaborated in Arrowsmith. More importantly, de Kruif describes the test subjects as slippery characters who subvert treatment protocols and who must be seduced by some stunning professional performances. In essence, the episode suggests that American doctor-scientists didn’t have to travel far to experience an “imperial breakdown” or to have their authority challenged or disregarded.

Just as Arrowsmith’s strict positioning of (white) women as threats to experimental control and to male self-control undermines its attempt to masculinize
scientific medicine and the figure of the doctor-scientist, the novel’s similar representation of nonwhites as disruptors of scientific progress negates its proposal of American medicine—signifying the progressive, innovative, and above all, democratic qualities of the nation—as an “antidote” to an obliviously obsolescent British colonialism. In light of the obvious similarities between the McGurk Plague and Bacteriophage Commission to the Lesser Antilles and the various Rockefeller Institute commissions of the 1910s and 20s that addressed public health problems in the American South, I argue that the novel points to similarly ambivalent ideologies of gender and race that informed both early Rockefeller work and later pharmaceutical testing of the 1930s in that region. Like the fictional St. Hubert trials, this work produced some similarly unpredictable results that challenge the nexus of experimentalism and expertise that cemented the cultural authority of the doctor-scientists.

Although mobilized to respond to a Caribbean crisis, the McGurk Commission’s activities in that region insistently evoke similar business in the American South, underscoring the imperialistic capitalism connecting the two regions and the tropics. Natalie Ring has examined the emergence of rhetoric in the first decades of the twentieth that rendered the American South “equally primordial and treacherous as any distant foreign nation” (619). For example, discourses about the distinctly different topographical features and demographic composition of the South worked to establish a kind of ideological continuum between the Southern states and the West Indies, South America, and South Africa, among other “exotic” regions. Researchers compulsively
mapped the presence of “tropical” illnesses in the South, ultimately reinforcing “the idea of a pathological disease-carrying region of non-white people” (629).

Accordingly, in *Arrowsmith*—which relentlessly emphasizes the darkness of St. Hubert, especially in the plague-ridden capital of “Blackwater,” with its “black-weathered huts, without doors, without windows, from whose recesses dark faces looked at them resentfully”—the McGurk Commission evokes the Rockefeller Sanitary Commission for the Eradication of Hookworm Disease, established in 1909 and charged with improving public health in the rural South (381-82). However, historians claim that “despite their humanitarian appearances, the major Rockefeller public health programs in the Southern United States were intended to promote the economic development of the South as a regional economic, political, and cultural dependency of Northern capital” (Brown, “Public” 897). Experts and employers theorized that eradicating hookworm disease, contracted when a parasitic worm tunneled into bare feet, would improve worker productivity dramatically: hookworm disease was identified as “the germ of laziness” because it rendered its hosts anemic and lethargic and stunted their mental and physical development.

The Commission, in partnership with local officials and health departments, worked to identify infested areas and infected people and to educate the afflicted about treatment and prevention. While these programs did not actually eradicate hookworm disease, they did “bring it under control in some areas, reduce its incidence, and (in some few locations) develop sufficient sanitation systems to halt the hookworm cycle and its spread” (Brown, “Public” 898). Still, the statistics seem unimpressive: in the 653
surveyed counties, 43% of children had been infected in 1914; by 1915, that number had dropped to 39% (Boccaccio 52). Despite the educational campaigns, and the well-attended “dispensary days”—important district social events with lectures and treatments administered amongst “exhibits, charts, photographs, posters, and specimens under the microscope” and enlivened by group singing—many patients obviously failed to (or could not afford to) take the steps necessary to prevent reinfection (Boccaccio 42).

Furthermore, the Commission’s activities reinvigorated some dormant suspicions about the legitimacy and intent of doctors, with newspapers in Arkansas and North Carolina publishing stories about “a doctor’s trust cooperating with a leather trust, charging that doctors created a hookworm ‘bugaboo’ so that more people would wear shoes” (Boccaccio 44).

Nonetheless, after five years, the Rockefeller Foundation transformed the Hookworm Commission into the International Health Commission and extended these programs internationally to warm, moist climates where hookworm infestation coincided with and reduced the profitability of mining efforts and plantation farming. Most importantly for this study, the Rockefeller Commission’s results reveal doctor-scientists, showcased in the Cathell-esque pantomimes of the dispensary days, surrounded by microscopes and laboratory paraphernalia—the tools of their trade, the proof of their authenticity and efficacy—yet sometimes frustrated, even maligned, in their work.

Unlike the McGurk Commission, the Rockefeller Commission did not conduct controlled experiments, focusing instead on identifying and treating hookworm positives quickly, but they were at times conducting dangerous research on human subjects. The
standard treatment for eliminating hookworms was a combination of Epsom salts and thymol, a poisonous derivative of phenol used today for killing molds and fungi, taken orally. As researchers and field operatives experimented with dosing amounts and schedules, deaths from allergic reactions to thymol were not unknown. The Commission’s chief expert on hookworm, as well as a pharmacologist at the national Hygienic Laboratory, began to experiment with alternative preparations.35 Ironically, when actual controlled studies conducted in 1914 at the Georgia State Reformatory, the State Prison Farm, and the Georgia Normal and Industrial College suggested that chenopodium or betanaphthol were safer and more effective than thymol, the studies were considered too small to prompt an immediate change in therapeutic protocols.36

The ideologies shaping the Rockefeller campaigns recall a long history of human experimentation in the South and anticipate certain pharmaceutical trials of the 1920s and 30s. Harriet Washington writes of an “open desire for black bodies to fill wards, surgical suites, operating theaters, autopsy tables, and pathology jars” in the antebellum South, where independent practitioners and medical schools called for enslaved subjects with particular diseases or disorders in newspapers advertisements (107). Among African-Americans, whisperings about “night doctors,” who would steal black cadavers from fresh graves for dissection at medical schools and research laboratories—whispers often dismissed as antebellum superstition or racial paranoia of the uneducated by more educated whites and blacks—attested to the reality that most dissections for education and research were performed on black bodies, illegally obtained, well into the twentieth century.37 The infamous Tuskegee Experiment cultivated “living cadavers” (Washington
Luring extremely poor black males with the promise of free treatment for “bad blood,” the United States Public Health Service began in 1932 to observe the progression of syphilis—like hookworm, considered a threat to worker productivity—in infected males while secretly withholding the promised treatment. (When the study began, the moderately effective Salvarsan 606 was the standard treatment, but by the 1940s, penicillin had been proven highly effective against the disease.)

While PHS doctors monitored the untreated subjects’ physical and mental declines—the disease caused catastrophic neurological damage in its final stages—autopsy was the most revealing tool to assess the ravages of the disease. PHS doctors admitted that they were waiting for these subjects to die. Although the doctors established a control group of uninfected subjects mid-study, if a member of the control group happened to contract the disease, he was moved to the infected group. Such manipulation violates the principle of the experimental control, falsifying results and rendering any true comparison between the health and the physiology of infected versus uninfected persons impossible. This conduct, motivated by a kind of scientific entitlement grounded in a profound racism, eventually besmirched the reputations of some of the PHS doctors and other officials and caregivers involved after the study was ended in the 1970s, but more significantly, stands as a self-sabotaging violation of the practice of controlled experimentation that had solidified the authority of the medical profession.
A Syphilis Dragnet

In *The Sweeping Wind*, de Kruif relates his experiences in the 1930s helping Dr. O.C. Wenger of the national Public Health Service devise a “syphilis dragnet.” Not surprisingly, de Kruif casts Wenger as a manly microbe hunter, with a “temperament resembling that of welter-weight prize-fighting champion Ace Hudkins” and “a way of leveling with his VD patients that made them love him. ‘I’ve never had syphilis,’ he kept telling them. ‘But only because I’ve been lucky’” (185). With the fight against the disease made more difficult by the extreme poverty of the test subjects, de Kruif makes the startling claim that it is Wenger’s showmanship that gives his treatment protocol special efficacy. Here we find medical professionals needing to “perform” not for a white middle-class audience but for impoverished Southern blacks.

With his usual deeply racist language, de Kruif describes the carnival-like atmosphere surrounding Wenger’s mobile VD clinic, or “bad-blood wagon,” parked in front of an African-American church. Initially, de Kruif represents these potential test subjects as simplistic and animalistic, easily lured by the promise of food:

Wenger is shouting, like a circus barker: “Free pink lemonade and hot dogs for all who’ll take a blood test!” The congregation, from fathers and mothers through swains and dusky damsels all the way down to adolescents and pickaninnies, filed through the trailer, shed their blood for the Kahn test, passed out the other door for hot dogs and pink lemonade. (189)

After the service, Wenger and de Kruif make their way to a “Negro jukebox dance hall” and “in its sinister atmosphere Wenger became a Dionysiac master of ceremonies. He solicited nickels from us to keep the jukebox blaring its music. He clapped his hands. He
stomped his feet” to encourage the revelers to make their way to the back room for a blood sample. In order to collect the samples and the data necessary for immediate treatment and for long-term research, Wenger must mirror his subjects—a far cry from the kind of mirroring suggested by Cathell only a few decades earlier.

However, the extreme poverty—as well as the perceived hypersexuality of the test subjects—in this “tropical” region threaten to defeat Wenger’s efforts. De Kruif notes that “between the dances, couples vanished into the subtropic night and from the bushes came sighs, giggles, and wild cries of delight. ‘Aren’t you causing more VD by your whooping them up with that hot music?’ ‘Maybe so,’ he said” (190). Similarly, Wenger predicts reinfection for a typical patient, “a pretty seventeen-year-old girl, who was at the clinic for her combined syphilis and gonorrhea,” whom de Kruif describes as “a bit of human flotsam” (187). Wenger rails that “We’ll treat her here. We’ll cure her. She’ll be well fed and have a good clean bed and shelter out at the camp while we’re fixing her. Then what’ll she do? She’ll wrap up her toothbrush and her nightie in a bath towel. She’s got no money and no place to go. We’ve cured her. But who’s going to make a decent citizen of her?” (187). In this “tropical” region, despite all the rhetoric of simplicity and docility, test subjects cannot be easily controlled.

However, de Kruif’s most incredible claim comes at the conclusion of the episode. He insists that “for all his heroic fight, Wenger’s weapons against syphilis had a limitation in those later years of the 1930s. He was no armed with a truly magic bullet. Wenger’s Salvarsan and bismuth shots were powerful, but they were dangerous as well as uncomfortable. They only produced spectacular results when they were directed by
Wenger’s special brand of enthusiasm” (190). Despite having accumulated vast cultural authority, the professional must perform, hawking pink lemonade and stomping his feet, in order to increase the efficacy of his treatment and to guarantee the progress of his research.

“Blind” Studies

Human experimentation in the American South, both as evoked by the representation of tropical medicine in Arrowsmith and as described by selected records of public health campaigns, problematic medical “research,” and early pharmaceutical trials from the 1910s, 20s, and 30s, points to one of the central dilemmas created by the disciplinary discourse of medical professionals. Although they might wish to follow D.W. Cathell’s advice, confining practice to middle- and upper-class patients, touching poor bodies as little as possible, doctor-scientists now depended upon human experimentation—on poor bodies, male and female, white and black—as an outgrowth of the laboratory research that had helped to solidify their professional authority. However, the discriminatory ideologies not only of class, but also of race and gender, that had allowed regular physicians in the nineteenth century to declare Others unfit for medical practice now distorted experimental protocols. Blindly underestimating the intelligence, the independence, and even the humanity of their subjects, doctor-scientists endangered their own experiments and their own reputations. Faced with subjects less docile and predictable than they imagined, these doctor-scientists lost control.
1 See Starr (116-23).

