Georgia State University
Digital Archive @ GSU

Communication Theses | Department of Communication

1-12-2006

Alice Hamilton: The Making of a Feminist-Pragmatist Rhetor

Vicki J. McCoy

Follow this and additional works at: http://digitalarchive.gsu.edu/communication_theses

Recommended Citation
McCoy, Vicki J., "Alice Hamilton: The Making of a Feminist-Pragmatist Rhetor" (2006). *Communication Theses.* Paper 5.

This Thesis is brought to you for free and open access by the Department of Communication at Digital Archive @ GSU. It has been accepted for inclusion in Communication Theses by an authorized administrator of Digital Archive @ GSU. For more information, please contact digitalarchive@gsu.edu.

DR. ALICE HAMILTON: THE MAKING OF A FEMINIST-PRAGMATIST RHETOR

by

VICKI J. MCCOY

Under the Direction of James F. Darsey

ABSTRACT

Dr. Alice Hamilton (1869-1970), the leading American figure in industrial medicine during the early to mid-1900s, left behind a body of rhetoric that is important in the history of American feminist discourse and American public address. Her discourse is the exemplary of feminist-pragmatist rhetoric, a genre of cross-gender communication developed by New Women associated with Hull House and the University of Chicago between 1892 and 1918. Hamilton's rhetoric illuminates a key event in the history of the American rhetorical tradition—the emergence of the modern woman from her late-Victorian beginnings through her Progressive self-transformation. This study is approached as a rhetorical biography. It tracks Hamilton's evolution from "reticent scientist" to outspoken feminist-pragmatist by examining family, educational, peer and social influences on her development; and through critical analysis of her speeches, technical writing, books, and popular and specialty magazine articles over a 36-year period, from 1907 to 1943.

INDEX WORDS: Alice Hamilton, feminist-pragmatist rhetoric, Progressive Era, social reform, industrial poisons, Hull House, feminist oratory.

DR. ALICE HAMILTON; THE MAKING OF A FEMINIST-PRAGMATIST RHETOR

By

VICKI J. MCCOY

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts

In the College of Arts and Sciences

Georgia State University

2005

Copyright by
Vicki J. McCoy
2005

DR. ALICE HAMILTON; THE MAKING OF A FEMINIST-PRAGMATIST RHETOR

by

VICKI J. MCCOY

Major Professor: James Darsey
Committee: David Cheshier
Mary Stuckey

Electronic Version Approved:

Office of Graduate Studies
College of Arts and Sciences
Georgia State University
December 2005

This thesis is dedicated to
the courageous women of Hull House,
whose lives continue to inspire me.

Table of Contents

Introduction…… 1

The "New Woman": A Neglected Figure in the History of American Public Address……... 1

Alice Hamilton: Exemplar of the Feminist-Pragmatist New Woman… 4

Chapter 1 - Alice Hamilton: A New Woman's Story…… 8

A "Rooted and Grounded" Freedom: Late-Victorian Childhood and Early Education…… 8

Studying Medicine at the Turn of the Century at Home and Abroad…. 15

American Feminism Gives Birth to a New Woman..... 26

Chapter 2 – Hull House and the Chicago School of Pragmatism…….. 35

Alice Hamilton's Introduction to Jane Addams and Hull House……... 35

Hull House and Feminist-Pragmatism…… 39

Chapter 3 – The Emergence of the Citizen-Orator……. 44

1897-1907: Early Experiences with the Rhetoric of Reform…….. 44

1908-1938: Exploring the Dangerous Trades…….. 59

1915-1919: World War I as Transformation……... 66

Answering the Call of the Rhetorical Situation……... 73

Feminist-Pragmatist Rhetoric as a Genre Study……. 80

Chapter 4 – In Her Own Voice: A Generic Analysis of the Rhetoric of Alice Hamilton…… 87

Balance……... 87

Transcendence……..... 106

Multiple Logics…….. 131

Perfectionism……. 160

Balance, Transcendence, Multiple Logics, and Perfectionism in Constellation…….. 178

Chapter 5 – (Conclusion) Listening to Alice Hamilton: Implications of Feminist-Pragmatist Rhetoric for American Public Address…….. 191

Rediscovering Alice Hamilton, a Significant but Neglected Turn-of-the-Century Rhetor…… 193

Hamilton as Exemplar of the Feminist-Pragmatist Genre…… 205

Learning from Alice Hamilton……... 207

References……..... 214

Introduction

The "New Woman": A Neglected Figure in the History of American Public Address

In 1984, when Karlyn Kohrs Campbell (1989a, 1989b) published her ground-breaking, critical study, Man Cannot Speak For Her, her stated purpose was to contribute to the creation of a history of women's rhetoric, specifically the rhetoric of the early woman's rights movement in the United States. Campbell pointed out in the introduction to her work that, unlike men in Western society, whose public persuasion has been studied since the ancient Greeks, women have no parallel rhetorical history. She attributed this lack to the historical suppression of women's voices by powerful cultural forces, in evidence as early as the eighth century BC in Homer's Odyssey, and to the devaluing and marginalizing of women's rhetoric in modern times. The suppression was long successful because of the weight of the cultural authority behind it, including even the Scriptures, where the Apostle Paul exhorts women to keep silent. This devaluing and marginalizing have resulted in a failure to preserve the words of many early female rhetors who defied tradition and spoke publicly on moral and public policy issues, and, for those rhetorical acts by women that have survived, a failure to treat these works as an essential part of the tradition of American public address.

Twenty years after the publication of Campbell's study, and hundreds of thousands of words of rhetorical criticism later, it appears that there is still much work left to do in building a female rhetorical history and incorporating that tradition into existing histories of American public discourse. Judith Allen (2003) complains that in

texts on Progressive history, for example, feminism is either scarcely mentioned or its contribution to Progressive political philosophy is marginalized. A revival of interest in the rhetoric of Progressive Era activist and feminist-pragmatist Jane Addams (see Burgchardt, 2003; Elshtain, 2002a, 2002b), Jennifer Borda's (2003) essay on the Progressive identity of the woman's suffrage movement, and Allen's (2003) own piece on the non-fiction writing and the lectures of Progressive feminist Charlotte Perkins Gilman are all encouraging signs that more stones are being added in the creation of the monument to the female rhetorical tradition that Campbell envisioned and that women deserve.

The Progressive Era is a particularly rich place to look for new stones for that monument. It was during this period, from about 1870 to the 1920s, that a "New Woman" emerged from what might at first glance appear to be the dying embers of the first wave of feminism in America. The New Woman was a member of the privileged first generation of "college" women. She pioneered in the professions and social reform, and she claimed her right to a career outside the home and to a public voice (Sicherman, 1984; Smith-Rosenberg, 1985). In fact, the challenges of life in the large, over-crowded, ethnically diverse cities that sprang up at the turn-of-the-century in the wake of the Industrial Revolution in America provided not only employment opportunities for the reform-minded New Woman, but also the exigencies for her to take part in the reinvigoration of the public sphere that characterized the Progressive Era (Hogan, 2003). As Hogan (2003) explains, "Virtually all Progressives shared an abiding concern with public opinion and its role in the democratic process," and "feared that, in an increasingly complex world, powerful special interests had supplanted the 'voice of the people.'"

"Whatever their other differences," he writes, "they all agreed on the need to reinvent the public sphere" (p. xiii). New Women social workers, physicians, public health specialists, lawyers, educators, and those associated with the settlement-house movement spoke powerfully, often, and to diverse audiences on issues relating to social and economic justice and to the health and welfare of women, children and immigrants.

While the New Woman was well aware that no man could "speak for her," as Elizabeth Cady Stanton (cited in Campbell, 1989b, p. 42) had so eloquently pointed out at the first woman's rights convention at Seneca Falls, New York in 1848, neither could the women of any previous generation. The New Woman sought and found her own public voice, one that was consonant with her role as a transitional woman whose life bridged two centuries, the nineteenth and twentieth, and two eras, the late-Victorian and the Progressive.

The rhetoric of the New Woman has been largely overlooked, in American public address generally and in the history of Progressivism specifically. It merits more intensive scrutiny because the New Woman's public discourse is the rhetorical representation of a watershed moment in American feminist history--the first manifestation of today's modern woman. Critical examination of the rhetoric of the New Woman illuminates the choices she made in communicating within a cultural environment that was at once old and new--old in its patriarchal hegemony and the rhetorical challenges for women that such a power imbalance implies; and new in the intellectual and rhetorical possibilities that opened up as women assumed roles outside the female sphere, and as empiricism and science assumed positions of prominence in American ideology.

Alice Hamilton: Exemplar of the Feminist-Pragmatist New Woman

Dr. Alice Hamilton (1869-1970) is a near-perfect exemplar of the Progressive era New Woman. Like other New Women, she grew up in late-Victorian America in the relative affluence of the new bourgeois class. While steeped in the values of small-town America, she nevertheless attended college as a means of helping to ensure her social and financial independence and her access to a larger world. She eschewed marriage in favor of an autonomous life and a professional career, which she pursued while living and working alongside other, like-minded New Women in a female-headed settlement house. She self-consciously sought to contribute to Progressive reform of American society and, in so doing, developed and honed the requisite political and rhetorical skills.

Even among her extraordinary peers, Hamilton's achievements as a rhetor were distinguished. It has been written of her that, "No one did more during the first half of the twentieth century to alert Americans to the danger of industrial diseases than Alice Hamilton" (Sicherman, 1984, p. 1), yet, like other accomplished New Women, she became "neither a literary figure nor a household word"(p. viii). A physician, scientist, reformer, pacifist, writer and public speaker, Alice Hamilton pioneered in the field of industrial toxicology in the early 1900s, wrote the first American textbook on industrial poisons, and, in 1919, became the first woman to be appointed to the faculty of Harvard University.

Her work on industrial poisoning had its genesis in the factories and mills surrounding the famous Hull House settlement in Chicago, where she lived for 22 years of her long life. With Jane Addams, Hull House's illustrious founder, and Florence Kelley, Grace Abbott, Julia Lathrop and other remarkable women, Alice Hamilton worked to improve the lives of those most affected by America's rapid transformation

from an agrarian, rural society to an industrialized economy centered largely in squalid, impersonal cities. Across the nation, the predominantly immigrant men, women and children who constituted the working poor of the early 1900s all benefited from Alice Hamilton's research and advocacy concerning causes of industrial disease, as have all subsequent generations of Americans.

Alice Hamilton's relative anonymity in the face of such accomplishments is noteworthy in that it points once again to the significant oversight in the scholarship of Progressive Era feminist rhetoric. The period from the late 1800s to the start of World War I has been a contested period in feminist history—a period that some feminist historians have characterized as "unrelieved doldrums" and "continued paralysis" in comparison to the periods that preceded and followed it (see Flexner, 1996/1959, p. 255; and Campbell, 1989a, p. 157). The very existence of an Alice Hamilton supports the assertion of Anne Firor Scott and Andrew Mackay Scott that despite an apparent lull in feminist activism, brought on at least in part by the transition in the movement's leadership, "'beneath the quiet surface the currents were running strongly'" (Scott and Scott, 1975, p.24).

For the critic of feminist rhetoric, Alice Hamilton is an important find, a veritable treasure-trove. She left behind a significant body of public discourse in the form of speeches, popular and specialty magazine pieces, technical writing, and books that illuminate the new, cross-gender, cross-generational communication that the New Woman created as she left the limitations, and the relative safety, of the woman's sphere and staked her claim to a place in the larger world. In Alice Hamilton's case, that place

would be at the very heart of the man's sphere, in "the laboratory, the factory, and Harvard" (Sicherman, 1984, p. 2).

Alice Hamilton found both her life's calling and her public voice living and working among her peers at Hull House in Chicago. In the process, she became the rhetorical exemplar of a particular cohort of New Women that Mary Jo Deegan (1996) has termed "feminist-pragmatists" in reference to the early twentieth-century philosophy developed by the women associated with Hull House and members of the University of Chicago's Department of Sociology between 1892 and 1918. As both a philosophy and a rhetorical style, feminist-pragmatism "unites liberal values and belief in a rational public with a cooperative, nurturing, and liberating model of the self, the other, and the community" and "emphasizes education and democracy as significant mechanisms to organize and improve society" (Deegan, 1996, p. 590).

Through her feminist-pragmatist, New Woman rhetoric, Alice Hamilton was successful in bridging the gap between the values of the Victorian and Progressive eras and their competing family and social claims upon women. As a result of her upbringing, her education, her career choice, and her nature, Alice Hamilton enjoyed unparalleled success as a New Woman who achieved the unification of the male and female spheres, the marriage of feeling and reason and of belief and science that was the feminist-pragmatist ideal. Analysis of Alice Hamilton's rhetoric reveals a genre manifesting recognizable characteristics of balance, transcendence, multiple logics and perfectionism, held together by the internal dynamic of pioneering a new public voice for women (Campbell and Jamieson, 1978). The genre merits recognition for its importance in feminist and Progressive rhetorical histories.

A critic of the work of Alice Hamilton is fortunate in the fact that, in addition to being a prolific rhetor, Alice Hamilton lived a life that was interesting enough to be preserved in an autobiography and two biographies. One of the latter, a biography-in-letters by historian Barbara Sicherman (1984), provides access to verbatim transcripts of important letters from a private collection of Alice Hamilton's prodigious personal correspondence. In addition, Alice Hamilton's papers are archived at Harvard's Schlesinger Library. The availability of this historical material on Alice Hamilton's life makes it possible to trace the arc of her development as feminist-pragmatist New Woman rhetor, furthering our understanding of the evolution of the genre itself. For this reason, this following critical study is approached as a rhetorical biography.

Alice Hamilton's rhetoric has been the subject of very limited scholarly study (see Madaus, 1997). Through the study of what might fairly be called a "fugitive literature" [1] (Wrage, 2000/1995, p. 30), we discover hidden riches that may be profitable to us even beyond their contribution to American public address. This study offers us the opportunity to consider the wisdom of Alice Hamilton, as reflected in her rhetoric and her rhetorical strategies; and to listen to what this feminist-pragmatist New Woman exemplar has to say to us at the dawn of the twenty-first century, when belief and reason often continue to be at war with one another.

Chapter 1 - Alice Hamilton: A New Woman's Story

A "Rooted and Grounded Freedom": Late-Victorian Childhood and Early Education

Like the career in industrial medicine that she was eventually to carve out for herself, Alice Hamilton's childhood was nothing if not unusual. Those few individuals who have written biographically of Alice Hamilton, including historian Barbara Sicherman and college professor Madeleine Grant, describe her early life as privileged (Grant, 1967; Sicherman, 1984; Slaight, 1974; Young, 1976); and, whether judging by nineteenth or twenty-first century standards, that assessment seems to hold. Alice Hamilton was a member of what might quaintly be called a "good family," certainly a "leading family" of Fort Wayne, Indiana (Sicherman, 1984, p. 14). Her Scotch-Irish paternal grandfather, Allen Hamilton, emigrated from northern Ireland, arriving in Indiana in 1823, when the state was still frontier.[2]

In 1828, Allen Hamilton brought to Fort Wayne his new wife, Emerine Jane Holman Hamilton, the oldest daughter of a politically prominent family (Sicherman, 1984, p. 15) and a match for her husband in terms of community involvement and activism. Of the two grandparents, it was Emerine Hamilton who lived long enough to personally influence and be remembered by Alice Hamilton and her siblings.

Emerine Hamilton was a devoutly religious woman who reportedly gave away as much as one-fifth of her yearly income as charity to the needy in Fort Wayne (Sicherman, 1984, p. 15). An avid reader, she established a free reading room for women who couldn't afford to buy books (p. 15). She also supported the temperance movement, and

through that, woman suffrage.[3] "Those two valiant crusaders, Frances Willard and Susan B. Anthony, were her personal friends and used to stay at the Old House when they came to Fort Wayne," Alice Hamilton wrote in her autobiography (1943, p. 24).[4] While Alice Hamilton (1943) saw her grandmother as somewhat elusive and impersonal ("I always felt I was 'Montgomery's second daughter' to her," she once wrote), she also found qualities to admire: her grandmother's quickness of mind and body, her love of reading, and her courage in supporting causes she believed in (pp. 23-24). Indeed, Alice Hamilton herself was to manifest similar energy, enthusiasm and courage in her own adult life, and like both grandparents, she would choose to pioneer.

Emerine and Allen Hamilton produced five living children, three daughters and two sons, including Alice Hamilton's father, Montgomery Hamilton. In 1862, Montgomery Hamilton alarmed the family by leaving Princeton to join the Union Army, largely, he was later to admit, in search of adventure (Hamilton, 1943, p. 25). He spent the following year on a recuperative trip to Germany, where he met and subsequently married Gertrude Pond, a woman in whom he found a kindred spirit. Like him, she had grown up amid affluence, was well educated, and had lived abroad to escape the Civil War; but she was also spirited, unaffected and down-to-earth (Sicherman, 1984, p. 17). Each parent was to have a profound influence on Alice Hamilton, but it was to her mother that she was most devoted.[5]

Gertrude and Montgomery Hamilton produced five children, four daughters born in a six-year time span, and a son, born thirteen years later, when Alice Hamilton was seventeen. To appreciate the influence her parents had on Alice Hamilton's development

as a feminist,[6] a researcher, and a good candidate for Hull House membership, one might consider the memories of them that she includes in her autobiography. It is significant, for example, that in telling her family history, Alice Hamilton recounted a story about the birth of the last of her siblings and the only boy, her brother, Arthur. She wrote, "An old German gentleman said to my father, 'You should call your son Primus, Mr. Hamilton.' 'Indeed, no,' we said, 'he is only Quintus'--and Quintus he has been ever since" (Hamilton, 1943, p. 18). That strong sense of equality between the sexes was helped along by her father, who "hated sentimentality. . .probably a wholesome factor in a household of women," Alice Hamilton recalled (p. 31).

The Hamilton brood was not sent to public schools. Montgomery Hamilton objected to the curriculum–"too much arithmetic and American history"–and Gertrude Hamilton objected to the long hours (Hamilton, 1943, p. 29). Both parents thought languages, literature, and world history to be the most important subjects, a perspective that helped prepare Alice Hamilton for later studies and work abroad.

Only in languages did the Hamilton children receive formal instruction, Latin from their father, French from their mother and from tutors, and German from the family servants and later, from a Lutheran school teacher (p. 30). Everything else was learned through independent reading and research, their chief occupation while indoors. Her sister Margaret Hamilton once wrote,

> We were expected to know literature—French, German and English—to know history by reading all the many books around us. One did not study these subjects; they were to be read and enjoyed. Modern languages were learned by conversation and reading. . . .This curious method of education made for hard work on our part. We were determined to be educated. It made for independence

> of mind, as we had to answer our own questions, solve our own problems. (as cited in Sergeant, 1926, p. 765, and in Slaight, 1974, p. 7)

Although she gives no hint in her autobiography that formal training in public speaking was part of her education,[7] Alice Hamilton was taught persuasion. Her father expected his children to be able to back up their arguments with "good reasons," based on research. Alice Hamilton's first research assignment, at age twelve, was to search the Bible for proof of the doctrine of the Trinity, which her father had already concluded was a later addition to the Gospels. She recalled that her father had a passionate interest in theology, "but religion, as it was taught to us, had little authoritarianism; certainly credulousness was not encouraged" (Hamilton, 1943, p. 30). Both qualities, anti-authoritarianism and a commitment to persuasion based on research, would later influence Alice Hamilton's approach to reform work and to investigating industrial diseases.

Alice Hamilton (1943) considered her mother "less intellectual" than her father, "but more original and independent in her approach to life" (p. 31), and her influence on Alice Hamilton seems to have been significant and enduring. She viewed her mother as an extraordinary woman for her time who, perhaps because of having spent her young womanhood in Germany, was "free of the Victorian prudery which was considered essential to a lady" (p. 31). Gertrude Hamilton openly addressed such subjects as sex, pregnancy and childbirth, unconscious of the social taboo against such discussion in her Midwestern community. This release from slavish obedience to Victorian norms was in itself an important gift to Alice Hamilton, who though she remained unmarried

throughout her life, carried on work at Hull House that required that she be able to address matters of human sexuality candidly and realistically.

Gertrude Hamilton was a passionate woman when it came to injustice. Alice Hamilton reported that even in old age, her mother could be outraged by stories of police brutality, lynching, child labor, and cruelty to prisoners. Like the Progressives of the next generation, Gertrude Hamilton placed the blame more on "the system" and on groups or professions in society than on individuals. More importantly, she taught her children that whether or not the ills of society affected one personally, they should still be a personal concern. Alice Hamilton (1943) remembered,

> Something she said once gives a picture of her quality and of the atmosphere in which we girls grew up:--"There are two kinds of people, the ones who say, 'Somebody ought to do something about it, but why should it be I?' and those who say, 'Somebody must do something about it, then why not I?'" (p. 32)

Perhaps the greatest gift that Gertrude Hamilton bestowed upon her daughters was her commitment to personal freedom as "the most precious thing in life." She took as her own the motto of the monks of the Abbey of Theleme in Rabelais' Gargantua: "*Fay ce que vouldras* -- Do what thou wilt" (Hamilton, 1943, p. 32). The freedom she espoused also included a woman's right to privacy, to a "room of one's own," so to speak. Given that Gertrude Hamilton exercised that independence nearly three-quarters of a century before Virginia Woolf put the concept on paper, she did so within the constraints of the "family claim."[8] It was, however, exactly the support Alice Hamilton and her sisters needed to resist the life of sacrifice that the family claim had required of women for generations, and to instead pursue their personal ambitions and dreams.

Although she was a homemaker, Gertrude Hamilton paved the way for her daughters to join the elite ranks of the New Women, the first generation of college women to pursue careers outside the home (Sicherman, 1984), and they rose to the challenge. Alice Hamilton became one of the greatest women of her generation,[9] profoundly influencing the field of industrial medicine. Her older sister, Edith (1887-1963), became an internationally acclaimed writer whose books The Greek Way and Mythology brought the classics to the general public. Her younger sister, Margaret (1871-1969), graduated from Bryn Mawr College and became headmistress of Bryn Mawr School, a college preparatory school for women. The youngest of the Hamilton sisters, Norah (1873-1945), became an artist who specialized in etchings, drawings and lithographs of working class and urban life. Although she suffered from mental illness throughout much of her adult life, Norah Hamilton illustrated books for Jane Addams and Alice Hamilton, and she pioneered in the field of art education for underprivileged children at settlements in Chicago and New York (p. 12).[10]

In keeping with a family tradition, at age seventeen Alice Hamilton was sent to Miss Porter's School in Farmington, Connecticut. Her time there did nothing to prepare her scholastically for a future career in medicine (she remembers the teaching as some of the "world's worst") (Hamilton, 1943, p. 35), but it did prepare her in other ways. The two years at Miss Porter's gave Alice Hamilton what she called "the best of the New England tradition–integrity, self-control, no weakness or sentimentality, love of beauty, respect for the intellectual, clear thinking, no nonsense"(p. 37). These qualities also

describe the environment she would later encounter among the New Women of Hull House.

At Miss Porter's School, she was exposed for the first time to other young women who had upbringings quite different from her own, and she formed friendships there that she called upon throughout her life. Alice Hamilton (1943) recalled that girls stood on their own two feet, so to speak, and were liked or disliked on their own merits. At Miss Porter's, out from under the protective wings of her large family, Alice Hamilton began the journey of individuation and finding her own voice.

Along with the privileges of being a Hamilton--tutors and private schools, summers at Mackinac Island--came expectations, keenly felt by the younger members of the family. Alice Hamilton, her sisters and cousins were expected to meet rigorous intellectual and moral standards and to be worthy of the advantages that they enjoyed. Being worthy was measured in intellectual achievement and a high moral purpose rather than financial success or an early marriage and a life of leisure (Sicherman, 1984, p.14). Like others of her generation, including Jane Addams, Alice Hamilton and her sisters were aware of their special opportunities and felt an obligation to make the most of them (Addams, 1893; Elshtain, 2002; Sicherman, 1984; Smith-Rosenberg, 1985). Alice Hamilton once complained of another young woman, whom she believed to be wasting her opportunities in favor of the pursuit of marriage,

> Aren't things badly mixed in this world? Here is a girl who hates independence and longs to be shielded and protected and managed and has no cravings after latch-keys and money of her own earning, while hundreds of much-fathered and mothered girls would gladly change places with her. (Sicherman, 1984, p. 128)

Alice Hamilton desired no such sheltered life for her future. In her teenage years, having read a book about Persia, she considered becoming a medical missionary to Teheran. She believed it would allow her to do something useful while she explored faraway places and met interesting people.[11] Later, after reading works by Frederick Denison Maurice and Charles Kingsley, she and her cousin Agnes became interested in the "English social question," the plight of the working class. They determined that the slums of America might hold as much excitement as Persia (Hamilton, 1943, pp. 26-27).

Their intuitive belief proved itself true in Alice Hamilton's life. She would one day enter the world of urban, working class suffering, where she would find herself,

> walking intrepidly on narrow planks hundreds of feet above the ground alongside of vats of seething sulphuric acid; dropping down vertical ladders into the dense darkness of copper mines; crawling on hands and knees into remote stopes; listening in back rooms of saloons or union headquarters to strange tales in halting foreign tongues. . .(Sergeant, 1926, p. 763)

The life of freedom, adventure and meaning that Alice Hamilton craved as a youth would be hers, but it would come at a cost of years of educational preparation, long periods of separation from a family she deeply loved, and a struggle to find her niche as a reformer.

Studying Medicine at the Turn of the Century at Home and Abroad

Completing her stint at Miss Porter's in 1888, and facing diminishing family finances, Alice Hamilton (1943) was determined to find a career that would allow her to lead a "wide and full life" (p. 38) in the big world outside of Fort Wayne. She considered teaching, nursing and the practice of medicine as the three possibilities open to her, and she chose medicine. Of the three careers, it was the one in her estimation that would

allow the most autonomy, independence, and possibility of being useful. It was not a choice championed by Miss Porter or by Alice Hamilton's family.

In the late nineteenth century, a career in medicine did not enjoy the prestige that it later would. It attracted "rough" sorts and wasn't considered an appropriate pursuit for a woman of Alice Hamilton's breeding--Edith Hamilton went so far as to call it "disgusting," and Miss Porter hoped it was a fancy Alice Hamilton would outgrow. At the same time, record numbers of women were entering the field of medicine in the 1890s, many of them studying in the newly founded women's colleges[12] (Sicherman, 1984, p. 34). Spurred on by her desire for independence, Alice Hamilton spent the next three-and-a-half years in Fort Wayne, studying to make up for her deficiencies in science and working on convincing her father that she was serious in her choice (Hamilton, 1943; Sicherman, 1984).

In 1892, Alice Hamilton entered the medical department of the University of Michigan in Ann Arbor, a co-educational school that was in the vanguard of the transformation of the study of medicine from a somewhat haphazard enterprise into a scientifically rigorous pursuit (Sicherman, 1984, p. 37). Her time there was happy, exciting, and emancipating, she later wrote in her autobiography (Hamilton, 1943). She appreciated the long tradition of co-education at Ann Arbor and saw little of the "sex antagonism" that she experienced later at Eastern schools (p. 40).

As a medical student, Alice Hamilton was low on the social totem pole, patronized by the very faculty wives she identified with (Sicherman, 1984, p. 41). "I am absolutely nobody, for the first time in my life," she wrote to Agnes Hamilton, "with no

family name or reputation to fall back on, just one of the multitude with no more deference shown me than any of the others" (p. 38).

At Ann Arbor, Alice Hamilton was exposed to some of the finest medical training available. The school had recently introduced a four-year curriculum that emphasized research as well as lectures. The medical department had attracted to its faculty outstanding professors who had trained in Germany, where laboratory experimentation rather than rote learning was the model (Slaight, 1974, p. 12). She studied the theory and practice of medicine with Dr. George Dock, who had once been the assistant of the great Dr. William Osler,[13] and she was one of three seniors selected to assist Dock at the University's teaching hospital (Sicherman, 1984, p. 42).

Under Dr. Dock, Alice Hamilton was introduced to clinical laboratory work, using the microscope and chemical analysis as diagnostic tools in the interesting and unusual cases brought to the University hospital. Dr. Dock was a stern taskmaster, sparing with praise and sarcastic about religion, but Alice Hamilton respected him deeply. Having been prepared by her upbringing to search for answers, she reveled in the challenge of ferreting out the mystery of an obscure illness, spending even her spare time over a microscope and working up thorough reports (Hamilton, 1943; Sicherman, 1984).

It was at Ann Arbor that Alice Hamilton's lifelong tendency toward self-deprecation in spite of her more-than-ordinary abilities came to the fore. Alice Hamilton's letters to her family often revealed the self-doubt that preceded any new endeavor she undertook: "I have got over my fear of the Hospital," she wrote Agnes Hamilton from Ann Arbor in October 1892, "for as usual it is only the first step that

frightens me; after I have done a thing once I can always feel sure of it." But less than a month later she wrote, "The work grows more and more fascinating, but I grow more and more afraid of it" (Sicherman, 1984, p. 45).

During her Ann Arbor training, particularly during the time she spent working in the university hospital, Alice Hamilton's tendency for a subtle snobbishness, a by-product of her upbringing, began to give way to a less judgmental and more compassionate nature. At the same time, interestingly, her interaction with patients led her to conclude that the demands of the clinical practice of medicine were not for her. In her encounters with patients in dire circumstances, such as a young, unwed pregnant woman suffering the complications from a sexually transmitted disease, Alice Hamilton felt at a loss to offer either comfort or spiritual guidance. In a letter to her cousin Agnes, written in January 1983, she berated herself for having the Hamilton trait of not being able to put into words her deepest feelings. She wrote, "It simply is a mental and physical impossibility to me to do what comes as easily as can be to some people" (Sicherman, 1984, p. 47).

Clearly, it was not a lack of caring that kept Alice Hamilton from expressing her feelings but rather an inability or an unwillingness to detach from the intense suffering she observed. Her letters home indicate the deep concern she had for patients, and her involvement moved her to action. For example, she bought baby clothes for one indigent woman and arranged an extended hospital stay for another who had no where else to go (Sicherman, 1984, p. 52). She undertook the kind of empathetic activism that later would be part of her everyday experience at Hull House.

But it appears that something more than a strong empathy for the plight of other women was taking root within Alice Hamilton. Immersed in the secular atmosphere at Ann Arbor, studying science with its emphasis on empirical evidence, and facing the harsh realities of human existence in her hospital cases, Alice Hamilton's childhood religiosity was giving way to a more authentic, less judgmental self. When faced with the opportunity to proselytize the young women whose "wickedness" or bad fortune had led to pregnancies and desertion, she discovered that her voice was not that of the missionary or the religious zealot. Alice Hamilton was moving in the direction of a more secular Christianity preached by liberal Protestants beginning in the 1870s, when political and economic corruption, associated with the Industrial Revolution and the rise of capitalism, ran rampant. Known as the "Social Gospel," this theology interpreted the Christ's teachings to love one another, to be wary of material wealth, and to care for the poor, as a mandate to pursue social, political and economic reform (Cooper, 1990, p. 137). It was a theology that would eventually stand Alice Hamilton in good stead at Hull House, where the Social Gospel prevailed (Elshtain, 2002).

While her upbringing had given her roots, it had also prepared Alice Hamilton to search for the "truth" in any given situation and to be open to new ideas, including those arising from outside the sphere of her protected existence. The case against the anarchists in the 1886 Haymarket bombing would be the first major challenge to her parochial thinking. During a vacation at Mackinac in 1893, while Alice Hamilton was still a student at Ann Arbor, she and her sisters were introduced to "the literature of revolt" by Judge Edward Osgood Brown, a family friend visiting from Chicago. Brown had them reading

George Bernard Shaw and Henry George's Progress and Poverty, a book that decried the social dangers of great wealth brought by American capitalism (Cooper, 1990, p. 137). Brown also vigorously defended the anarchists who had been executed for their involvement in the 1886 rally-turned-riot at Chicago's Haymarket Square in support of the strike for the eight-hour workday.[14] In her autobiography, Alice Hamilton (1943) wrote,

> To us girls that episode had been one of criminal violence threatening the whole country and Judge Gary's conduct of the trial we had never thought of criticizing. Our talks with Judge Brown were eye openers in a field quite new to us, but we never thought of rejecting his ideas because they were new and upsetting. If they were true we had to accept them, and therefore they must be carefully thought out. (p. 42)

And think them out she did. In the decades that followed, Alice Hamilton would find herself, as a Hull House resident and a reformer of the industrial workplace, on the front lines of the struggle for workers' rights. She would also come to see the Haymarket affair as a pivotal event "that would cast its sinister shadow on all of us working at Hull-House[15] in the late nineties" (Hamilton, 1943, p. 59).

By the end of her Ann Arbor training in 1893, Alice Hamilton had concluded that the human side of hospital work was "just a little bit hardening" (Sicherman, 1984, p. 53). She was terrified by the direct responsibility for patients' lives, but bacteriology (her "beloved germs") and pathology had captured her interest (p. 89). She did so well in her studies that the faculty of the medical department allowed her to graduate in just three semesters, rather than the required two years. Although she had settled on a career in science rather than in direct patient care, Alice Hamilton (1943) wrote in her

autobiography that Dr. Dock convinced her to do a year's internship in a hospital to balance Ann Arbor's intense focus on the laboratory side of medicine (p. 42). Biographer Barbara Sicherman (1984) writes that, in later life, Alice Hamilton would confess that it was watching the death of a patient following childbirth that had swayed her professional move toward laboratory science (p. 57).

Whatever the case, Alice Hamilton interned at New England Hospital for Women and Children outside Boston. Located in the poor section of the city, New England Hospital introduced Alice Hamilton to the slums of America that had captured her imagination as a student at Miss Porter's, where, upon graduation in 1888, she had given a tongue-in-cheek response to a query concerning her future address: "Corner 375 & Slum Alley" (Sicherman, 1984, p. 33).

In Boston, Alice Hamilton hit the ground running. Her work took her into the worst parts of the city, including houses of prostitution and saloons, without a chaperone. Alice Hamilton's sheltered world expanded in other, more important ways in Boston. In a letter to Agnes Hamilton in December 1893, Alice Hamilton, who only months before had privately referred to another intern as "Irish and Catholic and rather third class" (Sicherman, 1984, p. 63), wrote her cousin this concerning the family of a dying patient in New England Hospital:

> They, the relatives, were people we would all have thought coarse, vulgar, uninteresting. But death-beds to bring out people in their own characters, so that all their externals are forgotten. This red-haired, vulgarly-dressed husband, who looked like a fifth-rate commercial traveler, showed himself self-controlled, brave, utterly unselfish and most deeply loving. And the loud-looking mother and sisters-in-law, overdressed millinery clerks, the silent old Scotch father, the dried-

> up, shabby old mother, they all seemed heroes and heroines to me, when I watched them around that death-bed. (p. 77)

Alice Hamilton's training included an assignment to the hospital's Pleasant Street Dispensary in a poor section of town, where she worked with blacks and with immigrants of many nationalities. If still somewhat patronizing, she was fascinated by their customs and beliefs and backgrounds that contrasted with her own. She also relished the opportunity to combine medical and charitable work, drawing upon Boston's Associated Charities and various other sources to meet destitute patients' needs for food, clothing, and coal.

No doubt her new-found friendship with fellow New England Hospital intern Rachelle Slobodinskaya played a significant part in Alice Hamilton's enlightenment. She marveled that this Russian immigrant had joined the Russian Revolution at age thirteen, fled her homeland for America at seventeen, and worked at a sewing machine in the garment district sweatshops of New York for two years before entering medical school (Sicherman, 1984; Lasch, 1971). Alice Hamilton (1943) would later remark, "At seventeen I was starting for Farmington and in all my life I had never had to think where my next meal was coming from. Being so sheltered and so ignorant seemed contemptible" (p. 43). "Dr. Slobo," as she was known at the New England Hospital, went on to specialize in obstetrics and to marry journalist and philosophical anarchist Victor Yarros. As Dr. R.S. Yarros, she helped found the birth control and social hygiene[16] movements in the United States. The Yarroses and Alice Hamilton would share a common home, Hull House, for two decades (Sicherman, 1984; Hamilton, 1943).

Along with an enlightened view of the foreign-born of other social classes, another feminist trait—anti-authoritarianism--would also rear its head during Alice Hamilton's internship in Boston. She bridled at the excessive and unnecessary rules that she believed deprived interns of any real authority at the hospital. Boston had an excess of staff physicians, with so little to do that interns were robbed of the training promised in their contracts. She expressed her deep resentment in letters to her cousin Agnes Hamilton, criticizing the New England Hospital's management, its physicians, and its undeserved reputation as one of the nation's premier training hospitals.[17] When Agnes Hamilton remonstrated with her about her critical attitude, Alice Hamilton held her ground; but she addressed the double-bind of a woman of her era, or perhaps any era, in standing up to authority and claiming her own truth and her own voice:

> I will acknowledge that I have done a great deal of unnecessary grumbling, but, my dear, do you think it is best to take quietly and without protest, things that you know are wrong, absurd and unjust? . . . As it is, whether from politic desire to stand well with the authorities or from lack of courage to face an angry woman . . . the interns have submitted to everything and contented themselves with abusing the place after they were safely out of it . . . They promised me good experience and teaching and they are giving me neither. I know it is only for a year, but think how much a man can learn in one year's interneship [sic] . . . .Sometimes I am really puzzled to know how far it is right to resist and how far I ought to submit. . . . I have been learning "Rabbi Ben Ezra" by heart lately and lines of it come to me now and then "Young, all lay in dispute; I shall know, being old." One of these days I suppose I shall look back and see where I was right and where I was wrong. All that I am sure of now is that I am not altogether either. (pp. 75-76)

In the spring of 1894, Alice Hamilton sought an early release from her contract at New England Hospital for Women and Children, citing "strong family demands" that called her home. The hospital accepted her resignation, "not because of the reasons stated

. . . but because in the opinion of the board the best interests of the hospital will be served by her withdrawal" (Sicherman, 1984, pp. 86-87).