2 Of course here I am referring to “regular” physicians in nineteenth-century America, and not to the “irregular” practitioners detailed in the previous chapter. I am attempting to outline a threefold movement in general terms, while acknowledging that these shifts were uneven and gradual, that numerous differences of medical opinion percolated constantly amongst the regulars, and that the practices of the irregulars were influenced by direct and indirect contact with the regulars.

3 As James Harvey Young notes, drugs “were not considered specifics to treat particular disease entities, but rather tools to achieve calculated physiological effects”; thus, “during the first half of the nineteenth century, under these prevailing concepts, drugging, as prescribed by regular physicians, reached ‘heroic’ levels” (“Patent” 157).

4 Although relatively few physicians could afford European study, those who could frequently emerged as the most influential voices within the developing profession.

5 See John Harley Warner’s *The Therapeutic Perspective*; Warner and Tighe’s *Major Problems in the History of American Medicine and Public Health* (196-233); James Harvey Young’s “Patent Medicines” (156-7); Rothstein’s *American Physicians in the Nineteenth Century* (41-62 and 177-97).

6 Van Leeuwenhoek referred to the tiny organisms he saw in his microscope as “animalcules.”

7 In England, John Snow systematically mapped the transmission of cholera at mid-century, providing evidence that the disease was spread via water. Similarly, in the
article “The Contagiousness of Puerperal Fever” (1843), American physician Oliver Wendell Holmes, Sr., theorized the transmission of the deadly “childbed fever,” linking serial fatalities to contact with particular physicians. See Thraillkill’s “Killing Them Softly.”

8 British researcher John Tyndall had noticed bacterial antagonism in penicillin in 1875, but abandoned the research due to lack of funds.

9 See Brown’s *Rockefeller Medicine Men*; also see Conn (9-66) and Wright (18).

10 The character of Max Gottlieb was inspired by scientists Jacques Loeb and Frederick Novy (de Kruif, *Sweeping* 83).

11 Eugenicists encouraged more affluent and educated people to reproduce freely, and discouraged the poor and the otherwise “unfit” from having families, sometimes resorting to involuntary sterilizations and other violent interventions to prevent them from reproducing. I discuss eugenics in depth in the next chapter.

12 See Warner’s “Professional Optimism and Professional Dismay.”

13 See Warner and Tighe 317-8.

14 The percentage of female physicians in America dropped steadily from 1910 to 1950; in fact, the actual number of women practicing in 1940 was nearly equivalent to the number practicing in 1900 (Walsh 186). See my previous chapter for an extensive discussion of the history of American medical women.

15 The John Ford screen adaptation appeared in 1931.

16 My discussion of women in this section is restricted to the white women that Arrowsmith encounters in his professional and social lives on the American mainland. In
the next section, I discuss the ways in which the Afro-Caribbean women of St. Hubert are represented in this text.

17 My use of “together” here is deliberate: deKruif signed a contract for twenty-five percent of royalties; in addition, his name was to have appeared on the title page as co-author with Sinclair Lewis’s, but the publisher eventually nixed that idea. James Hutchisson offers helpful analysis of deKruif’s contributions to the collaboration.

18 As biographer Richard Lingeman notes, the initial meeting between Lewis and deKruif has been variously reported by different sources; I follow Lingeman’s account (206).

19 Although throughout history American women have performed all manner of farm work, I consider this imaginative leap from “soft” intellectual work to “hard” physical labor a masculinization because Lewis is so intent on defining gender-specific domains.

20 Although contemporary rhetorics of public health commonly personified disease-causing microbes as tiny enemies and insidious invaders against which the public must “mobilize,” I am more interested here in the representation of Arrowsmith as soldier and its implications for connecting American medicine to colonial expansion, which I discuss later in this chapter. See Nancy Tomes’s The Gospel of Germs.

21 I will reserve my analysis of the narrator’s casual use of “lynching” here for a more thorough discussion of the text’s racial logic in the next section.
Despite the symbolic promise of his last name, Gottlieb’s Jewishness is invoked mainly to explain his flight from the anti-Semitism of Germany; we never see him practicing his faith.

23 See Kimmel (125) [Further explanation]

24 Brieger, Hutchisson, Lynch, Richardson, and Rosenberg detail the composition process.

25 The specific action of “bacteriophage” is unclear. Arrowsmith discovers the substance by noticing that certain microbes are dying off mysteriously in his lab, which suggests that bacteriophage is an antibiotic. However, the St. Hubert protocol requires him to inoculate test subjects—and all the members of the McGurk delegation—which suggests that bacteriophage is a vaccine.

26 Charles Rosenberg, for example, argues that “Arrowsmith has conquered the final and most plausible obstacle in his quest for personal integrity—he has renounced success itself” (452).

27 I discuss miasma theory in relation to the sanitary movement in public health in the next chapter.

28 Lewis declined the prize, still miffed about the Main Street incident. In 1921, the Pulitzer jurors had recommended that Main Street be awarded the fiction prize, but their decision was overruled by the more conservative trustees, who gave the prize to Edith Wharton for The Age of Innocence instead. See Lingeman (183-4; 277-80).
It should be noted that despite this cultural romance of “progress,” technology and mechanization did eliminate jobs for some working-class people.

Critical work on the Hookworm Commission seems to assume that those subjects were white (describing them as textile workers, for example), but the campaign of the Hookworm Commission followed the model of the earlier Rockefeller Education Commission, which reached out to and served whites and blacks, albeit differently.

Boccaccio acknowledges that the Commission was frustrated by inaccurate recordkeeping by surveyors (52).

Improper disposal of human and animal waste supported hookworm infestation in the soil. Treated patients and their families needed to begin to use hygienic privies to avoid further contamination, but many farms lacked any sort of privy at all.

See Cassedy (165-6).

See Boccaccio, Breeden, Cassedy, and Brown (Rockefeller; “Public”).

The Hygienic Laboratory was a precursor to the National Institutes of Health (NIH).

Boccaccio (48-9).

Washington notes that “black graveyards were the favored hunting grounds of northern body snatchers” as well (131).

In addition, Salvarsan 606 had a number of dangerous side effects.

I discuss recent erosions of public trust in the medical profession in the conclusion to this study.
CHAPTER IV
DISSEMINATING AUTHORITY: PROLETARIAN NOVELS AND THE DISCOURSES OF PUBLIC HEALTH

Despite the internal anxieties about finding cures in a timely fashion that *Arrowsmith* registers and that de Kruif’s autobiography admits, between 1880 and 1940 the bacteriological breakthroughs of the laboratory did bolster the cultural authority of doctors by offering visible evidence of the causes of, and eventually the remedies for, many of the deadliest diseases threatening the nation. Treating patients with greater efficacy by relying on this growing corpus of increasingly specialized knowledge, doctors gradually regained the public’s confidence. This increasing reliance on the revelations of the laboratory motivated one prominent medical educator to respond in 1922 to allegations “that many of our medical schools and teaching hospitals are producing ‘laboratory men’” instead of clinical practitioners (Peabody 365).

Still, social historians agree that by the 1930s, the “professional sovereignty” of doctors, who were enjoying ever-increasing status and income, as well as power to shape policies and behaviors, was secured. Such accounts have ignored the subsequent effort inevitably required to maintain that cultural authority, however. While late nineteenth-century doctors were forced to put on a professional show for their patients, by the 1930s, these roles had been reversed: as the prototypical professionals, the top earners of the middle class, physicians no longer had to mold themselves into the mirror images of their
ideal patients; in fact, I argue that physicians extended their social control by insisting through the discourses of public health that working-class bodies attempt to mimic middle-class behaviors—in essence, to perform middle-class identity.¹ Later, I discuss how the success of this strategy depended upon the absolute impossibility of these mandates for a poor audience; in fact, constant failure to meet these goals only reinforced feelings of deprivation and inadequacy. In order to interrogate the strategies by which the medical profession sought to maintain its hegemony, this chapter turns from representations of physicians working to patients suffering, both physically and mentally, from contact with the discourses of public health developed jointly by doctors, scientists, and government officials. Maintaining hegemony requires far more subtle and insidious tactics than the bold grasps of an ambitious group on the rise; thus I choose to examine representations of working-class bodies, determining the shape of the ideologies underpinning the discourses of public health by monitoring their effects.

Two proletarian novels composed during the 1930s suggest that by exerting eugenic pressure upon poor bodies via the growing apparatuses of public health, doctors reinforced their cultural authority by becoming indispensible mediators in the exchange of labor. Tillie Olsen’s Yonnondio: From the Thirties traces critical changes in working-class female subjectivity wrought by contact with the visual rhetoric of public health—changes that cause poor mothers to identify themselves as “unfit” and limit their own reproductivity accordingly. Similarly, under constant threat of involuntary sterilization, impoverished women in Meridel LeSueur’s The Girl self-segregate from the public health system, submitting instead to risky procedures at the hands of untrained working-
class men—who in complex acts of mimicry inspired by contemporary radio dramas “play doctor” as a kind of psychological compensation for their own socioeconomic powerlessness.

I. *Yonondio* and the Rhetorics of Public Health

The proletarian literature of the 1930s sketched labor relations as an asymmetrical exchange: masses of workers propelling the mechanisms of industry for inadequate pay. These working bodies must not only accept insufficient compensation but also endure “the brutalizing force of industrial production, the power of work to twist, cripple, and exhaust the body, draining every ounce of human productive capacity” (Entin 65).

Writers concerned with developing a “proletarian realism” understood the mere representation of working-class life as a political act: at best, such narratives had the potential to validate experience and create solidarity among workers and to inspire outrage over “the suffering of hungry, persecuted, and heroic millions” among more affluent audiences (Gold 207). Accordingly, proletarian novels featured graphic depictions of industrial abuses and daily deprivations; however, leaders of the movement recommended that these narratives conclude with inspirational “revolutionary élan.”

With its representations of the Holbrook family’s endless struggles against excruciating poverty, as well as its chilling accounts of working conditions from a Wyoming mine to a Nebraska slaughterhouse, Tillie Olsen’s proletarian novel *Yonondio: From the Thirties* bears witness to both the violence of industrial accidents—the maiming of bodies, the
extinguishing of life—and to the less spectacular (but no less pernicious) siphoning of persistent influence of that movement, which featured theories and tactics of social amelioration that both reflected the bourgeois values of its proponents and attempted to impress those same values upon its poor clients, *Yonnondio* depicts the middle class—represented here by its prototypical professionals, the doctors—as mediators in the exchange of labor. In particular, by casting the middle-class rhetoric of public health as rich with ideological “pathogens” that permeate the borders of the fertile female body, *Yonnondio* reframes the contestation of working-class subjectivity as a struggle surrounding working-class reproductivity—a reiteration of contemporary debates about industry’s insatiable need for more workers versus the social problems ostensibly created by more poor bodies.

*The Public Health Poster and the Germ of Infection*

As Olsen’s characters navigate an Omaha meatpacking factory and its adjacent slum, they encounter health and safety posters similar to those produced *en masse* by the WPA in the 1930s. Many of these posters translated for the general public recent findings in the developing fields of bacteriology, immunology, and epidemiology. In the late 1800s, scientists had begun to uncover the connections between pathogenic microorganisms and infectious diseases; by the turn of the century, researchers possessed “an increasingly detailed and accurate road map of the circulation of germs,” through “casual contact, food and water contamination, insect vectors, and healthy human carriers” (Tomes, *Gospel 6*). Public health posters offered potentially life-saving
warnings by explicitly connecting disease to poor nutrition, unsanitary housing, and sexual incontinence. The WPA generated numerous posters that reminded workers to take care on the job as well.