Alice Hamilton returned to Fort Wayne. Having decided upon a career in science, she determined to prepare herself educationally, hoping to complete a Ph. D. in bacteriology. She discovered that educational opportunities for women in science, and for women or men in bacteriology, were limited. Neither the University of Michigan nor her preferred school, Johns Hopkins University, was willing to grant her, as a woman, a graduate degree. Alice Hamilton's advisors at Ann Arbor and Johns Hopkins told her that more important than a degree, studying science in Germany was crucial to gaining acceptance in her field. After considerable struggle and negotiation because of their gender, Alice and Edith Hamilton both gained permission to study science and the classics, respectively, at the universities of Leipzig and Munich. Neither university granted women degrees at that time (Hamilton, 1943; Sicherman, 1984).

The year in Germany was, for Alice Hamilton, both disappointing and broadening. She was disappointed to find that she German science education had little to offer beyond what she had learned at Ann Arbor. Beyond that, the extreme sexism that required that the Hamilton sisters be "invisible" at Leipzig University interfered with their studies and was particularly trying for two women from American co-educational colleges (Hamilton, 1943, p.p. 44-45). Alice Hamilton (1943) later wrote, "It was a man's world, in every sense, and at the top was the army, living in a world of its own, adored and feared by the common man" (p. 47).

Nevertheless, she also found much to admire in German scientific work and culture. She formed a lifelong friendship with a German Jew for whom she did research, Professor Ludwig Edinger, and his wife, Anna, a feminist and social welfare reformer. Those relationships helped to sharpen Alice Hamilton's political awareness during her German sojourn. She was deeply disturbed by the pervasive anti-Semitism in Germany, and had the opportunity to witness its consequences firsthand. The Edingers were the objects of personal insults and professional discrimination. She wrote to her cousin Agnes in November 1895, "I am becoming an ardent champion of the Jews" (Sicherman, 1984, p. 91).

At the end of her year in Germany, Alice Hamilton was well on her way to becoming a woman who would thrive in the feminist-pragmatist atmosphere at Hull House. She cherished the democratic values of her own country for the potential they offered for a more just society. Simultaneously, she held an international world-view that recognized what Americans could learn from the strengths of other cultures and other nations. It would one day be written of her,

> 'Tell me everything' – over and over she insisted as if the need to understand and to penetrate others' lives and points of view were an essential need. And what she came to know about the varieties of human experience by this power of identification which was at once objective and sympathetic she accepted with tolerance—however at variance with her own thought and habit. (Sergeant, 1926, p. 766)

Returning from Germany in the fall of 1896, Alice Hamilton was unable to find work as a bacteriologist or pathologist. She determined to continue studying in hopes that a career opportunity would open up, and so spent the next two years at Johns Hopkins

Medical School in Baltimore. At Johns Hopkins, Alice Hamilton was accepted by notable men of science, including Simon Flexner[18] and William Osler, "without amusement or contempt or even wonder" (p. 51). It was to be her last year of full-time student life, for she was offered a position teaching pathology at Northwestern University in Chicago. Jane Addams's (1910) metaphoric "snare of preparation . . . spread before the feet of young people, hopelessly entangling them in a curious inactivity at the very period of life when they are longing to construct the world anew and to conform it to their own ideals" (p. 88)[19], was finally coming to an end for Alice Hamilton.

American Feminism Gives Birth to a New Woman

Alice Hamilton's uncertain journey toward an independent, full life was typical of American women of her era and education, who were leaving behind the prescribed roles of the Cult of True Womanhood, which dominated the first half of the nineteenth century, for the uncharted terrain of the twentieth-century modern woman. The concept of "true womanhood" (Campbell, 1989a; Donovan, 1985; Smith-Rosenberg, 1985), or woman-belle ideal (Scott, 1970), had taken root in the nineteenth century as a result of the urbanization and industrialization that separated home and work. A man's sphere was outside the home; a woman's sphere was the home. Leadership, aggressiveness, and competitiveness were determined to be male qualities, while moral sensitivity, submissiveness, purity, and domesticity were the qualities of a "true woman." Campbell (1989a) writes, "A central element in woman's oppression was the denial of her right to speak (Lipking, 1983). Quite simply, in nineteenth-century America, femininity and

rhetorical action were seen as mutually exclusive. No ‘true woman’ could be a public persuader” (pp. 9-10).

The first significant challenges to the Cult of True Womanhood came about as a result of the contradiction contained within the woman’s role. If she were, indeed, morally superior to man, the keeper of the nation’s conscience so to speak, how, then, could she ignore the great societal wrongs, such as alcoholism, prostitution, and slavery, which were so evidently affecting the family in the nineteenth century? The refusal of nineteenth century men to allow women to have a voice on moral issues in the public sphere inevitably brought individual strong women out into the open demanding to be heard. Maria Stewart Miller, an African-American abolitionist, is identified by Campbell (1989a) as “probably the first woman in the United States to speak publicly to men and women” (p. 17), in 1832 in Boston’s Franklin Hall. Other early feminist-abolitionists went public to claim their right to speak, including Soujourner Truth, Angelina Grimke, and Lucretia Coffin Mott. Beginning in 1848 at Seneca Falls, New York, woman’s rights conventions coalesced the voices of individual women into the foundations of a social movement. Elizabeth Cady Stanton presented a manifesto, the “1848 Declaration of Sentiments,” outlining the grievances of women in a form that both parodied and was justified by the 1776 “Declaration of Independence.” Claiming their natural rights as Americans to vote, these first-wave feminists sought to enjoy opportunities for individual development, and to live free from discrimination in religion or within marriage.

By the time Alice Hamilton was born, in 1869, the first wave of feminism in America was giving way to the era of the New Woman. According to Smith-Rosenberg

(1985), the New Women "inherited a consciousness of women's new role possibilities almost as their birthright" (p. 176). She identified them as having been born between the late 1850s and 1900, raised by parents who were part of the new, affluent middle class, and college-educated at a time when most Americans were not.[20] Adopting the term "New Woman" from William James, Smith-Rosenberg (1985) describes the revolutionary woman who emerged in the 1890s:

> Eschewing marriage, she fought for professional visibility, espoused innovative, often radical, economic and social reforms, and wielded real political power. At the same time, as a member of the affluent new bourgeoisie, most frequently a child of small-town America, she felt herself part of the grass roots of her country. Her quintessentially American identity, her economic resources, and her social standing permitted her to defy proprieties, pioneer new roles, and still insist upon a rightful place within the genteel world. (p. 245)

While they rejected traditional female roles in favor of careers outside the home, New Women nevertheless tenaciously retained their late-Victorian gentility and bourgeois values and behavior, which included service to others and moral conduct (Smith-Rosenberg, 1985, p. 197). New Women held the role of wife and mother—the "family claim"—in high regard, and many, including Jane Addams and Alice Hamilton, believed that the incompatibility of the family and social claims almost required that a woman choose between the two. As Addams explained it in <u>The Second Twenty Years at Hull House</u>,

> Men did not at first want to marry women of the new type, and women could not fulfill the two functions of profession and home-making until modern inventions had made a new type of housekeeping practicable, and perhaps one should add, until public opinion tolerated the double role. (Addams, 1930, p. 196, as cited in Deegan, 1996, p. 599)

Alice Hamilton believed a responsible woman should make a choice between career and motherhood. In a letter to Agnes Hamilton, she commented on the plan of Marian Walker (fiancé of their cousin Allen Hamilton) to marry and to have a career in medicine,

> I do think it is such nonsense Marian's studying medicine. That is the fault of the transition period in which we live. Girls think now that they must all have professions, just because they are free to, not realizing that the proper state of society is one in which a woman is free to choose between an independent life of celibacy or a life given up to childbearing and rearing the coming generation. We will go down the path of degeneration if we lose our mothers and our home-life. We can easily get on with fewer professional people. I don't mean that she ought not to take up whatever studies she chooses, but she ought not to choose a work which is in its nature absorbing, which cannot be laid down and taken up again. . . . I suppose she might say that she has a right to follow her own tastes as well as Allen. Well, let her do it then, let her study medicine, but if she practices it simply means either avoiding the burden of maternity or fulfilling its duties imperfectly. (Sicherman, 1984, p. 103)[21]

The adamant tone taken by Alice Hamilton in this letter—the emphatic "do" in the first sentence, the condemning of Marian's decision as "nonsense," and the referencing of a "proper state of society" in which a woman chooses between a career and children--belies the wrenching emotional struggle that Hamilton and other New Women experienced as they attempted to create independent, fulfilling lives without failing in their responsibilities to those they loved. As Sicherman (1984) points out,

> In the late nineteenth century, religious and cultural norms encouraged women to be self-sacrificing and humble. They often gained a sense of their own competence only after years of experience during which they repeatedly proved to themselves that they could indeed do a new task well. For those who remained single, lingering doubts about their course may not have been fully resolved until the approach of middle age (p. 9)

New Women were no where near as self-certain about their choices as Smith-Rosenberg portrays them. Using Alice Hamilton as an exemplar of the New Women (as Smith-Rosenberg does), she and her sisters had, with their mother's support, favored "individualism" in the debates over a woman's obligations to her family, while Agnes Hamilton and other female cousins stood for "socialism," which translated to "family before self" (Sicherman, 1984). Nevertheless, Alice Hamilton's private letters reveal the constant struggle of the New Women to strike a balance between the two, a balance that it was not always possible to achieve. She wrote to Agnes Hamilton in January 1896,

> Is there anything in the world more utterly unprofitable than going over the last six years and wishing you had lived them differently? I suppose everybody does it, though, but I don't believe everybody has big decisions, important turning-places to regret. At any rate if you look back and regret, you cannot regret as much, for it can never be as bad to think of neglected opportunities as of neglected duties. Yet I am not sure I do really regret. Sometimes I think I do then individualistic principles reassert themselves and I think I was right. So perhaps if I had it to live over again I should be where I am now; perhaps at home without any medical education or hospital training or Europe trip. It is just "Rabbi Ben Ezra": "Let age speak the truth." "I shall know being old." (Sicherman, 1984, p. 95)

In staking out the social claim at the turn of the century, Alice Hamilton and other New Women were pioneering new female roles, with no models to follow, and with all the attendant uncertainty and exhilaration that such an undertaking implies. The New Women turned to one another, creating female networks within which to address the ills of society while simultaneously supporting one another personally and professionally. In her autobiography, Alice Hamilton remembered the last decade of the nineteenth century as "simpler" when juxtaposed against the period that followed it, the years leading to the First World War. She wrote,

> We had more uncertainty then, but on the other hand we had more faith. We were far less certain of what was needed to make society over; we were groping and seeking. We, ordinary Americans, had no ready-made system into which we could fit, which we could accept in its entirety . . . with an end after that to all questioning. But on the other hand we had more faith in human nature, we really believed in a steady progress of mankind. (Hamilton, 1943, p. 57)

The New Woman was the embodiment of the transitional state of the woman's rights movement from the 1870s to the 1920s. The first wave of feminism was coming to an end. Its aging leadership had suffered bitter disappointments at mid-century, when male abolitionists refused to support women's rights and failed to include woman suffrage in the Fifteenth Amendment that extended the right to vote to black males. In 1881, Elizabeth Cady Stanton and Susan B. Anthony warned the coming generation not to put their trust in men to achieve their rights during this transitional period: "Woman must lead the way to her own enfranchisement," they wrote, "since while regarded as [man's] subject, his inferior, his slave, their interests must be antagonistic" (as cited in Freedman, 1979, p. 516).

This era of the New Woman coincides with what some have identified as the Progressive Era[22] in America, a contested term in American history in that it has defied precise definition. Hogan (2003a) calls the Progressive Era "a historical fiction" and argues that the period's only unifying theme was the renaissance of rhetoric and the reinvigorating of the public sphere (p. ix). The Progressive Era is also a contested period in American feminist history. In her rhetorical analysis of the early woman's rights movement, Man Cannot Speak for Her, Karlyn Campbell (1989a) cites Lerner (1971) that the period between 1890 and 1915 was known as "the doldrums" because the woman's

rights movement made little progress (p. 157). Campbell (1989a) explains, “Anti-suffrage activity was at its height, and movement leadership was in transition as the initiators died and a younger generation took over” (p. 6). Support for this view can also be found in Eleanor Flexner’s (1996/1959) A Century of Struggle, a groundbreaking study of the woman suffrage movement. Flexner characterizes the period from 1896 to 1910 as a period of “unrelieved doldrums” and the years 1910 to 1915 as “a contradictory mixture of awakening, confusion, and continued paralysis” (p. 255). In contrast, Jennifer Borda (2003) argues that this period in the woman suffrage movement was, in fact, a “coming of age” marked by “intense growth and renewal” (p. 339), agreeing with historian Michael McGerr that “The early twentieth century was a distinctive era in the political history of women, rich in possibilities, when the suffrage movement developed a variety of alternatives. . .”:

> The years between 1896 and 1915 were, in short, critical to the woman suffrage movement. During this period, the movement intersected with the reform impulse of progressivism and cultivated the “progressive ethos”--a revivalistic vision of democracy and idealism tempered by political pragmatism. (Borda, 2003, pp. 339-340)

During the first decade and a half of the twentieth century, New Women extended the sphere in which women’s influence was perceived as a force to be reckoned with. Jane Addams, for example, enjoyed an international reputation for addressing the needs of the disenfranchised in the name of democracy at Hull House. Likewise, Florence Kelley, Alzina Stevens, and Julia Lathrop were widely recognized for their groundbreaking work in sociology, focusing on issues of concern to women and children in particular (Sergeant, 1926; Deegan, 1996, 1990/1988; Freedman, 1979). Alice

Hamilton enjoyed recognition within the academic community for her work in industrial medicine. That recognition ultimately led to her appointment as the first female professor at Harvard in 1919, although women were not admitted to Harvard as students until 1945 (Sergeant, 1926; Sicherman, 1984; Slaight, 1974; Young, 1982).

Viewed from this perspective, it can reasonably be asserted that by enlarging the women's sphere, the New Women helped to make the achievement of woman suffrage in America inevitable. By a transcendent strategy that I call acting "as if"—as if the woman's rights they sought were already theirs and they were free to participate fully in the larger society—they helped to bring the world they desired into existence.[23] Their accomplishments then became supporting arguments in their demand for the franchise.

Alice Hamilton's own transcendent strategizing, evident early on in her decision to enter the male sphere to study medicine, would later show up in her rhetoric as she "spoke for God" using the language of science. Her exposure to the plight of the working class through her early reading on the "English social question" and, later, through her hospital training, developed a social conscience in Hamilton that would manifest itself in not only the choice of her professional niche of industrial medicine, but also in a balance between the tough and the tender in her persuasion. As a New Woman scientist, Hamilton would argue for reforms from both formal logic, which had been inculcated by an unsentimental father and reinforced by the demands of her scientific training; and from feminine, narrative logic that brought statistics to life and created the opportunity for audience identification. Her rhetoric would also reflect her status as a "transitional" woman, who was steeped in the values of the nineteenth century and its belief in the

perfectibility of humankind; and who came of age in the twentieth century, with its commitment to science as the key to human progress.

Chapter 2 - Hull House and the Chicago School of Pragmatism

Alice Hamilton's Introduction to Jane Addams and Hull House

In the spring of 1895, prior to leaving for Germany, Alice Hamilton, her sister Norah, and her cousin Agnes had the opportunity to hear Jane Addams speak at the Methodist Church in Fort Wayne. Hull House was only six years old, but by that time Addams was already famous for her settlement work among the immigrant, working-class poor in Chicago. The Hamilton women were a receptive audience. They had been primed for the occasion by prior exposure to the works of Richard Ely,[24] which had spurred on their reading about the settlement movement. In later years, Alice Hamilton (1943) would recall that listening to Addams, "It was then that Agnes and I definitely chose settlement life" (p. 54).

Jean Bethke Elshtain suggests that the speech that Addams gave was probably "The Subjective Necessity for Social Settlements,"[25] which reflected Addams's (1910) belief, based on her own life experience, that educated, privileged young people with no outlet for their talents and enthusiasms were equally as pitiable as immigrants living destitute lives (p. 121). As a New Woman herself, Addams (1893) was keenly aware that America's turn-of-the-century, college-educated young women feared "partial living," of "being cultivated into unnourished, over-sensitive lives" (p. 17) that failed to contribute to the larger society to which they had laid claim. At the heart of Jane Addams's (1893) philosophy about "settling" among the poor was a belief that "the dependence of classes on each other is reciprocal;" and that those who involved themselves with the

downtrodden in society received as least as much as they gave in the social interaction (pp. 14, 21). In this speech, Addams described the emerging feminist-pragmatist New Woman as newly educated, aware of a "noble obligation" to use her knowledge and talents to "right wrong and alleviate suffering," and beginning "to recognize her social claim to the 'submerged tenth,' and to evince a disposition to fulfil [sic] it" (1892, p. 21).

Addams's words were an apt description of Alice Hamilton at this moment in time. The intention Alice Hamilton had expressed in her teenage years at Miss Porter's school to do something useful while she explored faraway places and met interesting people had manifested itself in her decision to pursue a medical career. "As a doctor," she wrote, "I could go anywhere I pleased—to far-off lands or to city slums—and be quite sure that I could be of use anywhere" (Hamilton, 1943, p. 38). Her preparation behind her, Alice Hamilton was ready to "be of use."

For the women who undertook the adventure of settlement life, Hull House was a place where they could, in Addams's (1910) mind, join thought and action and harmonize their theory and their lives (p. 115). It was a place to "learn of life from life itself" and to "put truth to 'the ultimate test of the conduct it dictates or inspires'" (p. 85). Addams saw Hull House as a locus for bridging the growing chasm between the city's working class immigrants and other classes of Americans, with each group contributing to the whole from the richness of their heritages and traditions. While Addams (1910) endorsed the emerging Social Gospel, her end goal was the socialization of democracy, by which she meant the unification, through "social intercourse," of Americans across boundaries and ethnicities in recognition of their common humanity and shared interests. From this intercourse, Addams believed a "higher civic life" would emerge in American democracy

and more permanent social gains could be achieved (Addams, pp. 113-127; Elshtain, 2002).

Addams (1908) identified as a New Woman's responsibility the need to respond to the harsh realities of life that the Industrial Revolution and the rise of cities had brought to bear upon all citizens. Her "civic housekeeping," as it came to be known, called upon women to extend rather than reject the female sphere (Freedman, 1979, p. 518). Addams (1908) encouraged women to engage in "social amelioration," which they had traditionally carried out within the home, on a grander scale in recognition of the changed conditions of modern life that had impoverished women, children and immigrants working outside the home in deplorable conditions in factories, mills and plants.

Hull House represented the most famous "settlement" approach to reform (Elshtain, 2002; Hamilton, 1943; Sicherman, 1984). Its leadership's goal was to find solutions to social problems in Chicago's nineteenth ward that would then be institutionalized, as appropriate, by local, state and federal governments (Addams, 1910; Hamilton, 1943; Elshtain, 2002).

In the fall of 1897, Alice Hamilton (1943) learned that a space had opened up for her at Hull House. She would later write of Hull House in her autobiography, "To me, the life there satisfied every longing, for companionship, for the excitement of new experiences, for constant intellectual stimulation, and for the sense of being caught up in a big movement which enlisted my enthusiastic loyalty" (p. 69). For Alice Hamilton, Hull House represented the attainment of the best of two worlds: It provided the comfort of a surrogate home and family not unlike her own--predominately female and yet

unsentimental in character. At the same time, Hull House offered a supportive atmosphere in which she and other residents could undertake daring experimentation in social reform to achieve practical results that would strengthen American society and democracy.

Alice Hamilton's recounting of her first evening at Hull House vividly conveys not only the tenor of life in that settlement house but also the dimensions of the social problems facing Chicago and the nation at the turn of the century. The guest of honor at dinner that night was the ex-governor of Illinois, John Peter Altgeld, whose presence drew a larger-than-usual gathering that included Jane Addams, Florence Kelley, and Julia Lathrop. Altgeld's four-year term of office and political career had effectively ended in 1897, when public opinion did not support his heroic stand in pardoning the surviving prisoners convicted in the 1893 Haymarket affair or his refusal to send in troops against striking railroad workers in the Pullman strike in 1894. Dinner conversation focused on those events, as well as on Altgeld's denunciation of the Carnegie Company's lawless behavior during the bloody Homestead strike,[26] his criticism of the Supreme Court for declaring a Federal income tax unconstitutional, and on Mrs. Kelley's role as Chief State Inspector of Factories during the Altgeld administration. While she served in that role, Kelley, with support from other residents of Hull House, worked successfully for passage of child labor laws and the eight-hour workday for women, the latter a part of child labor legislation that was later declared unconstitutional (Hamilton, 1943, pp. 60-61).

In the course of one evening at Hull House, Alice Hamilton found herself immersed in discussion of specific examples of the pressing issues of the day—anarchists and the "Red Scare," labor unrest, corporate greed and cruelty, the deplorable

conditions of the working poor and children in industrial cities, and the responsibility of the Federal Government for social welfare. It was also a discussion that, for all intents and purposes, marked her embarkation on a journey to find her own professional niche and public voice among the other feminist-pragmatists of Hull House, who saw themselves as facilitators of the "steady progress of mankind" (Hamilton, 1943, p. 57).

Hull House and Feminist-Pragmatism

The term "feminist-pragmatist" describes a unique epistemology developed by the women associated with Hull House and with the University of Chicago's Department of Sociology between 1892 and 1918 (Deegan, 1996). Feminist-pragmatists were "powerful political and intellectual leaders," usually unmarried, who lived in Chicago "in female-headed homes, social settlements or college/university dormitories," and remained "longtime, intimate friends" (p. 590). Uniting themselves in "activism, feminism, intellectual labor, and emotion," they created in Chicago a distinctive female world of love and ritual (p. 591). Deegan (1996) writes, "Their ritual world was not anchored in weddings and childbirths (Smith-Rosenberg, 1985, p. 71), but graduations, congressional hearings, book publications, and travel" (p. 604).

The Chicago women, having chosen to meet the social claim rather than the family claim, sought to create a context for their way of life. Their intellectual, affectionate, female world became "a praxis enacting their ideas" (Deegan, 1996, p. 599). Those ideas included:

- a faith in American democratic ideals liberally interpreted to apply to all races, classes and genders of people and to encompass political, social and economic rights;

- a belief in a rational public capable of solving its problems and constantly progressing, or capable of correcting its course;
- the importance of education and democracy in facilitating the problem-solving process, but education that was accessible and available to all classes of people;
- a commitment to the scientific method of data-gathering and to empiricism, with the goal of using it as a tool for effecting change;
- the need to subject emotion to the discipline of science to arrive at wisdom;
- the need to gain knowledge through practical experience and to apply that knowledge to solving everyday problems of people; and
- a cultural-feminist assumption of the superiority of traditionally defined feminine values, such as cooperation and nurturing, over traditionally defined masculine values, such as competition and aggression. (Addams, 1910; Deegan, 1996; 1990/1988; Elshtain, 2002; Siegfried, 1991; Smith-Rosenberg, 1985)

Feminist-pragmatism influenced and was influenced by the Chicago School of Pragmatism that developed concomitantly at the newly opened (1892) University of Chicago under the leadership of George Herbert Mead and John Dewey. Leading intellectuals at Hull House and in the University of Chicago's Department of Sociology worked closely with one another. Interpreting democracy in radical terms, Addams and her cadre of largely female residents sought to create within the walls of Hull House a public sphere in which discourse among all classes, races and sexes could occur that would lead to action in addressing social problems.

Leading social theorists, including Mead and Dewey, were frequent visitors and lecturers in Hull House's nightly educational programs. Deegan (1990) writes that Addams, Dewey and Mead were bound together as colleagues and friends by virtue of their shared "vision of the human as pliable and formed through social interaction" (p. 250). Mead worked closely with Addams for more than three decades as he formulated his ideas on symbolic interactionism and pragmatism (p. 249), and Mead was a close friend of Alice Hamilton's (Sicherman, 1984). Dewey was involved on the board of the settlement house and was a major force in the development of the Hull House Labor Museum, which provided immigrant laborers a sense of pride and continuity between their past and present lives. Dewey's views on democracy as a guiding force in education are widely acknowledged as having been influenced by Jane Addams and by his experiences at Hull House, particularly as those views were expressed in his book School and Society. Likewise, Addams's public lectures on public school methods and curricula and her book The Spirit of Youth were influenced by Dewey (Deegan, 1990, p. 252). Beyond that, and despite their differences over World War I, the two remained close friends throughout their lives, supporting one another through family joys and tragedies.

Several Hull House residents, including Addams, Florence Kelley, Julia Lathrop, and Sophonisba Breckinridge, taught and/or studied at the University of Chicago. In fact, Deegan asserts that the Chicago School of Pragmatism was a product of the collegial interaction and intellectual exchanges between Hull House residents and the men of the Chicago school, particularly between Mead and Addams and Dewey and Addams.[27] "They wanted to combine scientific and objective observation with ethical and moral values to generate a just and liberated society," (1990, p. 6), Deegan writes. "But it was

Addams and Hull House who were the leader and leading institution in Chicago in the 1890s, not the University of Chicago," publishing the groundbreaking sociological text Hull House Maps and Papers that put their joint interests out for public consideration for the first time (p. 5).[28] In her autobiography, Alice Hamilton (1943) wrote of Addams, "She was a pragmatist in the best sense before that word was invented, holding that anything one had learned in college and from travel must be tried out in actual life" (p. 65).

A key element of feminist-pragmatism was a commitment to the scientific method of information gathering for decision making and to guide discussions (Addams, 1910; Deegan, 1996; 1990; Elshtain, 2002; Siegfried, 1991; Smith-Rosenberg, 1985). By appropriating this element of the scientific ethos, New Women could take refuge from the criticism that their reform work was "sentimental," mere women's work, not to be taken seriously. At the same time, as pragmatists, they were critics of "positivist interpretations of scientific methodology" that emphasized value neutrality. Instead, they used science as a tool in what Sigfried (1991) has termed the "intelligent overcoming of oppressive conditions" (p. 5).

As advocates for social change, feminist-pragmatists were active as writers and speakers, and their values were reflected in their rhetoric. In Alice Hamilton's case, even her scientific discourse aimed at other physicians and industrial hygienists was infused with advocacy for democratic inclusiveness and workplace reform. Science and scientific methodology, as well as rhetoric itself, was, for Alice Hamilton and other feminist-pragmatists, a means to an end. John Dewey described the underlying philosophy that

would drive the rhetoric of Alice Hamilton and other feminists-pragmatists in Human Nature and Conduct:

> Why employ language, cultivate literature, acquire and develop science, sustain industry, and submit to the refinement of art? To ask these questions is equivalent to asking: Why live? . . . The only question having sense which can be asked is how we are going to use and be used by these things, not whether we are going to use them. Reason, moral principles, cannot in any case be shoved behind these affairs, for reason and morality grow out of them. (Dewey, 1983, pp. 57-58)

The exchange of ideas at Hull House helped to shape Alice Hamilton's philosophy of life, giving her the confidence that would prepare her for her role as a rhetor. Her upbringing by a socially concerned grandmother and mother had opened Hamilton to the possibility of service; but it was at Hull House that she developed the pragmatism that spurred her on to find her niche as a reformer and to use public persuasion as means for achieving her reformist ends. As Hamilton (1943) attested,

> I should never have taken up the cause of the working class had I not lived at Hull-House [sic] and learned much from Jane Addams, Florence Kelley, Julia Lathrop, and others. . . . Living as I did with Jane Addams, I could not escape being drawn into the peace movement and the efforts to reconstruct Europe after the Armistice. (PP. 16-17)

Chapter 3 - The Emergence of the Citizen-Orator

1897-1907: Early Experiences with the Rhetoric of Reform

In an insightful piece that appeared in the May 1926 issue of Harper's Magazine, Elizabeth Shepley Sergeant wrote of Alice Hamilton, "She was not naturally a speaker or a propagandist: she became one only because she must" (p. 768). Sergeant provided excellent insight into Alice Hamilton's rhetorical motivation when she wrote:

> Alice Hamilton was not born a reformer, though she may have been born with the scientific spirit. She has developed slowly. Her career has followed the gradual evolution of a mind that primarily sought knowledge, not conflict or domination; and finally, out of deep, out of earnest, out of piercing conviction, sought to share its knowledge and make its wisdom prevail. (p. 765)

Alice Hamilton's whole life up to this point can be viewed as her personal journey toward *authoritas*: a feminine self nurtured by a grandmother and mother who responded to the misery of the world around them with compassion, outrage and some limited action; and a masculine self, bolstered by a father who demanded arguments backed by "good reasons" and who wouldn't tolerate sentimentalism; her rigorous scientific and medical training in male-dominated institutions; her work as a scientific researcher, where she developed her scientific ethos as she sought to contribute to the body of scientific knowledge alongside her male peers; and finally, her association with Hull House, where the bonds that held the residents together were those of deep mutual respect and shared ideals rather than sentimentality and emotion.

By the time Hamilton arrived there in 1897, Hull House was the leading settlement in America. It was a model for reform activities in the city of Chicago and the

State of Illinois, and a true neighborhood center, sporting a kindergarten, a nursery, a coffee house, a boarding house for working women, a gymnasium, a theater, a music school, and an art gallery; and offering adult education classes, evening lectures, and community dances. Visitors flocked to Hull House, and owing to its policy of free speech, Hull House was suspected of radicalism and godlessness (Sicherman, 1984, p. 114). New Women and men of widely varying backgrounds and temperaments who shared Addams's passion for results on the ground were drawn to Hull House. Several, including Julia Lathrop, Florence Kelley, and Alzina Parsons, were outspoken and foundational members of the reform movement in Chicago. They publicly championed the rights of women and children, the aged and mentally disabled, were committed to abolishing child labor and sweat shops (Elshtain, 2002a), and fought for civic improvements in Chicago's nineteenth ward.

Hull House and its activities would provide the training ground for Alice Hamilton's rhetorical future, and its residents would be her significant teachers. It would also provide the launch pad from which her speaking career would take off.

The Influence of Extraordinary Women

During her early years at Hull House, Alice Hamilton could fairly be described as "impressionable"; in fact, she felt a need to protect herself from being at the mercy of the winds of many doctrines that swirled around her. She saw herself as a fence-sitter on many issues, including whether or not one should refuse to buy goods produced in sweatshops. While by no means unwilling to express her views—Jane Addams's nephew, James Weber Linn (2000/1935) wrote that Florence Kelley's table-talk was a "rapier" to

Alice Hamilton's "sword"—Hamilton was still stuck in a place of uncomfortable uncertainty about her life's work and personal philosophy.

Alice Hamilton (1943), by her own admission, was not raised as a pragmatist (p. 29), but her temperament and scientific training had poised her to become a feminist-pragmatist leader. That she was influenced by the powerful women who predated her by some seven to eight years at Hull House there can be no doubt. Sergeant (1926) writes, "Indeed it may be said that without Jane Addams and her great humane and personal sway, Julia Lathrop and her terse and vital humor and fine political intelligence, Alice Hamilton would have been undoubtedly less effective as a social force" (p. 768).

At first Alice Hamilton was awed and intimidated by Jane Addams, writing to her cousin Agnes in October 1897, "Miss Addams still rattles me, indeed more so all the time. . . . I really am quite school-girly in my relations with her. . . . She is—well she is quite perfect and I don't in the least mind raving over her to you. . . (Sicherman, 1984, p. 114). In her autobiography, written nearly fifty years later, Alice Hamilton (1943) would still speak of Addams with awe, but one borne of long association with an individual she deemed almost indescribable in her greatness. The "impressions" of Addams that Alice Hamilton was willing to venture are strewn with what might be called quintessentially feminist-pragmatist descriptors: "intellectual integrity," "unsentimental," "having no illusions," "willing to face painful facts," "pragmatic," "action-oriented," "experimental," "no slave of her own theories" (pp. 65-66).

Of the two other Hull House "greats," it was Julia Lathrop in whom Alice Hamilton found a kindred spirit in her approach to persuasion. "Fighting was not her method," she said of Lathrop, "nor was it mine" (Hamilton, 1943, p. 63). A high-spirited

woman with a light touch and a delightful sense of the absurd, Lathrop was a lawyer who championed the rights of women and children, the aged, and the mentally disabled. From Lathrop, Alice Hamilton (1943) learned:

> that harmony and peaceful relations with one's adversary were not in themselves of value, only if they went with a steady pushing of what one was trying to achieve. So often, when I have succeeded in breaking down the hostility of an employer and in establishing a friendly relation with him, I have been tempted to let it go at that, to depart without risking unpleasantness. Then I have remembered Julia Lathrop and have forced myself to say the unpleasant things which had to be said. (p. 63)

Alice Hamilton also grew very fond of Florence Kelley, for whom she would wait up nights and ply with hot chocolate just to hear her stories of the day's adventures. Where Lathrop was a diplomat, Kelley was a fighter, known for her ability to rouse others to outrage and action (Linn2002/1935; Hamilton, 1943). Vivid and memorable, Kelley was determined to abolish child labor and sweatshops (Elshtain, 2002b). It was she who more than anyone turned the focus of Hull House outward to address the conditions of the working man, woman, and child in industrial Chicago (Sicherman, 1984). Many years later, on the occasion of Florence Kelley's death, Alice Hamilton referenced the influence that all three of the leading women of Hull House—Jane Addams, Florence Kelley, and Julia Lathrop—had upon her life. In a letter to Kelley's son, Nicholas, who grew up at Hull House, Hamilton wrote:

> One of the few people who started me on my road in life is gone. I was so immature when first I went to Hull-House [sic] and your mother, J.A. and Julia Lathrop were the ones who began my education and continued to help in it for many years. Her gallant spirit is what I shall remember most, her courage and honesty of mind and generosity in all her many battles. (Sicherman, 1984, pp. 318-319)

A term that frequently shows up in Alice Hamilton's (1943) descriptions of the three women who had so great an impact upon her is "disinterested" (pp. 63, 66). The

term goes to the heart of what would set Alice Hamilton apart from her peers as a feminist-pragmatist rhetor. By disinterested, she meant an ability to separate oneself from the work at hand, to accomplish the work for its intrinsic value rather than for self-gratification (p. 63).

What Alice Hamilton was describing is one of the six institutional norms of the scientific ethos identified by Robert K. Merton in his groundbreaking work on the subject (Prelli, 1989, p. 48). Merton postulated that the norms of disinterestedness, universalism, communality, organized skepticism, originality, and humility function to minimize behaviors that could distort the information- gathering process and to maximize the dissemination of certified, objective knowledge about the physical world. He believed that the scientific ethos is binding both technically and morally and thus, is internalized by scientists (pp. 48-49).

Disinterestedness was a binding norm at Hull House, and it resulted in an informed compassion that led to practical remediation. In her autobiography, Alice Hamilton (1943) described life at Hull House as “almost entirely devoid of personal intimacy. We knew each others’ opinions and interests and work and we discussed them often and freely, but the atmosphere was impersonal, rather astonishingly so for a group composed chiefly of women” (p. 61).

What was viewed as the opposite of disinterestedness, sentimentality, wasn’t tolerated at Hull House—not by Alzina Stevens toward the labor movement (p. 62), nor by Jane Addams toward “the poor, or labor, or the half-baked young radicals, or the conscientious objectors” (p. 65). The explanation lies in the fact that feminist-pragmatists were the turn-of-the-century New Women of science (Smith-Rosenberg, 1985, p. 265),

who, to be taken seriously in their professional endeavors, felt compelled to distance themselves from the sentimentality of the Victorian Era that had come to be regarded as the antithesis of reason and objectivity (Hartnett, 2002, p. 6).[29]

The sentimental style, with its emphasis on emotion and melodrama, fell into disrepute in critical circles by the twentieth century, and only recently has the style become the object of critical attention for its merits rather than its shortcomings.[30] The historical disapprobation of the sentimental style had, and still has, a significant measure of sexism attached to it. For example, in 1855, during the heydey of the sentimental style, Nathaniel Hawthorne complained in a letter to William Ticknor that "America is now wholly given over to a damned mob of scribbling women, and I should have no chance of success while the public taste is occupied with their trash . . . (Brown, 1940, p. 179).[31]

The sexism inherent in the condemnation of in the sentimental style was not lost on feminist-pragmatist rhetors. In 1881, Jane Addams admonished her classmates in her valedictory address at the all-female Rockford Seminary that they must subject their feminine, intuitive minds to the discipline of science to avoid becoming like the mythical Cassandra—"always . . . in the right, and always . . . disbelieved and rejected" (2002b, p. 11). In so doing, they would gain *authoritas* and provide less ammunition to their critics (pp. 10-13). When later Addams established Hull House, it would be known to its residents as a supremely unsentimental environment, despite the fact that most of its residents were female (Hamilton, 1943).

Hull House Maps and Papers was a product of "disinterestedness"; but it was a social scientific achievement. It was Alice Hamilton who would bring "hard" science to bear as a feminist-pragmatist rhetor at Hull House. Jane Addams (1910) venerated

science, but she had dropped out of medical school when she discovered she had no aptitude for science as a vocation. No doubt her efforts to keep Alice Hamilton at Hull House at all costs were due at least in part Addams's recognition of the niche Alice Hamilton could fill among women trained largely in law and social science.

Campaign Against Johnny Powers

During her first year at Hull House, Alice Hamilton participated in Hull House's third unsuccessful campaign to unseat Johnny Powers, an alderman of the nineteenth ward. Powers was an extremely powerful and corrupt politician whose bribe-taking from businessmen thwarted Hull House efforts to improve sanitation or education in the ward. Powers held important chairmanships in both the Chicago City Council and the Cook County Democratic Committee, and he was politically wired to banking, church and newspaper interests.