The lineage of the WPA/FAP poster unites diverse political developments and design projects. Robert Brown notes that “the 1890s mark the poster’s beginning as an active medium for the selling of ideas, the motivation of consumers, and the expression of artistic and design ideals” (15). Russian revolutionaries had recognized the poster’s potential to “sell” ideas to a far-flung, uneducated populace; Mildred Friedman observes that “between 1917 and 1923 over three thousand posters were produced to carry the new political and social ideology to the far reaches of the Soviet Union” (11). Concern for the collective surfaces in the later efforts of the WPA/FAP as well: according to Ralph Graham, former director of the poster project in Chicago, the public finds in the poster “means to help itself materially and culturally, means to enjoy itself, and means to improve itself. The poster performs the same service as the newspaper, the radio, and the movies, and is as powerful an organ of information, at the same time providing an enjoyable visual experience” (181). For Depression-era viewers, the “visual experience” encompassed new influences; under the direction of Richard Floethe, a Bauhaus graduate, the WPA/FAP—employing a number of immigrant artists with similar experiences in the European avant-garde—produced works that enlivened commercial art with traces of surrealism, constructivism, and cubism (Heimann 110).

Such posters represent a relatively new tool in the public health system’s efforts to shape human behavior. Throughout most of the eighteenth and nineteenth centuries,
responsibility for the protection and preservation of public health in America fell upon local governments and volunteer organizations, as a general distrust of centralized government limited federal involvement (Wright 10). For example, a federal law encouraging and facilitating smallpox vaccination was passed in 1813, but prevailing views that the federal government should be involved in public health only in times of true emergency triggered the law’s repeal in 1822 (Wright 49-50). Accordingly, until the elaboration of germ theory, so-called “sanitarians,” or believers in the miasma theory of disease, exerted the most influence on public health. Miasmas, or “bad air” supposedly containing particles of decomposing matter, were thought to emanate from sewage, from contaminated water, and from overcrowded slums. The theory gained traction because as the sanitarians, waged their own war on miasma by scrubbing hospitals, purifying water, removing refuse from streets, and ventilating crowded living quarters, there was a corresponding decline in certain illnesses, particularly water-borne diseases such as cholera. By mid-century, these reformers were coming together at national meetings such as the Quarantine and Sanitary Convention to discuss strategy on a broader scale. Long complacent about these matters, the federal government was unprepared to face the massive health challenges created by the Civil War; private organizations such as the United States Sanitary Commission were “so much more effective than early medical efforts by the military that they received quasi-governmental status” (Warner and Tighe 160).

The health crises of the Civil War—including near-constant epidemics in camps and hospitals—underscored the need for greater federal involvement in public health
issues. By launching the national Public Health Service (PHS) in 1912, the federal government emulated the numerous localities that had had well-established health departments for some time; the New York City Board of Health in particular featured sophisticated laboratories that were able not only to confirm outbreaks of disease but also to manufacture their own antitoxins and vaccines. During the first decades of the twentieth century, debate about the proper limits of “public health” remained lively. One expert famously declared public health to be

the science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for the sanitation of the environment, the control of community infections, the education of the individual in principles of personal hygiene, the organization of medical and nursing service for the early diagnosis and preventative treatment of disease, and the development of the social machinery which will insure to every individual in the community a standard of living adequate for the maintenance of health. (Winslow)

Although few localities accepted this sweeping mandate in toto, the purview of public health began to widen nationally. With more people to reach and more issues to address, public health agencies embraced the power of new media, experimenting, for example, with radio (which I discuss later in this chapter), reverberating through nearly every home, and with posters, papering poor neighborhoods. In Yonnondio, however, such signage seems to transcend the status of mere warning. Consider, for example, the novel’s final image of industry, in the Dantean inferno of the meatpacking factory in high summer. Carrying his pregnant coworker Lena away from the scene of a steam pipe explosion, Jim Holbrook “sees plastered onto
her swollen belly the SAFETY sign torn from the wall by the first steam gust’” (126). Here converging upon the suffering body, the body that labors and strains to process meat by-products for the Cudahy company and to produce another worker for the labor force, are the safety poster that reminds workers of industrial dangers and the steam blast that causes workers to “fall and writhe in their crinkling skins, their sudden juices” (125). Clearly, the moment describes the safety poster, dislodged by the explosion, as utterly ineffective against an uncontrolled industrial machine. The steam blast, the spectacular evidence of industry’s oblivious cruelty and indiscriminate reach, decommissions the legally mandated safety sign; in fact, the dislodged sign becomes an extension of the blast, its deadly “hand” finding and covering the pregnant abdomen of the worker. The episode raises troubling questions regarding both the instability of these public health warnings and the nature of the cultural work that such signs perform. But because the scene figures as one of the final episodes in Olsen’s increasingly fragmentary “unfinished” text, the reverberations of the explosion necessarily remain unexplored.

However, the text does elaborate in fascinating detail the aftereffects of an earlier encounter with similar signage. After a traumatic miscarriage, Anna Holbrook visits the local health department clinic for follow-up care; she finds the posters in the waiting room, which connect the proliferation of contagious diseases to unsanitary living amongst dirt and flies, deeply disturbing (see figure 3). Later, just remembering these signs motivates the frail convalescent to abandon her sickbed, to the consternation of her husband and her neighbor, Mrs. Kryckszi:
“Anna! You aint supposed to be up. Was you needin something?”
“…The house…It needs cleanin.”
“And you’re in fine shape to do it. Get back to bed.”
In a mesmerized voice. “Dirt, the poster said. Dirt…”
“Ferget it. You ain’t supposed to be up.”
“…Breeds Disease. Disease…” (82)

This “mesmerized voice” might be a residual effect of the near delirium in which Anna Holbrook has hovered for several days; however, her further conversation suggests that memories of the signs seem to regulate the spellbound voice:

“….C’mon now.” At her side but hesitant to touch her. “Back to bed. You lost a lot of blood.”
“Germs spread…” She recoiled from his touch, said in notice: “Why, Mis’ Kryczski!” cordially, naturally; relapsed again into the haunted voice: “Your children…Contagion…O, the posters…” (83)

Ultimately, these haunting images animate the automaton: the next day, an unbidden “strength and fury” fuels the convalescent’s extraordinary efforts to restore some semblance of order within her household (88). Waking from a tortured sleep and creeping through a deserted house, Anna sees “the potato peels turning black in the sink, the dirty dishes, the souring bottle of milk about which flies droned. Flies, the poster said, Spread Germs. Germs Breed Disease” (84). Despite her weakened condition, Anna begins to wage war on the stench and the filth, the spiders and the flies that even the most conscientious housekeeping cannot hold at bay in the hovel overlooking the garbage dump.
Figure 3. “The fly is as deadly as a bomber!” by Robert Muchley for the Philadelphia War Services Project, between 1941 and 1943. Library of Congress, Prints and Photographs Division, WPA Poster Collection [LC-USZC2-5437 DLC]. By the People, For the People: Posters from the WPA, 1936-1943.
I derive my use of “automaton” here from the version of *Yonnondio* published by the University of Nebraska in 2004. Although otherwise identical to the Delta edition, the Nebraska text registers some small, but noteworthy changes to this scene:

In a mesmerized voice. “Dirt, the poster said. Dirt Breeds Disease.”
“C’mon now. You ain’t supposed to be up.” At her side but hesitant to touch her. “C’mon. You been awful sick.”
“Disease…” She recoiled from his touch, said, “Why, Mis’ Kryczski” cordially, naturally, relapsed into the automaton voice: “Disease…Your children…The posters…”
“Outa her mind,” he explained to Mrs. Kryczski. “I said c’mon. You lost a lot of blood.”
“Germs spread…The house…The posters…” (119)

While the Nebraska version tellingly describes Anna Holbrook as an “automaton” and places additional emphasis on the posters, the Delta version introduces the idea of “contagion” into Anna’s consciousness and into the text, a notion that I explore later in this essay.

Memories of the posted warnings drive the convalescing Anna, even though “her limbs were trembling, her bones seemed water, her heavy breasts burned, burned,” into a frenzy of housecleaning: “She had wrapped a rag around the broom and swept down the walls, and swept the floors, and scrubbed the toilet bowl, and put the diapers to soak, and was filling a tub with water preparatory to scrubbing” when her concerned neighbor returns with two of the children (85). But these extraordinary measures, intended to transform slum housing, where “dirt has eaten into and become part of the walls,” are largely in vain (48). The shoddy construction had always “resisted her,” mocking “all that
scrubbing to make a whiteness inside—and the stubborn walls and floors only a deeper smoke color” (54). Here “paper-thin boards” offer inadequate protection from the elements and little separation from the outdoors (48). In the bathroom, “high up in a dirty brown corner, a cobweb spangled. Unsteadily she picked up the plunger and swept it down. One fly, still alive, moved an iridescent wing and buzzed” (84). In the kitchen, “cleaving to the table for support, disregarding the flame of agony in her engorged breasts, she swatted feverishly. The flies lifted and evaded. Disease…Your children…Protect” (84). But in the end, the unhealthy and unsafe environment of the slum defeats Anna’s best attempts to eradicate filth and flies and to guard against disease.

Jim explains his wife’s “altered state”—the mesmerized voice, the maniacal cleaning—in purely physiological terms. He explains to Mrs. Kryczski that his wife is “outa her mind” due to extreme blood loss during the miscarriage (82). However, Anna has lost more than just blood: she has lost a child, a child with already recognizable human form, “a little oyster, a little pearl, a growin…” (76). The visit to the clinic deepens the loss: there, Anna undergoes a curettage that methodically removes any remaining tissue. Certainly such a traumatic sequence of events, beginning with the marital rape that triggers the miscarriage, could explain Anna’s mental changes and seeming disconnection from her profoundly injured body. However, the regulatory effect that the clinic’s posters seem to exert on the “automaton” points to a more complicated explanation.

Even as Anna experiences intense loss, as her body is disinfected, emptied of dead, putrefying tissue, her mind is infected, filled with new, disturbing information. In
fact, Anna anticipates this infection when she describes the clinic as a zone of contagion rather than a place of health and healing. Waiting at the clinic with her friend Else, “waiting in the smell of corroding and the faces of pain, she lifted Bess out of Else’s lap, shielded her close and rasped out fiercely: ‘We shouldn’ta brought baby here, we shouldn’ta brought her’ ” (82). And later, facing her husband and Mrs. Kryczski, the agitated patient reiterates these fears:

“The house…” Wringing her hands. “At the clinic, they scare you. And all the poor sick people setting…”
“Don’t worry your head. Get under them covers.”
“All the poor sick people waitin. So many ways of being sick. And we shouldn’ta brought baby here, we shouldn’ta took her.” (83)

But why does this medical center, sterilized and professionalized, pose more of a threat to the youngest Holbrook than the “corrosion” of the meatpacking slum, where the microbial agents of disease feed on the ubiquitous filth? Perhaps Anna recognizes that in addition to hosting the diseases carried by poor bodies, the clinic harbors its own unique pathogens. From the posters at the clinic, Anna has gained a potentially lifesaving awareness of the relationship between unsanitary living and contagious diseases, of all the “ways of being sick.” Anna “picks up” these warnings, carrying them to her dumpside dwelling. However, her ensuing psychological distress—as well as significant changes in her subjectivity—exposes the ideological pathogens embedded in this ostensibly helpful discourse, ideological pathogens that can wreak havoc upon a fragile psyche as insidiously as microbial agents can devastate a frail body.
Like a mutating virus, memories of the clinic change as the “Dirt That Breeds Disease” tunnels deeper into Anna’s consciousness. At first, Anna recalls only the connections between dirt and disease, between the filth that provides a growing medium for germs and the flies that spread the deadly microbes. Eventually, though, crumbling under the weight of her hopeless housecleaning project, Anna remembers the posters differently. The impossible housecleaning tangles with the task that “loomed gigantic beyond her, impossible ever to achieve, beyond any effort or doing of hers: that task of making a better life for her children to which her being was bound” (88); now she surveys in tearful frustration the “dust that was Dirt That Breeds Disease You Make Your Children Sick” (88). Trapped in the deep divide between the revelations of the laboratory and the reality of the slum, Anna’s subjectivity shifts to that of an unfit mother, harmful rather than protective.