Alice Hamilton's involvement in the campaign appears to have been limited to long hours addressing envelopes to twelve thousand voters and folding campaign literature, but she had a front-row seat to the response to Hull House's persuasive efforts. In a letter home, she described Powers's final effort to thwart Hull House's assault on his incumbency, a large parade that included representation from those institutions over which he held sway. Cadets from the local Jesuit church and members of the Cook County Democratic Committee in top hats, with Powers among them, were joined by crowds carrying banners that attempted to deny Hull House residents the right to speak with the words "No petticoat government for us" and caricatures of Jane Addams and other members of Hull House.

Alice Hamilton appears to have taken it all in stride, as part of the rough-and-tumble of political activism. She wrote, “Except for cheering loudly for Powers as they passed the house nobody did anything much, indeed I think it was only small boys who yelled ‘Down with Hull-House.’ . . . To-day [sic], things seem very quiet” (Sicherman, 1984, p. 120).

Alice Hamilton also observed a longer-term price that Hull House paid when it naively publicly disclosed Powers’ connections to a powerful network of banking, church and newspaper interests that controlled the ward: For several months following this campaign revelation, Hull House suffered vigorous attacks in a Chicago daily newspaper (Addams, 1920, p. 320). This experience probably contributed to the “hostility toward newspaper reporters” (Hamilton, 1943, p. 76) that Alice Hamilton reports feeling for many years. It also may have contributed to her rejection of the muckraking approach in her own reform rhetoric, having been on the receiving end of it.

No doubt these hard-learned lessons helped hone Hull House’s political sophistication in problem-solving. From a rhetorical standpoint, however, perhaps the most important lesson of the campaign was that a failure to oust Powers didn’t mean that the rhetoric itself was a failure. Addams (1910) reported that the campaign against Powers provided Hull House with “identification with public-spirited men throughout the city who contributed money and time to what they considered a gallant effort against political corruption” (p. 319). Addams wrote, “One of our trustees . . . said that his nineteenth-ward experience had convinced him of the unity of city politics, and that he constantly used our campaign as a challenge to the unaroused citizens living in wards less conspicuously corrupt” (p. 322).

The campaign also contributed to Alice Hamilton's future as a rhetor by serving as a tutorial on the art of persuasion: the elements of public debate, how politics can trump the most logical of arguments, the importance of strategizing to avoid rhetorical pitfalls, and the handling of defeat. Later, her own public discourse on such issues as industrial poisoning, war, and the Equal Rights Amendment would display a level of sophistication that suggests Hamilton learned her lessons well.

Publish or Perish

While teaching her classes at Northwestern and pursuing scientific research on the side, Alice Hamilton threw herself into settlement work. During her first two years at Hull House, she was a veritable whirlwind of enthusiastic activity. She set up a well-baby clinic in the basement, where, in order to convince Italian mothers to bathe their babies, she anointed the babies with olive oil following their baths. In addition, she taught classes in English and in art anatomy and physiology, directed the men's fencing and athletic clubs, worked with the boys' clubs, and eventually took charge of the Sunday evening lectures. She also "toted" visitors, who showed up at Hull House by the thousands each week. Alice Hamilton was recognized at Hull House as a "woman-of-all-work" (Linn, 2000/1935, p. 145), none of which, to her great dismay, drew upon her scientific expertise (Hamilton, 1943, p. 98).

By the summer of 1899, Alice Hamilton began to feel overwhelmed, questioning whether she was carrying out either her teaching responsibilities or her work at Hull House particularly well. She was also deeply concerned that professionally she was losing ground by not contributing significantly in the field of scientific research, her first

love. To her cousin, Alice Hamilton also expressed doubts as to whether she really had the "settlement spirit." She wrote,

> All winter long I kept feeling what a farce it all was and how Miss Addams was classing me with the people she is always talking about, who have had scientific or literary training but are utterly unable to put their knowledge in to a form useful to simple people. I would worry over it and wonder how pathology could ever be applied to Polk street [sic]. (Sicherman, 1984, p. 133)

Alice Hamilton's biographer, Barbara Sicherman (1984) points out that this struggle to find her own niche and her own voice was compounded by the polarities of her two worlds—science and service—that represented the "classic polarities separating men's and women's spheres" (p. 136). Neither world by itself satisfied her completely, yet she was losing hope that she could integrate the two.

Ultimately, it was a return to research and entry into a world of scientific rhetoric that resolved the crisis. In 1899, Alice Hamilton returned to laboratory at the University of Chicago, determined to "get up a bit of a reputation to fall back on" (p. 137). The results of her research on tumors of the brain appeared that year in the Journal of Experimental Medicine; and in 1901, her research findings were published in the Journal of Comparative Neurology. Anticipating that the Women's Medical School at Northwestern University would close and she would be unemployed, Alice Hamilton intensified her research, contributing several articles on topics ranging from lung tumors to spinal meningitis for Albert Buck's Reference Handbook of the Medical Sciences in 1902. Although she makes no mention of it in her autobiography, she also launched her public speaking career that year, delivering a paper on poliencephalomyelitis at the second annual meeting of the American Association of Pathologists and Bacteriologists. She wrote to her cousin Agnes that the meeting brought her back into contact with

scientific men and convinced her to pursue her own scientific work vigorously (Sicherman, 1984, p. 142).

When her predictions about the future of her job at Northwestern University came true in 1902, Alice Hamilton accepted a job as a bacteriologist at Memorial Institute for Infectious Diseases in Chicago. At Memorial, a leading center in pathological and bacteriological investigation, she worked for the nationally known Ludvig Hektoen, editor of the newly established Journal of Infectious Diseases. The journal published Alice Hamilton's research findings on opsonins (a type of antibody), scarlet fever, and pseudodiphtheria, among other subjects. While she still harbored a fear that she would "never be more than a fourth-rate scientist" (Hamilton, 1943, p. 128; Sicherman, 1984, p.150), Alice Hamilton's return to research and her entrance into scientific discourse rekindled her faith that science and service could co-exist. This faith would form the foundation for her career as a rhetor.

Typhoid Epidemic in the Nineteenth Ward

In the fall of 1902, Alice Hamilton had her first opportunity to apply "pathology . . . to Polk street [sic]" (Sicherman, 1984, p. 133) when Hull House became the epicenter of an outbreak of typhoid fever in Chicago. Given how little was known about the cause of typhoid at the time and the city authorities' inability to explain why the nineteenth ward was so hard hit, Jane Addams prevailed upon Alice Hamilton to bring her bacteriologist's skills to bear on the problem.

Hamilton determined that a local condition must account for the excessive number of cases in the ward. Working in the manner of a first-rate epidemiologist, she and two Hull House residents scoured the streets and tenement houses of the ward,

visiting 2,002 dwellings (Sicherman, 1984, p. 145). There, they discovered overflowing outdoor privies and non-functioning indoor water closets, with swarms of houseflies feeding on the excreta.

Based on their graphs and charts of the incidence of typhoid in the ward, Hamilton determined that the high incidence of typhoid correlated with poor sewage removal. Supported by research that had been done during the Spanish-American War on typhoid and house flies, she postulated that the severity of the outbreak was due to contaminated flies spreading the disease by lighting on unprotected food and milk in tenement homes. With help from other Hull House residents, she collected flies from privies and kitchens and tested her theory in the laboratory at Memorial Institute. The bacteriological tests revealed the presence of the typhoid bacillus, an apparent confirmation of her theory. In January 1903, she presented her findings to the Chicago Medical Society, and they were published a month later in the Journal of the American Medical Association. Alice Hamilton (1943) would later write, “I am sure I gained more kudos from my paper on flies and typhoid than from any other piece of work I ever did” (p. 99).

Although she was addressing a technical audience, Hamilton’s discourse had social and political implications. The impact of her findings on the city of Chicago was immediate and far-reaching. A Civil Service Commission inquiry supported Hull House’s charge that the Chicago Board of Health had been lax in enforcing sanitary regulations. As a result, the Health Department was reorganized, many of the sanitary inspectors were dismissed, five were indicted for bribery, and a new chief inspector was named who forced landlords to comply with the sanitation law (Sicherman, 1984, p. 146).

Only later did it come to light that it was not the flies that were responsible for the severity of the typhoid outbreak in the nineteenth ward but rather a breakdown at the local pumping station that allowed sewage to flow for three days into the water pipes that supplied the neighborhood. The Board of Health kept the information secret, fearing even greater censure. The individual who did the most to make it public was Alice Hamilton herself. In keeping with her scientific ethos, she took pains to correct the record in speeches given during this period and later, in her autobiography. She wrote,

> For years, although I did my best to lay [to rest] the ghosts of those flies, they haunted me and mortified me, compelling me again and again to explain to deeply impressed audiences that the dramatic story their chairman had just rehearsed had little foundation in fact. (Hamilton, 1943, p. 100)

Alice Hamilton's depreciation of the value of her contribution in this investigation suggests the rigorousness of the demands she put upon herself as a scientist. Others would use words like "exacting" and "expertness" to describe Alice Hamilton's scientific endeavors and to help explain her success in the field of industrial medicine. Her biographer Barbara Sicherman (1984) sums it up best: "Few could resist the combined force of her meticulous research and her uncommon powers of persuasion" (p. 3).

While she may not have achieved all that she had hoped scientifically in the typhoid investigation, the resulting Hull House campaign to force the Chicago Board of Health to do its job in the immigrant communities of the nineteenth ward may have paid off for Alice Hamilton in another way. Sicherman (1984) argues that Alice Hamilton's prominent position in the controversy with the Board of Health was the start of her climb down off the political fence. In addition to that, her experience taught her the power of her own words, the power of persuasion. As much as she disliked controversy and conflict, Alice Hamilton concluded at the time, "I can't see how people can possibly do

work that is worth while without getting some people down on them" (Sicherman, 1984, p. 152). Hamilton was being pushed into a career as a public spokesperson.

Cocaine Wars

If the typhoid issue taught Alice Hamilton (1943) that she could fight city hall and win, her battles in the courtroom left her convinced that "the American system which most needs reform is the system of criminal law" (p. 101). The court battles began in 1904, when, continuing her foray into public health issues, Alice Hamilton worked with a neighborhood police officer and two Hull House residents on a campaign to stop druggists from trafficking cocaine to juvenile boys. She performed the toxicological tests to verify that the white powder that the police officer confiscated from neighborhood schoolboys was cocaine, and she served as an expert witness on her findings when a case against a druggist who sold the cocaine was brought to court.

It took more than a year and securing passage of a new law to get convictions in thirteen cases against druggists; but the convictions were all overturned in appellate court owing to a weakness in the new law. These and other experiences in the courtroom left Alice Hamilton with a deep, lifelong distrust of the American judicial system that she would later manifest in her own rhetoric. She railed against lawyers, judges, the rules of evidence, and legal procedures in a lengthy piece entitled "What About the Lawyers?" that appeared in Harper's Magazine in 1931; and she dedicated an entire chapter of her 1943 autobiography to repeating and expanding upon the criticism she had laid out in Harper's. These rhetorical artifacts are critiqued in Chapter 4; nevertheless, two observations are appropriate here concerning the impact of the "cocaine wars" on Alice Hamilton's emergence as a rhetor.

The first is that for perhaps the first time, even more so than in the typhoid epidemic, Alice Hamilton functioned both as a scientist and as a reformer, or perhaps better said, as a scientist motivated by the reform impulse. As a scientist, she worked within the scientific method and the scientific ethos of disinterestedness in testing the cocaine. As a reformer, her purpose was to eradicate cocaine trafficking to children and her ethos was humanitarian and biased. In the laboratory and in the courtroom, the two roles were intertwined. For example, when a defense attorney for one of the accused druggists drew attention away from his client's guilt by focusing the jury's attention on the cruelty of using animals in the toxicological tests, Alice Hamilton anticipated and countered this criticism in subsequent cases by testing the cocaine on her own eyes. Her reform agenda and its dependence upon successful persuasion influenced her scientific methods.

Secondly, this desire to persuade, to perform as a rhetor despite the limitations inherent in her role as an expert witness, an evidence-giver, was one cause of her frustration with court procedures and rules of evidence. The specifics of this, particularly as they relate to Alice Hamilton's understanding, or lack of understanding, of what Toulmin (2003/1958) calls "fields of argument" (p. 32) will be discussed in Chapter 4. What is noteworthy at this point is that Alice Hamilton felt a powerful urge to persuade that called her out of the simpler role of "reticent scientist" into the more complicated role of scientist/reformer. That she learned to perform that dual function with some measure of skill in the courtroom is evident from the advice she gave in 1927 to a member of the National Consumer's League who was preparing to testify in court:

> The only advice I can give you is to be perfectly cool and never let the lawyers of the other side bully you or get you confused, which is what they all try to do. . . .

> Never let yourself forget for a moment how contemptible a part you think they are playing; that will give you the right manner. Your strong point is your entire disinterestedness; the jury cannot help being impressed by that. (Sicherman, 1984, p. 242)

Alice Hamilton's scientific expertise, combined with her deep compassion for the immigrant community she had come to know and respect, would eventually lead her to extraordinary success as reformer and a rhetor. All that was lacking during her first decade at Hull House was an appropriate venue in which she could apply her prodigious talents.

1908-1938. Exploring the Dangerous Trades

Sicherman (1984) marks Alice Hamilton's entry into Progressive reform circles with her public health work between 1903 and 1910, when she also took her place as a rhetor on issues of social concern. During that period, Alice Hamilton published articles on her study of midwives in the Journal of the American Medical Association (April 25, 1908); on the results of her study on excessive childbearing as a factor in infant mortality in the Bulletin of the American Academy of Medicine (February 1910); and on the role of the social settlement in public health in Charities and the Commons (March 9, 1907). Nevertheless, despite her investigative forays into an array of public health issues, Alice Hamilton still hadn't found her professional niche. It was her socially ostracized working class neighbors—the "Dago," the "Polack," the "Hunky," the "Greaser," the Negro (Hamilton, 1943, p. 59)—and their stories of dangerously unhealthy working conditions that provided the impetus for her life's work (Sicherman, 1984, p. 153). It was the rhetoric of other reformers that provided the exigency that jump-started Hamilton's career as a scientist-reformer in industrial medicine.

Around 1907, Alice Hamilton read, in close succession, a muckraking article by a fellow “settler” from the Northwestern Settlement, William Hard, about employer negligence at a Chicago pumping station that had cost lives, and a book edited by Sir Thomas Oliver, a British physiologist and physician, on the dangerous trades in England (Hamilton, 1943; Sicherman, 1984; Young, 1974). What she read resonated: Alice Hamilton rubbed shoulders with working-class men and women at Hull House on a daily basis and had heard firsthand the stories of the dangers they faced in the steel mills, stockyards, and factories. “At Hull House, one got into the labor movement as a matter of course, without realizing how or when,” Alice Hamilton (1943) wrote in her autobiography (p. 80).

As a scientist, Alice Hamilton’s response to what she read was to undertake an exhaustive study of the scientific literature on the subject of industrial diseases. She found significant research on the diseases of various trades and efforts to control them in European literature, but she turned up very little in American medical research. She was skeptical of the American medical community’s response that the lack of literature was indicative of how much better working conditions were in American than in Europe. She also suspected that the apparent lack of interest she encountered among American physicians was that they viewed the subject as “tainted with Socialism or with feminine sentimentality for the poor” (Hamilton, 1943, p. 115).

Young (1982) argues that Alice Hamilton was incorrect in her assumption, expressed in her autobiography, that interest in industrial diseases was virtually non-existent in America prior to 1910 (p. 1). Young identifies a number of initiatives that had been undertaken beginning in the mid-1800s by local and state governments and boards

of health in the United States, including in textile and pottery manufacture and rubber boot and shoe production (p. 3). She also points out that the subject was a concern of the American labor movement as early as 1834 (p.4). Young attributes the oversight by Alice Hamilton and her peers of previous efforts to the piecemeal nature of earlier investigations and to the lack of federal infrastructure that might have recognized industrial disease as a national problem and coordinated and coalesced the efforts underway (p. 6)[32].

Alice Hamilton's opening salvo in her attack on the perceived apathy surrounding the health conditions in American industry was her September 1908 article "Industrial Diseases, With Special Reference to the Trades in Which Women Are Employed," which appeared in Charities and the Commons, the country's leading reform magazine. It was her first of what would be many dozens of articles over the next thirty years written for reform, popular, professional and government publications, in addition to two textbooks, an autobiography, and many speeches, calling attention to the subject of industrial diseases and the work to be done to prevent them. Beginning with this piece, she conveyed to the public a message that would become her trademark as a feminist-pragmatist rhetor on this subject, i.e., that industrial disease has a human face, and that industrial disease is preventable. As one writer said of Alice Hamilton:

> Somehow, her earnest, unsentimental courageous speeches manage always to convey a sense of the preciousness of every human life. Stop a minute, the undertones command. These statistics I am giving you are not marks on paper: they are men and women, fragile creatures of flesh and blood. See what you are greedily and needlessly destroying. (Sergeant, 1926, p. 770)

Alice Hamilton's 1908 article was one of the first on the subject in the United States (Sicherman, 1984). In the years that immediately followed, the movement to

improve the working and living conditions of Americans became a cause celebre. Other medical scientists, as well as social scientists, settlement workers, university professors, muckrakers, labor unions, business representatives, and state and federal legislatures took up the issue of industrial hygiene in addition to minimum standards for wages, hours and working conditions (Sicherman, 1984; Young, 1982).

With Alice Hamilton's rhetoric came reputation, and she was recognized within professional circles nationally and abroad as a leader in the new field of industrial diseases. In December 1908, Hamilton and eight men, including her teacher and boss at Memorial, Ludvig Hektoen, were appointed by Illinois Governor Charles S. Deneen to a newly formed Illinois Commission on Occupational Diseases. It would prove to be a turning point in her life.

No other state had ever undertaken such a study. With no hard data and no precedent to go by, the Commission could only report the industries in Illinois that might be exposing workers to serious diseases and recommend an in-depth investigation by medical experts in bacteriology, chemistry, and pathology. Nearly a year later, the state legislature agreed, funding a nine-month survey of industrial diseases under the Commission's auspices.

Given the dimensions of their task, the Commission decided that the survey should focus on the poisonous trades, where cause and effect was demonstrable. In 1910, Alice Hamilton resigned from the Commission to become the lead medical investigator for the survey. At age 41, she was given the opportunity to put her heart for reform and mind for science to work, leading a team of twenty-three physicians, medical students, social workers, and numerous other contributors in ferreting out industrial diseases. They

focused on trades and processes involving lead, arsenic, brass, zinc, carbon monoxide, cyanide, and turpentine, as well as caisson disease (resulting from work in compressed air) (Hamilton, 1943; Sicherman, 1984).

Alice Hamilton took the lead in investigating the most widely used and most insidious poison, lead. Lead accumulated in the body, in acute cases leading to paralysis, commonly seen as wrist drop, excruciating colic, convulsions, premature senility, and ultimately, death. In chronic cases, which often went undiagnosed, victims experienced extreme pallor, loss of weight and appetite, indigestion, constipation and symptoms of gout or rheumatism. From reading European literature, Alice Hamilton and her co-investigators were certain that the victims of industrial poisons were out there in American industry; the key was how to track them down. This is where Hamilton's background in research, which started with her father's unusual approach to home-schooling, could be brought to bear on an effort that could achieve practical results. Employing "shoe-leather epidemiology," Alice Hamilton visited suspect factories and plants, interviewed laborers, labor leaders, doctors, and pharmacists, and listened to gossip from workers that would lead her to other industries where lead was used. The work was painstaking: her team pored over hospital records, and in one case, Hamilton consulted with thirteen chemists to determine if lead was used in Illinois pottery glazes. She and her team would visit 304 establishments, uncover seventy industrial processes that exposed workers to lead poisoning in the course of their investigations, and confirm 578 cases of lead poisoning, an admittedly conservative estimate (Sicherman, 1984, pp. 157-158).

Hamilton's discovery that lead was used in enameling of bathtubs was original, and arrived at only after subterfuge on the part of plant managers was uncovered in a visit with a Pole suffering from colic and double wrist-drop (Hamilton, 1943; Sicherman, 1984). She also discovered that breathing lead dust was a leading cause of lead poisoning. This finding challenged the prevailing wisdom that lead was mainly ingested as a result of insufficient hand-washing by workers, a belief that no doubt survived because of its convenience to plant managers, who could absolve themselves of further responsibility for the disease among their workers.

The Commission's report to the Governor in January 1911 led to the passage of Illinois's occupational disease law a few months hence. The law required protective measures and medical examinations for those employed in dangerous industries and the reporting of all occupational illnesses. It also empowered the Department of Factory Inspection to prosecute for violations.

An approach that would characterize not only Alice Hamilton's work but also her rhetoric emerged during her work on the Illinois survey: She would develop expertise not only on the poisons but on the processes in which they were used. Hamilton would one day report that her greatest compliment in life had been when a smelting expert wrote in a metallurgical magazine, "Here is a woman writing on the metallurgy of lead who knows her job perfectly" (Sergeant, 1926, p. 764).

Following the Illinois survey, Alice Hamilton took up the pen and took to the podium on the issue of lead poisoning. She wrote in her autobiography, "Every article I wrote in those days, every speech I made, is full of pleading for the recognition of lead poisoning as a real and serious medical problem" (Hamilton, 1943, p. 124).

While presenting a paper on the white lead industry in the United States at the Second International Congress on Occupational Accidents and Diseases, Hamilton met the U.S. Commissioner of Labor, Charles P. Neill. Both were publicly embarrassed by a statement made by a Belgian physician that "It is well known that there is no industrial hygiene in the United States" (Hamilton, 1943, p. 128; Sicherman, 1984, p. 159). Soon after Hamilton arrived home, she received an invitation from Commissioner Neil to undertake a Federal Government survey of the lead trades first, then other trades. The job offered little in the way of security: She would have no official access to private establishments, and she would be paid when her report had been accepted for a fee to be determined. On the plus side, no one would keep tabs on her, and she would have a free hand in determining her methodologies. As a woman steeped in the love of her independence and convinced she had finally found her niche doing "work which has been scientific only in part, but human and practical in greater measure," (p. 180), she accepted the job and never looked back.

The job allowed Alice Hamilton to continue her relationship with Hull House while traveling throughout the United States on her investigations. It also gave her an even higher profile as a rhetor. She wrote and spoke prolifically on lead poisoning and other subjects, with her government work appearing as Bureau of Labor bulletins. By 1915, Alice Hamilton was without a doubt the foremost authority in the United States on lead poisoning, and one of only a few experts on industrial diseases. "By acquiring a specific skill and subjecting her emotions to the discipline of objective fact, she overcame her own feelings of uncertainty even as she worked on behalf of the oppressed and powerless," wrote biographer Barbara Sicherman (1984, p. 181).

Alice Hamilton had found her calling. She would work for the Federal Government in various capacities pursuing her specialty from 1911 to 1938. Within that period, she would become the first woman professor at Harvard University, teaching industrial hygiene until her retirement from Harvard in 1935, and the author of two texts on industrial poisons. Hamilton used her investigative and persuasive skills to change the course of industrial disease in America. In so doing, she left a lasting, if largely unrecognized, mark in the history of American medicine and the rhetoric of the Progressive Era.

1915-1919: World War I as Transformation

For a woman who had grown up in a sheltered, politically conservative family, Alice Hamilton's transformation into a reformer and a pacifist is startling. During her years at Hull House, her politics grew far more liberal than those of her family members (Sicherman, 1984). Nevertheless, in keeping with her intellectual integrity, her scientific skepticism, and her conflict-avoidance, Hamilton continued to straddle the fence on some issues. She had once described Jane Addams as having none of the "merciful muddle" about her, a state of mind she wished for herself (Hamilton, 1943, p. 65). America's entry into World War I and its devastating aftermath for the European combatants would be the issue that would move Alice Hamilton off dead center politically once and for all.

After nearly three years of adhering to a policy of strict neutrality, including a 1916 presidential campaign in which his slogan was "He kept us out of war," President Woodrow Wilson asked for and received permission to declare war on Germany in April 1917. Arguing that civilization itself hung in the balance, Wilson declared:

> We shall fight for the things which we have always carried nearest our hearts,--for democracy, for the right of those who submit to authority to have a voice in their

> own Governments, for the rights and liberties of small nations, for a universal dominion of right by such a concert of free peoples as shall bring peace and safety to all nations and make the world itself at last free. (2003, http://www.nv.cc.va.us/home/nvsageh/Hist122/Part2/WWwarMessage.htm)

Most Progressives [33] enthusiastically supported Wilson's declaration of war (Hamby, 1999; Hofstadter, 1956/1955), but among the minority who didn't, despite immense pressure brought to bear socially and politically, were ardent pacifists Jane Addams and Alice Hamilton. Two years prior, in April 1915, the pair was among fifty American women to heed the call from leaders of the European suffrage movement to attend an International Congress of Women at The Hague to protest the war and explore avenues for peace. Jane Addams presided over this gathering of more than 1,100 women from twelve warring and neutral nations.

Although it receives scant attention in histories of the period, the International Congress of Women was an extraordinary event. These women sought to influence world affairs when few of them had political power, not even the right to vote in their own countries (Sicherman, 1984, p. 188). Delegates from some counties risked public censure, if not prosecution as traitors, for even participating. Ex-president Teddy Roosevelt called the conference "silly and base" (Sicherman, 1984, p. 184), and conservatives condemned those who participated.

Both Alice Hamilton (who was not an official delegate) and Jane Addams were initially skeptical that any practical accomplishments would be realized from the conference. Their feelings began to change as early as the trip to Europe on the S.S. Noordam because of the willingness of most of the delegates to be educated on the issues and to be strategic in their thinking. In her inimitable blend of humor and acerbity, Alice Hamilton wrote to Mary Rozet Smith,[34]

> It is interesting to see the party evolve from a chaotic lot of half-informed people and muddled enthusiasts, and sentimentalists, with a few really informed ones, into a docile, teachable, coherent body, only too glad to let itself be led by those few. We have long passed the stage of poems and impassioned appeals and 'messages from womankind' and willingness to die in the cause, and now we are discussing whether it is more dangerous to insist on democratic control of diplomacy than it is to insist on the neutralization of the seas. (Sicherman, 1984, p. 186)

The four-day Congress culminated in the adoption of twenty resolutions, powerfully written and sweeping in their scope. Among them were:

- a call for the political enfranchisement of all women as key to the prevention of war;
- a conference of neutral nations that would offer continuous mediation to belligerent nations; and
- sending delegates from the Congress to the leaders of the belligerent nations and to the President of the United States to present the resolutions as a means of establishing a lasting peace (2004, http://womhist.binghamton.edu/hague/doc1.htm; see also Women at The Hague: The International Congress of Women and Its Results, Jane Addams, Emily Green Balch and Alice Hamilton, eds. (New York: MacMillan, 1915), pp. 150-159).

Delegates Jane Addams and Emily Balch were to head small delegations that would meet with leaders of belligerent and neutral nations and present the Congress's call for continuous mediation for peace. Addams was to visit all the countries except Russia and Scandinavia, and she invited Alice Hamilton to accompany her. While both women were initially dismayed by the mission and doubtful of its prospects for any kind of

success, the seriousness with which they were received by heads of state soon turned their skepticism around.

As Addams began the first leg of her mission in England, Alice Hamilton spent a week in German-occupied Belgium, where she came to grips with the icy horror of the loss of one's freedom. She wrote to her family, "It is simply a conquered country under the foot of the conqueror and what that means is almost indescribable" (Hamilton, 1943, p. 168). As she prepared to join Addams in visiting the war capitals, the German navy torpedoed and sank the Lusitania, killing nearly 1,200 passengers, among them, 128 Americans (Sicherman, 1984, p. 193). With a renewed sense of urgency born of the fear that the United States was inching toward war, Addams met with political leaders in Berlin, Vienna, and Budapest and received intimations of interest in pursuing peace. Alice Hamilton joined Addams in meeting with the prime minister of Hungary and with Pope Benedict XV, and she spoke unofficially with many others who could influence the peace process, including politicians, journalists, politicians, women's and peace organizations (Hamilton, 1943; Sicherman, 1984).

Alice Hamilton would later dedicate an entire chapter of her autobiography to the subject of Europe in 1915. In describing their surprisingly open reception by heads of state and other dignitaries despite their lack of official standing, Alice Hamilton (1943) wrote, "As I look back on it now . . . in 1915 the war had not yet conquered people's souls. . . . Hatreds had not yet congealed, atrocity tales had not yet accumulated to monstrous proportions (p. 170).[35]

Returning to the United States in 1915, Addams and other members of the Congress met with President Wilson several times. While he was sympathetic to the

concept of continuous mediation, he was not prepared to act upon the idea. That summer, Addams gave a speech at Carnegie Hall in New York City on her impressions from her travels on behalf of the Congress. During the presentation, she made a rhetorical error that laid the groundwork for her later censure by the nation for her pacifism. In attempting to convey the innate desire for peace and the price of war that she witnessed among the nations she had visited, she repeated something that she had heard many times during her sojourn: that English soldiers fortified themselves with rum and German soldiers with small doses of ether to brace themselves for bayonet charges, the worst form of warfare. The response to this statement was immediate and devastating. American journalists misconstrued Addams's remark as an attack on the honor of Allied soldiers, and overnight she went from being venerated as "Saint Jane" to being criticized in the press as "a silly, vain, impertinent old maid who . . . is now meddling with matters far beyond her capacity" (Sicherman, 1984, p. 194). Alice Hamilton supported Addams through this trauma and the repercussions that followed, encouraging her not to be intimidated and to "keep on saying things even more positively, no matter what you are called, for in the end it will count" (pp. 194-198). Americans, she said, romanticized the war and resented anyone who dared to tinker with that fantasy (Hamilton, 1943).

Ironically, when the United States declared war in 1917, the almost immediate result was an increase in the pace of Alice Hamilton's work for the Federal Government. She was called upon to design and oversee studies on war industries, including shell-loading plants where poisoning from TNT was a health risk. While she made no secret of her pacifism, neither did she flaunt it. Years later, in her autobiography, Alice Hamilton (1943) candidly confessed that she and Julia Lathrop "were both pacifists but neither of

us took a conspicuous anti-war stand, for the same reason—we were deeply attached to our jobs and feared to lose them" (p. 193). Alice Hamilton reasoned that her studies of the poisonous trades of the war industries were the most important contribution she could make, for under the pressure of war, concern for the health of workers was in danger of falling by the wayside. To the degree that her decision to work within the system conflicted with her idealism as a pacifist who opposed the system, Alice Hamilton experienced pangs of self-doubt. She wrote in her autobiography, "I have never been sure I was right in this position. Perhaps it would have been better to make an open protest, but I knew I was not influential enough to have that protest count for much, while my work in the war industries counted for a good deal" (p. 193).

Alice Hamilton's pacifism was not so inconspicuous, however, that she was unaffected by the hatred of pacifists, socialists, and all-things-German that the war unleashed in the United States. The head of her government bureau, Dr. Royal Meeker, received protests for allowing Alice Hamilton, as a pacifist, to work in munitions plants; but to his credit he resisted all pressures to fire her (Hamilton, 1943, p. 193).

Hamilton's opposition to the war grew steadily, partly as a result of ghastliness of "men sickening and dying in the effort to produce something to wound or kill other men," but also because of the "strange spirit of exaltation among the men and women who thronged Washington, engaged in all sorts of 'war work' and loving it" (Hamilton, 1943, p. 193). Her pacifism was further strengthened by her anger at the unrestrained attacks on civil liberties, including the rounding up of nearly two hundred leaders of the Industrial Workers of the World (I.W.W.) for striking industries considered important to the war effort. Writing to her sister Edith concerning one of the members of the I.W.W. who was

out on bail and visiting at Hull House, Alice Hamilton confessed, “I have got into an atmosphere of revolt here and as usual my involuntary response to it is very great. I cannot help loving the rebel. There are so few of them, there are so many of the ordinary” (Sicherman, 1984, p. 203).

In that same letter, she revealed the impact that the war had made in her personal journey of self-awareness: “I am meditating a good deal nowadays on the psychology of pacifism, for always whenever I waver I find myself returning to that path with a feeling of having found my real place and left muddled thinking behind,” she wrote (p. 203).

In 1919, Alice Hamilton returned to Europe for the second Women’s International Peace Congress in Zurich. Alice Hamilton would remember the Congress as one of the greatest experiences of her life. She was awed and inspired by the courage of the delegates from warring nations, who had suffered so greatly during the four years of war, but who had remained true to their pacifistic principles while taking an active role in organizing mass meetings against the food blockade at the risk of their own lives and liberty. Alice Hamilton left the Congress with a new resolve that she expressed in a letter dated May 1919 to Mary Rozet Smith: “None of us from the Allied Countries can help now doing all we can to get the food blockade raised and have the troops withdrawn from Russia and Hungary” (Sicherman, 1984, p. 229). “All we can” included speaking publicly of the situation: “I shall want to speak of it when I get back home,” she wrote to Smith (p. 232).

Alice Hamilton and Jane Addams would stay in Europe for two more months, much of it spent waiting for permission to enter Germany to take investigate the effects of the famine and to assist with the Quaker relief mission to distribute $30,000 worth of

food and supplies (Sicherman, 1984, p. 232). A week after the signing of the Treaty of Versailles, Hamilton, Addams and other delegates began their tour of four industrial cities that were the most affected, as well as the villages of South Saxony, and the city of Frankfurt. The horrors of starvation and disease that they witnessed were made bearable for Alice Hamilton only by her determination to do everything she could to bring relief to a country that had played such an important a part in her scientific education and whose people she had grown to love. Her role would be in large measure rhetorical, and she embarked on her mission on the trip home, co-authoring with Addams an article on their findings for The Survey (Sicherman, 1984, p. 233). The final stage of her transformation "from a sometimes bemused bystander into an effective political person" (p. 236) was complete. Alice Hamilton had found her causes and her commitment, as a woman, as a scientist, as a reformer, and as a feminist-pragmatist.

Answering the Call of the Rhetorical Situation

When Alice Hamilton and other New Women reformers came of age at the turn of the nineteenth century, American civic life was perceived by many of its citizens to be in a crisis situation.[36] The enactment of American democracy as a grassroots political system had been altered by the massive social changes brought on by the Industrial Revolution. By the 1880s and 1890s, the balance of power in America had shifted from small towns, with their influential local bankers and merchants, to a few large cities, [37] where giant corporations engaged in finance capitalism to carry out large-scale manufacturing to reach national markets. There was a pervasive sense of urgency about the future of democracy itself unless post-Industrial Revolution ills and shortcomings that challenged America's self-perception as the shining "city upon a hill" (Winthrop, 1630,

p. 47) were addressed. Americans felt a need to reinvent democracy to find solutions to frightening social ills that had led to revolution in Europe.[38] Politicians and social reformers of various stripes proffered very different solutions under the rubric of Progressivism.

While optimism was the dominant mood at the beginning of the twentieth century, social conflicts and hatreds also abounded, growing out of the rapid economic and social changes: the concentration of huge wealth in the hands of a few capitalist giants who demonstrated little concern for the workforce whose labor produced their fortunes; the influx of millions of immigrants from eastern and southern Europe and Asia, and their concentration in industrialized cities in the Northeast, Midwest, and West; the mass migration of blacks from the South to northern industrial cities; and the threat posed by the theory of evolution and other achievements in science and technology to the religious underpinnings of American culture (Boase, 1980; Cooper, 1990; Hamby, 1999; Hamilton, 1943; Hofstadter, 1956/55; Mattson, 1998a).

Communication between and among a polyglot citizenry of diverse ethnic and religious backgrounds and different classes was failing at a time when it was needed most to address the requirements and the new problems of urban existence. Labor riots, tuberculosis epidemics, escalating child mortality among the urban poor, and rampant venereal disease threatened America's cities. Wiebe describes America during this period as "a society without a core. It lacked those national centers of authority and information which might have given order to such swift changes" (as cited in Smith-Rosenberg, 1985, p. 172).

As a result, the transitional period of the late nineteenth and early twentieth centuries became an era of rhetorical renaissance[39] in America as its citizens looked to public deliberation for correctives to the political corruption, narrow concentration of wealth, and extensive human suffering that accompanied the rise of large corporations and huge industrial cities (Ethington, 1999; Hogan, 2003a; Kraig, 2003; Milkis, 1999; Mattson, 1998a). In fact, a unifying theme of what came to be known during this period as Progressivism was the reinvigorating of the public sphere as a key to revitalizing democracy[40] (Hogan, 2003a; also see Hofstadter, 1956/1955; Kraig, 2003; and Mattson, 1998a). "Virtually all Progressives shared an abiding concern with public opinion and its role in the democratic process," Hogan (2003a) writes, as well as "an implicit faith in the power of words to change the world for the better" (p. xiii).

As true Progressives, Alice Hamilton and other feminist-pragmatist New Women in Chicago felt compelled to speak publicly as they carved out their professional niches in what had been exclusively a man's world. Feminist-pragmatism was, after all, more than a philosophy; it was a way of being in the world that involved enacting democracy by taking action, including persuasive speech, to help ensure the rights of all citizens.[41]

While the late-Victorian prohibitions against women as public speakers began to give way under the Progressive impulse to find solutions to massive social problems, New Women feminist-pragmatist reformers, such as Alice Hamilton, were not "home free," rhetorically speaking. They were confronted with several challenges to achieving their persuasive ends.

First, politically, it was still a man's world, and women's communication had to reckon with that fact. Men controlled, with virtual omnipotence, what feminist-

pragmatists reformers saw as the source of many of American society's problems, especially the businesses and industries that employed immigrants and the poor, including children, with little concern for their welfare. Men also controlled the institutions, such as government, the courts, professional societies and academia, that feminist-pragmatists believed should provide the ultimate, large-scale solutions to social problems.

Women, on the other hand, had little political power of their own at the turn of the nineteenth century, not even the right to vote. Their access to power was largely through persuasion of those who held power. To bring about reform, feminist-pragmatists could engage in persuasion in two ways. The first was the interpersonal level, at which Alice Hamilton was adept (Sicherman, 1984). The second was through public appeals.