The imagery of “Your Kiss of Affection, The Germ of Infection,” created by the WPA Federal Art Project for the town of Hempstead New York, suggests how easily a health poster might trigger or catalyze such a shift (see figure 4). The equation of affection and infection, of a loving kiss and a nascent infection, casts mothers, in their extreme physical closeness to their child—indeed, indifferent to income or to status—is disrupted immediately by the baby’s bib that transmits a clear message: “Don’t Kiss Me!” Positioning such a message on the bib aligns the baby with those who wish to regulate maternal behavior and to separate mother and child. In fact, pictured at a slightly oblique angle, the baby seems to be withdrawing from
Figure 4. “Tuberculosis: Don’t kiss me!” New York WPA Federal Art Project, District 4, between 1936 and 1941. Library of Congress, Prints and Photographs Division, WPA Poster Collection [LC-USZC2-5369 DLC]. By the People, For the People: Posters from the WPA, 1936-1943.
the viewer. The circular framing of the baby, which strongly evokes the view through a microscope, amplifies the fear that this poster tries to inspire: is this baby, with its hectic flush, already affected/infected, already a teeming mass of pathogens?

The words that Anna remembers from this episode are signal: the dirt that breeds disease melds seamlessly with poor mothers who breed disease. As it positions working-class mothers as infectious “carriers,” both incubating and transmitting disease, the construct creates a troubling conflation of the breeding of children and the multiplication of germs. These harsh equations recast the curettage at the public clinic as more than a medical procedure, more than the necessary care of the maternal body: the event stands as a symbolic disinfection, the removal of dead, superfluous tissue that was at once a germ of humanity (“a little oyster, a little pearl”) and a germ of disease threatening the social body of the nation.

_Eugenicist Discourses_

This moment, the culmination of the physical disinfection and the psychological infection of the beleaguered, impoverished maternal body, points to contemporary debates about working-class reproductivity. The rapid growth of industrial capitalism in the late nineteenth and early twentieth centuries created an ever-increasing demand for workers, particularly as utterly deplorable factory conditions “weakened the health and stamina of employees, shortened their productive lives, jeopardized the reproductive capacity of the average woman”—in short, threatened a mass exhaustion of
the labor force (Abramovitz 182). Yet owners simultaneously desired and dreaded the reproduction of the working class. As abused workers concentrated in inner-city slums, the notion of such neighborhoods as centers of contagion, both bacteriological and sociological, coalesced in the popular imagination. Paul Boyer observes that as early as the middle of the nineteenth century, the threat posed by the slums that “oozed like lava over the urban landscape” was understood both in terms of “revolutionary violence—a possibility underscored by the riots, gang wars, and turbulent street brawls of the period” and in terms of “miasmic evils” that could “infect the larger society by more insidious means” (89). Those concerns lingered after the turn of the twentieth century. Medical personnel, social workers, and government officials knew that squalid living conditions in overcrowded factory slums could foster the spread of infectious diseases, such as tuberculosis; owners worried that these conditions could foster the spread of disruptive ideas as well, spurring massive strikes and igniting mob violence. Thus, in the early twentieth century, the reproduction of the working class emerges as a necessary evil.

At the same time, the frustrations of poverty steadily eroded working-class family units, preventing most workers from experiencing the kind of family life enjoyed in the growing suburbs and reinforcing popular conceptions of the city as a cesspool of vice and corruption. By the 1920s, middle- and upper-class families increasingly retreated to suburban areas, which offered greater opportunities for healthier living in open spaces and fresh air. Meanwhile, in urban slums, the frustrations of poverty fueled substance abuse and domestic violence. In addition, fathers abandoned families in record numbers—ostensibly to look for work—during the Depression. Olsen clearly intended to...
revisit this issue of abandonment; fragment three of *Yonnondio* includes Jim’s note of “goodbye for a while till I can send for you all” (143).

The social problems associated with poor bodies provided ample fodder for the concomitant growth of the eugenics movement. Codified in England in the late 1800s by Francis Galton, a cousin of Charles Darwin, the pseudo-science of eugenics exerted its greatest influence in America from about 1905 to 1930. In his study of hereditarian attitudes in America, Mark Haller notes that eugenicists privileged the role of heredity over the influence of environment in human development and hoped to build a better human race “through encouraging propagation by those with desirable traits and through restricting propagation by those with undesirable traits” (3). Such thinking coincided with an overall decrease in the birth rate in America, especially among the educated and the affluent. But eugenicist activities, as Michael McGerr observes, “focused less on encouraging the right sort of people to become parents and much more on stopping the wrong people from reproducing” (214). Those hereditarily “unfit” for reproduction included the criminal, the insane, the mentally and physically challenged—and the poor. While eugenicists could only encourage the educated and the affluent to create larger families, they could actually control the reproduction of these “undesirable” populations with involuntary institutionalizations and forced sterilizations, programs that were widespread during this era. Even some birth control advocates like Margaret Sanger, whose work helped to free women of all strata from unwanted pregnancy, supported the principles of eugenics; Sanger called birth control “nothing more or less than the
facilitation of the process of weeding out the unfit, of preventing the birth of defectives or of those who will become defectives” (qtd in Franks 47).

Eugenics married “laissez-faire economics and Darwin’s concept of the survival of the fittest to argue that the possession of wealth evidenced ‘fitness’ and that its opposite, poverty, signaled inherent weakness,” but because recent immigrants from southern and eastern Europe tended to be poor, eugenicist rhetoric frequently assumed a nativist bent as well (Abramowitz 148). Eugenics advocate Teddy Roosevelt insisted that for “fit” Americans, abundant reproduction was patriotic: “the inescapable duty of the good citizen of the right type is to leave his or her blood behind him in the world” (qtd in Haller 81). An episode from Arrowsmith both recalls Roosevelt’s rhetoric and exposes its fundamental faultiness. Lewis means for public health officer Pickerbaugh, father of eight daughters, to evoke the figure and the rhetoric of Roosevelt, including his well-known mania for physical culture; a ridiculous moment from one of Pickerbaugh’s health fairs shows the notions of reproductive “fitness” and physical fitness merging: Pickerbaugh thinks he has hired a “father, mother, and five children, all so beautiful and powerful that they had recently been presenting refined acrobatic exhibitions on the Chautauqua Circuit” to pose as a picture-perfect, all-American “Eugenic Family” (258-9). However, the group booth is recognized by local law enforcement as a gang of con artists and wanted criminals. The moment locates “criminality” within the eugenic movement itself, not among the supposedly “unfit,” and suggests that appearances, or the myriad manifestations of heredity, are not absolute predictors of economic productivity or civic virtue.
A local doctor, summoned by Jim Holbrook immediately after the fateful miscarriage, offers a coarse ventriloquization of eugenics within Olsen’s text. The doctor’s internal monologue of eugenicist thought emerges in a series of parenthetical comments as he surveys the sordid scene of the miscarriage in disgust—“(Pigsty, the way these people live)” (77). The doctor’s commentary elaborates this conception of the Holbrooks and their ilk as “feebleminded,” as thoughtless beings controlled by primal desires, as “animals” who “never notice but when they’re hungry or want a drink or a woman.” In fact, examining the youngest Holbrook, the healer seems to forget his professional oath: “(Rickets, thrush, dehydrated; don’t blame it trying to die).” Ultimately, the doctor’s post-miscarriage recommendations for Anna are standard, but his language is exceptional; the doctor indicates that Anna needs ample rest, quality nutrition, and “medical attention. So does the baby. Unless you can afford a private doctor, see she gets to the clinic for a curettage—that’s a cleaning out” (77). The eugenic bent of the doctor’s internal monologue imbues his “helpful” translation of medical terminology with a sinister feel. Visiting this “pigsty,” these “animals” so ripe for forced sterilization, the doctor coldly endorses not only the “cleaning out” of dead tissue from the maternal body, but also the removal and disposal of an unfit addition to the social body.

Unreachable Heights

Yet Yonnondio casts the doctor’s eugenicist rhetoric—as well as his overt disgust and his apathetic ministrations—as less damaging to a poor mother like Anna Holbrook
than the ostensibly benign “educational” posters glimpsed at the health department. The novel elides Anna’s reaction to the doctor—although Jim frets momentarily that “the doctor says she needs everything she can’t get”—but lingers over Anna’s mutating memories of the posters. Ultimately, it is the edifying message of the poster, rather than the callous condescension of the doctor, that infects Anna’s consciousness, profoundly changing her subjectivity to that of an unfit mother, a double “carrier” of bacteriological agents and poor offspring.

Why does the benevolent poster, rather than the malevolent doctor, trigger such deep changes in consciousness? Perhaps the answer lies in the extreme disconnect between America as represented by the poster and America as experienced by the Holbrooks. During the height of the Depression, WPA posters offered guidelines regarding nutrition and sanitation and broadcast the threat of communicable diseases—all points of particular concern as the unemployment rate escalated. Unemployment rates, which never dipped below nine percent during the 1930s, peaked at an astounding twenty-five percent in 1933; naturally, the resulting “hard times” interfered with adequate nutrition, safe housing, and proper healthcare for many Americans (Rose 19). However, the world sketched by the WPA poster emerges as determinedly disconnected from the world that poor families like the Holbrooks inhabit. While occasionally these signs acknowledge the harsh realities of the Great Depression—for example, one poster commissioned by the state of New York for its public health bureau insists that “Lack of Funds Need Not Discourage From Seeking Competent Medical Care”—most ignore the landscape of the city slum. Instead, the posters create an almost surreal world of healthy
bodies—strapping youths succeeding in school, whole families with cinematic smiles 
enjoying bourgeois recreations like golf and tennis (see figure 5). A poster from the 
Chicago Municipal Tuberculosis Sanitarium suggests that germs, rather than poverty, 
threaten this world: in this scene, three hurdlers face the obstacles of malnutrition, heart 
disease, and tuberculosis; while one hurdler sails over “malnutrition,” another athlete 
stumbles over “tuberculosis” (see figure 6).12

The resulting disconnect between these visual representations and the lived 
experience of poor families like the Holbrooks is painful to trace. How to coordinate Jim 
Holbrook’s scalded coworkers, “steamed boiled broiled cooked,” writhing in “their 
crinkling skins, their sudden juices,” with the worker receiving prompt first aid for “a 
scratch” in a poster for the Illinois Safety Division? How to reconcile the Holbrooks’ 
substandard diet with nutrition guidelines issued by the state of New York? As day 
breaks over the mining town in the opening pages of *Yonnondio*, the Holbrook children 
“eat” coffee for breakfast; later in the day, there will be only fatback and cornmeal. 
Accordingly the malnourished children have lost their muscle tone and have become 
“pulpy with charity starches” (64).13 But under the poster headline “Eat These Every 
Day,” a beautiful array—so abundant that it exceeds the bounds of the visual frame—of 
dairy products, fruits and vegetables, breads and cereals, as well as meat and eggs, hovers 
above portions suggestions. After these basic requirements have been met, the poster 
instructs the viewer to “eat any other foods you may choose” (see figure 7). But in the 
world of *Yonnondio* there is no balanced diet, there are no “other foods” to enjoy as 
snacks. In light of the deprivation that Olsen describes, “Eat These Every Day” emerges
Figure 5. “Milk—for health.” Ohio WPA Art Program, circa 1940. Library of Congress, Prints and Photographs Division, WPA Poster Collection [LC-USZC2-1086 DLC]. By the People, For the People: Posters from the WPA, 1936-1943.
Figure 6. “Keep Fit.” Chicago WPA Federal Art Project, between 1936 and 1939. Library of Congress, Prints and Photographs Division, WPA Poster Collection [LC-USZC2-5240 DLC]. By the People, For the People: Posters from the WPA, 1936-1943.
Figure 7. “Eat these every day.” New York City WPA War Services Project, between 1941 and 1943. Library of Congress, Prints and Photographs Division, WPA Poster Collection [LC-USZC2-5585 DLC]. By the People, For the People: Posters from the WPA, 1936-1943.
as almost cruel in its rendering of abundance and choice, as well as in its suggestions of pleasure in selection and consumption, all of which are entirely absent from the Holbrooks’ lives. In short, these poster propose a calculus of consumption that is utterly unfathomable by poor families. Olsen’s text underlines the absurdity of papering a slum, where “skeleton children” must scavenge in garbage dumps, with such signage (47). Even as they disseminate life-saving information, these signs tantalize the working-class viewer by exclusively linking good health to an unattainable standard of living.

The disturbing ambivalence of this discourse points back to the public health poster’s progressive roots. Progressivism, a largely middle-class reform movement which flourished from the 1890s to the 1920s, addressed inequity in American through social control, crusading against the excesses flaunted by the rich and the hardships faced by the poor. Progressives “sought to modify the imperfections of capitalism without overthrowing it” (Abramovitz 181). These reformers attacked the routine abuse of workers by unregulated industry, initiating protective legislation on their behalf. Progressives attempted to sanitize the vice-ridden city and to create an environment supportive of family life in the middle-class mold as well. Unlike eugenicists, progressives recognized the critical impact of environment on human development, and during this era, social workers turned away from earlier characterizations of the poor as immoral and Other (Reisch and Andrews 17). Instead, the progressives attempted to integrate the poor into society by impressing upon them many of the values of the middle class, including individual achievement, self-help, and economic opportunity through
education (Reisch and Andrews 21). Thus educational instruments such as the public health poster figured prominently in progressive battles against the ills of poverty.

Certainly, progressivism represented a leap towards social justice on many fronts. Progressive “social healers” alleviated the suffering of countless individuals and hurried the end of inhuman practices throughout the industrial sector. However, troubling contradictions riddled the movement. This ostensibly altruistic effort was not without its own self-interest: as Reisch and Andrews have noted, the progressives “proposed solutions to the problems of industrialization and urbanization which required the utilization of specialists and professionals like themselves” (21). In addition, the progressive movement provided a professional outlet for the manifold talents of the twentieth century’s New Women. Michael McGerr argues that Jane Addams, for example, “needed the poor of the Hull-House neighborhood to give her life purpose and form” (54). Ironically, the total resolution of social ills would deprive progressivism—and progressives—of a raison d’être.

Most problematically, progressivism attempted to consolidate the authority of the middle class by reproducing itself. But Anna Holbrook’s experience suggests that the arbitrary imposition of bourgeois ideals upon poor workers without a concomitant modification of economic relations generates ideological pathogens. Spurred by the posters, the convalescent Anna attempts to meet progressive standards of housekeeping and childrearing, embarking on a flurry of cleaning and warning daughter Mazie that “if you cant keep your own things out of a mess, you’ll never keep your life out of one” (87). When she eventually admits, however, that these new standards are completely
impossible to meet with inadequate resources—“impossible ever to achieve”—the Dirt That Breeds Disease opportunistically invades her consciousness at the very moment of that admission. As we have seen, the invasion creates in Anna an altered subjectivity, a movement from “fit” to “unfit,” a revision of the self as a carrier of bacteriological and social disease.

The final fragment of *Yonnondio* suggests the further effects of this revision. Even as the Holbrook children find a dead newborn among the refuse at the landfill—another “cleaning out,” dead tissue removed from the social body—Anna discovers that she is pregnant again. While practical concerns might motivate the now-single mother’s subsequent decision to abort, an echo of her earlier anguish, her surrender to the Dirt That Breeds Disease—“I can’t have another kid. I can’t. I’m half crazy now seein what happens all around that I can’t help”—sounds as Anna seeks information about termination (149). (In a bitingly ironic evocation of progressive notions of self-improvement, Anna educates herself about abortion with a medical book from the public library.) Ultimately, the fragment describes a painful attempt at the self-control of working-class reproductivity: Anna not only ends the pregnancy with “tiny snips” of a boiled scissors, but also cautions her daughter: “Mazie you fix yourself some way so you don’t have no kids. Don’t ever let no man touch you, see, unless you’re fixed” (147).

Policing reproductivity, Anna refuses to “infect” another generation.

In *Yonnondio*, through the relics and rhetoric of progressivism, the middle class dances attendance upon the reproductive working-class body. Olsen identifies the Progressive messages of public health posters as ideological pathogens waiting to invade
working-class consciousness—an identification that exposes the middle class as a mediating presence in the asymmetrical exchanges of capitalism. Yet in much proletarian literature, which schematically reduces the exchange of labor to abusive owner and abused worker, the mediating role and the vested interest of the middle class in those exchanges remains unexplored. As does the reproductive working-class body itself: proletarian literature reflects the profound “andocentrism” of the radical movements of the day. As Constance Coiner reminds us, *Yon nondio* emphasizes “many of the physiological events that shape women’s lives—pregnancy, childbirth, miscarriage, battery, and rape. This is remarkable at a time when these topics seldom appeared in literature, including proletarian writing” (181). Olsen’s attention to these processes—within a deft coordination of the dynamics of labor with the etiology of disease—casts the vulnerable borders of the reproductive working-class body as the ground upon which subjectivity is most fiercely contested.

II. *The Girl*

Like *Yon nondio*, Meridel LeSueur’s *The Girl* revises the generic conventions of the proletarian novel by locating the struggle for working-class subjectivity in the (re)productivity of the female worker. The unnamed heroine of LeSueur’s novel—like *Yon nondio*, composed during the 1930s, but “rediscovered” and published during the 1970s—feels similar eugenic pressure when her reproductive body comes into contact with the apparatuses of public health, but here the eugenic message is delivered not by a
shaming health poster but by a threatening social worker. In danger of sterilization and incarceration by local officials, the novel’s working-class women self-segregate from the public health system, a move that forces them to rely on working-class boyfriends and husbands for reproductive “care.” I find these working-class men appropriating the language and mimicking the behavior of trained doctors—a measure, I argue, not only of the by-then superabundant cultural authority of doctors, but also of their corollary anxieties about maintaining that authority.

LeSueur’s novel ends with the requisite “revolutionary élan” when Girl gives birth, surrounded and supported by the female activists of the Workers’ Alliance, to a future worker/activist, but not before the public health system almost deactivates her reproductivity altogether. Girl’s rural upbringing fails to prepare her for city life in an impoverished section of St. Paul, Minnesota, where her work at a neighborhood tavern brings her in contact with working-class men and women in and out of legitimate employment and criminal endeavors; soon impregnated by Butch, an unemployed laborer who is fatally wounded in a bank robbery gone awry, she seeks assistance at the public clinic. After wading through a bureaucratic morass—stories circulate about women in labor turned away because of incomplete paperwork—Girl receives prenatal counseling that evokes the impossible suggestions offered by the health posters in Yonnondio. Here the recommendation are even more pointed: Girl reports that “I was trying to get on relief and I went to the clinic and they told me that to have a good baby you got to have one quart of milk per day and oranges….Well, oranges don’t grow in the fine tropical climate of Minnesota” (143). In the context of this proletarian novel, where a network of police
officers, social workers, and paid informants routinely surveil young women, ready to pounce at the first sign of “immoral” behavior, “good” reads as more than a benign reference to every parent’s hope for a healthy child; it stands as an implicit comment on maternal fitness. A “good” baby—a future worker who will make fewer demands on public resources, now and later—necessarily comes from a “good” mother, a sexually continent woman who makes measured contributions to the labor force from within a heterosexual marriage. The relief agencies render this prediction self-fulfilling with sanctions ranging from reduced assistance to involuntary sterilization against “bad” mothers. On the basis of informant’s report, a social worker cuts the pregnant Girl’s food allowance to nearly nothing—“if you live with a man you ain’t married to then you won’t get relief, we can’t have any immorality around here” (156). When Girl glimpses a sterilization order in her file, her attempt to flee lands her in a detention facility for unwed mothers, where the price of adequate food and medical care is the surrender of personal freedom and the abdication of future reproductivity.

Warned early by other women about the dangers associated with accepting public assistance, Girl applies for relief only as a last resort; finding the system treacherous to navigate, friends like Belle, the tavern owner, and Clara, the waitress and prostitute, frequently turn to their men for reproductive “care.” In the depressed world of this novel, the automatic response to unwanted pregnancy is abortion, but methods vary. Although Belle shares horror stories of unqualified underground abortionists—all male—in St. Paul, the men of their circle dabble in such procedures as well. These men take a twisted pride in their ministrations, casually discussing abortifacients and statistics: Belle’s
husband Hoinck brags that “I got me some woman. She took the rap for me once when I forged a check, and she had thirteen abortions. I give her a spoonful of turpentine with sugar and it’ll loosen anything” (14). Butch’s response to Girl’s pregnancy is to “get rid of it. I could do it myself with a pair of scissors, there’s nothing to it” (97). While this group of working-class women discusses the problem of uncontrolled reproductivity and supports each other in dealing with the consequences of unwanted pregnancy, their working-class men assume unusually assertive roles in managing the women’s reproductivity.

As I noted earlier in my discussion of anti-abortion discourses in relation to the figure of Dr. Laphame, traditionally abortions had been performed by midwives until the latter part of the nineteenth century, when male physicians made a concerted effort to colonize the obstetrical-gynecological business, both as an entrée into complete family care and as a way to exert control over female patients by influencing reproductive behavior. Then more affluent women began to seek abortions in the offices of those physicians who, in contravention of AMA guidelines, would perform the procedure, while poorer women continued to consult midwives. In addition, Leslie Reagan observes that “most of the women who had abortions at the turn of the century were married” and that their men were becoming increasingly involved in reproductive decisions (23). Single women counted on their men as well: Reagan offers examples of males not only assuming financial responsibility, but also arranging for and accompanying women to the procedure (31). Still, despite men’s growing involvement in negotiating and co-managing
reproduction, the representations of men (gleefully) performing abortions in *The Girl* seem exceptional.

I argue that these crude and scary procedures are more than cheap and expedient solutions to the problem of unwanted pregnancy; rather, they are part of a rhetorical reclamation of working-class masculinity in the face of socioeconomic powerlessness, an attempt to occupy momentarily the cultural space of the most successful of the middle-class professionals by rehearsing their language and behaviors. Michael Kimmel points out that during the Depression, with “nearly one in four American men out of work, the workplace could no longer be considered a reliable arena for the demonstration and proof of one’s manhood” (193). Men had to find other means of and other arenas for meeting that need. Kimmel contends that interwar masculinity began to be reconceived as “the exterior manifestation of a certain inner sense of oneself. Masculinity could be observed in specific traits and attitudes, specific behaviors and perspectives. If men expressed these attitudes, traits, and behaviors, they could be certain they were ‘real’ men, regardless of their performance in the workplace” (206).