Feminist-pragmatists were well aware that they walked the razor's edge as they advocated for reform within a patriarchal society. Alice Hamilton, for one, had learned during the Hull House effort to unseat alderman Johnny Powers in the nineteenth ward how readily opponents would attempt to turn serious political issues into a "petticoat government" campaign in the public's mind. Hamilton had also seen the press turn against Jane Addams as a "silly, vain, impertinent old maid" for comments she made in an anti-war speech at Carnegie Hall (Sicherman, 1984, p. 194). Each time Hamilton publicly spoke or wrote about industrial poisons, she knew the inherent dangers of speaking out as a woman, and that she risked alienating owners and employers who had the power to make improvements at a time when few protective laws were in place requiring them to do so. In fact, to carry out her investigations, she had to rely on cooperation from owners and employers. Even as an agent of the Federal Government

investigating the poisonous trades, she had no official authority to enter factories, plants or mines without the permission of the owners, and no power to demand changes or improvements when she found dangerous conditions. During her work as chief investigator for the Illinois Commission on Occupational Diseases, she was actually advised by her superiors to write her reports "in such a way that no factory described in the report could be identified" (Hamilton, 1943, p. 7).

A second challenge for feminist-pragmatists was that, as women reformers, they were caught rhetorically between the proverbial "rock and a hard place." As women, they risked comparison to the sentimental writers and rhetors of the Victorian Era and risked having their professional work discounted as mere feminine sentimentality for the poor. As reformers, they risked public censure as Bolshevists or Socialists by an American public shaken to the core by political revolutions in Europe and political unrest among immigrants at home. Alice Hamilton drew attention time and again to this double-bind of New Women reformers and the obstacle it posed to persuading the public and other professionals in science and medicine to support reform causes. In the October 1929 issue of Harper's Magazine, for example, she remembered,

> It is almost impossible to believe that only so short a time ago American physicians could have been as ignorant about the whole subject of diseases of occupation as we actually were. We knew little and cared less. Indeed, the subject was not quite respectable in the eyes of the profession; it was felt to carry a flavor of sentimentality if not of socialism—Bolshevisim had not yet been discovered; and usually, if a physician were questioned about sickness in a dangerous trade he would answer that the men were suffering only from drink and their wives' poor cooking. (Hamilton, 1929, p. 580).

Feminist-pragmatist rhetors were also challenged in their public expression by their own cultural self-definition as women, which, in its most self-limiting manifestation, became the "enemy with outposts in your head" (Kempton, 1970, p. 57).

On the one hand, as “transitional women,” feminist-pragmatists were still their mother’s daughters in terms of respect for the family claim and for bourgeois values, as well as in their desire to retain at least some of the gentility of late-Victorianism. On the other hand, as New Women, theirs was a brave new world, unlike anything their mothers had known. Feminist-pragmatists and other New Women were pioneers in a dramatically altered American intellectual landscape in which science, following the publication of Charles Darwin’s Origin of the Species in 1869, had assumed a prominent position. In challenging religion as the dominant ideology for explaining humankind’s place in the universe, the book, and the debate it inspired, also challenged cultural norms, such as women’s place in society. Feminist-pragmatists were among the first women to benefit from this challenge to cultural norms; and beyond that, to be professionally educated in the new language of science, and, in Alice Hamilton’s case, to become fluent in that new language. Their rhetorical challenge, then, was how to function with one foot in the old world and one in the new; how to, in effect, reconcile the dualism of the voices inside their heads in regard to their self-definition as women.

Closely linked was the challenge of feminist-pragmatists’ self-definition as feminists as they took their places as public persuaders in the late nineteenth- and early-twentieth-centuries. Campbell (1989a) writes that, between 1890 and 1915, the feminist movement underwent a major transition with the deaths of early, influential leaders Elizabeth Cady Stanton, Lucy Stone and Susan B. Anthony. During the lifetimes of these first-generation feminists, the all-inclusive fight for women’s rights they helped launch had given way to a narrow appeal for women’s suffrage, reflecting an ideological shift as the movement adapted in the face of internal and external conflicts. At its core, the shift

away from addressing all the social facts of women's oppression, including their rights in marriage and divorce, represented a schism over two conflicting views of women that have challenged the feminist movement's cohesiveness throughout its history: one view holding that women are fundamentally different from men, in which case legislation should take into account biological and cultural differences; the other side holding that women should be viewed as human beings, identical to men and naturally entitled to all the rights that men hold (Campbell, 1989a, p. 86).

As Campbell (1989a) notes, both views are potentially powerful, but they are not easily combined or reconciled rhetorically (pp. 87-88). As social feminists, or "difference" feminists, Alice Hamilton and other feminist-pragmatists struggled rhetorically with this dichotomy in feminist thinking. They found themselves, for example, simultaneously supporting other feminists in seeking women's suffrage, and at odds with feminists whose support of the first attempt to pass the Equal Rights Amendment in the 1920s threatened, in the view of Alice Hamilton and her colleagues, hard-won protective legislation for women workers.

Together, these four material and cultural challenges acted as both constraining and liberating forces for this cohort of New Women in the creation of a new genre of public persuasion, feminist-pragmatist discourse. It was a genre that Alice Hamilton would pioneer as she addressed other reformers, popular audiences, and other scientific and medical professionals through her writing and public speaking. In fact, I argue that Alice Hamilton became the rhetorical exemplar of feminist-pragmatist discourse because of her ability to use her scientific knowledge and expertise in her public persuasion; and because, unlike others of her feminist-pragmatist peers at Hull House, she could count

among her audiences the scientific community that had assumed a prominent role in American intellectual life by the turn of the nineteenth century.

Feminist-Pragmatist Rhetoric as a Genre Study

Alice Hamilton and other feminist-pragmatist New Women were in the vanguard in expanding the female sphere at the turn of the nineteenth century—an expansion that would manifest itself rhetorically as well as socially. For the first time, in large numbers, women were working, studying and even living (in settlements) shoulder-to-shoulder with men who were not their husbands, fathers or brothers. Inevitably, this first generation of American career women found themselves pioneering not only new roles for women but a new form of public communication as well. I argue that the communication form evolved by Alice Hamilton and other feminist-pragmatist New Women associated with Hull House and the University of Chicago at the turn of the century is best apprehended if it is approached as a rhetorical genre. Support for this approach can be garnered from the critical theory and criticism of Campbell and Jamieson (1978, 1982), Black (1965/1978), and others.

In their widely quoted introduction to Form and Genre, Campbell and Jamieson (1978) write that a genre is "composed of a constellation of recognizable forms bound together by an internal dynamic" (p. 21) that responds to perceived situational demands (p. 19). The usefulness of generic classification, they would later write, is that it is an "economical way of acknowledging the interdependence of purpose, lines of argument, stylistic choices, and requirements arising from the situation and the audience" (1982, p. 146). In this study, I will attempt to identify the interdependent "constellation of recognizable forms" of the body of feminist-pragmatist rhetoric—the themes that inform

its substance, which were influenced by, and often the direct result of, its purpose, i.e., the desire to extend democracy and its benefits to all classes and races of people in America; the pragmatic approach to ethos-building that was needed to persuade the wide range of audiences implied by that purpose; the stylistic choices of its rhetors, made within the constraints and opportunities of a transitional period socially and economically in American history—all of which are held together by the internal dynamic of women path-finding a new cross-gender, cross-generational language that would bridge the cultural values and the intellectual developments of two centuries and two eras, as feminist-pragmatists staked their claim to a public role in American society.

In a work that has been recognized as seminal to the development of rhetorical theories of genre, Edwin Black (1978/1965) reminds us that rhetoric is influenced by other rhetoric that has preceded it in time. Kathleen Jamieson (1975) argues that, in fact, rhetorical genres "bear the chromosomal imprint of ancestral genres," (p. 406). James Darsey's (1997) demonstration that American public discourse can trace its roots to more than one rhetorical tradition, including the prophetic tradition of the Old Testament, is valuable to this study (pp. 15-16). Also of value is Campbell's work on the feminine style, both as an antecedent and an element of feminist-pragmatist rhetoric. Campbell (1989a) is credited with identifying the feminine style when she undertook examination of texts of early feminist rhetors as they took to the podium in the mid-1800s to argue for women's rights. The feminine in style is characteristically personal in tone, relies heavily on storytelling and personal experience, tends to be structured inductively, and invites audience participation (p.13). What the feminine style of discourse borrowed from its antecedent, the sentimental style, was its use of personal experience to interpret and

explain the world. As Dow and Tonn and Chodorow assert, women's roles involve mediating and bridging the gap "between the social and cultural categories which men have defined," between nature and culture (Chodorow, as cited in Dow and Tonn, 1993, p. 292). This was precisely the task that Alice Hamilton and other feminist-pragmatist New Women took up rhetorically at the turn of the nineteenth century.

These examples of the influence that antecedent genres and styles have upon rhetoric serve to illustrate what makes a generic approach particularly useful as a critical tool: its emphasis on the interdependence of rhetorical forms working together with audience and situation to produce meaning. Within a genre, each generic element is recognized as influencing and being influenced by all other elements. The result is that the sharp distinctions between the elements break down, and "meaning, as well as persuasive force, emerge from a complex interaction of discursive elements" (Jasinski, 2001, p. 537). Within a genre, rather than looking at style as something apart from substance, or looking past style to find the meaning of words (Jasinski, 2001), we observe that,

> Particular linguistic or stylistic choices are not innocent value-free selections from a system; they work to conceal and reveal certain realities rather than others, establishing or reinforcing ideologies in the process and refracting (as opposed to reflecting) particular points of view. (Carter and Nash (1990), as cited in Jasinski, 2001, p. 537)

In this study, I will examine many works of the exemplary Alice Hamilton, in her efforts to make "knowledge's wisdom prevail" over a period of thirty-six years. I will look at her discourse as she addressed three distinct audiences: social reformers; popular audiences; and scientific and medical professionals. An audience approach has been useful in generic criticism since the time of Aristotle, who used audience as a marker for

generic classification of rhetoric. One of the best contemporary examples is Leff and Mohrmann's (1974) analysis of Abraham Lincoln's 1860 speech at the Cooper Union, which these critics argued belongs to the genre of campaign oration and is addressed to three audiences. I will use audiences not for generic classification but rather as a means for showcasing the pragmatic decision-making in regard to style, ethos-building and substance that were driven by purpose and audience considerations within the genre of feminist-pragmatist rhetoric.

Alice Hamilton's appeals to social reformers take the form of articles in "small magazines," i.e., limited-circulation, specialized publications targeting settlement and social workers, sociologists, and woman's rights advocates.[42] The appeals to popular audiences appear as magazine articles, speeches, a book chapter, and an autobiography, addressing a wide range of topics, from war to witchcraft. The appeals to scientific and medical professionals, consist of journal articles, speeches, textbooks, and government publications aimed at other professionals in science, medicine and industrial hygiene, and comprise the bulk of her writing and speaking (Madaus, 1997). It is her appeals to other scientific professionals that sets Alice Hamilton apart as the rhetorical exemplar of feminist-pragmatist discourse: Unlike others of her feminist-pragmatist peers at Hull House, she could count among her audiences the scientific community that had assumed a prominent role in American intellectual life by the turn of the nineteenth century and subsequently, of the modern world.

The examples of her persuasion with all three audiences offer insight into the strategies Alice Hamilton employed to advocate for reform as a feminist-pragmatist within the constraints of her scientific ethos, and in the case of her scientific audience,

within the added constraints of the disciplinary requirements for scientific communication. It is here that Black's (1965/1978) work on genres in Rhetorical Criticism may prove particularly useful. We might anticipate that in the discourse of Alice Hamilton, a feminist-pragmatist scientist, we will find a unique blending of the rational and emotive elements that Black argued were pre-eminent in the argumentative and exhortative genres, respectively. The fusion of generic elements can occur, Campbell and Jamieson (1982) remind us, as a rhetor attempts to respond to a complex situation, such as that which Alice Hamilton faced as a New Woman rhetor. A benefit of generic analysis is that it enables us to better interpret why and how that fusion occurs.

With this study, I hope to contribute to the "long view" of rhetoric by showing that the rhetorical emergence of feminist-pragmatism during the Progressive Era signals an important phase in the history of American discourse and American feminist discourse--the rhetorical birth of the twentieth-century, modern woman from her nineteenth century, late-Victorian beginnings.

Zyskind (1950) and Campbell and Jamieson (1978) contend that generic criticism by its very nature involves close textual analysis. In that regard, Jean Bethke Elshtain's (2002) rhetorical biography of Jane Addams is particularly valuable as a model for my purposes. While not intending her book to be a study of feminist-pragmatist rhetoric as a genre[43], Elshtain's close textual analysis of Addams's rhetoric offers valuable insights that I have appropriated to my own ends. First, she identifies the search for a radical interpretation of democracy that offered both shelter and empowerment to all classes of Americans as a motivating force that helped to shape the substance of Addams's rhetoric, and I argue, feminist-pragmatist rhetoric, as exemplified by Alice Hamilton, as well.

Elstain also powerfully illuminates in Addams's discourse what I argue is an important stylistic element of feminist-pragmatist rhetoric, the use of narrative to create audience identification and response and to resolve the dualisms of reason and emotion, fact and value (Fisher, 1984, p. 299).

Bernard J. Brommel's rhetorical biography of Eugene V. Debs is also useful in suggesting a rhetorical-exigency approach to criticism that allows one to see Debs's rhetoric within the context of his era, and to better understand the history of the American labor movement and American socialism by listening to Debs. In the same way, I will attempt to show how Alice Hamilton's rhetoric illuminates the history of the Progressive Era and its powerful New Women, and the feminist-pragmatist voice that emerged in response to the rhetorical exigencies of the period.

Like Elshtain and Brommel, I have chosen rhetorical biography as the most useful way in which to analyze a discourse that is both individual, in that it is the discourse of one significant rhetor; and representative, of a time and place in history, a rhetorical purpose, as well as, in the case of Alice Hamilton, other discourse with which it shares recognizable rhetorical forms.

If we accept Campbell and Jamieson's (1978) assertion that genres "transcend a specific time and place" (p. 422), it is worth noting that feminist-pragmatist discourse did not die out with the end of the Progressive Era, when it appears to have been at its most prolific stage. Alice Hamilton, for one, continued to express herself publicly into her eighties and nineties in the same genre on familiar feminist-pragmatist themes of fairness to the foreign-born, civil liberties, and labor issues, as well as retrospective pieces on her life and career.[44] While the sole measure of a rhetorical artifact is not the results it

achieves, as Black (1965/1978) so effectively demonstrated in his analysis of Chapman's Coatesville address, it is nevertheless noteworthy that even in old age, Alice Hamilton could stir an audience. The letter she wrote in December 1952 to the New York Times, for example, praising Elizabeth Gurley Flynn for going to jail rather than giving evidence that would incriminate other communist leaders suspected of violating the Smith Act of 1940[45] resulted in letters of support, including a prized letter from Albert Einstein.

Chapter 4 - In Her Own Voice: A Generic Analysis of the Rhetoric of Alice Hamilton

In closely examining Alice Hamilton's speeches, popular and specialty magazine pieces, technical writing, and books, four essential characteristics of feminist-pragmatist discourse emerge. I have captured these characteristics under the headings Balance, Transcendence, Multiple Logics, and Perfectionism and will further define them in the analysis that follows. Hamilton strategically employed these characteristics to the material and cultural constraints she faced as a rhetor, adapting her discourse to the reality of the political power of men and the public resistance to women reformers, while also capitalizing on her strengths as a New Women scientist, and remaining true to her pragmatist philosophy and its "difference" feminism (Elshtain, 2002b). While these four characteristics can be individually distinguished in Hamilton's discourse, I will show that it is the interplay and interdependence among the characteristics that make it possible to recognize her feminist-pragmatic rhetoric as a genre.

Balance

Although Alice Hamilton owed her career investigating industrial poisons at least in part to a muckraker's story about the death of workmen at a Chicago pumping station, she rejected muckraking in her own reform rhetoric in favor of a more balanced approach to persuasion.[46] This prolific exposé journalism of the Progressive Era had been excoriated by President Theodore Roosevelt in 1906 in his famous speech, "The Man with the Muckrake," in which he said,

> In Pilgrim's Progress the Man with the Muckrake is set forth as the example of him whose vision is fixed on carnal instead of spiritual things. Yet he also typifies

> the man who in this life consistently refuses to see ought that is lofty, and fixes his eyes with solemn intentness only on that which is vile and debasing. (Roosevelt, 1906)

In her autobiography, Hamilton wrote that, early in her career, she was tempted to write an expose of conditions in a white lead and oxide plant for McClure's Magazine, "But on soberer reflection I gave it up" (Hamilton, 1943, p. 135). Her reasons were pragmatic: "The result would be only a temporary flurry, no lasting reform, and it would make any further work on my part impossible. A muckraking writer would not be permitted to visit other plants," she concluded (p. 135).

Alice Hamilton's rejection of what had become an extremely popular rhetorical form for exposing industrial capitalism's dark side—McClure's and other Progressive Era muckraking magazines reached audiences of 400,000 to 1,000,000 in their heyday (Hofstadter, 1956/1955, p. 191)—did not keep her from using aggressive, even shocking language in her public discourse if she believed it would be efficacious.

For example, in her extensive writing in "small" magazines aimed at the reform community, Alice Hamilton frequently demonstrated her capability to wield a rhetorical "sword" (Linn, 2000/1935) with the best of them concerning social conditions, institutions or ideas that she believed needed reform. In 1908, Alice Hamilton opened her very first article on industrial diseases[47] with this disturbing analogy:

> As long ago as the first half century after Christ, the Latin writer, Pliny, spoke of certain diseases as peculiarly the diseases of slaves. . . . In the nineteen centuries which have elapsed since then we have abolished slavery, but we still have Pliny's diseases of slaves, only now we call them "industrial diseases." (Hamilton, 1908, p. 655)

Later in the piece, she added, "For in all this question of dangerous trades, we must remember that we are dealing with a class which is not really free" (p. 659).

Alice Hamilton's comparison of industrial diseases to the "diseases of slaves" and her reference to industrial laborers as the equivalent of slaves, "a class which is not really free," would have alarmed a Progressive Era audience of reformers already concerned about the future of democracy. "Slavery" had been the ultimate "devil" term in America dating from the American Revolution, when patriots such as Samuel Addams used it in propaganda as a metaphor for the relationship between white colonists and the British administrators of the colonies (Bradley, 1995, p. 590). It was a loaded term for Progressives, playing to their worst fears of an eruption of class warfare in America like that which was underway in Europe. Many Progressives, including Alice Hamilton herself, were only one generation removed from the war over slavery that had nearly cost the nation its union. Some of them, such as the women's rights advocates, could even trace their reform roots back to the abolitionist movement (Campbell, 1989a). In fact, the term "slavery" had been appropriated by militant feminists to describe the condition of American women.[48]

Beyond that, and of even greater immediacy, was the fact that many of those individuals whom Alice Hamilton was likening to slaves were disillusioned immigrants whose assimilation into democracy was largely a failure (Hofstadter, 1956/1955). In their desperation, some of these immigrants were turning away from the democratic ideals that Progressives cherished, and turning toward political bosses or radical philosophies to sustain their hope. By the early 1900s, intellectuals and academics such as Edward Alsworth Ross, one of the "leading ideologues of Progressivism" (Hofstadter, 1956/1955, p.178), as well as many muckrakers, were comparing massive industrial organizations to slavery and predicting violent class struggle if the abuses of capitalism and industrialism

were not addressed (Wilson, 1968). Alice Hamilton's invocation of the specter of "industrial slavery" in her 1908 magazine piece would have confirmed her Progressive audience's worst fears about national disunity and a troubled democracy, best expressed by Progressive Era writer John Dos Passos (1929) when he declared in USA, "all right we are two nations" (unnumbered page, following title page).

The subject of war also incited Alice Hamilton's aggressive verbal swordplay. In a January 1916 piece for The Survey, a Progressive social work journal, Hamilton, borrowing and redefining a chilling term from Social Darwinism,[49] accuses the warring countries of Europe of engaging in "race suicide" (Hamilton, 1916a, p. 407), characterizing as national self-destruction the killing off of potential fathers in battle and the wartime increase in infant mortality. To her audience, the term "race suicide" would have been jarring, juxtaposed in their minds against the Progressive notion of the continuous progress of humankind (Hofstadter, 1956/1955) and challenging their romantic notions about war.

The following month in The Survey, knowing that America was rapidly progressing on its path toward joining the conflict in Europe, Alice Hamilton again attempted to awaken her audience to the horrors of war by proclaiming that scientific advances in warfare had "created a Frankenstein." Comparing the fictional story about science run amok to the reality of war, Alice Hamilton demonstrates her ability to use harsh, unsparing language, as she describes for her readers, in vivid, sickening detail, the "slaughter" and "carnage" that new weapons had made possible: "heaps of dead," "men standing upright, stiff in death," "tearing, burning, lacerating flesh and joints, blowing away limbs or part of the face," and "bones of his comrade driven into a man's body"

(Hamilton, 1916b, pp. 560-660). Here, Hamilton was likely influenced by Jane Addams's anti-war speeches that lamented the glorification of war, which, Addams said, "tends to fix our minds on the picturesque" rather than war's abject brutality (as cited in Burgchardt, 2003, p. 393).

Alice Hamilton was also bitingly sarcastic about what she perceived as America's misplaced cultural-superiority complex. In an article on the League of Nations' International Labour Office that appeared in the sociological publication Social Forces, for example, she invites readers to join her in comparing the labor legislation of American and League member nations "in order to reassure ourselves that we really are in a superior position and do not need any outside advice" (Hamilton, 1932, p. 113). "It would be most illogical for us to impose a tariff to protect us from competition with the 'pauper workers of Europe," she wrote, "and then ourselves tolerate worse conditions of exploitation than exist over there" (p. 113).

In suggesting that conditions for workers in the United States might be worse than the conditions of "pauper workers of Europe," Hamilton mounted a frontal assault on what she viewed as arrogance and ignorance in America's post-war refusal to participate in the League of Nations, a refusal that Hofstatder (1956/1955) attributed to America's perception of itself as a "non-Europe." In comparison to Europe's "static, decadent, and aristocratic" institutions, Americans believed their institutions to be "modern, progressive, moral and democratic" (p. 278). Alice Hamilton could be unrelentingly acerbic when confronting what she believed underlay America's assumption of its superiority, the nativism and racial and ethnic prejudice that had become particularly virulent in the xenophobic, post-war years. In The Woman Citizen, a magazine dedicated

to woman suffrage, for example, she excoriates those who considered the cruel side-affects of war an acceptable means of controlling populations of less ethnically desirable people.

> Of course, we all know that some of our best people, some of our most eminent vital statisticians, hold that pestilence and famine should be allowed to keep down the numbers, not of people like themselves, but of the non-Nordic races, lest there be too little space and food left for the Nordics. (Hamilton, 1925, p. 15)

There is great irony in Alice Hamilton's use of the words "best" and "most eminent" to describe the technocrats whom she was accusing of racism for espousing a eugenicist worldview that masqueraded as scientific Progressivism (Danbom, 1987, as cited in Hogan, 2003a). The "we/they" dichotomy that Alice Hamilton created in this statement with the use of the words "Nordic" and "non-Nordic races"; and her almost conspiratorial tone, reflected in the phrase "we all know," are an invitation to her audience of women, already attuned to her argument by the "we/they" rhetoric of feminism, to identify with another down-trodden minority, America's "non-Nordics." Her criticisms in this piece seem prescient when juxtaposed against a article she wrote for Harper's Magazine in 1934 about the Hitler regime and the rising up of a "Nordic religion" (Hamilton, 1934, p. 168) in Germany devoted to restoring the Nordic race to its original purity.

Popular audiences, whom Alice Hamilton often addressed through respectable magazines associated with established, conservative publishing houses, and less frequently, through public speaking engagements and through two books, were not spared her cutting criticisms or extreme comparisons. In The New Republic in 1919, for example, she calls the display of "angels of victory" that lined Chicago's Michigan Avenue in celebration of an Allied victory in World War I "a hideous joke," given

conditions in the war-ravaged countries of Europe: “town after town in ruins, deathly still, the houses like skeletons with empty, staring eyes, the little villages of gray stone cottages, so helpless before modern high explosives, like kittens shot down with cannon balls” (Hamilton, 1919a, p. 244). In this passage, Alice Hamilton contrasts the functionally superfluous display in Chicago with the lack of even rudimentary human dwellings remaining in European towns after the war. She personifies the houses in Europe that were destroyed by mortal shells as “skeletons,” the symbol of death, in contrast to the personification of victory in Chicago as an “angel,” the symbol of eternal life. Her writing approached the melodramatic when she compared the anthropomorphized “helpless” cottages destroyed by modern artillery to “kittens shot down by cannon balls.”

In Harper’s Magazine, Alice Hamilton (1929) again attacked American industry, this time calling it “a form of feudalism” in which “peasants” (workers) live under the control of “barons“ (factory owners), (p. 588). Here, she strikes at the heart of the American myth of a classless society, arousing her audience’s antipathy toward a new, industrial version of the old European aristocracy that revolutionary America rejected at its core. Alice Hamilton’s extreme analogies were an appeal to a widespread, Progressive concern over the future of democracy itself in the face of the rapid rise of industrialism and the destabilizing affect of its excesses and abuses on American society (Hofstadter, 1956/1955).

To Alice Hamilton, nothing deserved biting language more than the American system of jurisprudence, especially with respect to how that system meted out justice in cases involving immigrants. Alice Hamilton’s illusions about American jurisprudence

had been shattered by her experiences during her years at Hull House. In her autobiography, she commented, “As an American, nothing mortified me as much as the system of criminal law in Chicago, for it was impossible to explain it or to defend it to the immigrants whom one wanted so much to inspire with confidence in our American form of government” (Hamilton, 1943, p. 103). In a 1929 speech at Madison Square Garden commemorating the first anniversary of the execution by the State of Massachusetts of Italian-born anarchists Nicola Sacco and Bartolomeo Vanzetti, Alice Hamilton (1929a) decries the lack of progress in “the administration of what we still continue to call justice,” suggesting that a more precise term might be “the organized vengeance of society” (p. 3). Comparing courtroom proceedings to “medieval trial by combat” (p. 4), she writes, “And the fight is watched by a bewildered group of jurors who are not themselves free from prejudice. . . . And to help them to clarity, to the mood which makes it possible to deal justly even with those whom we detest, there are only two champions, both clouding the issue” (p. 4). In this speech, Alice Hamilton’s radical similes (“organized vengeance” to speak of American justice, “medieval trial by combat” to describe a courtroom trial) and her bold accusations (a “bewildered” and “prejudice[d]” jury passing judgment on people “whom we detest,” guided by opposing counsels “clouding the issue”), were strategically aimed at shattering America’s comforting illusion of its society and institutions as enlightened and continuously progressing; and of its system of justice as a reliable dispenser of Constitutionally guaranteed due process in which the rights all citizens are safeguarded. With the words “whom we detest” Hamilton outed the class hatreds of the “’submerged tenth’” (Addams, 1893, p. 21) that lay beneath the surface of American democracy.[50]

Similarly, in a piece entitled "What About the Lawyers?" that appeared in Harper's Magazine, Alice Hamilton attacked American justice in the harshest terms when she wrote, "I firmly believe that the worst that can be said about medical practice is too good to be said about legal practice" (Hamilton, 1931, p. 542).

> It is judges alone against whom lese majeste is a crime. One may revile the President of the United States with impunity, one may utter blasphemies against the Most High without even attracting attention, but if one is bold enough to protest against an abusive tirade by an ill-bred or drunken judge one may have to expiate it in prison." (Hamilton, 1931, p. 547)

Alice Hamilton knew that the majority of the staid readers of Harper's would have had little opportunity for direct experience with the court system. She wrote, "The majority of respectable, educated people . . .does come in personal contact with our far from perfect system of medicine but almost never with our even less perfect legal system" (Hamilton, 1931, p. 542). Thus, her reference to an "ill-bred or drunken judge" would have come as a shocking revelation to the presumably well-bred and sober readers of Harper's, not at all in keeping with their uninitiated, idealized mental-image of judges as dignified fonts of wisdom. Her use of the French term "*lese majeste*," meaning "offense against the supreme ruler," would have rankled with an audience whose democratic values stood in direct opposition to the power of kings of the old, European tradition.

The bulk of Alice Hamilton's rhetoric was addressed to the scientific and medical communities (Madaus, 1977), and some aggressive language made its way even into her lectures to medical and industrial hygiene associations, her papers for professional magazines, and her technical bulletins for the U. S. Bureau (later, Department) of Labor, although in a comparatively more subdued form than appeared in her reform and popular rhetoric. For example, in her Cutter Lecture in Preventative Medicine and Hygiene,

delivered at Harvard Medical School and published in The Journal of Industrial Hygiene in 1919, Alice Hamilton took on what was, for her, a recurring and altogether appropriate subject for criticism with this audience, the shortcomings of the medical community itself. In several instances in this lengthy and otherwise highly technical lecture/journal article, she indicts physicians for their apathy and for their outright neglect in the matter of industrial poisons. In the first instance, she uses a doctor from Perth Amboy as the exemplar of physicians who demonstrate a "deplorable lack of curiosity":

> He had witnessed an autopsy on a case of industrial poisoning. The body, he said, was a deep mahogany color all over, the deepest discoloration of skin he had ever seen, and the organs were much congested. He did not know to what the man had been exposed, had not even asked, though he had a vague idea it might have been arsenic" (Hamilton, 1919b, p. 93).

Hamilton's tone here is acerbic: "deplorable lack of curiosity," "he did not know," "had not even asked," and "he had a vague idea" are phrases that are dripping with indictment. For Hamilton, science was a means to an end; so the idea that a medical doctor, confronted with the "deepest discoloration of skin he had ever seen," would not perceive that he had an ethical obligation to ask questions about the poison that had caused it was unthinkable.

Hamilton's contempt is veiled but still palpable when she criticizes physicians for failing in their duty to disclose information, observing,

> Of course we know that pretty widespread poisoning can go on in some of our more remote industrial centers [,] where all the medical work is in the hands of company physicians, without the world at large knowing of it. This problem would make an interesting subject of research. (p. 95)

The term "company physicians" suggests doctors that have been bought and paid for: "all the medical work" is in their hands, yet "widespread poisoning" goes on, but is kept from "the world at large." (Hamilton (1943) would later write in her autobiography, "For

a surgeon or a physician to accept a position with a manufacturing company was to earn the contempt of his colleagues as a 'contract doctor'" (pp. 3-4).) The conspiratorial phrase, "Of course we all know" was Alice Hamilton's invitation to her audience to both acknowledge and distance itself from this professional failure; and her suggestion that the issue "would make an interesting subject of research" was a tantalizing reference to her desire to expose and, by implication, root out the problem of physicians abdicating their professional and ethical responsibilities because they were reluctant to say or do anything that could implicate their employers. Hamilton lets fly other little darts of criticism of physicians for their failure to disclose information when she says, concerning cases of mercurial poisoning, "If physicians knew of it they kept the knowledge to themselves" (p. 95); and, "I found a few histories of carbon disulphide poisoning, not related by physicians—they seemed never to have heard of it or to know what its effects would be—but by foreman" (pp. 97-98). The irony in her statement that physicians failed to identify cases of carbon disulphide poisoning, in fact, "seemed never to have heard of it," while laymen, i.e., foremen, were the ones who reported the disease, would not have been lost on her audience of medical professionals.

Hamilton is outright mocking when she uses the word "laudable" to describe the cover-up of the cause of death of a worker in Illinois from carbon monoxide poisoning:

> The physician in charge had called the case one of marsh gas poisoning in a laudable attempt to shield the company, and defended his diagnosis on the ground that the plant was built out in the marshes. But the man was digging up heaps of hot ashes and cinders. (Hamilton, 1919b, p. 100)

She takes another swipe at the medical community when she explains the abundance of scholarly literature on carbon monoxide poisoning as owing to the fact that this form of poisoning "has left the ranks of labor and has climbed up into aristocratic

circles, via the automobile and the private garage" (p. 100). Beyond protecting their employers, here Hamilton accuses physicians and scientists of engaging in class-consciousness, ignoring problems that affect only the "ranks of labor," but responding to those having an impact in "aristocratic circles."

In comparison to the searing language Alice Hamilton used in addressing reform and popular audiences, her criticisms in this address to professional audiences seem relatively tame. One can almost envision her inserting these rhetorical missiles into her otherwise highly technical information with a slight sniff and her nose in the air. The criticisms were, nevertheless, stinging because they addressed a communal failure by the medical establishment, of which her audience members were a part, to abide by ethical and scientific norms which they themselves regarded as binding. In failing to be proactive in seeking out the cause of an industrial disease or death, for example, physicians violated their responsibility under the Hippocratic Oath to keep all patients, regardless of their social standing, "from harm and injustice." In failing to share information on cases of industrial disease, physician violated their commitment under the Oath to share knowledge and ignored the institutional norms of universalism and communality of the scientific ethos (Prelli, 1989, p. 48).

In her 1912 technical bulletin, "Lead Poisoning in Potteries, Tile Works, and Porcelain Enameled Sanitary Ware Factories," Hamilton's criticisms of conditions in American factories are, in most instances, couched and indirect. While she pushed the boundaries of scientific objectivity by using the words "serious evil" (p. 30) to characterize the lack of sanitary control in factories and "evils" (p. 49) to describe low wages in the pottery-making trades, she opted for the indirect approach of quoting

another professional to make the accusation that managers and company officials in the lead trades were liars.

> The statement made by managers and company officials in general is always to the effect that when the ingredients are fused to form a glaze the lead is changed to the disilicate, insoluble in the gastric juice, and therefore not poisonous. According to Prof. A. V. Bleininger, of the Bureau of Standards, Department of Commerce and Labor, "this statement is not true. The disilicate (PbO2SiO2) can not [sic] be formed in enamels for the simple reason that there is not enough silica to go around."(pp. 32-33)

Alice Hamilton's cynicism about the managers' and company officials' intention is reflected in her generalization that their statement about lead glaze "is always to the effect that" it is not poisonous. Because she doubted their intention, Alice Hamilton accused them, through a surrogate, of lying ("this statement is not true"), rather than of making an honest mistake.

Alice Hamilton also couched aggressive advocacy in this bulletin in vivid case histories. Ten of them appeared early in the report under the heading "Typical Cases of Lead Poisoning," the title itself suggesting to the reader that these cases are representative of many more like them. The mental images she created for her audience with these case histories were as horrifying as her descriptions of impacts of modern warfare that had appeared in her popular and reform rhetoric: "a girl of 19 years," who has "worked 3 years in the dipping room of a white-ware pottery" and "is very apt to vomit in the morning if she takes breakfast, and can eat nothing at any meal till [sic] she has had a sour pickle to rid her mouth of the sweet taste" of lead (p. 10); "a white-haired old man, apparently over 70 years old, weak and trembling, unable to dress himself, tottering when he walks. . . . Actually he is only 46 years old. For 26 years he has worked in the colored dipping room of a tile factory (p. 11); and "A young American who had worked two

years as an enameler" and had an attack of lead colic "so severe that doctors were unable to control the pain; he became delirious, and during an unguarded moment he took a fatal dose of the morphine which had been left beside him, and died" (p. 11).

These are not dry, sterile case histories that a medical or scientific audience might expect in a highly technical report, weighed down, as it was, with scientific language and lengthy descriptions of the lead trade manufacturing processes. Alice Hamilton's inclusion of the details of ordinary life humanized the tragic consequences of industrial poisoning for a professional audience that, by 1912, was only just beginning to grapple with the problem.

In the course of her life, Alice Hamilton apparently never relinquished the use of aggressive language as a persuasive tool. Her biographer, Barbara Sicherman, wrote that even in old age Hamilton continued to express vigorously her opinion on issues such as civil liberties, McCarthyism, and a foreign policy based on militarism in letters to members of Congress, to newspapers, and to her old friend, Supreme Court Justice Felix Frankfurter. Hamilton was, in fact, so publicly vocal that in her eighties, the former chief investigator of the House Committee on Un-American Affairs included her among the "top academic collaborators with the Communist-front apparatus" in an article that appeared in the American Mercury (Sicherman, 1984, p. 392), and the FBI continued to maintain a file on her as a suspected subversive (p. 381).