*The Girl* substantiates that claim, showing how working-class men attempt to inhabit other social spaces through fantasy and performance. Not surprisingly, the poor men of LeSueur’s novel vent their socioeconomic frustrations with a misdirected rage towards their women, stupid “bats” who are almost always the reason for the men’s economic failures: Girl’s father writes her that “fisically I am a broken men and mentally lord knows if your mother and all the rest that are the cause of my present condition are satisfied what they have done to me” (21, 39). They also soothe themselves with dreams
of another life. Although much has been written about fantasy—particularly as enabled by Hollywood—as a coping mechanism during the Depression, the working-class men of this narrative respond to the frustrations and denigrations of their situation with blustery denials—“We’re sure gold. We’re natural winners”—that lead to the actual implementation of unrealistic schemes like bank robbery (7). Hoinck claims these daydreams can reconstruct damaged masculinity: after suffering the humiliation of begging from church charities, “I got a course from some magazine, a course in psychology. You all probably heard about it. I never heard of it until I seen this piece in the paper. Well it made a new man out of me. I learned that thought is all-powerful. You can make any thing so by believing it’s so. You make your own good and cure your own evil” (16). The rest of the men not only adopt this pseudo-science but also become increasingly “medicalized.”

Throughout the text, there is an equation of medicine with sex, a move that allows them to equate their raw bodily force—underappreciated in the depressed market—with always valuable professional expertise, and to legitimate misogynistic behavior in the bargain. Butch insists that the virginal Girl has egged him on sexually and, as a consequence, must “take her medicine” (34); Girl recalls that her mother risked her life “every time she turned over and took her medicine as papa used to say” (61). Patronizing remarks by the bank robber Ganz—who, not coincidentally, espouses eugenicist views, insisting that “what we need in this country is someone like Hitler, that’s what we need. Hitler knows we don’t need so many people, kill off half of ‘em, leave only the best people who know what it’s all about” (88)—show how fully he and his cronies inhabit
this medicalized imaginative space. As Girl anxiously questions his plan as she drives the getaway car, his flippant and sarcastic “you’re the doctor, anything you say, baby” reminds her who “the doctor” really is (81).

Although we might read “taking her medicine” as simply a vulgar twist on a colloquialism, a key moment between Butch and Girl illustrates the ideological complexity of this equation of sex and medicine and illuminates the imaginative transformation from pseudo-scientist to medical impersonator—a transformation that Girl enables. Soon after Girl learns that she is pregnant, she meets Butch in the tavern and they discuss abortion. Their discussion is interrupted, however, by a ballplayer who recognizes Butch and asks, “‘When were you with the Wisconsin Blue Socks?’”—a reminder that Butch has had glimpses of life beyond the factory walls. But the reminder of unfulfilled promise is too much for him: after the ballplayer leaves, Butch begins to cry and insists on the abortion, saying “You’ve got to do it, that’s all.” Just as the radio announces that the White Sox scored, Girl’s thoughts skip from Butch’s professional disappointment, which she extrapolates to their entire class, to the temporary relief of interpersonal tension that the abortion, or “science,” will provide: “We won’t ever make a home run, ring the bell, beat the race, come in first. There’s nothing to it, science is wonderful. Listen, honey, don’t cry. It’s nothing. I’ll do it, I’ll do it” (100). Although unspoken, Girl’s interior monologue somehow galvanizes Butch. “You’ll do it,” he cries, and despite his earlier boasting about the scissors, he marches Girl to an old woman on a riverboat for the procedure. Here Butch seems to be playing the role of a doctor, speaking to the old woman as if she were a nurse or a surgical assistant, handing Girl off to her
with terse instructions: “Give her, abort her. Get it out of her” (101). In this sequence, the pain of socioeconomic failure is mediated by Girl’s conjuring and acquiescing to the “science”—even the “science” of inexpert abortion—that can rebuild damaged masculinity, the science that Butch appropriates in his surprising role play.

*Transparent Meshes of Sound*

Significantly, radio provides both the background for this sequence as well as the psychological and narrative “triggers” for Butch’s breakdown (recognition by the other ballplayer listening to the game) and for Girl’s acquiescence (announcement of the White Sox score) and hence, for the culminating role play. I argue that popular radio plays of the 1930s and 40s that dramatized the lives of doctors could have provided a model for working-class men like Butch, already susceptible to mail-order pseudo-science, to emulate the language and behaviors of doctors in an effort to rebuild masculinity damaged by socioeconomic powerlessness.

Even for the poorest people, the radio was a lifeline during the Depression. In fact, Girl and her friends risk losing all of their remaining assistance by listening to a contraband radio, confiding to us that “we’ve got a radio, that is, Belle has got one. You have to keep it hidden because if the relief found out Belle has one we would get cut off, so we only take it out at night when it is sure that no caseworker is coming around. We have to attach it from the hall, which is the one place where there is electric light. We play it long cold winter nights” (148-9). The radio is thus as important as physical sustenance. Not coincidentally, the radio figures similarly in a key moment in *Yonnondio*
as well. Critics have repeatedly revisited the moment late in the novel when baby Bess Holbrook bangs the lid of a fruit jar as a declaration of independence and creative capacity, a triumphant ending, but have not paid so much attention to the family gathering around a borrowed radio that immediately follows:

And Will comes in to the laughter with coils and boxes and a long, long wire. One by one, on the Metzes borrowed crystal set, they hear for the first time the radio sound. From where, from where, thinks Mazie, floating on her pain; like the spectrum in the ray, the magic concealed; and hears in her ear the veering transparent meshes of sound, far sound, human and stellar, pulsing, pulsing….(191)

Here Bess’s nascent subjectivity, her dawning recognition of “the human ecstasy of achievement, satisfaction deep and fundamental as sex: I achieve, I use my powers; I! I!” joins with the family’s first foray into radiophonic space, their first experience of that connection with unseen others via “transparent meshes of sound.”

And indeed, radio was capable of creating “imagined communities.” By the end of the 1920s, 40 percent of American homes had a radio set; by 1932, there were twice as many radios as telephones (LaFollette 6). A survey of poor mothers at a public well-baby clinic in 1943 revealed not only that all but one mother owned a radio but also that “despite the fact that they were from the low income group, 30 per cent of them owned from two to four radios each” (Murray 952). In addition to providing needed escape from the trials of the Depression, radio “created national crazes across America, taught Americans new ways to talk and think, and sold them products they never knew they needed” (Lewis, “Godlike” 26). Public officials recognized that radio could influence
behavior in other ways as well. A 1925 *New York Times* article reports that “radio entertainment provided for the drug addict inmates of the New York City municipal farm of Riker’s Island has had a beneficial effect” upon behavior; moreover, a microphone in the warden’s residence “enables him to address the inmates at any time” (“Radio”). Other types of institutions were quick to exploit the power of radio: even as Herbert Hoover announced plans to campaign primarily through radio and movies in 1928, public health programming had already been on the air for several years.

Organizations such as the AMA quickly discovered that audiences preferred dramatizations to lectures, and radio plays featuring doctors became quite popular. Public health programming began in 1921 with the national Public Health Service’s weekly “HealthHints by Wireless”; the AMA began broadcasting in 1923. However, throughout the 1920s, the PHS and the AMA competed with local operators, such as Davenport, Iowa’s Palmer School of Chiropractics, which had its own station, and flamboyant “radio doctors,” such as John Romulus Brinkley, who notoriously “used his own station in Kansas to promote goat gland transplants as a remedy for impotence,” for the attention of listeners (Lafollette 14). More earnest voices, such as temperance organizations, took to the airwaves as well. However, public preferences began to shape the nature of programming early on. A 1932 study in Racine, Wisconsin revealed that of those surveyed, thirty percent listened “regularly” to local health department broadcasts and sixty percent preferred to listen to health information couched in plays (Turner 589). The AMA responded with series like *Doctors at Work*, dealing “with the experiences of a typical American boy choosing medicine for his vocation and proceeding to acquire the
necessary education and hospital training for the practice of medicine.” (Remember that the percentage of women in the medical profession declined after 1910. Significant recovery did not begin until 1950, so the series’ exclusive focus on the “typical American boy” seems inevitable.) Interwoven with the personal story of the young doctor and his fiancée was “the romance of modern medicine and how it benefits the doctor’s patients” (“Miscellany” 45).

The *American Journal of Public Health* praised *Doctors at Work* and its writer, who “has a decided ‘knack’ for developing situations that appeal to Mr. Average Man and his household. This quality is the very essence of successful radio programs—particularly those dealing with medical or health themes.” The series utilized “interesting radio effects and technics [*sic*]” to support narrative devices like dream sequences and to captivate its listeners (Armstrong 635). Episodes such as “Health for the Workman” spoke directly to a working-class audience, and to working-class men in particular; I imagine that devices like dream sequences not only “captivated” that audience, but also made imagining oneself differently—in another role, in another body, in another class—all the easier.

The adoption of “medicalized” behaviors by certain working-class men that I am arguing for here is supported by the psychological effects of radio listening itself. As Edward Miller points out, phenomenon such as the popularity of radio séances attest that radio, “particularly as a new object in many homes in the 1930s, is especially primed as uncanny: its powers surpass the human, transmitting and receiving voices far beyond the amplification of the human voice” (26). More importantly, “radio severs bodies, ripping
voice from body, returning it as strange, placing it in a realm where it interacts with other estranged voices. Voices are spliced onto other imagined bodies” (27). It is just such “splicing” that I see enabling the medical role play in The Girl, as the voices of radio doctors find a temporary home in the bodies of working-class men.

Certainly working-class male desire to adopt the voice of the doctor, to inhabit even momentarily the cultural space of the doctor, with all of its entailed privilege, is a measure of the cultural authority of doctors during this decade—authority so superabundant that it spills over and creates imaginary medical “stand-ins” amongst working-class men. I contend that this medical “deputization” of working-class men helps doctors, the prototypical middle-class professionals, not only to maintain their own cultural authority but also to protect the existing class structure by soothing the (potentially revolutionary) discontent of the socioeconomically powerless with fantasy.

Such pacification resonates with David Roediger’s notion of the non-wage “compensation” that racialized performances such as minstrelsy—adopting a “black mask” in order to underscore an essential whiteness—offered the “wage slaves” of the white working class in the competitive labor markets of the nineteenth century. In an interesting analog to Roediger’s examples, in 1938 the popular radio duo of “Lum and Abner” devoted a week of their broadcasts during December 1938 to discussions of the doctor-patient relationship. Before these natives of Pine Ridge, Arkansas, became radio stars—eventually moving to Hollywood and raising thoroughbreds as a sideline—they had an equally successful blackface act, creating the “Lum” and “Abner” characters on the fly after discovering that four other blackface acts had entered a local charity show.
During their week dedicated to doctors and patients, Lum and Abner advocate for doctors, claiming that “a feller who won’t tell his doctor ever’thing that ails him ain’t got much right askin’ for help….some folks ‘pear to think a doctor ought to read their minds—an’ then they get mad iffen he does” (“Lum”). Although these episodes were a small part of the “Lum and Abner” programming, here we see the former blackface performers retaining the folksy appeal that their working-class audience loves while identifying with, if not exactly impersonating, the doctor figure. The pair is able to use radio to broadcast—and I would argue, implicitly recommend—that kind of identification to millions. Putting on the “doctor’s mask” offers its own compensations to working-class males.

_The Girl_ describes the working-class female body between a rock and a hard place. Threatened with involuntary sterilization, poor women self-segregate from the eugenicist arm of the public health system to preserve their own future reproductivity. In LeSueur’s text, these women turn instead to their working-class men for dangerously inept reproductive “care.” Here their reproduction is limited not by birth control, but by routine abortions. The eagerness on the part of working-class men to perform those procedures and to “stand in” for doctors suggests that such medicalized role play offers some psychological compensation in the face of socioeconomic powerlessness. In _The Girl_, doctors manage to intervene in the (re)productive lives of the poor both through overtly eugenicist attacks on working-class female bodies via public health services and through the imaginary “deputization” of working-class males with the rhetoric of radio
doctors--rhetoric that soothes damaged masculinity in an attempt to preclude the revolt of labor.

III. Conclusion

By “disseminating authority” through the discourses of public health, doctors were able to distance themselves from poor bodies, freeing them as individual practitioners to concentrate, as D.W. Cathell had recommended, on paying clients of the middle and upper class. More importantly, by exerting eugenic pressure on poor bodies—whether implicitly through educational posters, or explicitly through sterilization campaigns—the medical profession embedded itself in the exchange of labor as essential regulators of working-class reproductivity. Such moves worked to shore up the cultural authority doctors had been gathering over the past fifty years by extending the reach of medical expertise into the labor market.

Significantly, these maneuvers represent a new freedom from the constraints of professional “performances.” Having accrued sufficient cultural authority, doctors no longer had to discipline themselves, to inhabit medical *mises en scène* in order to attract patients—or even to obtain the cooperation of test subjects. Instead, proletarian novels like *Yonnondio* and *The Girl* suggests that the discourses of public health directed by the work of the doctor-scientists disciplined Others by imprinting that self-regulatory imperative onto working-class women, who would add the burden of double consciousness, of monitoring their own reproductive behavior through the perspective of the dominant culture, to their heavy loads. At the same time, these discourses offered
deeply frustrated working-class men a chance to reclaim their manhood outside of the workplace and in the realm of fantasy and performance—an offer that never translated into material gain.
1While the incomes of doctors were steadily increasing during this period, I still view them as middle-class.

2Although fatigued workers may not have had the time nor the energy to read novels, they certainly read periodicals like The Daily Worker and The Masses featuring shorter examples of proletarian realism that could be finished in one sitting.

3By the People, For the People, the Library of Congress archive of WPA posters, suggests the range of signage that a poor family like the fictional Holbrooks might have encountered. The Works Progress Administration/Federal Art Project of the 1930s expanded dramatically the education campaigns waged by local public health departments during the 1920s. See William Helfand on the European roots of the illustrated public health poster.

While Yonnondio ostensibly opens in a Wyoming mining town of the early 1920s, according to Tillie Olsen’s introductory note, the unfinished text was “conceived primarily as a novel of the 1930s” (v). Thus I read novel and signag•e as contemporaneous documents.

4The Marine Hospital Service, the forerunner of the United States Public Health Service, was actually created in 1798 by John Adams to provide relief for sick and disabled merchant seamen. The role of the Marine Hospital Service eventually expanded to enforcing quarantines and performing medical inspection of immigrants during the
nineteenth century. In 1912, the name of the Marine Hospital Service was changed to the Public Health Service (PHS) and the agenda of the agency greatly expanded.

5 I would add that film becomes an increasingly important medium for speaking to the masses, and in fact, “doctor movies” were extremely popular. However, because such films emanated from movie studios and not (directly) from the apparatuses of public health, I have excluded them from this discussion. See Susan Lederer’s “Repellent Subjects” for more on the “doctor movies” produced during the 1930s.

6 Although the second fragment following the main text in the 1974 Delta edition of *Yonnondio* includes a brief glimpse of Mazie working in a candy factory, the accident at the packhouse remains the final image of industry in the novel proper.

7 Throughout *Yonnondio*, Olsen uses apostrophes inconsistently in representing dialogue; I have faithfully reproduced those inconsistencies.

8 Although most agriculturalists also belonged to the working class, the nation’s continuing transition from agrarian to mechanized, and from rural to urban, focused attention on the problems of workers in cities. See Priscilla Wald on the changing definitions of “contagion” from Jacob Riis to Robert Park, and the uses of social contagion in Americanizing recent immigrants in urban areas. Also see Nancy Tomes’s “Epidemic Entertainments” on the “national hypochondria” that gripped the country from 1910 to 1940, creating a cultural industry devoted to representing—and profiting from—the fear of dread diseases.

9 See Haller (79).
Unfortunately, these programs continued in many states for years. For example, the North Carolina Eugenics Board, which reviewed and authorized sterilizations, was not abolished until 1977.

The services of the WPA/FAP artists were available to any government agency. Thus the FAP generated, in addition to health and safety posters, advertisements for travel and tourism, for cultural performances and community events, and for educational and recreational opportunities.

Posters frequently represented germs—and carriers—in militaristic terms, another tactic that deflected attention from the living conditions of the poor. The few posters that graphically depict the negative consequences of disease maintain focus on the germ and on controllable behaviors rather than underlying causes of disease: for example, the “false shame” of the patient reluctant to seek treatment could “destroy health and happiness.” Similarly, a safety poster from New York indicates that inadequate fireproofing can cause a devastating inferno. However, poor workers would most likely be renters—and victims of unscrupulous landlords—rather than autonomous homeowners capable of making improvements.

Olsen describes the children elsewhere as “puffing out with starch” (22). The edema of their “swollen bellies,” along with their lack of muscle tone and general apathy, could be indicative of a disease caused by protein deficiency.

Of course, women freely shared information about how to self-induce miscarriages as well. See Reagan (26-7).
Unquestionably, the content and placement of the texts of public health—of posters in factories warning against industrial accidents, for example—indicate that public health officials wanted working-class audiences to have access to their discursive products, although as I note in the previous section, their motivations could be diverse. Thus LeSueur’s claim that the radio was contraband is puzzling. I can only imagine that she is attempting to emphasize the cruelty of the aid workers, their pleasure in enforcing deprivations.

See Lewis (“Godlike” 27).
CHAPTER V
CONCLUSION

Between 1880 and 1940, the medical profession initiated a threefold movement to establish its authority, first “cleansing” the field of unqualified charlatans as well as of qualified white female and nonwhite male competitors; then gaining the public’s confidence by deploying effective, predictable laboratory-tested therapeutics; and finally, maintaining and expanding cultural authority by becoming essential mediators in the exchange of labor. The texts under consideration in this study show how raced, classed, and gendered bodies figured so prominently in this process of disciplinary formation. However, these texts reveal doctors disciplining themselves as much as they discipline Others. In fact, I conceptualize the pursuit of medical professionalism and the consolidation of cultural authority around doctors as a gradual shift from rigid self-discipline to increasingly invasive and spectacular disciplinary measures visited upon the Others in their care. This movement coordinates with the expansion of the kind of professional “pantomime” that D.W. Cathell first described from the “stage” of community practice to the arena of eminently consumable popular entertainments like radio dramas and public art.

By dramatizing the constant tension between the need to discipline the self and the need to discipline Others, these professional performances illuminate the fault lines and the stress points in the threefold narrative of medical professionalism. For example,
in my discussion of *Arrowsmith* and human experimentation, I affirm the overwhelming
boost to professional authority that scientific medicine provided, particularly when
viewed over decades; however, the professional performances in *Arrowsmith* and *The
Sweeping Wind* describe doctor-scientists frustrated by, and yet dependent upon, the
Others they recruited as test subjects. While Arrowsmith’s excessive and abandoned
performances of ideal masculinity point to a relaxation in self-disciplinary impulses, his
mandate to deprive plague victims of life-saving bacteriophage in the name of science
attests to an indiscriminate disregard for raced, classed, and gendered bodies; even so,
free-wheeling Arrowsmith “loses control” of science and self quite quickly in the tropics.
Equipped with and authorized by the very latest in technology in his “bad-blood wagon,”
de Kruif’s associate Dr. Wenger must serve as the “Dionysian master of ceremonies” at
the juke joint, molding himself into a reflection not of a middle-class white clientele but
of a group of impoverished black test subjects. Such moments reveal the unevenness—
jaggedness—of this threefold movement towards professionalization.

Because Cathell defines the true professional as male and middle-class (or
alternatively, completely committed to the performance of middle-class status), I have
been particularly concerned with observing intersections of class and masculinity across
the professionalization process. The two constructs are always intertwined and
interdependent, but my texts suggest that as doctors accrued cultural authority, the
articulation of gender began to take precedence in these professional performances. This
shift coordinates with the early twentieth century trend towards defining masculinity
outside of the increasingly unstable workplace, a zone restrictively organized by class
constraints. While casting aspersions on the masculinity of the simultaneously racialized and feminized McTeague and the dandified Other Dentist, Norris seems to be more concerned with issues of class, with denying McTeague professional credentials and preventing the couple from ascending the social ladder. And of course, Blix, the new ideal medical professional, is unmistakably middle class. In contrast, *Arrowsmith* is far less concerned with issues of class than *McTeague*. However, this interwar text is obsessed with performances of masculinity and with “virilizing” the profession. Proletarian novels suggest that after establishing their hegemony, the medical professionals directing and developing various discourses of public health assigned such performances to Others, charging working-class men and women with the impossible task of reclaiming their gendered subjectivity by imaginatively inhabiting a middle-class social space.

Furthermore, the form of the texts under consideration here has similarly illuminated the stress points and fault lines along the timeline of medical professionalization. *McTeague* and *Blix* seem to enact the disciplinary measures and professional recommendations that they describe: the narrow naturalistic focus of the former mimics the exclusionary events triggering McTeague’s downfall; conversely, the hybrid form of the latter bespeaks elasticity, evoking the expansion of the profession. Likewise, I contend that Lewis loses control of the social realism of *Arrowsmith*, wandering into the realm of sentimental discourse, just as his central character loses control of self and science in the tropics. In each case, the realism of *McTeague* and *Arrowsmith* “failed,” requiring another text to function as a supplement or a corrective to
its limitations or confusions. The realism of Yonnondio and The Girl revise the androcentric conventions of the proletarian novel, resituating working-class subjectivity in female (re)productivity even as their narratives expose the manipulation of (male and female) subjectivity by the hegemonic discourses of public health.

I. Historical Shifts

Revisiting representations of medical authority and professional formation in American literature has taken on particular urgency in the face of recent changes not only in how the public views and uses doctors, but also in how doctors think of themselves and their profession. These changes, triggered by the compromises of managed care and exacerbated by the availability of health information online, mark a significant erosion in the cultural authority of doctors—the first major erosion since the 1930s. Perhaps the most interesting change is that some embattled doctors are admitting that they feel oppressed by the notion of professional performance for a demanding public.

*Examining the Health of Others*

These changing power dynamics between physician and patient are layered upon a national crisis of access and affordability of health care. With even fully insured middle-class citizens experiencing difficulties navigating “the system,” impoverished and underinsured minorities are especially challenged. Minorities have registered steady population increases nationally, but unfortunately, their overall health still lags behind whites in many areas. These disparities tend to affect women disproportionately. A recent
report from the U.S. Department of Health and Human Services indicates that minority women can expect to live five years less than white women; in addition, minority women are more likely to die from cancer and to suffer from diabetes, hypertension, lupus, and HIV/AIDS. (Of course these rates are influenced by a complex of socioeconomic factors beyond the scope of this project; however, monetary, logistical, and cultural obstacles to routine screenings and preventive care, plus a lack of health education, high-quality food, and regular exercise are key.) The report also reveals that for minority women, having a chronic condition like diabetes posed a barrier to other kinds of preventive care, such as PAP smears and vaccines (“Health”).