Taken on their own, these examples of Alice Hamilton's aggressive language might suggest that the major difference between her rhetoric and that of the muckrakers' was the publications in which their respective discourses appeared. In actual fact, what distinguishes Alice Hamilton's rhetoric from muckraking "realism" (Hofstadter,

1956/1955, p. 196) was that she rarely left her audience with a one-sided picture, even when describing egregious situations that cried out for reform.[51]

For example, in an address to the National Conference of Charities and Correction in 1911, in which she leveled many harsh criticisms of American industry, Alice Hamilton also said of her investigations of factories for the Illinois Commission on Occupational Diseases, "As a usual thing, we found the man at the head not only approachable but very reasonable and often eager to receive suggestions" (Hamilton, 1911, p. 203). Similarly, in an article for The Survey in which she expressed dismay over the irresponsibility of a manager of a white-lead works who opposed a workers' compensation law for lead poisoning, she concluded,

> That law has been in effect now some eighteen years, and I am sure my friend the manager has long ago forgotten that he ever opposed it, for certainly everything possible is done in his plant to prevent harm to the men, and, if a case of poisoning develops, compensation is paid without question. (Hamilton, 1929, p. 583)

Her use of the words "approachable," "reasonable," and "eager to receive suggestions," to describe factory owners in Illinois, her reference to the recalcitrant lead-works manager as "my friend," and her acknowledgement that he now does everything possible to "prevent harm to the men" and pays compensation "without question" demonstrated the balance in her arguments for workplace reform. She took employers to task, individually and collectively, but she did so without demonizing all employers as heartless or unredeemable. She was also quick to praise improvements in conditions, as when she stated in the introduction to her 1914 technical bulletin, Lead Poisoning in the Smelting and Refining of Lead,

> There has been in recent years evidence of a greater interest on the part of managers in the health and safety of their workmen, and there is probably now no

> plant in the United States in which some effort is not made to lessen the dangers of lead poisoning as well as to prevent accidents. (Hamilton, 1914, p. 5)

Alice Hamilton showed similar balance in responding to the national concern aroused by the production and sale of leaded "ethyl-gasoline" in her 1925 article in The Woman Citizen entitled, "Concerning Motor Car Gasoline." Given the devastating effects of lead poisoning that Hamilton had witnessed firsthand among workers in factories and plants and her discovery of the danger from airborne lead particles, one would almost expect her rhetoric to be aggressively cautionary. Instead, she is even-handed, laying out research findings with clarity, completeness and fairness. For example, she tells her audience, largely members of the National Woman's Party, that "…tetra-ethyl lead can increase the efficiency of gasoline fifty per cent, thus helping greatly in the conservation of oil, which up to now has been used in so notoriously wasteful a fashion" (Hamilton, 1925b, p. 14); and that "The industrialists consider the discovery of this compound, for which Thomas Midgley, Jr., of Ethyl-gas Corporation has received a medal, one of the most important in recent years" (p. 14). At the same time, she balances this positive information with the negative reality that the production of ethyl-gasoline since 1922 in American plants owned by DuPont, General Motors, and Standard Oil has resulted in the poisoning and several deaths, facts that were withheld from the public:

> We began to hear vague rumors of insanity and death among workmen engaged in producing it during the fall of 1923. In the older industrial countries such accidents could not be kept secret, an investigation by competent state experts would be made immediately and the facts given to the public. But here that did not happen until October 1924, when a large number of men employed in the Standard Oil Company's plant in Bayway, New Jersey, became poisoned—five died and about twenty more were under treatment. It was then disclosed that these were not the first deaths, for two men had died in the General Motors plant in Dayton, Ohio, and three in Carney's Point, New Jersey. Since then only one death

> has been recorded although when the statement was made at the Washington Conference that the deaths numbered fifteen it was not denied. (Hamilton, 1925b, p. 14)

Hamilton is direct in her criticism of the initial attempts to keep these facts from the public, as evidenced by her words, “In the older countries such accidents could not be kept secret, an investigation by competent state experts would be made immediately and the facts given to the public.” She nevertheless balances out even this criticism by adding that “The companies in question have made extraordinary efforts since the fatal accidents occurred to safeguard this work and there is no reason why there should be a repetition of the poisoning and death that attracted so much attention” (p. 14).

Even in her most devastating criticisms of industry or of social conditions, Alice Hamilton showed herself unwilling merely to engage in polemics. For example, in addressing the California Medical Association in 1944, during World War II, Alice Hamilton acknowledged that the First World War “gave industrial medicine a great boost forward” and that “the second is going to push it on still further,” adding “It is a comfort to think of one good thing coming out of this ghastly mess” (Hamilton, 1944, p. 60). Alice Hamilton held fast to her argument that war was “ghastly,” while admitting that even war can have its upside.

Alice Hamilton often balanced the two sides of an issue within the same sentence, as when she told a technical audience that factory foremen “have different standards, and while some are slovenly, others are naturally lovers of cleanliness” (Hamilton, 1912, p. 41); a reform audience that “from employers, one may get trustworthy information and one may get information that is false” (Hamilton 1911, p. 200); and a popular audience that “the factory was under a benevolent despot; but there are despots who are not

benevolent, and they cannot be omitted in any description of industrial conditions in this country of ours" (Hamilton, 1929, p. 589). Similarly, in her autobiography, she wrote, "The Carnegie Company's principle of a high tariff to shut out cheap foreign-made goods, and a wide-open door to let in cheap labor, resulted in the building up of great fortunes; but measured in terms of human welfare it was cruel and ruthless (Hamilton, 1943, pp. 6-7); and "Yet in spite of the neglect of the doctors and the medieval backwardness of the lawmakers, the picture of that period is not all black, it is lightened by some remarkable instances of wise and humane employers, who were far in advance of their times" (p 7).

Alice Hamilton's disposition to look for the psychological motivation behind behavior that she condemned was a means by which she balanced her criticism with understanding. For example, in the 1908 Survey article in which she compared American industrial work to slavery and accused America of being "reckless of health and life and impatient of the control of law," she recognized industrial abuses as possibly "a relic of the youthful daring pioneer spirit, which achieved such brilliant things in the early days of our country" (Hamilton, 1908, p. 658). In the Sacco and Vanzetti memorial speech at Madison Square Garden, in which she decried the vengefulness of American justice and the prejudice of juries, she also observed, "It is hard for most Americans to forgive a foreigner who comes to this country with high hopes and then suffers disillusionment, who instead of feeling gratitude and admiration is bitterly disappointed and actually sets himself to try to change things (Hamilton, 1929a, p. 1). In her speech to the California Medical Association, she attributed the erroneous claim of an "eminent physician" that benzol poisoning could be prevented by body cleanliness to "the subconscious comfort

that a man gets in being able to pass on to the worker the responsibility for a very distressing occurrence, a case of occupational disease, and to that temptation a good many men do succumb" (Hamilton, 1944, p. 55). Even when she did not agree with a situation, such as abuse of workers, injustice to immigrants, and bad science, Alice Hamilton tried to understand the psychology behind it.

She took a similarly balanced approach in how she called for workplace reforms. In her 1908 piece on industrial diseases in The Survey, for example, Alice Hamilton wrote, "Long hours, artificial light, dusty and dirty rooms, over-crowding, are not essential to any industry, but they are very common features of many" (Hamilton, 1908, p. 657), suggesting that "essential" industrial conditions do exist and must be factored into reforms. Arguing in the same vein in a 1912 Bureau of Labor technical bulletin on lead poisoning, she wrote that "a great deal could be done to control the [lead] dust without altering the present method of manufacture" (Hamilton, 1912, p. 41). As with the phrase "not essential to any industry," "without altering the present method of manufacture" suggests Hamilton's willingness to work with industry rather against it; to achieve reforms within the framework of industry's processes, where possible. That idea is echoed in a Cummings Memorial Lecture Hamilton delivered at the Ninth Annual Meeting of the American Industrial Hygiene Association some 36 years later. In reviewing the development of methods for preventing industrial poisoning, she says,

> Even now the shortening of exposure may be adopted as the only practical way of avoiding serious trouble. There are emergencies, such as accidental spillage, or breakage, or unusual repair work, which have to be dealt with at once. It may be that the only possible way to manage is to let no individual work in the poisoned air for more than a few minutes. (Hamilton, 1985/1948, p. 4)

Here, Hamilton takes a balanced approach to preventing workplace poisonings that is both "practical" for industry and avoids "serious trouble" for workers. Specifically, she balances the needs of industry ("There are emergencies. . .or unusual repair work, which have to be dealt with at once") with the needs of workers to be protected ("let no individual work in the poisoned air for more than a few minutes"). Rhetorically, the imperative "have to" is balanced with the imperative "let no" in this passage.

Alice Hamilton demonstrated a willingness to "play fair" rhetorically. She often explicitly or implicitly acknowledged the two sides of a contested issue or, at the very least, attempted to expose the psychology behind a position with which she disagreed. She balanced out harsh criticism of American industry and institutions with a measure of compassionate understanding for the human ignorance often found at the root of abuse or intolerance. The balance found in Hamilton's discourse is emblematic of the feminist-pragmatist struggle to achieve balance in all aspects of life as New Women pioneering a new path between the family claim and the social claim, between the logic of science and the logic of emotion, and between the competing values of the late-Victorian and the Progressive eras.

Transcendence

While playing fair was a strategy for achieving balance, Alice Hamilton also adopted a rhetorical stance that positioned her above the fray, as a kind of impartial arbiter of truth, an umpire as opposed to a player. I use the term "transcendence" to describe this characteristic of feminist-pragmatist rhetoric, employing the term not in the Burkean sense but closer to what Heysse (1997) has described as "the transcendent perspective of the logician," the "objective perspective of a neutral observer" (p. 219). He

writes, “This objective self is omniscient in the sense that he succeeds in conceiving of the world as a whole, individual viewpoints included” (Heysse, 1997, p. 220). From this vantage point, the rhetor might be conceived by the audience as God-like, or as speaking for God.

Alice Hamilton’s generation was a scientific one, and like others of her era who enjoyed the intellectual legacy of Darwin’s discoveries, she believed that truth could best be arrived at through science. “If it [a theory] is scientifically true,” she wrote in 1913, “it must be accepted, no matter at what cost” (Hamilton, 1913, p. 865). Her training as a scientist and the prestige that science enjoyed at the turn of the century conferred upon her an advantage in arguing from transcendence, even on nonscientific matters.

So, for example, when Alice Hamilton writes in her 1911 speech to the National Conference of Charities and Correction that she “puzzled a great deal over this curious blind spot of ours” (Hamilton, 1911, p. 198) that allowed Americans to think conditions in their factories were superior to conditions in European factories, she is arguing from transcendence. Her use of the word “ours,” despite its suggestion of identification, doesn’t confuse her audience into thinking that Alice Hamilton herself has a “blind spot” on this issue. Her audience knows she can’t “puzzle” over her own blind spot; puzzling is done by one who is above such human frailties, one who sees the big picture, as from a distance. This rhetorical positioning would not have been possible had she used a more loaded descriptor, such “egregious “or “ridiculous,” which would have broken the aura of objectivity created by the neutral language. When Alice Hamilton follows up with the statement that she could “find only one explanation for it [America’s blind spot] and that not altogether satisfactory” (Hamilton, 1911, p. 198), she is priming her audience to

accept her finding as the initial pronouncement of an objective scientist who was still questing for more satisfactory answers to this “curious” problem. Hamilton solidifies her transcendent position in this piece by speaking for science, i.e., reporting on the scientific investigations undertaken to address the “blind spot”—“We found about seventy industrial processes which are productive of lead poisoning in Illinois and we inspected the hygienic condition of 304 establishments in which lead is handled” (Hamilton, 1911, p. 201); and “Eighty-nine brass foundries were inspected and it was found that 63 were acknowledged centers of trade sickness, and seven more were apparently as bad, while of the remaining 19 only four were undoubtedly well enough equipped to prevent industrial disease (pp. 205-206).

When she was writing or speaking on scientific matters to reform audiences, Alice Hamilton also demonstrated transcendence through rhetorical maneuvers such as those that appeared in her 1925 piece, “Concerning Motor Car Gasoline.” Because of Alice Hamilton’s role in assisting the U.S. Government in examining the public health implications of leaded gasoline, The Woman Citizen magazine had invited her to explain to its readers the controversy surrounding the product’s manufacture and sale. In this article, having been editorially introduced as “one of the experts who were summoned to Washington to confer on the much discussed tetra-ethyl lead” (Hamilton, 1925b, p. 14), Alice Hamilton took on the transcendent status of the expert witness in her opening paragraph:

> On May 20 last, there met in Washington, at the invitation of Surgeon General Cumming of the Public Health Service, a number of industrialists interested in the production and sale of what has come to be called ethyl-gasoline, and with them physiologists, chemists, clinicians, and experts in public health who were interested in the question of possible danger to the public from the use of the new compound. (Hamilton, 1925b, p. 14)

From the outset, her audience was apprised that she speaking as one of the "experts in public health," and an acknowledged expert at that, invited by the Surgeon General himself. This would have carried great weight with the female readership of The Woman Citizen, a magazine dedicated to removing barriers to women's leadership and influence in the world. Her audience's confidence in granting her "expert" status was then reinforced by Alice Hamilton's display of technical knowledge concerning the matter at issue.

> A motor engine consists essentially of cylinder, piston, and two valves—the first valve lets in air and gasoline, the piston compresses it, the spark ignites it, the piston moves, and the second valve lets out the gasses. There are therefore four stages, drawing in, compressing, ignition, and discharge, and it is desirable to reduce the space for the second so that there may be less dilution of gas, less exhaust retained, less surface to heat. But if compression is raised, "knocking" results." (Hamilton, 1925b, p. 14)

Alice Hamilton's readers would likely have looked up to, if not been somewhat awed by, a woman who could write with such command about the workings of an internal combustion engine, machinery being a subject traditionally belonging to the male domain, and about which few women of the era would have been expected to even be knowledgeable. Hamilton took the transcendent role of the teacher in this passage ("A motor engine consists essentially of cylinder, piston, and two valves. . ." as a means of empowering her readers to comprehend the debate that was underway.

Alice Hamilton's own impartiality on the controversial issue of leaded gasoline, despite her reform background, was a signal to her audience that she was an "umpire" in the controversy who could see the issue in its entirety, including the viewpoints of all the "players."

> Many compounds were tested before tetra-ethyl lead, in the effort to do away with "knocking"; but none compare in efficiency with tetra-ethyl lead. . . . With motor engines specially constructed, tetra-ethyl lead can increase the efficiency of gasoline fifty per cent, thus helping greatly in the conservation of oil, which up to now has been used in so notoriously wasteful a fashion. . . . (Hamilton, 1925b, p. 14).

Alice Hamilton's audience was aware that she had made her public health reputation as a reformer who investigated industrial poisons, focusing particularly on lead poisoning. By providing her readers with insight into the rationale of producers of leaded gasoline ("many [anti-knocking] compounds were tested," but "none compare in efficiency to tetra-ethyl lead"); and by describing the merits of the product ("tetra-ethyl lead can increase the efficiency of gasoline fifty per cent, thus helping greatly in the conservation of oil"), Alice Hamilton stepped out of the role of reformer and into the role of impartial arbiter of scientific truth. In so doing, she strengthened her hand by showing herself able to deal objectively with the core scientific issue at stake:

> The real question is one of possible danger to the public from small quantities of lead dust. What becomes of the lead in the gasoline when it is burned? The Bureau of Mines answered this question by showing that is it changed to chloride, sulphate and oxide. The last two compounds of lead are very familiar to us because they are used a great deal in industry, and men who handle them suffer from lead poisoning if the dust gets into the air and they are obliged to breathe it in. Lead chloride is not used in industry [sic] but it is decidedly more poisonous than the other two because [it is] very much more soluble, and therefore we know that chloride dust will do more harm than the dust with which we are already familiar. The Bureau of Mines experiments showed that about sixty-three percent of the lead in gasoline is deposited as powder or scales in the engine hood, exhaust pipe, crank case, etc., and forty-seven percent is discharged with the exhaust gases as a fine powder with some heavier particles. (Hamilton, 1925b, p. 14)

Alice Hamilton argued from expertise, as in "The Bureau of Mines answered this question"; "We know that chloride dust will do more harm"; and "The Bureau of Mines experiments showed." She identified the scientific research question that needed

answering when she wrote, “The whole question is the extent of this danger. Is the amount of lead so small that it can safely be ignored?” (Hamilton, 1925b, p. 15); and she reported the Surgeon General’s decision to suspend retail sales of ethyl gasoline until a committee of experts could answer the question. When, in summing up, Alice Hamilton wrote, “These are the facts which have given rise to all the agitation about the use of ethyl-gasoline” (Hamilton, 1925, p. 14), the phrase “the facts” had the ring of authority of one speaking from the transcendent position of the scientific expert who could rise above her own reform impulses to impartially convey the scientific issues at stake.

In contrast to the impartial position she assumed in her article in The Woman Citizen, it was as a reformer that Alice Hamilton represented the National Consumer’s League in a spirited debate with Doris Stevens52 of the National Woman’s Party. The debate appeared in the August 1924 issue of a small, public affairs magazine, The Forum. At issue was a “blanket” Equal Rights Amendment proposed by the National Woman’s Party and opposed by the National Consumer’s League because of the amendment’s potential to supplant protective legislation for women in the workplace.

In this debate, Alice Hamilton staked out the higher ground rhetorically by immediately directing her audience’s attention to her greater objectivity and credibility on the issue of women’s rights. She opened with the following statement:

> There is a difference of opinion between two groups of women in this country with regard to the best way to secure for women freedom from discriminatory laws which hamper them as women and which survive as anachronisms in a modern society. The goal of all feminists is the same, the securing for women of as great a degree of self-determination as can be enjoyed in complex community life without detriment to others, and freedom from handicaps in the industrial struggle. The method whereby this is to be secured is the point of controversy. I belong to the group which holds that the right method is to repeal or alter one by one the laws that now hamper women or work injustice to them, and which opposes the Constitutional amendment sponsored by the Woman’s Party on the

> ground that it is too dangerously sweeping and all inclusive. (Hamilton, 1924, p. 152)

With the words “the goal of all feminists is the same” and “the method whereby this is to be secured is the point of controversy,” Alice Hamilton reframed the debate from the polemical, “right/wrong” argument of her opponent, Doris Stevens, to the more objective argument of “how best.” Rather than making their differences her focus, as Stevens had done in arguing in favor of the amendment in the same article, Hamilton elevated the debate to the level at which there was agreement—securing for women “the freedom from discriminatory laws which hamper them as women.” Rather than ridiculing her opponents, as Stevens had done, Hamilton identified with them as fellow feminists who recognized discrimination against women as outmoded, an “anachronism in a modern society.” “I come from a family of suffragists; my grandmother was a close friend of Susan B. Anthony, and I certainly never wished for any sort of privilege or special protection during my own career as a professional woman,” she reassured her readers (Hamilton, 1924, p. 159).

The result was that when Alice Hamilton then recommended a grand strategy for achieving the “goal of all feminists” without incurring the harm of an “all inclusive” amendment (i.e., to “repeal or alter one by one the laws that now hamper women or work injustice to them”), she addressed her audience from the transcendent position of one who had risen above the petty language of attack and ridicule to address the big picture in the interests of all women. She had made herself the “bigger” person in the debate. Her seeming identification with her opponents (“I come from a family of suffragists”), was, in fact, a rhetorical sleight of hand that that allowed Alice Hamilton to speak not for herself but rather for all women.

In the criticisms that Alice Hamilton did allow herself in this piece, she maintained her transcendent position by finding her opponents guilty of ignorance rather than malice and by holding herself up, in comparison, as more knowledgeable and experienced. “Experience is a thorough if hard teacher,” she wrote (Hamilton, 1924, p. 160).

> We are told by members of the Woman’s Party that if we ‘free’ the working woman, allow her to ‘compete on equal terms with men,’ her industrial status will at once be raised. She is now supposed to be suffering from the handicap of laws regulating her working conditions and hours of labor and longing to be rid of them. But such a statement could never be made by anyone familiar with labor. (Hamilton, 1924, p. 154)

The phrasing of “such a statement could never be made by anyone familiar with labor” itself insinuates that Alice Hamilton is familiar with labor. She could speak with the authority of firsthand experience, as when she writes,

> The advocates of the amendment quote in its favor working women who have lost their jobs because of laws prohibiting night work or overtime, and of course such cases do occur. The bitterest opponent of trade unionism is the highly skilled, exceptionally capable workman with an individualistic outlook on life, who resents any control from the group and wants to be let along to work when and how he pleases. That his grievances are often real, nobody can deny, but if we are to live in a community, the greatest good to the greatest number must outweigh the rights of the individual. For every woman linotypist who wishes to take night work on a newspaper, there must be hundreds of textile mill operatives who suffer from the compulsion to work on the night shift. (Hamilton, 1924, p. 153)

In this passage, Hamilton achieves transcendence through three rhetorical moves. First, she firmly establishes herself as one familiar with labor by way of the specificity of her examples: “the bitterest opponent of trade is the highly skilled, exceptionally capable workman with an individualistic outlook on life,” the “woman linotypist who wishes to take night work,” and the “hundreds of textile mill operatives who suffer from the compulsion to work on the night shift.” Only one who has spent time in the trenches, so

to speak, with laborers could comment on their outlook on life or how they are compelled to work at night. Next, Hamilton positions herself as an impartial umpire in the debate by admitting the weaknesses in the argument against an Equal Rights Amendment with the words, “such cases do occur” and “That his grievances are often real, nobody can deny.” Finally, she shifts the argument, and herself as rhetor, to a higher plane by introducing men into the equation (“exceptionally capable workman”), thereby taking this from an argument about women’s rights to a universal debate over a democratic principle, “the greatest good to the greatest number.”

Alice Hamilton further bolstered her transcendent position both as one “familiar with labor” and a scientist in this piece by relying heavily on statistical data gathered in mills and factories to convince her readers that a blanket amendment would do women more harm than good. For example, she reported on studies in England and America that showed women’s much greater susceptibility than men to lead poisoning in the lead trades.

> In England, in those trades in which both men and women have been employed in contact with soluble lead compounds, such as pottery glazing and decorating and the production of white lead, it has been shown by abundant statistical evidence that women are at once more susceptible to lead poisoning and suffer more severely when they are poisoned. Recently the United States Public Health Service published a report of the potteries in New Jersey, Pennsylvania, Ohio, and West Virginia in which the same over-susceptibility of women is shown. They examined 1, 809 men and women employed in work which brought them in contact with soluble lead and found that the average period of exposure to lead of the men who developed lead poisoning was 17 years, but the average period of exposure of the women was only 9.3 years. (Hamilton, 1924, p. 158)

By arguing from the transcendent position of science, Alice Hamilton could tell her audience with authority that the “freedom” for women promised by the National Women’s Party through a blanket Equal Rights Amendment was “a mockery,” and that,

"far from benefiting the woman wager earner, it simply hands her over to the exploiting employer" (Hamilton, 1924, p. 155).

Hamilton was a "difference" feminist, and she also used science to support her argument that women needed protection not only because of their greater susceptibility to industrial poisons, but also because of their unique value to society as bearers of children and as guardians of the race. For example, she writes,

> The advocates of the blanket amendment say that they do not oppose laws designed to protect the child, that they are ready to favor protection of "pregnant persons." This is, of course, an important concession. But the damage done by an industrial poison may antedate pregnancy. Women who have worked in a lead trade before marriage and still more women who work in lead after marriage are more likely to be sterile than women who have worked in other trades; if they conceive they are less likely to carry the child to term; and if they do they are less likely to bear a living child and their living children are less able to survive the first weeks of life. There are many proofs of this in the literature. . . . (Hamilton, 1924, pp. 159)

In this instance, Hamilton's scientific data was used to call her audience to the transcendent, shared values of the sanctity of motherhood and the sacred duty to protect the health of future generations. When she challenged the suppositions of the National Women's Party regarding the true status of working women, she spoke with the transcendent authority of one who had been a foot-soldier in the battle, but was now operating above the fray, from the omniscient position of the master strategist who saw the bigger issues at stake.

One of the key ways in which Alice Hamilton argued from transcendence in addressing popular audiences was to appeal to their commonly held religious beliefs and highest ideals. In an article for The Nation during World War II, for example, she based her argument in favor of sending food to countries under German control on Christian principles:

> If it is really impossible to help these people without indirectly helping Germany, then throughout this winter we shall have to watch the inevitable starvation of thousands of helpless people, especially the "sick persons and young children" whom for centuries Christians have commended to the care of a merciful God. (Hamilton, 1940, p. 596)

Many in Alice Hamilton's audience would have recognized the phrase "'sick persons and young children'" from "The Litany" portion of the Book of Common Prayer, spoken at Sunday morning worship services across America to invoke God's mercy on his people. In reciting from a "common" prayer, Alice Hamilton was speaking on behalf of all Christians.

Hamilton spoke for all Americans in this piece when she appealed to shared values and principles.

> This war is being fought to save the values for which civilized people stand—not only for freedom and justice but for mercy and a belief in the supreme worth of each human being. If we choose as our weapon starvation, not of the fighting forces but of the most helpless, are we not destroying the very values we seek to save? (Hamilton, 1940, p. 597)

The words "civilized," "freedom," "justice," "mercy," and "a belief in the supreme worth of each human being" symbolized American values and principles that transcended political differences and were foundational to American democracy.

Alice Hamilton also alluded to passages from the Bible in her rhetoric, speaking, literally, for God. For Americans, invoking the Word of God is a time-honored rhetorical practice. Darsey (1997) writes that in the United States, the Christian Bible has been a ubiquitous and powerful presence in our public discourse, and that, in fact, the "primitive source for much of the rhetoric of reform in America has been the prophetic books of the Old Testament" (p. 6). While Alice Hamilton relied heavily on the words of the New Testament in her persuasion, particularly the words of Christ, Darsey's assertion that "the

uppermost idea with Hebraism is conduct and obedience" (p. 7) would apply equally to the words of Christ, rooted as they are in the Old Testament prophetic tradition.

In the "Angels of Victory" anti-war piece written for The New Republic in 1919, for example, Alice Hamilton's rhetorical transcendence manifested itself as prophesying about the inevitable outcomes of war and of a peace treaty that punished and humiliated the vanquished nations. Drawing upon her extensive knowledge of Holy Scriptures to speak on God's behalf, she wrote,

> Perhaps we may come to see that they who appear to be the victors have lost things that really matter, and that the losers may in the end have won them; that they who drew the sword have perished by the sword while the dumb, meek masses whom they led into war remain to possess the earth. Perhaps we may come to look on the so-called peacemakers at Paris as men who had ears to hear and heard not and whom we shall liken to a foolish man which built his house upon the sand; and the rain descended, and the floods came, and the winds blew, and beat upon that house, and it fell; and great was the fall of it. (Hamilton, 1919, p. 245)

Here, Alice Hamilton paraphrased Jesus' beatitudes ("blessed are the meek, for they shall possess the earth"); parables ("a foolish man [. . .] built his house upon the sand"); his admonitions ("all who take the sword will perish by the sword" and "For what shall it profit a man if he shall gain the whole world, and lose his own soul?"), as found in the gospels of Matthew, chapters seven and 26, and Mark, chapter 8; and Old Testament prophecy from Ezekiel 12 and Jeremiah 5 ("they have ears to hear, and hear not"), to draw her audience's attention heavenward to what she called eternal truths, the "prophetic logos" (Darsey, 1997, p 10). Arguing from what Darsey (1997) calls "the circular power of the sacred" (p. 21), Alice Hamilton (1919) wrote, "It must be that deep down in their hearts men know that these words are true and that history vindicates them, for it not, they would have long since sunk into forgetfulness," (Hamilton, 1919, p. 245).

Alice Hamilton was calling her audience back to its covenantal relationship with God (Darsey, 1997). Despite her references to the admonitions of Ezekiel and Jeremiah, her focus was not the covenant of the Old Testament, with its emphasis on the need for God's people to separate themselves from (and even conquer militarily) heathen foreigners. Rather it was the New Covenant of brotherly love that Christ represented, a covenant that looked beyond national and ethnic differences to a common humanity, a covenant that, for Alice Hamilton and other feminist-pragmatists, was embodied in the ideals of American democracy. In arguing that these truths transcended time and place, Alice Hamilton enacted the role of the prophet "to bring the practice of the people into accord with a sacred principle" (Darsey, 1997, p. 16). She called her readers to a higher place from which to consider the events of World War I, the shared tradition of the Christian virtues expressed in Luke 6, verses 27-31, of loving your enemies, turning the other check, and doing to others as you would have them do to you.

When she prophesied that, like the foolish man in Jesus parable, the "so-called peacemakers" orchestrating the Treaty of Versailles had "ears to hear but heard not" and would see their unjust peace collapse like a house built upon sand, she was enacting the prophet's "uncompromising, often excoriating stance toward a reluctant audience" (Darsey, 1997, p. 16). Virtually every member of her audience in 1919 would have recognized these Scripture passages, as well as the exhortative style in which they were written, the purpose of which was to evoke in the audience an emotional response that "induces belief in the situation to which the emotion is appropriate (Black, 1965/1978, p.138). Her audience would have understood, from the basis of a shared Judeo-Christian upbringing, that Alice Hamilton was speaking not in her own behalf, but was rather

asserting that she was called by God to speak for God in a time of crisis to correct the people's failure of perception: "perhaps we will come to see" and "perhaps we will look," she wrote. Like the Old Testament prophets, Alice Hamilton took no pleasure in the denunciation of her people—there is a distinct sorrowfulness in the words, "and great was the fall of it"—but the prophetic warning for America that those words contained was recognizable.

In her moving 1929 speech at Madison Square Garden commemorating the deaths of Sacco and Vanzetti, Alice Hamilton argued from the higher plane of universally held ideals, as well as prophetically. With the words, "I cannot speak to you tonight of these two men whose death we are commemorating as one who knew and loved them, for I never knew them, never even saw them, nor was I present at any session of the court that tried them" (Hamilton, 1929, p. 1), Alice Hamilton asserted that her motives were something more than personal and that she was capable of a far greater objectivity than a friend of Sacco and Vanzetti might have been. When she continued, "No, I do not belong to the group of personal friends but to that far larger group of men and women all over the world who saw in this case a symbol of the ever-renewed struggle for human justice" (p. 1), she positioned herself as one whose motives were linked to one of the highest of human ideals, "justice," in a universal battle that must be fought in every generation, but will never be won. It was an argument that would have inspired an audience of beleaguered supporters of Sacco and Vanzetti to look beyond their unsuccessful, seven-year battle to prevent the execution of these two men and to focus their attention on the symbolic significance of these deaths and the larger issues at stake.

In the closing paragraph of the speech, Alice Hamilton called upon her audience to hold fast to that higher meaning and the hope it offered.

> Again and again in history it has taken a great and dramatic wrong to bring about a reform long over-due. I will not recapitulate the instances, [sic] they are familiar to all of you. Perhaps—this is our greatest hope—it may prove that the death of these two men is another instance and that the long over-due changes in our treatment of the accused may have their beginning in this terrible revelation of our shortcomings. (Hamilton, 1929, p. 5)

Taking the transcendent "long view" with the words "Again and again in history," Alice Hamilton turned the court's judgment against Sacco and Vanzetti on its ear, putting American jurisprudence itself on trial and casting Sacco and Vanzetti as martyrs to an unjust system. The words "again and again in history" demonstrate Hamilton's transcendent view of the events as considered in the light of history. By calling the deaths of Sacco and Vanzetti symbolic of other "great and dramatic" wrongs, Alice Hamilton made these otherwise ordinary men into transcendent, larger-than-life figures whose deaths might provide the catalyst for "long-overdue changes" in America's system of justice. From a rhetorical perspective, the personhood of Sacco and Vanzetti and, for that matter, Alice Hamilton herself, are of less importance than the cause they represent; their individuality is subsumed in the larger issue of correcting societal injustice. Sacco and Vanzetti, by their deaths, and Alice Hamilton, by her words, together fulfilled the transcendent role of the prophet: they were, all three, servants to the message, confronting society with its failure to uphold its most cherished and fundamental values (Darsey, 1997).

In speaking in this address of "our greatest hope," Alice Hamilton extended to her Madison Square Garden audience the opportunity to join in the transcendence, inviting them to engage the familiar Christian perspective toward martyrdom, with its promise of

reform and redemption. Within that reformation lies what Darsey (1997) calls the "essential optimism of the prophetic judgment" (p. 27), the reinstatement of the covenant relationship and the resolution of the crisis as "this terrible revelation" of the nation's "shortcomings" is acknowledged and repented.

When addressing her peers in the scientific and medical communities, for whom objectivity was a professional norm, Alice Hamilton's rhetorical challenge was to transcend her role and reputation as a "woman reformer" and to demonstrate her *authoritas* as a scientist. As Prelli (1989) explains, "The professional ethos of a rhetor as a scientist becomes specially relevant when there is reason to believe that his or her primary aims are tied to such 'nonscientific' pursuits as . . . achieving political or religious aspirations"(p. 50). Alice Hamilton never ceased advocating for her feminist-pragmatist ideals, even in her technical, scientific works. Nevertheless, she transcended the limitations that advocacy might have posed for her credibility as a scientist in part by adhering in her rhetoric to the six institutional norms of the scientific ethos: universalism, which subjects claims to "pre-established, impersonal criteria that render them consonant with observation and previously established knowledge"; communality, which prescribes that research is not personal property but must be made available to all; disinterestedness, which requires that scientists fulfill their self-interests through accomplishment of the work itself and through serving the scientific community; organized skepticism, which "mandates that scientists. . .scrutinize beliefs critically against empirical and logical criteria of judgment"; originality, which helps to advance the scientific body of knowledge; and humility, which counterbalances inappropriate behavior that could result from the emphasis on originality (Prelli, 1989, p. 49). Beyond adherence to these norms,

Hamilton's pioneering work and commitment to scientific rigor and excellence would have automatically accorded her a measure of professional respect among her peers.

Not surprisingly, a hallmark of Alice Hamilton's discourse to professional audiences was her extensive use of data to make her arguments, presented in such a manner that, as Darsey (1988) wrote of Eugene Debs, the speaker Alice Hamilton disappeared to allow the absolute, objective truth to emerge (p. 445). In her discourse with scientific audiences, Alice Hamilton spoke for the God of the twentieth century, whose name was "science" and whose truth was continuously unfolding, building on past truths, and finding new directions. In a 1913 Bulletin of the U.S. Bureau of Labor Statistics entitled, Hygiene of the Painters' Trade, for example, Alice Hamilton introduced her topic with a surprising disclaimer and a firm commitment:

> It is absolutely impossible to discover even approximately the proportion of painters in the United States who suffer injury from the use of lead paint. . . .This study is presented, therefore, as a tentative report only, a collection of what can be gleaned from the scanty sources available. In every case where a statement is made, care will be taken to explain upon what foundations it rests and how nearly accurate it may be assumed to be. (Hamilton, 1913, p. 5)

With the astonishingly candid words "absolutely impossible to discover even approximately," Alice Hamilton demonstrated the institutional norm of "humility" of the scientific ethos (Prelli, 1989, p. 49), admitting at the outset the limitations of this study in the face of nonexistent national data. Her candor was impressive, not only because of the scientific integrity inherent in the statement, but also because she represented the U.S. Government, where such honesty would normally be considered a political liability. The phrase absolutely impossible to discover" suggested to her readers that they were hearing from a scientist, not a politician. Alice Hamilton underscored her transcendent role as a spokesperson for science by using the passive voice to make herself less visible, as in

"care will be taken," rather than the active voice and a personal pronoun, which would have drawn attention to herself as rhetor. When she committed to provide both the "foundation" for each statement of fact, as well as an assessment of its probable degree of accuracy, Alice Hamilton announced her intention to adhere to the norm of "organized skepticism."

Despite the caveat that what she offered was a "tentative report," in the 68 pages of data and analysis that followed, Alice Hamilton demonstrated the norms of both "organized skepticism," "originality," and "communality" (Prelli, 1989, p. 49), advancing scientific knowledge by providing her audience with comprehensive, state-of-the art information on lead poisoning in the painting trade. For example, in this bulletin, Alice Hamilton upheld her reputation for getting to know a trade from the inside out: after she investigated a poisonous trade, there was simply no one, other than the workers themselves, who knew more than she did, and her audience became the beneficiary of what she learned. Thus, she was able to demonstrate originality by speaking with unique authority about the painting trade, making such absolutistic statements as, "This is the most widespread of the lead-using trades" (Hamilton, 1913, p. 5); and "No house painter can work for any length of time without being obliged to employ lead paint to some extent, but in factory work a painter may use leadless paints entirely" (p. 6). As was typical of her scientific writing, in this bulletin Alice Hamilton took an "A to Z" approach to her subject, for example, educating her audience on the "Composition of paint":

> A paint is a mixture of pigment and vehicle (liquid portion) either of which may be harmless or poisonous. Usually there is at least one substance in paint which is capable of producing harmful effects on the workmen who handle it; often there are several of such substances. High-priced paints usually consist of white lead, linseed oil, and turpentine, the first and last of which are poisons. Cheap paints may contain as pigments nothing more dangerous than chalk or barites, but the

> liquid portion may be so strong in petroleum products as to cause acute poisoning among men who are obliged to use the paint in small ill-ventilated inclosures. (Hamilton, 1913, p. 7)

In this passage, Hamilton adhered to the norm of "organized skepticism" by providing information on the composition of paint that was verifiable by known scientific means, as in "A paint is a mixture of pigment and vehicle (liquid portion) either of which may be harmless or poisonous," and "High-priced paints usually consist of white lead, linseed oil, and turpentine, the first and last of which are poisons." She also demonstrated the norm of "communality" by making available to a wide, new audience important findings about industrial poisoning that she had discovered in the course of her investigations, as when she writes that the liquid portion of cheap paints "may be so strong in petroleum products as to cause acute poisoning among men who are obliged to use the paint in small ill-ventilated inclosures." Hamilton displayed "universalism" by providing a thorough review of what could be learned about the hygienic risks of the painters' trade from European and American scientific literature, such as, "In the Pasteur institute experiments were made under the direction of Trillat which showed that fumes from white lead paint are capable of hindering the growth of vegetable molds (p. 9). She lived up to her commitment to support her statements with evidence and to reveal the degree of its reliability, as in "Baly insists that the fumes in question do not contain lead in any form" (p. 9); and "If these experiments are confirmed, we shall have to regard the symptoms. . . as caused by a transient poisoning from aldehyde fumes, not as lead poisoning" (p. 10).

A final section of this bulletin, "Possible legislation for the protection of painters in the United States," is noteworthy for its restraint and objectivity despite its obvious intention to advocate for improved conditions for industrial workers. "It does not seem

unreasonable to insist that American painters should be protected against the danger of dry rubbing and that if paint must be sandpapered, the use of some oil to moisten and catch the dust should be required," she wrote (Hamilton, 1913, p. 63). Here, Hamilton used the words "not . . . unreasonable" (as an opposite of "emotional") and the passive voice to temper the advocacy inherent in the words "insist" and "should be required." She resumed scientific "disinterestedness" when she wrote, "When it comes to the question of prohibiting the use of white lead paint for inside work there is a difference of opinion" (p. 64), followed by a detailed accounting of the various positions of members of the International Congress of Industrial Hygiene on the matter. Nevertheless, Hamilton's willingness here to push the boundaries of the scientific ethos to lobby for workplace reform supports Prelli's (1989) observation that rhetors may construct the scientific ethos by employing contrasting images of Merton's scientific norms (in this case, "disinterestedness" versus "interestedness") in ways that advance their goals and address audience and situational constraints (p. 61).

In delivering the Cutter Lecture in Preventative Medicine and Hygiene to the Harvard Medical School in 1919, Alice Hamilton addressed the topic, "Inorganic Poisons, Other than Lead, in American Industries" with similar attention to scientific norms and thoroughness, spiked with advocacy as she warmed to her subject. In the interest of communality and universality, for example, she provided a review of all known research, including her own, on each of the nine poisons covered in her presentation, as in "The earliest case of brass poisoning that I have been able to find in our literature is that reported from Dr. Osler's clinic at the Hopkins by Oppenheimer (1) in 1895" (Hamilton, 1919, p. 89); "I know of but one extensive article in American

medical literature on industrial arsenical poisoning—a paper by Noble W. Jones (1) of Portland, Oregon" (p. 91); and "I could not find any evidence of antimonial poisoning in an examination of printers in 150 different shops" (pp. 93-94).

Alice Hamilton gave this lecture during her first year on the faculty at Harvard. Industrial toxicology was still a new field in 1919, and it is fair to assume that most members of her audience would have had less exposure than she to the literature and research on the subject of industrial poisons. As a pioneer in the field, Hamilton was providing her audience with new information. Front-loading her presentation with data in the form of a review of all known literature and research for each of the poisons was a means by which she sought to establish a transcendent rhetorical position as a scientist with this male audience[53] of physicians and scientists. She achieved her desired rhetorical impact by displaying an overwhelming command of her subject, as revealed in such statements as, "Brass founders' ague is found most frequently in founders who are exposed to the dense whitish-green fumes rising from the molten brass as it is poured into molds" (Hamilton, 1919, p. 90); and "Carbon disulphide with sulphur monochlorate is called in the trade the 'acid cure' or the 'vapor cure,' and is used to splice the inner tubes of tires" (p. 96).

Having established her scientific ethos in this bulletin, Alice Hamilton allowed herself some latitude to use her speaker's platform as a bully pulpit, revealing her "interestedness": "I think you probably all know how we got rid of white phosphorus—by the passage in 1912 of the Esch law, which place a prohibitive tax on white phosphorus matches," she wrote (p. 99). The familiar tone of "you probably all know" and the inclusive "how we [emphasis mine] got rid of white phosphorous" contrasted

sharply with the objective, data-driven rhetoric that comprised the bulk of this bulletin; but these words were meant to enroll her audience in what, for Hamilton, was a higher ideal than the objective accumulation of scientific knowledge for its own sake. For Alice Hamilton, the ideal of service to others transcended even her beloved science; in fact, her scientific specialty was the unique means by which she could serve humankind.

This distinction concerning Hamilton's scientific ethos plays out interestingly in her book Industrial Poisons in the United States, published first in 1925. In this text, Hamilton broke from the rhetorical pattern of withholding advocacy until her scientific ethos was established with her professional audience. Her call for reform appeared within the first two sentences of the book, in the preface:

> The sources of our knowledge of industrial poisoning in the United States are neither full nor, for the most part, accurate. We lack the sickness insurance system which obtains in all industrial countries in Europe and which brings to light the incidence of illness of all kinds in all groups of workers. (Hamilton, 1929/1925, p. v)

Two things may account for what at first glance appears to be a lack of concern on Alice Hamilton's part for carefully timing her rhetorical reform firepower. To begin with, Industrial Poisons in the United States was the first text book on the subject of American industrial toxicology (Sicherman, 1984, p. 240). It was, according to Alice Hamilton herself, not a rehashing of what appeared in earlier, European texts but rather it presented "as much new material as possible" from American studies, including all "the literature up to January 1, 1924" (Hamilton, 1929/1925, p. vii). Her audience would have recognized that the book itself, an original work, was its author's best defense. By 1925, Alice Hamilton had hit her stride; she was the acknowledged national expert in industrial poisons in America. Her book was, and would remain, the "Bible" of industrial

toxicology until 1943, when she published Industrial Toxicology. Sicherman (1984) writes,

> In Industrial Poisons in the United States (1925) . . . Hamilton codified knowledge in her field and consolidated her position of leadership as well. Written mainly for industrial physicians, the volume demonstrated her unparalleled first-hand acquaintance with the poisonous compounds used in American industry and her encyclopedic knowledge of the American and European literature. . . . (Sicherman, 1984, p. 240)[54]

A second reason for Alice Hamilton's unrestrained advocacy was that after nearly twenty years of building a national reputation through "shoe-leather epidemiology," she had collapsed science and service. In her mind, the two were inextricably linked. While a national workman's compensation system was humanitarian and just, it was also the key to acquiring the data that would allow for greater scientific certainty about industrial poisons. For example, Hamilton (1929/1925) writes in Industrial Poisons, that greater concern by physicians for patients would lead to scientific truth:

> If the recording interne would only treat the poison from which the man is suffering with as much interest as he gives to the coffee the patient has drunk and the tobacco he has smoked, if he would ask as carefully about the length of time he was exposed to the poison as about the age at which he had measles, the task for the searcher for the truth about industrial poisons would be made so very much easier. (P. v)

Similarly, in her 1919 Cutter lecture on inorganic poisons published in The Journal of Industrial Hygiene, Hamilton addresses the costs in scientific embarrassment and human suffering of failing to exercise humanitarian concern. Describing the discovery of phossy jaw in the white- phosphorous match industry in the United States, she writes,

> While the phossy jaw of match workers agitated every European country for a decade, was the subject of many eloquent protests, was debated in parliaments and finally made the ground for an international agreement for the abolition of the use of white phosphorous, we went on for years serenely sure that we were quite free from this peculiarly painful and crippling industrial disease. . . . I remember quite well my surprise when John Andrew of the American Association for labor

> Legislation told me in 1910 that he was investigating phosphorous poisoning. . . . We all know the result—his discovery that in the fifteen factories which he visited (I think there were only sixteen in all, in the country), white phosphorous was always used and that 65 percent of all the operatives were exposed to its fumes. . . . In all, the records of over 150 cases were secured, four of which were fatal. Some of Andrews's cases deserve special mention, coming as they do from an industry which was supposed by everyone to be quite free from occupational disease. One man lost both bones of the upper and lower jaws, and lived on liquid food for the rest of his life. He had a horribly fetid discharge. In another case, suppuration extended to the bones of the orbit, and the patient lost his eye and finally died after great suffering. A woman was so frightfully disfigured that she shunned everyone and became melancholy and eccentric. (Hamilton, 1919b, pp. 98-99)

The irony in the words "serenely sure" and "we all know the result" convey the comeuppance for scientists, physicians and others in failing to be vigilant about this disease in America, while the vivid descriptions. as in "over 150 cases . . . four of which were fatal" and "one man lost both bones of the upper and lower jaws," show the costs in human terms.

In calling for health benefits like those provided for workers in European countries, Alice Hamilton was enacting the transcendent role of the prophet, speaking for both the God of the Bible and for twentieth-century science. As in her "Angels of Victory" anti-war piece, she called upon the nation to align its practices with sacred principles (Darsey, 1997), in this instance, both compassion for the sick and commitment to advancing the body of scientific knowledge. Without national sickness insurance, sound scientific data could not be acquired. It was an argument that an audience of industrial physicians would have understood and, in all likelihood, embraced.

Despite the fact that Industrial Poisons in the United States is seasoned with advocacy throughout its more than 500 pages, the sheer magnitude of the book in terms

of its comprehensiveness and originality sustained Alice Hamilton's transcendent scientific ethos. Sicherman (1984) notes,

> Reviewers commended its lucid style, its objectivity in appraising all sides of controversial questions, and its extensive and up-to-date coverage. George Kober, whose entry into the field had preceded Hamilton's, considered it "by far the best publication on the subject in any language," while Sir Thomas Oliver himself, in an appreciative letter, not only praised the book but noted his longstanding admiration of her work. (p. 240)

From Hamilton, other physicians learned both the science and the art of industrial medicine. For example, in dealing with a scientific disagreement over the poisonousness of lead sulphid, a controversy she characterized as being "as keen as its importance warrants" (Hamilton, 1929/1925, p. 120), Hamilton provided her readers with comprehensive, objective science, as well as practical advice. Observing the norm of organized skepticism and universalism, she laid out the scientific basis of the debate, as in "According to Leymann (1), Tambousek (2), Blum (3), Etz (4), and Beck (5), the toxicity of a lead compound is in direct proportion to its solubility in weak hydrochloric acid and they, therefore, classify the compounds used in industry on this basis" (p. 116); and "Goadby (8), in testing white lead, the sulphate, and litharge, with human gastric juice, came to conclusions quite at variance with those universally held" (p. 117). Having covered the hard data in great detail, and concluding that "How much the solubility in human gastric juice has to do with the actual toxicity of the lead compound cannot as yet be stated" (p. 121), Hamilton provided the wisdom of her long experience to guide industrial physicians:

> Practical experiments with lead compounds in industry shows [sic] that the that the danger of a given compound depends quite as much on the physical properties as on the chemical; for if a given compound is light and fluffy it will do more harm than one that is far more toxic but not dusty. For instance, lead acetate gives no trouble, although it is soluble even in water. But it is sticky, so that it does not

> contaminate the air, and it has a sour taste so that a man is conscious of it at once if any gets into his mouth. Litharge, which is not nearly so soluble, is tasteless and is also very light and fluffy, extremely troublesome to handle and productive of much plumbism. (Hamilton, 1929/1925, p. 121)

In the final paragraph of Industrial Poisons, there appears one of Alice Hamilton's boldest reminders to her audience of their sacred duty as physicians. She called upon industrial physicians to transcend the circumstances of their employment and to heed their highest calling: "In closing, let me beg the industrial physician not to let the atmosphere of the factory befog his view. . . . His duty is to the producer, not the product" (Hamilton, 1929/1925, p. 541).

Multiple Logics

In January 1927, H.L. Mencken's popular monthly, The American Mercury, published a beautiful and literary piece by Alice Hamilton entitled, "Witchcraft in West Polk Street." Written at the height of her scientific career, the subject-matter of the article was decidedly unscientific: it dealt with the important role of magic in the lives of her Italian immigrant neighbors at Hull House. In "Witchcraft in West Polk Street," Alice Hamilton told the story of Feluccia, the mother of seven, who favored the diagnoses of *il mago* and *la maga*, the Italian "witchman" and "witchwoman," over conventional medical explanations for illness in her family. Feluccia also preferred witchcraft as an explanation for various love stories, including the marriage of one Filomena to a previously rejected suitor who won her hand and her heart through the use of a witchman's charm. Alice Hamilton made observations in this piece on the role that old-country witchcraft played in ameliorating the grief and hardship of the Italian immigrants' lives, and she recast these humble people as the heroes and heroines of their own stories.

Alice Hamilton's objective in "Witchcraft in West Polk Street," was not to court either approval or disapproval of the Italian practice of witchcraft. Rather, she used storytelling about the subject of magic as a window through which her audience could catch a glimpse of the real lives of these working-class people and as a vehicle for challenging the hypocrisy inherent in assuming the superiority of Anglo-Saxon culture over other cultures. As such, the piece serves to illustrate a characteristic of the genre of feminist-pragmatist discourse, the use of multiple logics to persuade an audience. Alice Hamilton used "all available means of persuasion" to advance her feminist-pragmatist ideals among audiences of different professional, educational and cultural backgrounds and interests. In particular, she employed the "feminine" logic of narrative, which relies heavily on personal experience, anecdotes and inductive structure (Campbell, 1989a, p. 13)[55]; and the "masculine" logic of Western thought, which proceeds formally or informally through claim, warrant and evidence, and she often used a blend of both logics within the same piece of discourse. Given that Alice Hamilton and other feminist-pragmatists were attempting to bridge the male and female spheres professionally and rhetorically, Fisher's (1984) assertion that narrative is a means of truth-seeking that helps to resolve the dualisms of "masculine" reason and "feminine" emotion by giving us the opportunity for understanding human choice or action (pp. 298-300) seems particularly salient. In her rhetoric, Alice Hamilton attempted to convey the "whole" truth, often using narrative logic to induce her audience to "dwell" in the communities of marginalized or oppressed peoples through identification with their stories (Fisher, 1984, p. 296) and Western logic to argue rationally for the need for action or change or for a scientific conclusion.

For example, in her 1911 speech to the National Conference of Charities and Correction on occupational diseases, Alice Hamilton made a claim that “there is no one subject at the present day which has been so generally neglected by American sociologists and physicians as the subject of occupational diseases” (p. 197). Hamilton then laid out her evidence for the neglect of industrial hygiene in America inductively, citing, for example, the fact that the study of occupational diseases “is centuries old,” and “There is now in Europe a very comprehensive literature on the subject, a literature which is partly medical and partly sociological and the two aspects of the subject are shown in the name which is now given to it: industrial hygiene” (p. 197); “an almost complete silence on the subject” in American medical and sociological literature (p. 197), the lack of “facts” to support the American belief that its workers are stronger and their conditions much better than in Europe (pp. 197-98), the lack of a centralized system of recordkeeping on lead-related illness or hospitalization of workers (p. 201), and the “problem of ascertaining the morbidity rates” of the poisonous trades when hospital records contained “superficial” diagnoses (p. 201) made by doctors who were “content to ascertain the actual condition present and did not care to look for its cause” (p. 202).

Having presented her evidence, Alice Hamilton issued a call for reform: “I do not think I need say any more to convince you that if we wish to know of the harm done physically and economically by the poisonous trades we must begin at the bottom and slowly build up a system of record making” (p. 202). In asking America’s social workers and physicians to “begin at the bottom” to “build up a system of record making,” Alice Hamilton made an appeal to apply the formal logic of empirical induction to rectify the problem of insufficient national data on occupational diseases.

Despite her words to the contrary, Alice Hamilton did feel compelled to "say more" in this article about the harm done to those exposed to industrial poisons. But even as she did so, she was aware, as discussed previously in this chapter, that as a woman reformer advocating for the poor she was walking a rhetorical tightrope in and that she risked further censure for sentimentality if she employed feminine storytelling to make her case. Hamilton handled this rhetorical constraint by blending the feminine, narrative logic of storytelling with the hard, inductive facts of masculine logic, explaining, ". . . I have an impression that people in general do not know just how serious a matter lead poisoning is. . . .I might give some extracts from hospital history sheets and thus guard myself against the suspicion of exaggeration or sentimentality, for nothing can be more cold blooded [sic] than a hospital history (Hamilton, 1911, p. 206).

The hospital records provided the rhetorical cover Hamilton needed. Although they were factual accounts from a scientifically reliable source and additive to her other inductive evidence, Hamilton's narrative accounts proved anything but "cold blooded"; in fact, they were filled with human pathos. For example, she described "V.O.," a 30-year old Italian:

> He went to work in white lead at a very dusty job soon after he reached this country and being unable to understand English he was given no instructions as to the care of his person. It is hardly likely that he would have been told anything anyway, for he was working in one of the factories that changes its help continually and pays little attention to the men. Vincenzo ate his lunch among the white lead pots and without washing his hands. He had no respirator and he wore his dusty work clothes home and slept in them. On the 37th day of this work he was suddenly struck to the ground by a pain so violent that he almost lost consciousness. He was taken to the hospital, recovered partly, came home and relapsed, went back to the hospital and finally, at the end of three months, he had recovered strength enough to work again. (Hamilton, 1911, p. 207)

By declaring that “V.O.” was newly arrived to America, “spoke no English,” and worked in a factory that “pays little attention to the men,” Hamilton presented him sympathetically as a defenseless victim, one of many whom her audience of fellow charitable and social workers would have dealt with routinely. When she used his first name, “Vincenzo,” and described him eating his lunch “among the white lead pots” and sleeping in his “dusty working clothes,” she enabled members of her audience to see him, in their mind’s eye, as an individual and to differentiate “Vincenzo” from all other Italian immigrants they knew. When Alice Hamilton stated that, after only five weeks of working in the lead trades without a respirator, Vincenzo “was suddenly struck to the ground by a pain so violent that he almost lost consciousness,” for at least that instant her audience dwelt in Vincenzo’s tragic reality. That reality included a return to his place of injury, when he had “recovered strength enough to work again,”only to continue the cycle. Vincenzo thus becomes a synecdoche for the plight of immigrant workers in the industrial trades.

In the September 30, 1916, issue of The Survey, Alice Hamilton also blended narrative and Western logic to plead for shorter work-days and work-weeks and for rest-periods for American laborers. She used the recommendations from nine reports issued by the British Health of Munition Workers during wartime to pile claim upon claim in her inductive argument that “overwork does not pay even as an emergency measure, that it is wasteful and short-sighted” and “does not produce a seven-day output” because

> It results in too severe a strain upon the workers and therefore in lost time through exhaustion and sickness; it imposes a specially heavy strain on the management; it gives too little time for sleep to the young and to all who live and at distance from their work; it increases the temptation to alcoholism. (Hamilton, 1916, p. 638)

While the series of claims, i.e., recommendations that would align the American workplace with the committee's recommendations for maximum hours of work, are themselves part of Hamilton's induction in this piece, from the standpoint of formal logic, her argument is weakened by her failure to provide much of the actual data upon which the British committee's recommendations were based and no data from the American workplace. One of the few instances in which she provides such data in this piece is her retelling of a quasi-experiment on the issue of fatigue that took place on the war front and appeared in one of the committee's nine reports. Calling British munitions workers' wartime experience "an experiment in human endurance on an enormous scale" (Hamilton, 1916, p. 638), Hamilton wrote,

> Two officers for a wager competed in making a certain length of trench, each with an equal squad of men. One let his men work as they pleased but urged them to work as hard as possible. The other divided his men into three sets to work in rotation digging their hardest for five minutes, then resting ten minutes. This team won easily. (Hamilton, 1916, p. 638)

While this is a valid and persuasive piece of data in support of her inductive argument about the lack of benefit from overwork, for the most part Hamilton rested her argumentative case on the authority of the British committee, a valid but less persuasive form of evidence given how little her audience knew about this committee or the subject it studied. Hamilton admitted as much, noting that the committee's reports had received attention in American newspapers "but they merit more attention than has been paid them," and she recommended "a detailed study in this country" on the committee's conclusions (p. 638). Rather than provide evidence from the reports, Hamilton called upon her audience to accept the authoritativeness of the committee and thereby validate as evidence the committee's recommendations without further qualification. For

example, she offered as evidence for her claim that overwork "does not produce a seven-day output" the committee's recommendation supporting "deliberate 'slacking'" on the part of workmen during an overwork situation as a means to "improve the output just as 'nursing' a rowing crew over part of the course helps in the final effort" (p. 639).

Within this same example, however, Hamilton strengthened what was a somewhat weak argument from the standpoint of formal logic with persuasive narrative logic:

> In a spirit which would cause many American captains of industry to gasp with amazement and indignation, the committee discusses the deliberate limitation of output by workmen, which was so common before the war and has always been so conspicuous a policy of British trades unionism, and actually deplores the fact that under the promptings of patriotism this safeguard has been given up. "It is not surprising that where employers following tradition rather than experience have disobeyed physiological law in the supposed interests of gain. . .the workers have themselves fallen very commonly into a tradition of working below their best during their spells of labor" (Hamilton, 1916, p. 639)

Hamilton's sarcastic reference to "American captains of industry" gasping "with amazement and indignation" over both the idea of, and the committee's support for, deliberate 'slacking' by workmen was effective from the narrative perspective, despite the fact that ridicule is generally viewed as *ad hominem* or *ad personem* in a formal argument. The ridicule comports with a truth that her audience of social workers recognized about the real world of blue-collar workers and about the resistance of America's Carnegies and Pullmans to acknowledging that world. Readers of The Survey worked were involved with the working classes on a daily basis, and beyond that, they shared in America's free-floating anxiety about the undemocratic nature of the concentration of power in the hands of a few "captains of industry." Hamilton's argument would have had for her audience what Fisher (1984) refers to as "narrative fidelity," in that it rang true with "the stories they know to be true in their lives. . . (p. 297), i.e., that

in oppressive conditions people will do what they have to do to survive. Hamilton wanted to tap into her audience's emotions, to remind them to "feel" the unfairness of overwork to the workers and to exult in their consistent ability to resist such oppression, even by "deliberate 'slacking.'" With this use of narrative logic, Hamilton was able to convey a more complete truth about the effects of overwork than formal logic would have allowed. She used narrative logic to move her audience beyond mere knowledge conveyed by data to the wisdom to be found in joining knowledge and experience of life as it is lived. That wisdom, then, would dictate the next appropriate steps to take to remedy the situation of overwork in the American workplace.

Similarly, Hamilton appealed to her audience's sense of "narrative fidelity" when she wrote, "It has taken only a little more than a year for Great Britain to discover the evils of over-long hours. For how many years have we been discussing the pro and con of an eighty-four hour week in our steel mills?" (Hamilton, 1916, p. 638). Many in her audience were foot-soldiers in the battle for a shorter work-week, and this argument would have been compelling, given their experiences. As Fisher (1984) comments, "The sort of hierarchy condemned by the narrative praxis is the sort that is marked by the will to power, the kind of system in which elites struggle to dominate and to use the people for their own ends or that makes people the blind subjects of technology" (p. 299).

Hamilton concluded this piece with this appeal:

> If in the midst of the most terrible war in her history when everything depends on the uninterrupted production of stupendous quantities of munitions, Great Britain can find time to consider the condition of her workers and recommend measures for their benefit even at the possible expense of the immediate output, surely we who are at peace and in a state of great prosperity should be ready to go at least as far as they. (Hamilton, 1916, p. 639)

By juxtaposing Great Britain's concern for her workers "in the midst of the most terrible war in her history" when "stupendous" efforts were required against America's inaction despite "peace" and "a state of great prosperity," Hamilton again drew on her audience's emotions and put America's self-respect on the line. While this final argument appears in the syllogistic form of Western logic, its power rests in its narrative logic, with its appeal to common-sense action that would obviate the national shame Hamilton implied was inherent in the status quo of America's workers. Despite a relatively weak argument from the perspective of Western logic, Hamilton achieves "narrative probability," a "coherent story" (Fisher, 1984, p. 297).

Hamilton employed both the common sense of narrative logic and the statistical data of formal logic when she argued in The Forum against the passage of a "blanket" Equal Rights Amendment. In this piece, entitled "Protection for Women Workers," her claim from Western logic was the following:

> If no legislation is to be permitted except it apply to both sexes, we shall find it impossible to regulate by law the hours or wages or conditions of work of women and that would be, in my opinion, a harm far greater than the good that might be accomplished by removing certain antiquated abuses and injustices, which, bad as they are, do not injure nearly so many women as would be affected if all protective laws for working women were rendered unconstitutional" (Hamilton, 1924, pp. 152-53).

Within the formal claim that "we shall find it impossible to regulate by the law the hours of wages or conditions of work of women" was an argument from narrative logic, signaled by the words "in my opinion." Hamilton objectivity was strained when she spoke of values, "a harm greater than the good that might be accomplished"; but she put the argument back on firm ground from the perspective of Western logic by supporting her subjective opinion with objective, scientific evidence based on her expertise as a

medical doctor and researcher. For example, using the formal logic of induction she argued, “There is evidence that they [women] stand the strains of industry less well than men” (Hamilton, 1924, p. 156), and she provided that evidence in the form of statistics from credible sources: a 1912 Federal Bureau of Labor Report on the Condition of Woman and Child Wage Earners in the United States; a report published by the Metropolitan Life Company on tuberculosis rates for men and women; German wartime studies on sickness rates for men and women in munitions production; and a Public Health Service report on exposure to lead in the pottery-making trades. All of these studies showed what Alice Hamilton called the “over-susceptibility of women” to industrial diseases. Describing death rates from all diseases, for example, she reported, “The women in the mills have in every age group but one a much higher death rate than the men, and in that one the numbers are about equal. . . .The total death rates from 15 to 44 years are as follows: Men outside mills, 2.04; women, 1.23. Men in mills, 2.63; women, 3.20” (p. 157).

Hamilton’s use of scientific data to support a value-based argument is consistent with the effort by her peers Jane Addams and John Dewey to create a “science of values” in which values were “subjected to the same scientific methods of criticism and testing as other beliefs” (Randall, as cited in Fisher, 1984, p. 294). Hamilton’s effective use of “masculine” Western logic in “Protection for Women Workers” was also her practiced response to the rhetorical challenge inherent in the issue itself: for women to free themselves from the burdens and handicaps of patriarchal discrimination, she had often said, they must protect themselves against charges of feminine “exaggeration or sentimentality” (Hamilton, 1911, p. 206). In fact, Alice Hamilton challenged her

opponents in the National Woman's Party to use the "precise terms" associated with a "masculine," rational argument, rather than "words of general significance" more typical of an argument from "feminine" emotion to avoid "confusion" over what for her and other feminist-pragmatists was an issue that should be argued on facts (Hamilton, 1924, p. 153). From the standpoint of Western logic, precise terms in the form of facts, rather than generalizations, are required as evidence to build and win an inductive argument; and from the narrative paradigm, such facts could give narrative probability to an argument concerning social values.

But not all of Hamilton's own "facts" are as well-supported in this piece as those concerning the need to protect women's health in industrial settings. For example, she argued that one "indisputable fact" is that women needed special legislation to protect their interests because "women have never been very strong in the trade union movement, not even in those industries that are overwhelmingly feminine" (Hamilton, 1924, p. 153). Hamilton's explanation of why this was so went to the heart of the schism in the feminist movement at the turn of the century. She speculated (no doubt from her own empirical observations and those of her compatriots at Hull House) that the difficulty in organizing women was, at least in part, a matter of women's "own nature," which caused the working mother, for example, to put the needs of her family ahead of her own and thus be "hopeless material for the union organizer" (pp. 155-56). While this evidence was a weak spot in Hamilton's formal argument, since her perspective on women's "nature" was essentialist and a subjective generalization itself, from the standpoint of narrative logic it was, nevertheless, compelling. At this point in history, few of the women or, for that matter, the men in her audience would have argued with the claims that women were by

"nature" caregivers to their families and put themselves second to their husbands and children. In fact, most would have probably considered this to be the natural order of things. Because her audience could identify with women's "nature" from their own experience, Hamilton's argument has narrative "fidelity" and thus, holds up as evidence for her larger claim.

Responding to her opponents point-by-point, Alice Hamilton argued, "It is not necessary to try the experiment of identical laws for the two sexes; we have been watching that experiment for decades and we can still observe it in many States" (Hamilton, 1924, p. 154). The words "try that experiment," "watching that experiment," and "observe it" revealed Alice Hamilton's strategy of applying scientific language to what was actually subjective evidence in the debate over an Equal Rights Amendment. For her, multiple, ongoing "experiments" had produced observable, repeatable results:

> Compare for instance three pairs of States lying side by side. Will anyone say that it is better to be a woman wage earner in Indiana where hours are practically unrestricted than in Ohio where a woman is sure of a nine-hour day and a six-day week? Is the textile worker in Rhode Island freer and happier than her sister in Massachusetts because she is not handicapped by legal restrictions, except a ten-hour day, while the Massachusetts woman may work only nine hours, and that not without a break, must have time for her noon-day meal, one day of rest in seven, no night work, and it not allowed to sell her work for less than a minimum living wage? What of Missouri and Kansas? I should like to ask Kansas women if they envy the freedom of the women of Missouri and if they are ready to give up the laws which provide for an eight-hour day and a six-day week and a minimum wage and no night work. Any one who knows conditions in those States will say without hesitation that the so-called liberty of the women of Indiana, Missouri, and Rhode Island is a mockery and that, far from benefiting the woman wage earner, it simply hands her over to the exploiting employer (Hamilton, 1924, p. 154)

Women's freedom and happiness are subjective states of being that are difficult to quantify and do not move her argument from Western logic forward. As de Beauvoir (1949) writes in her groundbreaking feminist work, The Second Sex, "It is not too clear

just what the word happy really means and still less what true values it may mask. There is no possibility of measuring the happiness of others, and it is always easy to describe as happy the situation in which one wishes to place them" (Introduction). Despite this logical fallacy from the standpoint of Hamilton's formal inductive argument from Western logic, the pathos in her warrants that "no night work" and "time for her noon-day meal" were good for women was something every woman, including homemakers in her audience, could relate to as second-class citizens in a patriarchal society. Hamilton's use of the ideographs "freedom" and "liberty," as in "Is the textile worker in Rhode Island freer," "the freedom of the women of Missouri," and "the so-called liberty of the women of Indiana, Missouri, and Rhode Island" also serves as a powerful argument from narrative logic, delivered with the heavy irony characteristic of Hamilton's style. As noted earlier in this chapter under the section entitled "Balance," the first wave of feminists had raised the specter of slavery in their fight to achieve suffrage and equal rights. Hamilton's audience had long heard the argument, including in this issue of The Forum in a counterpoint by Doris Stevens of the National Woman's Party, that women deserved the same rights as men. Hamilton turned her opponents' own argument against them, using narrative logic to imply that the proposed Equal Rights Amendment would enslave women rather than free them, would bind them to conditions of slaves, "where hours are practically unrestricted" and where a "noon-day meal, one day of rest in seven," and "no night work" would likely become a thing of the past.

Hamilton engages in both "slippery slope" and "straw man" fallacies, respectively, in suggesting that the loss of all protections for women in the workplace was inevitable if the Equal Rights Amendment were passed and that the bill represented a

battle between freedom and slavery for women. Nevertheless, Hamilton's narrative argument that "so-called liberty of the women of Indiana, Missouri, and Rhode Island is a mockery" is still compelling in that it moves the argument from the realm of theory about good that may come one day into the realm of the practical reality of real women and the good that they enjoy now. It is an example of argument from "obvious knowledge—all the more genuine for being obvious" (Booth (1974), as cited in Fisher, 1984, p. 298).

Hamilton's audience had reason to doubt the "pie in the sky, by and by" of an Equal Rights Amendment. By 1924, her audience had borne witness to the fact that achieving the franchise had done little in the short term to advance women's interests, for example, in legislation to protect children, despite the propaganda by feminists that it would change women's world. As Campbell (1989a) points out concerning the passage of the Nineteenth Amendment,

> Sadly, that achievement meant less than women activists had hoped. Few women voted, and in a short time it became clear that women did not form a distinct voting bloc or constituency. The limited meaning of woman suffrage was manifest in 1925 when an amendment prohibiting child labor failed to gain ratification, and that event symbolizes the end of the early movement. (P. 6)

Such practical experiences, readily recognizable to her audience, would have provided Hamilton's narrative a high degree of fidelity. They would have primed Hamilton's audience to relate to the threats she envisioned for women handed over "to the exploiting employer" and would have encouraged that audience to accept her arguments for women's ongoing need for protection. Hamilton (1924) made further rhetorical capital by making an *ad hominem* attack proponents of the Equal Rights Amendment, calling them "women of the professional and leisure classes" and accusing them of wishing "to make it impossible for wage-earning women to use any method of procedure for their own

betterment except one [trade unionism] which they have shown themselves unable to use with any real power" (p. 153). While *ad hominem* attacks fail as evidence in logical arguments, Hamilton's suggestion that women of the elite classes, who apparently need no workplace protection, should not compromise the protection or benefits of working-class women is reasonable from the narrative perspective. It exploits an extant class suspicion, providing a view of the world consistent with what her audience already believes. As Fisher (1984) points out, "Narrative rationality…is inimical to elitist politics, whether fascist, communist, or even democratic—if traditional rationality is the prevailing societal view" (p. 299).

Just as Alice Hamilton used narrative logic to bring to life the plight of industrial workers and to argue for workplace protections and reforms, she also used it to convey a complete picture of war and to plead for peace. Hamilton's article "At the War Capitals," first appeared in the August 7, 1915, issue of the reform publication, The Survey, and later, as the second chapter in a book for the general public, Women at The Hague, The International Congress of Women and Its Results.[56] She introduced the magazine version by declaring that "The Survey has asked me to write the narrative of Miss Addams's journey to present the resolutions of what is now usually called the Woman's Peace Congress at The Hague to the governments of the warring and some of the neutral countries" (Hamilton, 1915, p. 417). She added, "My account of our wanderings must be confined to the unofficial parts, to the people we met informally and the impressions we gained as we passed through the countries, and stopped in the capitals and [saw] the life there (p. 417). Hamilton's use of the words "wanderings," "unofficial," "informally," and "impressions" to downplay her role in the delegation and, by virtue of that, her

significance as a rhetor, belie the care with which she employs both narrative logic and Western formal logic within this narrative account to construct arguments for peace and reconciliation. For example, she used narrative logic to argue that people in warring nations were more alike than different, that they were, at their core, simply human. In recounting her meeting with "the most famous journalist of Germany," she described him as "a little man with a big head, almost all of it forehead and hair, his eyes tired and burnt-out and his general aspect full of weary depression" (Hamilton, 2003/1915, p. 16). She wrote of a former German government official with whom she and Addams had met in Berlin, "And so we left him in his great, somber library, a hopeless figure in deep mourning, stooping as he walked, torn continually with a racking cough, his cheeks and temples hollow, and his eyes sunken" (p. 16). Alice Hamilton's rich descriptions of "burnt-out eyes," "weary depression," a "hopeless figure in deep mourning, with a "stooping" walk, a "racking cough," and "hollow" cheeks and temples, and "sunken eyes" showed the powerful in his humanity, brought low by the weight of war. While the descriptors "a racking cough" and "burnt-out eyes" would not qualify as evidence in a formal argument, the picture of war Hamilton creates for her audience has narrative fidelity. As Fisher (1984) notes, narrative rationality does not rely on "prescribed rules of calculation of inference making," but rather "is. . .descriptive, as it offers an account, an understanding, of any instance of human choice and action. . . ." (p. 298). Its "operative principle," he writes, is "identification rather than deliberation" (p. 298). Hamilton's descriptions create identification by inviting her audience to "see" the enemy. In this regard, Perelman (1969) writes that "one of the preoccupations of the speaker is to make present, by verbal magic alone, what is actually absent but what he considers important to

his argument" (p. 117). Once seen, or "present," the barriers that separate Hamilton's audience and its enemy (or her audience and herself as rhetor) may disappear. As Burke (1969) explains, "Identification is affirmed with earnestness precisely because there is division. Identification is compensatory to division. If men were not apart from one another, there would be no need for the rhetorician to proclaim their unity" (p. 22). As the barriers fall between audience and enemy (or audience and rhetor), consubstantiality (Burke, 1969) is possible. In that place of communion (Perelman, 1969), Hamilton's narrative descriptions draw upon a shared human understanding between audience and enemy at the level of human existence, despite the fact that they are on opposite sides in a war. That shared understanding is that war is hell for both sides, the victors as well as the vanquished.

Similarly, Alice Hamilton (2003/1915) used narrative logic to convey the common humanity she uncovered in her visit with relief workers in Berlin:

> I had a curious sensation on that expedition of having seen and heard it all before; and then I remembered that just a little while ago in Brussels I had seen gentle Belgian ladies organizing work for the Belgian poor in exactly the same way as these gentle German ladies were doing it for the German poor. Both in Paris and in London it was the same. (pp. 13-14)

Unlike Western logic, which requires a level of argumentative competence and knowledge of modes of reasoning and rules of advocacy (Fisher, 1984, p. 298), narrative logic relies on the ability of people to reason from their own life experiences and from truths deemed common to all humanity. In creating for her audience this image of "gentle ladies" ministering to the "poor" in all the warring nations she visited, Alice Hamilton argued that there was significant common ground among all peoples, despite differences in nationalities and ideologies. Offering suffering and a desire to relieve suffering as

proofs of the commonalities among people in Germany, Belgium, France and England, Alice Hamilton suggested that people in these warring nations might also share a common desire for peace.

Alice Hamilton believed they did. Within this narrative argument, she also employed Western logic to make her case to Americans that, “There is in the countries mutually at war no such universal desire to fight on to the bitter end as we suppose over here” (2003/1915, pp. 25- 26). To support her claim, Hamilton argued from authority that she attributed to people she met during her journey, a weak form of inductive evidence, but nevertheless valid. For example, she wrote that in Germany, “From the first we met men and women who were pacifists” (p. 14), and that among them was “a clergyman, who has gathered around him a group of people free from bitterness and from ultra-patriotism, fair-minded, and deeply sorrowful over the war” (p. 14). She reported that she had encountered “a group that calls itself *Der Bund Neues Vaterland*, which stands for very much the same things as the Union of Democratic Control in England,-- [sic] that is, for a peace without injustice or humiliating terms to any people no matter who is victor” (p. 14). She stated that the aforementioned “most famous journalist of Germany,” while known as a “fire-eater, one of the men who had done most to encourage the war,” appeared to her to regard the war “as a terrible tragedy (p. 16), and believed help from neutral nations was “the only hope” (p. 16). Offering evidence from Vienna, Alice Hamilton reported that she had “met with pacifists and others who were eager to hear what the committee had done and hoped to do” (p. 19), including a “lovely woman” who worked in the American Red Cross Hospital in Vienna who said that she had “never heard a soldier speak with hatred or contempt of the men on the other side” (p. 19).

Likewise in Budapest, she said that she sat next to a Hungarian "privy councilor" at a dinner "who told me frankly that he was a pacifist" (p. 20); and that in meeting with the prime minister of Hungary, he "said nothing of the glories or gains of war, only of its senseless horrors" (p. 21). In Belgium, she reported that "The Belgian minister for foreign affairs . . . spoke with real feeling of Belgium's longing for peace, although, as he said, she was in the hands of her allies and must leave such things to them" (p. 24). From the standpoint of formal logic, some of the authorities that Hamilton relied upon carried more weight in her argument than others. For example, the prime minister of Hungary might be perceived as more of an authority than a "lovely woman" from Vienna working for the American Red Cross. This is where Hamilton's meshing of formal and narrative logic works to her advantage: From narrative rationality, the "lovely woman" from Vienna who altruistically works with soldiers contributes narrative probability to this story. She is typical of the real people who influence our thinking in everyday life. Booth (1974) describes this influence as a way in which people "characteristically, in all societies, build each other's minds" (as cited in Fisher, 1984, p. 298).