Equally disturbing is the notion of the formation of a “bio-underclass.” Although the legions of crack-addicted babies famously anticipated by Charles Krauthammer in the 1980s—“the inner-city crack epidemic is now giving birth to the newest horror: a bio-underclass, a generation of physically damaged cocaine babies whose biological inferiority is stamped at birth”—never materialized, the idea of a bio-underclass continues to recirculate (Jackson).¹ It seems that we leap at the chance to blame mothers for prenatal wrongdoing. For example, a recent study claims that maternal obesity can trigger epigenetic changes—“genes inherited from mother and father may be turned on and off and the strength of their effects changed by environmental conditions in early development”—in utero that set a fetus on a course for lifelong obesity, permanently adjusting the child’s satiety set point upward (Rabin). While no one would dispute the importance of maintaining a healthy weight before and after pregnancy, the greater incidence of obesity among minority women complicates these findings, creating more
opportunities for blaming minority mothers for a dooming prenatal negligence. I suggest that we reframe the notion of a “bio-underclass” as a group routinely deprived of accessible and affordable health care as we think through the wide-ranging practical ramifications of and look for solutions to this problem.

**Doctors in Crisis**

Although the prestige of medicine remains relatively high in relation to other professions, it has declined gradually since mid-century. In 1949, 28% of lay people would have recommended medicine, before any other profession, to a young person asking for career advice (Strunk 553). However, in a 2009 poll, firefighter and scientist were considered the most prestigious jobs, eclipsing doctor (“Firefighters”). The pollsters make the point that the public seems to associate professional “prestige” less with earnings and more with service. This decline coordinates with continuing redefinitions of the doctor-patient relationship.

While the specialized knowledge of doctors remains valuable, especially as that knowledge evolves along with technological advances, the exigencies of medical practice in the age of managed care have chipped away at public confidence in the profession. Although at the turn of the twentieth century D.W. Cathell worried about overly inquisitive patients with “eyes like microscopes,” the public reception of texts like *Arrowsmith* shows that with the advent of scientific medicine, diagnoses rendered and therapeutics ordered with the assistance of laboratory technology not only provided
essential “proof” of the competency and the efficacy of doctors but also enabled the outright glamorization of the profession. Today, as ongoing research propels diagnostics and therapeutics forward at remarkable speed, the expertise of doctors is needed more than ever: assessing and interpreting, doctors stand between the extraordinary complexity of scientific medicine and the vulnerable bodies of their patients. At the same time, however, cost-cutting changes in the delivery of care—demonstrated, for example, in the new reality of increasingly expensive yet unsatisfyingly brief office visits, referred to (without irony) in some practices as “encounters”—create ample opportunities for the rushed or incomplete conversations that lead to less favorable outcomes and to decreased public confidence. The world of D.W. Cathell, where the mere presence of a simple microscope within the office setting inspired awe, could not be farther away from our world of technological marvels, but his recommendation that the practitioner stay long enough that the patient felt he or she was getting their “money’s worth” of expertise still resonates.

For many patients feeling less “tended” by their doctors, cyberspace has rushed into the perceived void. These are the “e-patients” and the “cyberchondriacs”—people who not only use the internet to follow up on advice received from doctors, but also to investigate their symptoms prior to, or even in lieu of, an office visit. A 2008 poll showed that more than 80% of wired adults had searched for health information online, with a quarter of those searching “often”—a full 15% of respondents had looked for health information ten or more times in the previous month. An overwhelming majority
(86%) of cyberchondriacs believed that the information they found was reliable ("Number"). However, a Columbia University study hints at the tremendous potential for misinformation online. Researchers examined references to antibiotics in Twitter (micro-blog) status updates, finding that a total of 687 updates recommending misuse or demonstrating misunderstanding of antibiotics (recycling leftover prescriptions or seeking antibiotics for viral conditions, for example) reached more than one million online followers (Scanfeld). Yet 60% of e-patients say that health information found online has impacted their treatment decisions. This online research is clearly affecting the nature of the office visit as well: 53% of e-patients say that their preliminary “findings” have led them to question their doctor or to seek a second opinion. Clearly, as patients feel more informed—regardless of the actual veracity of their information—they feel more free to question the expertise and the judgment of their doctors.

Furthermore, as e-patients not only consume but also add information to online sources, physicians are subjected to greater scrutiny. “Rating” sites that provide the educational backgrounds and work histories of physicians—including malpractice claims against them—as well as “ratings” and comments by patients, are thriving, with 24% of e-patients using these sites (Fox). Zagat operates one such site and argues that their ratings give “consumers the power to make smart decisions about selecting doctors based on other people’s experiences” (Solnik). In fact, a 2009 study for the Pew Internet and American Life Project concluded that e-patients frequently rely on the experiences of others as they seek “tailored information” and search for “‘just-in-time-someone-like-me’”: 41% have read another e-patients online commentary about health issues (Fox).
This desire for comparable experience has given rise to sites such as Patients Like Me, which resembles a social networking site but describes itself as an information-sharing platform that enables “a new system of medicine by patients, for patients” with the long-term goal of collecting and sharing real-world experiences of disease with doctors, researchers, pharmaceutical and medical device companies, and nonprofits (www.patientslikeme.com). In this “new system,” the voices of other patients compete with the voice of medical providers.

None of these studies suggest—as some medical sociologists had predicted—that online research has displaced an office visit, but online activity has changed the nature of doctor-patient interaction. Some scholars have suggested that the “preliminary research” conducted by patients could make office visits more productive and grow the doctor-patient relationship, while others have seen increased access to health information as a harbinger of postindustrial deprofessionalization, marked by the professions’ loss of “their monopoly over knowledge, public belief in their service ethos, and expectations of work autonomy and authority over the client” (Lee 451). The reality seems to lie somewhere in the middle. Although the 2009 Pew study asserted that “trust” in doctors had increased along with the proliferation of health information online, another 2007 poll showed that 44% of Americans had ignored a doctor’s advice or sought a second opinion. Perhaps more importantly, 89% of those respondents reported no negative consequences as a result of ignoring medical advice (Zimney). A significant number of patients, disillusioned by doctors operating under managed care and “empowered” by their own
health research, are selectively following orders, interpreting and evaluating medical advice as they see fit.\textsuperscript{6} Clearly, “doctor’s orders” lack the force that they once carried.

These changes in the cultural landscape have affected not only patients’ perception of doctors, but also doctors’ views themselves and their profession: many are operating with a siege mentality. In contrast to a 1948 poll which found that 86% of physicians found practice to be as satisfying as they imagined it would be as medical students, a 2008 survey conducted for the Physicians Foundation revealed that 60% of doctors would not recommend medicine as a career to young people (Strunk 555). In another survey conducted by the American College of Physician Executives, doctors cited low reimbursement, patient overload, loss of autonomy, and loss of respect as the greatest factors contributing to low morale with the field (“Special”).\textsuperscript{7} Almost sixty percent have considered leaving practice as a result of morale problems. One doctor surveyed accounted for the physical and mental “burnout” that he and many of his colleagues feel:

Physicians are being ‘hit’ from all sides—the public expects perfection 100% of the time and have for the most part shirked their responsibility for their own health, insurers and Medicare expect to pay the least amount possible for the greatest amount of work at the same time the cost of practice continues to climb. At some point—you can’t continue to see more and more patients without something going wrong…. (“Special”)

Another doctor cited an emotional “double standard”: while “we are harangued to be more in touch with our patients’ human feelings, physicians are treated in a completely dehumanized way, never allowed to be wrong, sick, grouchy, or have any personal
needs.” Doctors are feeling both misunderstood and misrepresented. Ninety percent practitioners feel that television dramas centered on doctors or hospitals have “an impact” on the doctor-patient relationship; twenty percent felt strongly that that impact was negative. Respondents claimed that dramas like ER create unrealistic expectations by suggesting that “we can either do every single procedure known to medicine in the ER, are all having sex with each other, or spend hours wringing our hands over patient care” (Mattera). The misanthropic genius at the center of House, M.D. came under particular fire from a number of doctors, who contend that in the “real world” there are no scruffy Vicodin eaters who head a department and whose rudeness is tolerated while he sends a ‘team’ of pickaxe-bearing protégés to someone’s home, where they proceed to break down the walls and discover a rare infestation of nematodes that have somehow migrated to the patient’s canals of Schlemm thereby rendering him blind! Bingo—medical mystery solved? Please. (Mattera)\(^8\)

With most doctors stretched to the limit of productivity, the typical medical practice does not unfold like a televised medical drama. Considering the role that popular entertainments have played in the consolidation of medical authority, it is ironic that doctors are now feeling oppressed by the expectations created by the medical drama.

Primary care physicians may feel these strains the most as many find themselves working more and earning less. Historically, greater specialization has been a hallmark of professionalization, but the lure of far greater earning potential in subfields has created a problematic shortage of primary care doctors.\(^9\) On average, specialists earn about four times as much as primary care doctors, but work about two-thirds less.\(^10\) Accordingly, over the past 10 years, 90% of medical students have gone into specialized practice,
while only 10% have chosen primary care. Nationally, 70% of physicians are currently in specialized practice. Meanwhile, certain specialist nurses, such as certified nurse anaesthetists (CRNAs), have earned more than primary care physicians for the past five years, even though those physicians typically have four to five more years of training.\textsuperscript{11} Overworked and underpaid in relation to their specialist peers, and lacking status within the field, some primary care doctors have begun describing themselves as “second-class citizens.”\textsuperscript{12}

While I can imagine truly impoverished Americans taking issue with the notion of medical professionals as “second-class citizens,” these (relatively) beleaguered doctors sound more like the physicians of Cathell’s time, subject to the whims of the “foxy public,” than physicians of the twenty-first century. Although the infinite mystery of the human body offers protection against total deprofessionalization—new insights from laboratory research constantly augment that body of specialized knowledge that the general public cannot access—the profession faces challenges to its authority once again.
1 See also Okie.

2 More precisely, to a “young man”; see my earlier discussions of the fluctuating numbers of female doctors in practice beginning in the nineteenth century.

3 Although ranked third in this poll, doctors have lost nine percentage points in perceived prestige in a series of Harris polls from 1977 to 2009 (“Firefighters”).

4 Terms coined by the Pew Internet and American Life Project and Harris Interactive, respectively.

5 A 2009 Pew study makes the point that only 12% of e-patients use micro-blogs or social media to discuss health concerns; however, the Columbia research underscores the reach of micro-blogs (Fox).

6 Certainly, there have always been non-compliant patients, as well as patients who have dabbled in alternative therapies or tried patent medicines against advice, but this level of self-conscious patient “empowerment” is new.

7 Although one doctor indicted this survey for “bias supporting low morale,” the volume and the detail of the written comments by other physicians suggests that most not only agreed that there is a morale problem within the field but also welcomed the opportunity to vent their frustrations.

8 Although admittedly House, M.D. is unrealistic in many ways, physician executives point to disruptive behavior on the part of physicians as an “ongoing” and worsening problem. See reports by Weber and by Johnson.
Some experts estimate a shortage of 40,000 primary care physicians by 2020 (Kavilanz, “Family”).

Jonathan Weiner of the Johns Hopkins Bloomberg School of Public Health argues that a “specialist can earn $500,000 or more a year and work 20 hours a week versus a family doctor who earns on average $120,000 a year and works more than 60 hours a week” (Kavilanz, “Family”).

CRNAs earned an average of $189,000 in 2009 (Kavilanz, “Specialist”).

See Kavilanz (“Family” and “Specialist”).
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