Alice Hamilton understood the role of rhetoric in sustaining the spirit of war. She argued that "censorship of the press" (Hamilton, 2003/1915, p. 19) in the Central Powers nations provided both the means by which people in Germany and Austria had been persuaded that war against the Allies was justified ("One must always remember that most Germans read nothing and hear nothing from the outside," she wrote (p. 17). This censorship was also the basis for the American belief that all peoples in the Central Powers nations desired war to the "bitter end": "We judge largely by the newspapers that come to us from that side, and which are of course strictly censored" (pp. 23-24). Alice

Hamilton invited her audience to apply Western logic to see through propaganda from nations on both sides of the conflict. For example, commenting on the photographs of a Belgian child with one hand cut off, photographs that were conspicuously displayed in shop windows in Milan as evidence of German atrocities, she wrote,

> It was evident from the photograph itself that the little hand had been carefully amputated, but such trifling evidence was of course not considered—and the old war story of mutilated children, utilized for hundreds of years in various countries, once more did its work. (Hamilton, 2003/1915, p. 21-22)

Pointing out in this example that truth is often a casualty of war, she asked her audience to consider the "evidence," as she had, rather than allow emotion to cloud the truth and dictate the response.

Just as At the War Capitals was a narrative embedded with Western logic, so Alice Hamilton's 1940 opinion piece for The Nation on the subject "Shall We Feed Hitler's Victims?" was a logical argument embued with narrative. Her central claim in "Feed the Hungry!" was that for America's provision of food to the nations under German control would not aid Hitler, weaken the British blockade, or prolong the war and was, in fact, the politically right thing to do. Building her case inductively, she provided such evidence as, "The Quakers are even now distributing to the people of unoccupied France food which they buy in Switzerland and Portugal, and they have no trouble at all with the Germans" (Hamilton, 1940, p. 597); "The Polish Relief Commission and the Red Cross tell us that the Germans have helped, not hindered, relief in Poland (p. 597); "Starving people have no strength to revolt, and the day of uprisings of armed mobs is past" (p. 597); and that "after this war was over . . . we shall have to live with these countries, and it may be hard if we have won the hatred of a whole generation" (p. 597).

Alice Hamilton took up the argument from the humanitarian standpoint using narrative logic. For example,

> In Germany we saw the slow destruction of people of flesh and blood, and that is far worse. As I think back I see hospital wards full of children with multiple bone tuberculosis, with great masses of tuberculous glands such as no American doctor ever sees nowadays, with tuberculosis of the lungs, and the form called lupus, "the wolf," because it eats into the skin, forming deep ulcers. I remember an outdoor hospital in Frankfurt where naked boys lay in the sunshine, the only thing that the blockade could not shut out, their ribs and shoulder blades showing through their skin, their arms and legs like sticks. (Hamilton, 1940, p. 596)

Here, Alice Hamilton allowed narrative to fulfill one of its most powerful functions. In describing a world in which, except for the sunshine, the essentials of life are withheld, she provided the opportunity for her audience to dwell in the other's reality and to, thereby, see a more complete truth upon which to base their decisions and actions. Sergeant (1926) called this ability by Alice Hamilton to "convey the varieties of human experience," a "power of identification which was at once objective and sympathetic" (p. 766). It was an effective tool for reaching a popular audience because, as Fisher (1984) points out, while Western logic demands argumentative competence, narrative logic "is a capacity we all share" (p. 298).

Alice Hamilton felt her competence in arguing from scientific logic strained when she used it within the American justice system. In an article entitled, "What About the Lawyers?" that appeared in the October 1931 issue of Harper's Magazine, she complained, in regard to the Averbuch case in Chicago,[57] "Why should the search for truth, for the actual facts, be held so high by doctors and not even considered interesting by lawyers?" (p. 545). As an expert witness in court cases, Alice Hamilton provided "truth" that had been ascertained through the scientific method. For her, "truth" was both predictive and dynamic in nature, readily responding as new evidence appeared and new

theories emerged. Not so the law, Alice Hamilton complained. “It does not seem to occur ever to the legal mind that change is good. In a changing world, the law alone is changeless,” she wrote (Hamilton, 1931, p. 546).

In this Harper’s piece, Alice Hamilton mixes Western and narrative logic to argue that “Medicine, no matter how imperfect, is a silvery pot when compared with the black kettle—law” (p. 549), and that “Lawyers are more deserving of arraignment than doctors” (Hamilton, 1931, p. 542).[58] In her formal, inductive argument she declares, “I shall speak only from my own experience, gathered partly in the old police courts and the modern municipal courts of Chicago, partly in the more respectable civil courts” (Hamilton, 1931, p. 542), letting her audience know that her evidence was empirical (“from my own experience”), and verifiable (existing in court records). Even here, however, Hamilton employs narrative logic with the value judgment that civil courts are “more respectable”; and she relies upon her audience’s shared prejudice rather than evidence to support that claim. Hamilton cites the “cocaine wars” in the nineteenth ward (described in Chapter 3) as inductive evidence of the imperfections of the law, arguing, “The law under which we worked was very inadequate. It specified cocaine, and did not cover bodies such as alpha- and beta-eucaine, synthetic compounds with a similar action” (p. 542); and “The law did not make the druggist responsible for his clerk’s actions; it provided for a fine but no jail sentence, and the druggist paid the fine easily” (p. 542). Switching again to narrative logic, she adds, “Now here was a situation for the legal profession to consider and correct, since the law was manifestly imperfect” (pp. 542-543), using a medical analogy to make her point: “If a town is stricken with typhoid fever, the doctors hold themselves responsible not only for the care of the sick and the

protection of the rest of the people against infection, but for tracking down the sources of infection and helping to clean it up" (p. 543). Alice Hamilton wanted the law to do what in medicine would have been the next logical step: take corrective action to prevent a recurrence of the problem. As Fisher (1984) has observed, "Narratives are moral constructs" (p. 300), with a logic that appeals to values and ideals rather than relying upon the rules of Western logic. Hamilton was appealing to her audience's values when she argued that, just as physicians were ethically responsible to "care" for and "protect" the sick and to "track down" and "clean. . .up" the source of the illness, so lawyers and judges had the same responsibility within their sphere of influence to "consider and correct."

When she criticized judicial procedure to support her argument that the legal profession needed reforming, Hamilton appealed to her audience's broadly held prejudices, characterizing the legal system as a capricious game in contrast to science, which is concerned with "real truth."

> Courts never seem to be after the real truth of the matter, nor what is fair and sensible, but only bent on playing a game between two lawyers with the judge as umpire to see that the rules are observed, rules which were made centuries ago by men no wiser than themselves. You would think a judge would pride himself on making an original decision, but not at all. He seems to feel safe and happy only when he can find a precedent for everything he does—that is, find something that somebody else once said about a case that resembles this one. (p. 547)

Hamilton's evidence for her argument from narrative rationality, expressed as frustration with the law for its failure to ascertain "the real truth," for its obeisance to "rules" and "precedent," and its lack of "original" thinkers, reveals a failure on her part to recognize what Toulmin (1958) calls "a field of arguments" (p. 14).

> Two arguments will be said to belong to the same field when the data and conclusions in each of the two arguments are, respectively, of the same logical

> type: they will be said to come from different fields when the backing or the conclusions in each of the two arguments are not of the same logical type. (Toulmin, 1958, p. 14)

Perhaps her rhetorical motivation in excoriating lawyers and the law is contained in Toulmin's warning about the "dangers of singlemindedness" (p. 32) in argument:

> We may come to feel that one particular set of criteria has a unique importance, and accordingly be tempted to pick on the criteria proper for the assessment of things of some one sort as the proper or unique standards of merit for all sorts of things, so dismissing all other criteria either as misconceived or as unimportant. (Toulmin, 1958, p. 33)

Alice Hamilton was adept at arguing from Western logic, from narrative logic, and from the scientific logic of medicine. Nevertheless she resisted acknowledging in the Harper's piece and her autobiography that the law might have a logic of its own, a fact she must have considered given that the noted jurist Felix Frankfurter was one of her closest, lifetime friends and a frequent partner in what was sometimes intense debate about America's legal system. One reason might be found in the influence that the era's scientific positivism had on Hamilton. She believed that "real truth" could be ascertained through science, a discipline that, unlike the law, was dynamic, resisted being bound by precedent, and prided itself on originality. A second reason may be the fact that Hamilton's rhetorical career was motivated largely by her desire for reform. To the extent that the American legal system stood in Hamilton's way, she was genuinely committed to its reform, as well. That reform impulse led her to use "all available means of persuasion" to move her audiences to action, even to the point of rather shamelessly exploiting their prejudices when she believed it might be effective. Hamilton used multiple logics in the Harper's piece to bridge the two worlds of intellect and emotion with an audience that she described in this piece as "respectable, educated people," a class that "does come in

personal contact with our far from perfect system of medicine but almost never with our even less perfect legal system, above all not with its least respectable branch, criminal law" (Hamilton, 1931, p. 543). She used her status as a physician and Western logic to appeal to her "educated" audience's intellect and narrative logic, with its sometimes scathing humor, to stir her "respectable" audience's emotions about imperfections in a legal system that they had little direct contact with.

In contrast to her discourse in with popular audiences, with professional audiences Alice Hamilton naturally relied heavily on formal Western logic based on scientific findings to make her arguments. Even in the most erudite examples of her discourse, however, such as her groundbreaking text, Industrial Poisons in the United States, she humanized her arguments with informal language, evidence taken from practical experiences, and some narrative logic. For example, when writing about the effects of food in relationship to the effects of industrial poisons, she begins her deductive argument with the following claim:

> It is, of course, a fact well known to pharmacologists that drugs are absorbed more quickly by the fasting stomach than when administered after a meal, but although almost anyone knows this to be true with regard to medicines, few people realize that it is equally true with regard to industrial poisons. (Hamilton, 1929/1925, p. 4)

Hamilton's informal tone is reflected in her use of the phrases "a fact well known" and "almost anyone knows" and her reliance on what she considered to be common knowledge. The groups of experts she relied upon in this and other instances in this text included not only scientific professionals, such as "pharmacologists," but also "experienced foremen and employers" (p. 6), whom she had come to respect as more knowledgeable than most physicians in identifying cases and causes of industrial disease.

Hamilton also provided informal evidence for her claim, lending an anecdotal, storytelling style that allowed her audience to connect an otherwise dry subject to the lives of real people. She wrote,

> Experience in the lead trades taught the English years ago that one of the best preventatives of lead poisoning was the presence of food in the stomach, and in English lead works it has long been customary to supply the workmen, free of cost, a glass of milk or a cup of cocoa the first thing in the morning . . . (Hamilton, 1929/1925, p. 4).

While she offered practical "experience" and a successful "customary" approach as evidence, she ultimately she backed up her argument to her professional audience with data that would withstand scientific scrutiny:

> Carlson's and Woelfel's (4) experiments with the solvent action of human gastric juice on the basic carbonate of lead and the basic sulphate confirm the practical experience of the British that milk or other food in the stomach minimizes the danger of lead poisoning from the digestive tract. They found that when milk and gastric juice are mixed in the proportion of one to one, lead salts added and the mixture incubated at body temperature for 10 hours, not enough lead goes into solution to give a qualitative test for lead [. . .]. [. . .]. But when the ratio of gastric juice or HCl to the milk was increased, the lead salts were dissolved in proportion to the increase in the quantity of gastric juice of HCl. (Hamilton, 1929/1925, p. 4-5)

Hamilton could rarely stop with cold, dry statistics such as these. Convinced that "This question of the influence of proper and sufficient food in warding off industrial poisoning has received less attention in the United States than one would expect" (p. 4), she turned to the moral appeal of narrative logic to argue for improvements. For example, she sarcastically compared "the indigestible cold lunch [which is]. . . customary in American factories where poisons are used" to "the lunch room with hot food and hot tea or coffee in the German and British factories" (p. 4). From the standpoint of formal Western logic this evidence fails to support Hamilton's larger claim that a full stomach wards off industrial poisoning better than a fasting stomach, given that food is food,

whether it is “cold” or “hot” or served in a “lunch room” with “tea or coffee” on the side or “served” on the factory floor with water or nothing to drink. Nevertheless, with this comparison Hamilton was able to powerfully convey the difference in concern by those in authority for employees in American factories, where rates of industrial poisonings are high, to employees in German and British factories, where rates of poisoning are significantly lower, implying a connection between the two that a strict, formal logical analysis would not sustain. In this use of narrative logic, hot food becomes a metonym for compassionate concern, the implied starting place for improving conditions.

Hamilton’s appeal to emotion shows up as well in her 1919 Bureau of Labor Statistics bulletin, Women in the Lead Industries, where she argued from both Western and narrative logics that individual susceptibility to lead poisoning varies widely. Beginning her inductive argument, she writes,

> In one white-lead factory the records show that one of the employees began to feel symptoms of lead poisoning at the end of two weeks’ time. He died of acute plumbism after five and a half months’ work. In the same factory was a man who had worked in clouds of white-lead dust for 32 years, ever since he was a boy of 12, and had felt no ill effects.
>
> Hirt, who had long experience in industrial poisoning, says that 20 to 30 per cent of all lead workers are not susceptible. Of the remaining 70 to 80 per cent a little over one-half (about 40 per cent of the whole number) sicken quickly, the others more slowly. (Hamilton, 1919, p. 8)

As in the previous example, the use of individual case histories from the work place backed up by general scientific data was typical of Hamilton’s persuasive style with professional audiences. The case histories were the vehicle through which Hamilton could provide the detail that would bring cold statistics to life, just as the statistic “20 to 30 percent of all lead workers are not susceptible” was made more vivid by Hamilton’s description of the 32-year veteran who “had felt to ill effects” despite having worked “in

clouds of white-lead dust. . .ever since he was a boy of 12." Hamilton made a rhetorical choice here to employ the pathos of narrative logic. She could have simply described "a male who worked in lead for 32 years and felt no ill effects." Instead, she invited her professional audience to see a larger reality, a more complete truth about the lives of industrial workers that the description of "a boy of 12" working "in clouds of white-lead dust" conveyed.

Also typical of Hamilton's argumentative style, however, was her need to engage in narrative logic to convey truth that she believed existed in a larger realm of thought that included but was not limited to scientific data, truth that "everyone" knew, or should know, at the core of their being, "common sense." This faith reflects Hamilton's roots in nineteenth-century American culture with its optimistic sense, fast disappearing by Hamilton's time, of a "commonwealth," (Darsey, pp. 202-203). Hamilton displays that faith in this bulletin when she argues that, despite the fact that individual susceptibility to lead poisoning varies widely, women as a class needed special protection from lead poisoning. Claiming that "it is necessary to forbid the entrance of women into the more dangerous kinds of lead work," she included as evidence that "lead is a race poison" (Hamilton, 1919, p. 12) in that it affects not only a woman but her unborn children; and she argued that "everyone will admit that a poison which may destroy or cripple a women's children is a far more dangerous poison that one which only injures the woman herself" (p. 12). While neither argument meets the standards of evidence for formal logic, both are powerful and persuasive from the narrative paradigm since "narratives are moral constructs" (Fisher, 1984, p. 300). As Hayden White asserts, "Where, in any account of reality, narrativity is present, we can be sure that morality or a moral impulse is present

too" (as cited in Fisher, 1984, p. 300). Hamilton use of the words "race poison" to describe lead poisoning in women and her assurance that "everyone will admit" that a race poison is worse than a poison that affects only one generation are moral arguments meant to stir her audience's heart and conscience more than its mind.

Her argument is also evidence that Hamilton was a "transitional" New Woman, living with one foot in the nineteenth century and the other, in the twentieth: Arguing from narrative logic, she exploits the nineteenth century notion of a woman as the repository of moral values, so that to injure women in the workplace is also to injure morality in the society as a whole. At the same time, she uses the Western logic of the twentieth-century "new women of science" (Smith-Rosenberg, 1985, p. 265) as evidence to support her claim. Hamilton played both sides of the fence, rhetorically speaking, consonant with her feminist-pragmatist view of women as the keepers of the nation's highest virtues who were in need of special protection so that their innate superior qualities could be allowed to accomplish their good work in the larger society.

By blending the two logics in her professional discourse, Alice Hamilton pressed her audience of scientists, physicians and industrial hygienists to attach a human face ("a man who had worked in clouds of white-lead dust for 32 years") and to bring a problem-solving orientation ("supply the workmen, free of cost, a glass of milk or a cup of cocoa") to what otherwise were merely cold, hard statistics. Madaus (1997) calls the style of argumentation with professional audiences developed by Alice Hamilton, Crystal Eastman, and others in the occupational health field "technical advocacy" (p.263). "While the scientific report format bolstered the credibility of their professional writing,"

Madaus writes, “each promoted her recommendations in language ‘colored’ by a variety of linguistic strategies, including the powerful evaluative capacity of narrative” (p. 263).

Perfectionism

In her autobiography, Alice Hamilton (1943) described the impetus for the establishment of Hull House, writing of Jane Addams:

> She knew that the social exclusiveness of the well-to-do, the social ostracism of the “Dago,” “Polack,” “Hunky,” “Greaser,” Negro, was harder to bear than political corruption and rotten city government. Bad government led to wretched conditions, but it did not degrade the poor man in his own eyes. . . . Contempt, she said, is the greatest crime against one’s fellow man. (p. 59)

Sigfried (1991) points out that “the intellectual appeal of pragmatism was grounded in an absolute respect for the other” (p. 3), which included a belief in the human capacity for growth and change. That faith in the progress of humankind had its roots in the nineteenth-century religious notion of “perfectibility”--the individual as “a ‘reservoir’ of possibilities” (Thomas, 1965, p. 656). By the Progressive Era, perfectibility had become “a dynamic principle of reform” (p. 659) to address the problems of the secular world:

> Since social evils were simply individual acts of selfishness compounded, and since Americans could attempt the perfect society any time they were so inclined, it followed that the duty of the true reformer consisted in educating them and making them models of good behavior. As the sum of individual sins social wrong would disappear when enough people had been converted and rededicated to right conduct. Deep and lasting reform, therefore, meant an educational crusade based on the assumption that when a sufficient number of individual Americans had seen the light, they would automatically solve the country’s social problems. (Thomas, 1965, p. 659)

Feminist-pragmatists were among the reformers who believed that if people “knew better,” they would “do better,” and they emphasized education as a key to social reform and to extending democracy to all classes. Thomas (1965) explains, “With the sudden transference of a vague perfectionist faith in self-improvement to urgent social

problems there emerged a new type of professional reformer whose whole life became identified with the reform process" (p. 663). Many of these reformers, including feminist-pragmatists, believed "political results . . . would be forthcoming only when the reformation of society at large had been accomplished through education and example" (p. 662). Alice Hamilton's rhetoric reflects her commitment to knowledge as the key to eradicating evil and inequity. For example, she wrote of Jane Addams and Hull House:

> She offered young people of education and culture and gentle ways a place where they could live as neighbors and give as much as they could of what they had. They were not to live in sordid tenements—that sacrifice was not asked of them—but they were to suffer with the rest from the squalor and discomforts of the slums so far as outer things were concerned, and in the knowledge they acquired they would be better equipped to fight against these evils. (Hamilton, 1943, p. 60)

The "knowledge they acquired" was not the kind necessarily obtained in the classroom—these "young people of education" already had book-knowledge—it was practical experience and applied knowledge that left them "equipped to fight against these evils" that counted with feminist-pragmatists. So, for example, in one of her earliest articles for the social reform community, "The Social Settlement and Public Health," published in Charities and the Commons in 1907, Alice Hamilton wrote of the unsanitary conditions in the poorer quarters of Chicago, "It is in this field that the settlements can do most valuable service by interpreting the sanitary laws to those who do not understand them, and by showing those who do how they can demand and secure better administration from the city" (Hamilton, 1907, p. 1038). In this passage, Hamilton recommended "interpreting" and "showing" as the educational tools to be used with the poor as a means of empowering them to secure sanitation services they were entitled to. She also favored "showing" as a means for enlightening public officials. For example, she praised the Nurses' Settlement in New York who, "because of their intimate

acquaintance with the tenement house districts and their observation of the real working of laws designed to protect the public health, have been able to show the Department of Health the defects in some of their measures and how these defects could be overcome" (p. 1038). In Hamilton's way of thinking, "intimate acquaintance" with real life leads to "showing," which ultimately leads to the elimination of "defects," in keeping with the perfectionist view of the progress of humankind. Showing eliminates the need for persuasion because the truth that is revealed through showing is self-evident—a "force to which every normal mind must yield" (Perelman, as cited in Darsey, 1997, p. 19).

Hamilton reiterates the point about "showing," using Hull House as an example of success in this arena:

> It may be advisable in some cases for the residents in a settlement to undertake the performance of certain public duties in order to show that it is possible to do them thoroughly and efficiently. Mrs. Kelley has called attention to the many different kinds of public offices which have been held by settlement people. In the early days of Hull-House [sic], the Woman's Club made an inspection of the alleys and of the backyards of the ward and found a shocking condition of filth and neglect. As the most practical way of securing a reform in the garbage collection, Miss Addams applied for the position of garbage inspector and obtained it, appointing Miss Amanda Johnson as her deputy. The next year Miss Johnson became inspector and for three years performed the duties of that office. Her administration was most efficient and is still recalled with admiration by the people of the neighborhood. (Hamilton 1907, p. 1038)

The term "inspector" relates to showing in that the inspector's role is to officially serve as "spectator to a 'spectacle,'" in this case, garbage collection, and show where improvement is needed by finding and pointing out flaws. The inspector needs only to show, not to prove or argue. To "show" city officials a model of thoroughness and efficiency in the performance of sanitation services was a means of "inducing those officials to perform their plain duty" (p. 1038), as well as means of rousing residents to "demand proper service from its paid officials" (p. 1038). "Plain duty" is a common

sense phrase that carries ontological weight, putting the situation, putatively, beyond debate. That the "plain duty" of "paid officials" is to deliver "proper service" is, from the perfectionist world-view, uncontestable, a truth that the audience would accept without question (Darsey, 1997).

Showing was effective, in Hamilton's view, because of the nature of human progress. She expressed her philosophy concerning the ongoing perfecting of society in a piece entitled, "Industrial Diseases" that appeared the following year in Charities and the Commons:

> Now if all the evils of which I have spoken were inevitable there would be no use talking about them, but inasmuch as every civilized country has proved that industry can be carried on without the sacrifice of human life and health, it behooves us to at least discuss the question and not to resign ourselves to ills that are preventable. (Hamilton, 1908, p. 658)

For Alice Hamilton, industrial "evils" were not "inevitable"; through human progress they could, she believed, become a thing of the past, as "every civilized country" other than the United States had demonstrated. The elimination of these evils occurred as individuals were enlightened to the truth and responded out of their inherent goodness. In her 1911 speech to the National Conference of Charities and Correction, Alice Hamilton described the outcome of her efforts to educate the owner of a group of factories about industrial disease among his workers by bringing him a list of eighteen recent cases of lead poisoning: "Once convinced, he showed himself entirely ready to correct the most crying evils and this has been true of many other employers. Their willingness to do the right thing is only equaled by their fathomless ignorance that anything needs to be done" (Hamilton, 1911, p. 203). Evil was the result of ignorance, and education was the means by which ignorance, and evil, were banished.

Hamilton struck a similar chord in relating the story of "What One Stockholder Did" in a piece that appeared in The Survey the following year. Mrs. Joseph T. Bowen, a supporter of Hull House and a major stockholder in the Pullman works, had been approached by Alice Hamilton about industrial disease discovered among the men working on Pullman railroad cars. Hamilton writes,

> I should like to tell the story of one stockholder who attacked this apparently impossible problem with unhesitating directness and found, as I suspect many others would find, that the difficulties were not insurmountable and that the soulless corporation was made up of very reasonable and humane men. (Hamilton, 1912, p. 387)

There is a certain irony in Alice Hamilton speaking well of the management of the Pullman company. Hull House had earlier been involved in supporting Eugene Debs's strike against the company, a strike that made history in the annals of the labor movement and Debs a household name (Brommel, 1978). Nevertheless, the point Hamilton wished to make concerned the capacity of human beings to change: Bowen was successful in changing the behavior of "reasonable and humane men" of Pullman by educating them to the facts. She commissioned an investigation that, while "not at all sensational" (p. 388), showed the inadequacy of the Pullman company's efforts to protect and treat employees who were injured on the job. The company's response was to extend protections beyond what was required in Illinois by the newly enacted Occupational Diseases Act. Hamilton once again drove home the point that people, including those managing a "soulless corporation," would do the right thing if properly educated to the truth. "It needed only that the conditions should be placed clearly and with a certain insistence before the officials of the company for them to recognize the necessity for changes and to proceed to make them," Hamilton (1912) wrote (p. 389). This is a particularly interesting

sentence, a place where Hamilton's belief in showing and her desire to persuade collide. Her use of the word "clearly" suggests the metaphors of vision and self-evidence, while the ambiguous term "certain insistence" suggests that Hamilton felt a need to persuade, as well as show. With the word "necessity" she returns to the perfectionist idea of a self-evident truth that, once seen, will of itself induce company officials to act.

The principle of perfectionism extended beyond the managers of the Pullman company in Hamilton's mind—"Surely it is not rash to assume that the same thing would be true of most large companies" (p. 389)—because the age-old problem of evil was rooted in the age-old problem of ignorance: "The evils that exist are probably of long standing and it simply has not occurred to anyone to inquire if they are inevitable or if modern methods of protection would not do away with them" (p. 389). Again, the words "it simply has not occurred" and "inevitable" are "necessity" words that suggest a clear underlying ontology, a Platonic belief that there are things that really are, invariant and inviolable laws of nature, and that they are knowable. An individual who stepped forward to show truth was providing a "service" that "may really be the means of starting a very widespread reform in the methods of the company with which he is connected" (p. 389), Hamilton concluded.

Hamilton applied the same philosophy to the evil represented by war, refusing to accept that war was inevitable and that objecting to war was futile. In a rebuttal piece to an article that had appeared in the social reform magazine The Survey, in which social workers were accused of "ignorance, shallowness and coldness of heart" for taking a pacifist stance in regard to the war underway in Europe, Alice Hamilton wrote:

> Mr. Gleason takes issue with those of us who hope that war may some day be abolished. During the past year and a half several writers have reminded us that

> certain human institutions which once seemed as lasting as humanity itself have suffered gradual extinction. Human sacrifices, persecution for witchcraft, persecution for religious belief, chattel slavery—all these have disappeared or are disappearing—yet it is not so long ago since the last, at any rate, was held to be a necessary element in human society. (Hamilton, 1916, p. 308)

Here, as in the previous example, Hamilton sets up a Platonic appearance/reality dichotomy, pointing out that certain "human institutions" that "seemed" to be reality and to be "necessary" (human sacrifices, persecution slavery) were, in fact, only appearances of reality, and, thus, evil. The evidence of their unreality, she says, is in the fact of their "gradual extinction." Hamilton believed that just as an individual factory owner could be enlightened to reality, the Good, so could an entire society. The progress that had been made over time against social evils such as human sacrifices and slavery—"all these have disappeared or are disappearing"-- she believed could also be made against war.

As with other reformers of her generation, Alice Hamilton's belief in the steady progress of humankind was challenged by war and militarism. As Thomas (1965) observed, "Whereas Nemesis in the perfectionist imagination had assumed the shape of personal guilt and estrangement from a pre-established divine order, for the post-war reformers it took on the social dimensions of a terrifying relapse into barbarism" (p. 680). Nevertheless, Alice Hamilton's discourse reveals that she retained, through two world wars, a core commitment to perfectibility despite her dismay at the retreat from progress that military force represented. In writing for a popular audience in the 1933 Survey Graphic, for example, she said of Hitler's campaign of terror against the Jews, "What is the explanation for this return to a barbarous stage of human history? Excuses there can be none, but we must try to find some explanation for it" (Hamilton, 1933b, p. 453).

Hamilton's "explanation" was, first, that this devolution of humanity, the "return to the barbarous stage of human history," was limited in its scope: "I know that the change is not universal, that there are many [sic] many Germans who regard what is happening in that distracted land with dismay, with shame, sometimes with despair" (p. 453); and "Dissent is there, even passionate repudiation of the whole movement, and it is not confined to the Jews, who are the victims of specially [sic] relentless persecution; it is felt by Gentiles, too" (p. 451).

Secondly, Hamilton believed the retreat from progress was a result of ignorance, in this situation, based on propaganda and lies. Speaking of the German people, she wrote,

> They have had little but the attacks on the Jews dinned into their ears and the newspapers have all come into line, so that even the non-Jews have grown sick of it. More than one Gentile told us he had put his radio out of commission because he could not listen any longer to Goebbels [sic] scurrilous speeches, yet he must have excuse to give the neighbors if they asked. (Hamilton 1933b, p. 453)

Hamilton believed that the corrective to this reversal in human progress was enlightenment brought about by exposure to the truth. For example, she cites one of the accusations against Jews that was used by Germans to justify Jewish persecution:

> The specific charges we heard against the Jews were, first, that during and after the war hordes of impoverished eastern Jews poured into Germany and took possession of the houses so sorely needed by Germans. But the census of 1925 showed that the Jews numbered only 0.9 percent of the population of 65,000,000, while in 1913 they were 0.93 percent, so the horde cannot have been overwhelming. The truth is that the Jews who came after the War were from the parts of Germany that were given to Poland for they, like other Germans, refused to live under Polish rule. (Hamilton, 1933b, pp. 453-454)

In the article, Alice Hamilton enumerates this and other lies against the Jews and counters with "the truth" based on scientifically verifiable facts. For Hamilton, there was an absolute and knowable truth, and she believed that scientific, empirical data could be

relied upon to reveal it. Once that truth was plainly stated, as for example, when she points out that there was a mere 0.03 percent increase in the number of Jews in a population of 65 million, and that most of those were German Jews resettling from other parts of the country, Hamilton believed it was enough to change people's minds and behaviors. Hamilton uses this article, aptly titled "Below the Surface," as a tool for bringing to light for the American public a hidden truth, writing, "The tourist [in Germany] who cannot get below the surface . . . cannot know the truth" (Hamilton, 1933b, p. 451). Only the truth and the action it inspires could reverse the horrifying return to barbarism that Hitler represented, for as Hamilton (1933b) observed, "If anyone hopes that there will be a change for the better let him read Hitler's book, Mein Kampf [sic] and he will be convinced that so long as Hitler rules Germany there can be no hope for the German Jew" (p. 486).

In the perfectionist worldview of Hamilton and other feminist-pragmatists, it was not religion but rather twentieth-century science that was a key to the door of human progress, reflecting the dominant role that science had assumed in American ideology. In fact, Hamilton attributed the situation in Germany under Hitler in no small part to the turning away from science as a means of determining truth that would have, in turn, influenced right action and progress. In "The Plight of the German Intellectuals," for example, an article she wrote for Harper's Magazine in 1933, Hamilton makes the claim that, as terrible were the attacks on individual German Jews up to this point, what looms as far more "serious for Germany and the world is the revolution Hitler is bringing about in German intellectual life" (Hamilton, 1933a, p.159).

> Pure science, truth for its own sake, has been the goal of the German scholar, and it has been Germany's boast that the brilliant discoveries in the field of applied

> science on which other nations have prided themselves were made possible only by the groundwork of German research. The world has admitted this. (Hamilton, 1933a, p. 159)

Here, Hamilton says that "pure science" is "truth" that paves the way for human progress. While the Germany of the nineteenth century had excelled in pure science, the Nazis, Hamilton pointed out, were turning away from intellect and relying primarily on brute strength, a reversal in human development. Hamilton (1933a) writes,

> Yet now Germany is deliberately abdicating her place of leadership in the intellectual world, as she is giving public notice that from now on "intellectualism" is to be discouraged, to play only a minor role in the new Germany. Let the Leader himself speak. In his book Mein Kampf Hitler says that education in the new Germany must lay stress first on strong physique, second on character, and third on the intellect. Sport, defensive sport, is the most necessary part of all. "If our intellectual upper class had not been brought up in an atmosphere of culture but had been trained in boxing we should never have had the disgrace of 1918, the revolution led by deserters, cowardly and irresolute. Intellectual training does not serve in a moment when steel is needed." (P. 159)

In regard to the specific attack on science by the Nazis, Hamilton (1933a) writes, "The new Commissar for Education, Rust, announced his educational principles, saying that 'Unprejudiced, objective, scientific teaching, which is blind to the spiritual changes within the nation will no longer be tolerated'" (p. 160).

In Hamilton's perfectionist paradigm, this retreat to ignorance and brute force spawns evil. She (1933a) writes, "Hitler is not an educated man and perhaps it is partly his ignorance that makes him so ready to lay down the law to those who are far his superiors in this respect," (p. 162). Hamilton says that this evil that depends upon lies and the suppression of all dissent for its existence: "Hitler and Goebbels and other leaders make statements that are palpably lies and cruel lies, but it is on these lies that his [Hitler's] whole program is founded, and he simply cannot permit them to be questioned"

(p. 161). Her remedy for lies is the truth, arrived at through sound, scientific reasoning. She writes, “Every single statement in his daily propaganda could be challenged by an intellectual” (p. 161).

In this piece, Hamilton makes a nexus between a retreat from a robust intellectual life of science and a return to evil ways: “The attack on intellectualism goes hand in hand with the attack on the Jews. Again and again we are told that the Jew is intellectual, the German spiritual and idealistic” (p. 162). The result is a blocking of human progress, as in this example she gives from the field of medicine: “Jews and half-Jews and quarter-Jews are now exiles from the German medical world. What this will mean to the progress of medical science in Germany one can guess by reading the names of those that have been thus expelled” (Hamilton, 1933a, p. 166).

Hamilton’s commitment to science as truth and a key to human perfectibility in modern times is reflected in the speech she gave at Madison Square Garden in 1929 on the anniversary of the deaths of Sacco and Vanzetti. Having accused the American justice system of “a strange lagging behind in the progress of human society” (Hamilton, 1929, p. 3), Hamilton praises the virtues of the scientific approach:

> Compare with this the way the scientist of today approaches the search for truth. Here is no determination to prove what has been decided on as desirable. Science may set up an hypothesis but is ready to abandon it at any moment, holds it lightly only as long as it is an aid to progress. Its method is to let truth crystallize out of assembled and studied facts, not to put the facts into a preconceived pattern. This method belongs to our times, it is not unchanging in a changing world as the method of the courts. (Hamilton, 1929, p. 4)

The connection between progress, science, and perfectibility in Western thinking is explained by Robert Nisbit (1980) in his book, History of the Idea of Progress:

> No single idea has been more important than, perhaps as important as, the idea of progress in Western civilization for nearly three thousand years. . . . Simply

> stated, the idea of progress holds that mankind has advanced in the past—from some aboriginal condition of primitiveness, barbarism, or even nullity—is now advancing, and will continue to advance through the foreseeable future. . . . But what does "advance" or passage from "inferior to superior" mean in substantive terms? . . .First [sic] slow, gradual, and cumulative improvement in knowledge, the kind of knowledge embodied in the arts and sciences . . . From Hesiod . . . down to the great prophets of progress in the nineteenth and twentieth centuries . . . we find a rarely interrupted conviction that the very nature of knowledge—objective knowledge such as that in science and technology—is to advance to improve, to become more perfect. (PP. 4-5).

Alice Hamilton' post-Industrial Revolution world was a "changing world," and the flexibility of science and its lack of dogma, especially as compared to the law and religion, respectively, was what made science "an aid to progress" and to the perfecting of society. This apparent contradiction between Hamilton's belief in science as the pathway to an invariant truth, the ultimate Good, and her praise for the dynamic nature of scientific understanding exemplifies the transitional nature of her role as a feminist-pragmatist New Woman. Hamilton functioned with one foot planted in the nineteenth century, and the other, in the twentieth. She held fast to her perfectionist belief in an Ultimate Good that all people knew in their "heart of hearts," while also embracing the newly emerging scientific ethos of positivism, with its emphasis on the pure objectivity of science, its "disinterestedness" and lack of prejudice. While her belief in scientific objectivity might today be considered naïve, it was, for Hamilton, the means by which she achieved the balance between emotion and reason that Addams had identified as the key to *authoritas*.

In addressing scientific audiences, Alice Hamilton's commitment to perfectibility was evident in her desire to educate other professionals in science, medicine, and industrial health so that they could participate in moving society forward in protecting workers from industrial poisons. That she believed such progress was possible is

reflected in Lead Poisoning in the Smelting and Refining of Lead, a technical bulletin she wrote for the U.S. Bureau of Labor Statistics in 1914. Hamilton (1914) opens the bulletin with a progress report:

> The last 15 or 20 years have seen great changes in the lead smelting industry in the United States. As transportation has improved, small and poorly equipped smelters which had been built near the deposits of ore have been abandoned and the tendency has been to concentrate the work of smelting and refining in a few large plants, for it has proved cheaper to ship the ore to large centers where labor is abundant, than to do the smelting in the mining districts. This change has resulted in a twofold advantage to the worker. In the first place, as these plants are usually equipped with the latest and best machinery, the amount of handwork required has been materially diminished. In the second place, the conditions under which the employees work have been improved, for large, well-built factories are usually freer from dust and fumes than re those of the old type, and newer methods of manufacture involve economies, such as the saving of poisonous volatile products which used to be allowed to escape into air. Along with the improvements in equipment, there has been in recent years evidence of a greater interest on the part of the managers in the health and safety of their workmen, and there is probably now no plant in the United States in which some effort is not made to lessen the dangers of lead poisoning as well as to prevent accidents. As a result of these changes in most places where lead smelting is an old industry . . . the opinion is general among physicians and townspeople, as well as among the men in the industry, that lead poisons is far less frequent and less severe than it used to be. (Hamilton, 1914, p. 5)

Hamilton's references to "improved" working conditions for employees, "greater interest" of managers in the "healthy and safety of their workmen," efforts made to reduce "dangers of lead poisoning" and to "prevent accidents," and "far less frequent and severe" lead poisoning are all offered as evidences of "great changes in the lead smelting industry" over "the last 15 to 20 years," or progress. For this bulletin, Hamilton (1914) examined conditions in twenty plants and concluded that in most cases, "the smelting and refining plants which have the greatest incidence of lead poisoning are those in which unusually dangerous processes are used" (p. 6). Here again, Hamilton identifies

knowledge arrived at empirically as the “aid to progress” (Hamilton, 1929, p. 4), in this instance, knowledge of the “dangerous processes.”

Thus, she undertakes the education of her scientific audience with the words, “It may be well to give at the outstart a very brief outline of those processes in lead smelting and refining which are attended with more or less risk to the health of the men engaged in the industry” (Hamilton, 1914, p. 6). All of this technical bulletin then becomes a didactic tool, as when Hamilton writes, “Lead ore from the mines must be first crushed and screened to the proper size for roasting and smelting,” and the by-product of the process, lead refuse, is “dangerous to handle, the danger increasing in proportion to the dustiness” (p. 17); and, “. . . it is dust and fume that are responsible for the great majority of cases of industrial plumbism, and their control should be a simple matter compared to the complicated engineering problems which have been successfully solved by smelting experts” (p. 9). With the words, “their control should be a simple matter compared to the complicated engineering problems,” Hamilton expressed her faith in the ability of humans to make progress by relying on science and technology, in this instance, pointing out the susceptibility of the problem of dust and fumes to a technical solution given the success that had been achieved with more complicated problems.

In her 1925 text book on Industrial Poisons in the United States, Alice Hamilton undertook a major effort to educate physicians and industrial health professionals such as had never been done before by an American (Sicherman, 1984; Hamilton, 1929/1925). Her compilation of all available information on industrial poisons in the United States was an effort to move society forward by filling a need:

> It has been my task for many years to examine records of hospitals and dispensaries and to interview physicians in many parts of the country in my

> search for information about a given poison. Not one hospital in twenty has records which yield the sort of information which the student of industrial toxicology craves and yet this is not elaborate. If the recording interne [sic] would only treat the poison from which the man is suffering with as much interest as he gives to the coffee the patient has drunk and the tobacco he has smoked, if he would as carefully about the length of time he was exposed to the poison as about the age at which he had measles, the task of the searcher for the truth about industrial poisons would be made so very much easier. (Hamilton, 1929/1925, p. v)

Hamilton emphasizes the need for "information," for "records" containing facts that would lead a "searcher for the truth" to the ultimate truth revealed by scientific inquiry. While she lapses into persuasion in this Preface with the words "if. . .only," the didactic nature of the textbook predominates. A typical example is this passage on the effects of lead poisoning:

> The changes in the vascular system in chronic poisoning as such as follow repeated, excessive vacillations in the blood pressure (Thomas (14)). The proliferative endarteritis is probably reparative and compensatory to the damage done to the muscular coat, but, as usually happens in such repair processes, the changes may be out of all proportion to the damage in the media. The sub-endothelial connective tissue proliferates and then undergoes fatty, hyaline, and calcareous degeneration, resulting sometimes in complete occlusion of the vessel. A very striking case of oblitertive endarterisitis was described recently by Timme (15), in a painter who suffered from senile gangrene of the feet to a degree necessitating amputation. The vessels of the feet were found to be occluded and lead was isolated from the atrophied muscles. (Hamilton, 1929/1925, p. 22)

In this passage, Hamilton describes in technical detail the results of lead poisoning on the vascular system so that a physician could recognize the symptoms and take appropriate action in treating patients presenting such symptoms. That this is her intent is revealed in the title of the final chapter of the textbook: "The Prevention of Industrial Poisoning" (p. 538). Hamilton believed knowledge of the truth would naturally lead to progress, by way of prevention. Beyond educating physicians, in this chapter Hamilton also called upon industrial physicians to educate employees:

> The physician should be the one to whom the education of the employees in personal prophylaxis should be entrusted, or at least he should plan and supervise it, though it may be he will not have enough of factory vernacular to "get it across." But he should insist on the necessity of instruction. The idea is often held by employers who are using unfamiliar poisons that it is best to say nothing about them for fear of frightening the men away. This attitude on the part of the men in charge of munition [sic] works during the war was a distressing obstacle in the way of all who tried to introduce into American plants the safeguards successfully worked out in the British, which could not be done if the fiction were maintained that trinitrotoluene might indeed explode, but was otherwise quite harmless. As a matter of fact we all knew the workmen were not hoodwinked, they were only muddled. They knew perfectly well that something was there that made men ill but just what it was and how it affected them they did not know, so they ended by suspecting everything and promptly quitting the job if they fell ill, regardless of whether the illness were caused by the poison or not. The plants which were under intelligent management, with careful instruction of the men and prompt resort to the dispensary even for slight ailments, had a much lower labor turnover than those which followed the policy of secrecy (Hamilton, 1929, p. 540)

Alice Hamilton rejected the notion that "ignorance is bliss," calling it here an "obstacle" to progress, whether progress is defined as "safeguards" against poisoning or minimization of "labor turnover." She argues for the "necessity of instruction" and for "careful instruction" of employees for the evil of workplace poisoning to be eradicated from society through revelation of the truth. She points out the "if the fiction were maintained" that industrial poisons are harmless, then the truth, the "Good," could not do its work of changing minds and behavior. When Hamilton points out that the workers were "not hoodwinked, they were only muddled," she is appealing to common sense, a "plain truth" referenced earlier, in which the technical revelations of science, while not accessible to the layperson, comport with a truth the layperson knows intuitively. Hamilton makes clear that the perfectionist philosophy of a human being as a "'reservoir' of possibilities" (Thomas 1965, p. 656) applies to all people, no matter their station in life.

Some twenty years later, Alice Hamilton took a similarly didactic approach in addressing the 1944 meeting of California Medical Association on "New Problems in the Field of the Industrial Toxicologist," a speech that was published in the medical journal California and Western Medicine. Perhaps because two world wars had demonstrated to her the potential of humankind to fall back into "barbarism," in this speech her perfectionism was tempered by realism: she also included information on older, recurring problems. She says, "I want to include also older problems which have been with us for a long time, but which have increased in importance with the war" (Hamilton , 1944, p. 55). Speaking of her specialty, lead poisoning, she says,

> Some of the old and familiar poisons are coming in with the new trades or coming back in old trades. I went over a great shipbuilding plant at Fall River, Massachusetts, [sic] a few years ago and was very gratified to find they were not using lead paint. They said the navy [sic] had given it up and so they gave it up for all of their ships. That seemed to me a great step forward. Then not very long ago I was told that although the navy [sic] still, and I believe it is true, does not use lead paint, the Maritime Commission does, and that now the hulls of ships are being sprayed with red lead paint. . . . Anyway that danger has come back after we had thought it was quite sidetracked. (Hamilton, 1944, p. 56)

By this time, Hamilton recognized that human progress was not linear; society could take "a great step forward" and a "danger" could be "sidetracked," only to "come back" as a result of the exigencies of war or the development of new trades. As one committed to the perfecting of society, Hamilton's response was to continue educating other professionals about the "dangers," old and new. For example, of an old danger, she warns,

> Tetrachlorenthane has come back. . . . Tetrachlorethane is the most poisonous of all the chlorinated hydrocarbons. . . . So far as I know, tetrachlorethane was not used in any industry in the years between the two wars to any extent. . . . Now I find it on the list of the Bureau of Standards and the army [sic] and the navy[sic] as a very valuable solvent. Well, it is. But if you were thinking of the producer and not the product you would not touch tetrachlorethane. (Hamilton, 1944, p. 56)

Hamilton says that if her audience's vision is clear ("thinking of the producer and not the product"), its behavior will unquestionably follow suit ("you would not touch tetrachlorethane).

Addressing newer concerns in this piece, Hamilton writes,

> A number of new problems have come in that we did not have during the first World War. I think that one of the serious ones is the increased use of cracked petroleum. As you know, cracked petroleum is made by distillation at a heat so great that the molecules do crack up and you have as a result a change in the proportion of paraffins and olefins, and also the production of a certain quantity of aromatic hydrocarbons, the benzol group, which of course brings in a new danger. (Hamilton, 1944, p. 57)

With the words "as you know" and "of course" Hamilton signals a common-sense, shared understanding of science held by her audience at the same time she plays chemistry professor ("you have as a result. . .the production of a certain quantity of aromatic hydrocarbons"). She further demonstrates her perfectionist belief in a community of knowledge where certain truths are beyond debate in her description of a "new danger," the threat of aplastic anemia from exposure to gasoline fumes containing a high proportion of benzol. She writes,

> If you have a case of serious and unexpected symptoms in a worker in gasoline—and we do not expect anything more than a functional neurosis in such a worker—if there is real organic change, especially if it affects the blood picture, then our reasoning is that you have to do with coal tar benzol (Hamilton, 1944, p. 57)

Hamilton's use of the first-person plural pronoun, as in "we do not expect" and "then our reasoning," signals her belief that these truths need only be stated, not argued for.

Hamilton expressed her belief in society's ability to progress in the arena of workplace poisoning in her closing paragraphs of this speech. Referencing the progress that had been made in the battle against industrial poisons since 1917, when "there had

never been a meeting of the American Medical Association to discuss industrial medicine" (Hamilton, 1944, p. 60) and the "Public Health Service had nothing to do with industrial medicine (p. 60), she told her audience, "Now, it is so very different that I cannot help hoping for great things" (p. 60).

That hopefulness for the progress of humankind that is a hallmark of the perfectionist philosophy is a thread running through Alice Hamilton's discourse to reform, popular, and professional audiences. While her faith may have wavered in the face of the barbarity of war, her articles, speeches and books reflect her core commitment to the basic goodness of human beings and their ability to rise up and move forward when educated to "the truth." For Hamilton, "the truth" was found in science, and she and other scientists had a particular obligation to be purveyors of that truth.

Balance, Transcendence, Multiple Logics, and Perfectionism in Constellation

The four elements identified as characteristic of a feminist-pragmatist genre—balance, transcendence, multiple logics, and perfectionism—recur across the body of Alice Hamilton's discourse in varying proportions and endured over the course of her long rhetorical career. These elements work together synergistically, in constellation with one another, to produce Hamilton's meaning, i.e., her feminist-pragmatist philosophy and ideas. For example, in a passage previously quoted in the section "Transcendence," we see that when Hamilton (1924) opposed the National Woman's Party in The Forum on the issue of a "blanket" Equal Rights Amendment for women and men, she employed balance: she both identified with and differentiated herself from other feminists, juxtaposing the words "The goal of all feminists is the same" against "I belong to the group that holds. . . ." (p.152). In the same passage, she also asserted her perfectionism,

declaring that there was an ultimate truth, a “right method” for achieving women’s “freedom from handicaps in the industrial struggle” (p. 152), and that it was not to be found in a constitutional amendment. Rather, it could be apprehended by heeding the transcendent truth of science, which showed that women “stand the strains of industry less well than men” (p. 156) and, thus needed the special, protective legislation that an Equal Rights Amendment would render illegal. The scientific data Hamilton provided to support this claim—“The mill women have an excess death rate, compared to the women non-operatives, of 42 per cent to 96 per cent, and an excess tuberculosis death rate from 103 per cent to almost one thousand – 922 per cent (pp. 156-157)—help comprise her argument from formal logic against the blanket amendment. At the same time, the mocking language and the pathos in Hamilton’s challenge, “I should like to ask Kansas women if they envy the freedom of the women of Missouri and if they are ready to give up the laws which provide for an eight-hour day and a six-day week and a minimum wage and no night work” (p. 154) are evidence in her argument from narrative logic, meant to stir the emotions with the use of the “freedom” metaphor, even as they pointed to a common-sense truth that all people could understand. Again, we see the interplay of the constellation of generic characteristics in the fact that the two logics Hamilton employed also worked to balance her rhetoric. The result was a rhetorical style akin to what Campbell (1989a) described as Lucretia Coffin Mott’s “gender-free persona” that “avoided egregious violations of taboos against female rhetorical aggressiveness” in comparison to the more “assertive tone” of militant feminists such as Elizabeth Cady Stanton that “violated woman’s traditional role, and made little or no effort to render that violation less offensive to her audience” (p. 45). Use of the transcendent language of

science, in turn, was also a way in which Hamilton achieved that "gender-free persona." As Smith-Rosenberg (1985) puts it, while relying upon the old arguments of the moral superiority of women, feminist-pragmatists "embellished these earlier arguments with the language of a new, optimistic, nondeterministic science which reflected the hopes and ambitions of America's new women of science" (p. 265). That language was Hamilton's response to the rhetorical constraint against woman rhetors. It also helped resolve her internal struggle as a "transitional woman" to bridge the gap between the gentility of her late-Victorian upbringing and the intellectualism of her status as a New Woman of science.

In "Protection for Women Workers," these four characteristics work together to convey Hamilton's feminist-pragmatist belief in what Elshtain (2002b), in reference to Jane Addams, termed "difference feminism" in that it stressed the unique or particular features of "women's nature, or women's way of being in the world" (p. 248). To feminist-pragmatists such as Addams and Hamilton, women's primordial role in society as "first and foremost the nurturers of vulnerable human life" and the primary force behind settled as opposed to nomadic existence, was hugely valuable to the world (p. 248). That these feminine traits should be preserved and expanded to address society's ills was a cornerstone of feminist-pragmatist philosophy. As a consequence, depriving industrial working women of protective legislation even through well-meant legislation to equalize the economic playing field was a terrible mistake from a feminist-pragmatist perspective, for they believed that "to compel women to occupy the precise molds carved out by and for men would do violence to all of us" (p. 248).

This piece also reveals Hamilton's feminist-pragmatist commitment to science, which, while positivist and, by today's standards, naive in its belief that science was the objective path to ultimate truth, was also pragmatic and value-laden. For Hamilton and other feminist-pragmatists, science was a reformer's tool, a means by which they could improve the lives of real people, could apply "pathology. . .to Polk street" [sic] (Sicherman, 1984, p. 133). Hamilton sought scientific truth not simply for its own sake, but rather to be able to use it, in this case, to help protect working-class women. Feminist-pragmatists also relied upon knowledge achieved through practical experience to guide them in problem-solving, as when Hamilton (1924) declared in this piece that she accepted the inequality of laws that applied only to women because "experience is a thorough if hard teacher, and I have learned now to take what I can get and be thankful" (p. 160).

In Hamilton's 1929 speech commemorating the deaths of Italian immigrants Sacco and Vanzetti, we see transcendence working in concert with balance and perfectionism to convey her feminist-pragmatist belief in American democratic ideals and the need to apply them to all races and classes of people to ensure their political, social and economic rights. Hamilton (1929b) speaks from transcendence as an impartial arbiter of truth when she declares, "I do not belong to the group of personal friends but to that far larger group of men and women all over the world who saw in this case a symbol of the ever-renewed struggle for human justice" (p. 1). In arguing that such human justice was lacking in American court cases involving immigrants, she balances understanding with unsparing language: Hamilton acknowledges that "It is hard for most Americans to forgive a foreigner who comes to this country with high hopes and then suffers

disillusionment, who instead of feeling gratitude and admiration is bitterly disappointed and actually sets himself to try to change things" (p. 1); but she also likens the trials of such foreigners to "medieval trial by combat" (p. 4), "watched by a bewildered group of jurors not who are not free themselves from prejudice nor capable of looking at the conflict with clear eyes" (p. 4). When she says, in reference to Sacco and Vanzetti, that ultimately "the world slowly climbs to the heights from which it once dragged down those who reached the heights too soon" (p. 3), Hamilton is asserting her belief in the perfectibility of human beings, as well as her feminist-pragmatist confidence in an American public continuously progressing or, at the very least, capable of correcting its course.

In her 1917 piece "Prostitutes and Tuberculosis," which appeared in The Survey, balance, transcendence, perfectionism, and multiple logics all appear in Hamilton's argument that reformers must accept that "health and morals do not go hand in hand" (Hamilton, 1917, p. 516). These generic characteristics also work together to evince her feminist-pragmatist commitment to the scientific method of data-gathering and to empiricism. For example, balance is evident in Hamilton's identification of two approaches to the issue; she writes, "There are those who would keep back as long as possible any evidence which tends to weaken the appeal to the public for certain measures for reform" (p. 516), and "Yet the other class of reformers. . .would argue that no permanent gain can follow an appeal which is not founded on the truth" (p. 516). With these same words, Hamilton also sets up a perfectionist appearance/reality dichotomy when she writes that one group would "keep back. . .evidence" for appearance's sake, while the other would base its appeal on reality, "the truth." Hamilton argues that

maintaining an appearance of truth ultimate leads to evil in that "to say to the young that health and morals go hand in hand, when actually health and morals do not go hand in hand, is to cheat them perhaps for a while but in the end to lose their confidence in everything else we tell them" (p. 516). In contrast, the truth will lead to an Ultimate Good in the way of a "permanent gain." That truth, Hamilton argues, is absolute and knowable through scientific inquiry and empiricism. She writes that the prostitutes examined in this study, contrary to the predictions of members of the Social Purity movement, "did not die at the end of seven years, and when examined the majority of them were in good, even robust health" (p. 517). She also challenges a finding that a 6.9 percent rate of tuberculosis among 275 prostitutes examined by public health physicians was higher than the rate among women in factory work:

> Certain considerations, however, make the difference less great than appears from these figures. . . .The industries here listed are none of them notoriously bad, none has a decidedly high tuberculosis rate. Had the comparison been made in the textile towns of Massachusetts, where Dr. Perry found the death-rate from tuberculosis among women mill-hands to be from two and a quarter to five times as great as among women not in the mills, the result would have been quite different. (Hamilton, 1917, p. 517)

While the scientific evidence supports her argument from formal logic that "health and morals do not go hand in hand," she also argues her case with narrative logic when she writes, "If there is no way of deterring a girl from a life of shame save by terrifying her with the prospect of an early death, then we must give up trying to deter her" (p. 517) and "Fortunately we do not need the appeal to fear when we speak to the young; we have far stronger and more moving chords to play upon" (p. 517). This logic appeals to common sense, a shared understanding that withholding the truth and appealing to fear can result in no long-term good and that there is "something much

higher and finer" (p. 517), a higher truth, which human beings all know and which can be appealed to. Hamilton's displays her feminist-pragmatist respect for knowledge gained through practical experience, as well as for science and empiricism when she writes,

> Science every now and then surprises us by confirming some idea deeply rooted in the minds of the ignorant and vainly combated for years by the learned. Girls of the factories and workshops have listened with a polite and silent skepticism to the descriptions given them by their religious instructors and by lecturers on social purity, of the dangers of a prostitute's life. They knew girls who had left the factory with its poor pay and hard work for the ease and abundant food of the brothel and they had seen them flourish instead of fading away. (Hamilton, 1917, p. 517)

Hamilton argues that factory girls knew the truth from their empirical observations and practical life experience, and science confirmed what, from common sense, they knew to be true. When Hamilton concludes, "We need not be afraid that any harm will follow the publication of facts concerning the life of the prostitute" (p. 517), she is again asserting a perfectionist belief in the truth of science as the pathway to the ultimate good and worthy of our confidence. She is also stating a feminist-pragmatist belief that truth must be "put to the ultimate test of the conduct it dictates or inspires" (Addams, 1910, p. 85).

While perfectionism in the form of didactic "showing" of scientific truth predominates in Hamilton's 1919 Cutter Lecture in Preventive Medicine and Hygiene, "Inorganic Poisons, Other Than Lead, in American Industries," transcendence and balance are also in evidence to lesser degrees. Hamilton's perfectionism makes its first appearance in her opening statement:

> The earliest case of brass poisoning that I have been able to find in our literature is that reported from Dr. Osler's clinic at the Hopkins by Oppenheimer (1) in 1895. This rather obscure case was very thoroughly worked out and clearly presented. The man, who worked in a bell foundry, had already been under treatment at the Hopkins for lead poisoning contracted in the course of his work, and came back three months later complaining of breathlessness and other symptoms of uncompensated heart lesion. Careful questioning brought out a

> history of chills, perfectly typical in character, but when one thinks of the frequency of malaria in Baltimore and the total lack of anything on brass chills in American literature at that time, one cannot help congratulating Dr. Osler or his assistant on this case. Oppenheimer even collected the powder deposit from the fumes of the bell metal and had it analyzed. (Hamilton, 1919b, p. 89)

Her use of the first-person plural pronoun "our" to describe the scientific literature indicates her belief in a community of shared knowledge. Her reference to the "obscure" case being "clearly" presented, as well as the use of the phrase "In order to shed some light on this question" (p. 94) later in this piece relate to the metaphor of vision that allows truth to be seen. With the words "thoroughly worked out," "careful questioning," and "even collected the powder deposit from the fumes of the bell metal and had it analyzed," Hamilton is didactic, showing how obscure scientific truth is brought to light; and in turn, her recitation of the patient's symptoms, "breathlessness," "uncompensated heart lesion," "history of chills, perfectly typical in character" instructs her audience of physicians and industrial hygienists on how to recognize brass poisoning. Hamilton is similarly didactic, even professorial, when she says, "The presence of lead in brass is an important feature which must never be forgotten. Lead is present not only as an impurity in the zinc, but is added in varying proportions to the different alloys" (p. 91); and

> In Germany, Sommerfeld (2) and Lewin (3), and in England Legge and Goadby (4) believe that the addition of antimony to lead decidedly increases the danger of lead poisoning, for while antimony volatizes at a higher temperature than lead, the addition of antimony to lead, up to a certain proportion, results in a mixture which has a lower melting and volatizing point than pure lead itself. (p. 93)

The absence of overt advocacy in these examples and throughout this piece of discourse is further evidence of perfectionism at work. For Hamilton, these scientific facts were unassailable truths that, once presented, in and of themselves had the power to change audience members' minds and influence their behaviors. At the same time, Hamilton's

lack of advocacy shows transcendence at play, in that it signals her adherence to the norm of disinterestedness of the scientific ethos, just as the statements "The earliest case of brass poisoning that I have been able to find," and ". . . the addition of antimony to lead decidedly increases the danger of lead poisoning" demonstrate the norm of communality. Hamilton's transcendent position as a rhetor is made even more secure by the originality of her expert knowledge, in evidence when she says, based on her experience in factories in Illinois, "It is excessively hard to protect workers in Paris green. . . .The best procedure seems to be to plug the nostrils lightly with cotton, to plug the ears in the same way, and to smear the face over with some bland ointment" (p. 92).

While Hamilton stopped short of overt advocacy in this piece, she did display aggressive language in criticizing physicians for a "deplorable lack of curiosity" about industrial poisons, an issue that is dealt with at some length in a previous section of this paper under "Balance." She also takes a swipe at American ethnocentricity, when, in describing the fight to eliminate phossy jaw, she says,

> While the phossy jaw of match workers agitated every European country for a decade, was the subject of many eloquent protests, was debated in parliaments and finally made the ground for an international agreement for the abolition of the use of white phosphorus, we went on for years serenely sure that we were quite free from this peculiarly painful and crippling industrial disease. Then, when we were finally shocked into consciousness that our immunity was only fancied, we acted with a promptitude which does not always characterize us, and passed a federal measure to accomplish the same result as that obtained by more direct means in European countries. (Hamilton, 1919b, p. 98)

While Hamilton is critical of America's ignorance for being "serenely sure" of its "immunity" from phossy jaw, she balances this with a somewhat begrudging recognition that the nation acted to correct the problem. Within this balanced statement is also a perfectionist recognition of an appearance/reality dichotomy, a "fancied" immunity that,

once brought to “consciousness” by scientific truth led to changed behavior in the way of a “federal measure.”

The characteristics of perfectionism and transcendence in this discourse correspond to Hamilton’s feminist-pragmatist belief in the importance of education and science, respectively, in solving the problems that challenged democracy. As physicians were enlightened through science to the truth about industrial poisoning, Hamilton believed they would do the right thing to correct the problem. Her extensive use of case histories of working class immigrants to achieve that educational process derived from her concern that the fruits of democracy should belong to all members of society. Her criticism of physicians and the nation was an attempt to bring light where there was darkness and evinces her belief that the strength of democracy itself depended on the ability of individuals and the nation to be self-critical and to correct course, as needed. These generic elements together put Hamilton in a unique position among feminist-pragmatists to overcome the rhetorical constraint faced by women reformers, who were challenged by a patriarchal society as either sentimentalists or radicals (Hamilton, 1929; 1943). Her position as the acknowledged American expert in industrial poisons helped put Hamilton above the fray, as a kind of umpire, while her willingness to “play fair” rhetorically in addressing the nation’s shortcomings and her belief in the ongoing progress of humanity allowed her to effectively engage as an on-the-ground player in the reform movement.

Alice Hamilton employed all four characteristics of the feminist-pragmatist rhetorical genre when she took on the subject of war and its horrific effects in The New Republic in 1919. In “Angels of Victory,” Hamilton achieves transcendence by

establishing herself as an eye witness to the devastation of the war in Europe. She was one of a very small group of Americans who had seen firsthand the impacts of the war from its earliest days to its bloody finish. Hamilton becomes for her audience Emerson's (1836) "transparent eyeball": in herself she is nothing, but she sees all. She is the umpire who sees both sides.

> We came here to Zurich, to the meeting of the meeting of the International Congress of Women for Permanent Peace, the second meeting of those women who during the spring of 1915 had come together from all over Europe and from America to protest against war. Now we saw victory from the other side, the side of the conquered. (Hamilton, 1919a, p. 244)

Hamilton reports that she traveled extensively in the war-ravaged regions, as in "There have been several stages in the journey. First came Paris, a very different Paris from the one I saw in 1915. . . ." (p. 244); and "The next stage was the devastated regions, five days of motoring through the battlefields of the Aisne, the Oise, Vimy Ridge, the Champagne and the Argonne. . . ." (p. 244). She can bear witness as few others in her audience could do.

Hamilton balances a "fairy tale" version of war victory with a "very ugly reality" of the aftermath of war in Europe. She contrasts Chicago's Michigan Avenue "gay with flags and flower pots and streamers and all along it there were golden angels of victory" (Hamilton, 1919a, p. 244) with France's "town after town in ruins, deathly still, the houses like skeletons with empty, staring eyes" (p. 244). She calls the symbolic "angel of victory" a "hideous joke" (p. 244). Hamilton's "fairy tale" and "reality" language also suggest the appearance/reality dichotomy of perfectionism: she writes that "It is a strange and rather a terrible experience to have generalities to which one has grown fairly accustomed suddenly turn real and concrete, take on living flesh" (p. 244). Knowing that

"generalities," or appearances, disappear in the face of the "real and concrete," Hamilton shows her audience a true picture of war through her vivid descriptions, as in "What was most desolate of all, the heaps of mud and the wooden crosses under which lie Canadian, British, French, German and American soldiers" (p. 244). While the reality of war victory is ugly, it is also ultimately good in that it is a self-evident truth capable of destroying the evil illusion that there is glory in war. Hamilton raises the appearance/reality dichotomy again when she writes, in regard to national debate over "whether a nation could really be brought to surrender by the starvation of its women and children" (p. 244), "German women and children were not realities to people in America, they had become abstractions, like munitions and morale and the rest, but here in Zurich they were suddenly very intensely real" (p. 244). She destroys the "abstraction" of German women and children by showing her audience the reality through her word pictures: ". . .children two and three years old who have never learned to walk" (p. 244); "Vienna mothers who give their babies the breast as long as they can, sometimes eighteen months, but as soon as they are weaned the little things begin to lose weight and stop growing'" (p. 244); and "older children. . .dying of tuberculosis in great and increasing numbers" (p. 244).

These descriptions, in turn, add up as evidence to support Hamilton's inductive argument from Western logic that "whatever aspect victory bears. . .it is not that of an angel" (p. 244). Hamilton also argues from narrative logic in this piece, as when she writes, "If victory must be made out of the bodies of tiny boys and girls and helpless, broken old people, there may be those who still welcome it but nobody can say it bears the form of an angel" (p. 245). The pathos of "bodies of tiny boys and girls and helpless, broken old people" performs a narrative function in that it invites her audience to dwell in

the reality of the people of war-torn countries. At the same time, it performs a perfectionist function in that it destroys an illusion and illuminates a truth that rings true in the heart of any feeling human being. Hamilton's rhetorical transcendence reaches it zenith when Hamilton "speaks for God" in her closing paragraphs by paraphrasing Biblical passages from the Old and New testaments, as in "Perhaps we may come to see that they who appear to be the victors have lost things that really matter" (p. 245); and ". . .they who drew the sword have perished by the sword" (p. 245). As pointed out earlier in this paper in the section titled "Transcendence," Hamilton uses transcendent language to calls her audience back into its covenantal relationship with God (Darsey, 1977). In so doing, she is also manifesting her feminist-pragmatist assumption of the superiority of traditionally defined feminine values, such as nurturing and the concern for human life, over traditionally defined masculine values, such as competition and aggression.

Chapter 5 - Listening to Alice Hamilton: Implications of Feminist-Pragmatist Rhetoric for American Public Address

> Gather your deeds and your possessions,
> Whatever certainty you've known,
> Forget your heroes,
> You don't really need those last few lessons.
> Stand in the open;
> The next voice you hear will be your own.
>
> Throw down your truth and check your weapons.
> Don't look to see if you're alone,
> Just stand your ground,
> And don't turn around, whatever happens.
> Don't ask directions;
> The next voice you hear will be your own.
>
> From "The Next Voice Your Hear" by Jackson Browne

Alice Hamilton may have started out a reluctant rhetor, but when she found her voice, raising the alarm about industrial poisoning and arguing for workplace improvements; championing the civil liberties of immigrants, women and children; inveighing against lawyers and war; contributing to the world's scientific knowledge; and entertaining and enlightening others with her finely tuned observations of humankind, her rhetorical power was considerable. That rhetorical power, measured in terms of her output, her ability, her influence, and her inventiveness, highlights the importance of this study in drawing attention to Alice Hamilton as a significant but neglected turn-of-the-century rhetor who contributed to American public discourse. Wrage (2000/1947) asserts that "students of public address may contribute in substantial ways to the history of ideas" (p. 31). Karlyn Campbell (1989a) rightly points out that the difficulty of making such a contribution from an analysis of women's rhetoric when she writes,

> Many rhetorical acts by women are gone forever; many others can be found only in manuscript collections or rare, out-of-print publications. Even when reprinted, they frequently are treated as historical artifacts from which excerpts can be drawn rather than as artistic works that must be seen whole in order to be understood and appreciated. P. 1

Fortunately for scholars, many of the rhetorical works of Alice Hamilton, although out-of-print or otherwise difficult to locate, are still available to us through various manuscript collections. As a result, it has been possible to contribute to the "history of ideas," specifically, feminist history, by resurrecting Alice Hamilton's rhetoric and examining it as a body of discourse--allowing it to be, as Campbell puts it, "seen whole."

Campbell's (1989a) concern that woman "have no parallel rhetorical history" (p. 1) to that of men is addressed by this study's contribution to the scholarship on the American feminist rhetorical tradition during an understudied period in its history, the Progressive Era. While Campbell's own landmark study focuses on the early woman's rights movement and specifically the campaign for woman suffrage, this study of Alice Hamilton's discourse brings to light an overlooked cohort of Progressive Era New Women who were part of a transitional generation of feminists at the turn of the century. Perhaps because their major preoccupation was the idea of enacting an all-inclusive, deliberative democracy rather than the narrower agenda of women's rights, the contribution of these women to feminist history has been largely overlooked; and what has been emphasized, if anything at all, is their contribution to social reform work, as in the case of Jane Addams. Contrary to the view that this period in feminist history was stagnant or lackluster (Flexner, 1996/1959; Campbell, 1989a), this study reveals a fertile period in which a genre of feminist-pragmatist discourse emerged that was shaped by the need of New Women to negotiate the transition between the nineteenth and twentieth

centuries, with Alice Hamilton as its exemplar. This study shows the rhetoric of Alice Hamilton to be important in its own right, important as a genre of discourse, and important because of its implications for women's communication today.

Rediscovering Alice Hamilton, a Significant but Neglected Turn-of-the-Century Rhetor

In volume six of A Rhetorical History of the United States, J. Michael Hogan (2003) argues that Americans at the turn-of-the-nineteenth-century

> . . . rediscovered the art of rhetoric and found the courage to "test"' their ideas in the public forum. As political leaders, as social activists, and as ordinary citizens, Americans of the Progressive Era took seriously their obligations to listen, speak, write, and debate. They considered it not only a right but a responsibility of citizenship to discuss and debate the issues of the day with their fellow citizens. (P. 472)

Alice Hamilton was one of those social activists who "found the courage" at the turn-of-the-century to take her feminist-pragmatist ideas public in an effort to help bring about the all-inclusive democracy she believed in. Her discourse represents a missing piece in the rhetoric of reform of the Progressive Era, and its rediscovery in this study is made all the more valuable by the fact that historically, little attention has been paid to the rhetoric of American women of this period. In an article on another of the prolific, successful, and underappreciated rhetors of the period, Frances Perkins Gilman, Judith Allen (2003) questions the legitimacy of historical accounts of the Progressive Era when "the methods, procedures, privileged evidence, and criteria of historical significance adopted by the discipline eliminated a focus on half of humanity, whatever their race, ethnicity, or class" (p. 429). Within the same volume, Jennifer Borda (2003) calls attention to the importance

of women's social welfare work during the Progressive Era in bringing about "many changes in public policy at both the state and locals levels," citing Nell Irvin Painter's statement that "To a very great degree, women's institutions laid down the agenda for public health and social welfare reforms that in the twentieth century softened the impact of industrialization on working people" (p. 340).

This study's examination of the rhetoric of Alice Hamilton, then, helps to correct the imbalance in the history of the period noted by Allen, and it contributes another piece to our understanding of the impact of women on public policy issues raised by Borda, particularly in the area of public health. If, as Hogan (2003) has suggested, the "rhetorical renaissance" of the Progressive Era may be the period's "most significant and instructive legacy," Hamilton belongs among the female rhetors whose work merits attention by virtue of her rhetorical output, ability, and influence; and by virtue of her inventiveness, personally and rhetorically, in bridging the gap between the Victorian Age and the twentieth century.

Output

Alice Hamilton rhetorical output was prodigious and enduring, particularly her written discourse. According to Sicherman (1984) and Young (1982), the nearly 200 references cited in a doctoral dissertation by Wilma Slaight (1974) represent the most complete bibliography of Hamilton's published works. Hamilton's earliest work appears to be an 1898 article on Bacillus capsulatus chinensis that appeared in a German bacteriology journal (Young, 1982). It marked the beginning of a scientific writing career that continued, after her retirement from Harvard in 1927, in her work as a part-time medical consultant to Secretary of Labor Frances Perkins in the newly established Bureau

of Labor Standards, where Hamilton investigated and wrote about the dangers of carbon disulfide and hydrogen sulfide poisoning that led to major changes in the manufacture of viscose rayon; and culminated in her eightieth year with the publication, in 1949, of a highly acclaimed second edition of her book, Industrial Toxicology, which she co-authored with physician Harriet Hardy, known for her work on beryllium poisoning (Sicherman, 1984, p. 377). Hamilton's ability to put a human face on industrial poisoning reflects what Hogan (2003) calls Progressives' forging of "both a 'Christian' and a 'scientific' approach to progressive reform" (p. 472).

More difficult to locate, but not to be overlooked in evaluating her output, are Alice Hamilton's speeches, many of which were unpublished, including her moving tribute commemorating the deaths of Sacco and Vanzetti In her sixties, Hamilton took a more public speaking role than ever in her life, opposing Nazism in speeches to a number of organizations, many of them Jewish, as well as in a series of articles that appeared in such publications as the New York Times Magazine and Harper's Magazine. Ever the believer in the perfectibility of humankind and the need to balance criticism with praise, she complained in a letter to Jane Addams during this period that she found it a strain to speak solely in denunciation: "I find I do not like to do it. It is getting distasteful to me to keep on denouncing, accusing, with almost nothing one can say in extenuation. I never have done it before" (as cited in Sicherman, 1984, pp. 345-346.)

In her seventies and eighties, Hamilton's spoke much less frequently, but she continued to write extensively on topics ranging from her piece for the June 1943 issue of the Yale Journal of Biology and Medicine, "Toxicology of Chlorinated Hydrocarbons" a subject that would receive international attention when addressed by Rachel Carson in

Silent Spring; to a light-hearted piece for June 1959 issue of The Atlantic Monthly, "English is a Queer Language." Hamilton wrote an autobiography, published in 1943, that was serialized in abbreviated form in the Atlantic Monthly and publicly well-received, in part because, as Marion Frankfurter, wife of noted jurist Felix Frankfurter, observed, Hamilton was "one of the rare people who write as they speak" (as cited in Sicherman, 1984, p. 374). At age 96, five years before her death, The Atlantic published what appears to be Hamilton's last piece of discourse, "Edith and Alice Hamilton: Students in Germany," although I suspect it is possible that one of her fiery missives to the "letters" section of the New York Times on the protection of civil liberties, a favorite subject throughout her life and into her old age, could have made it into print after that date.

This study has dealt extensively with a representative sampling of Hamilton's discourse, on these and other topics, that Hamilton addressed to her three major audiences, other reformers and social workers, the general public, and fellow professionals in medicine and industrial health.

Ability

Hamilton's extraordinary output was apparently matched by her ability as a public speaker. Biographer Madeleine Grant (1967) describes Alice Hamilton's acceptance speech for the Cummings Award of the American Industrial Hygiene Association in 1948 as "unbelievably moving," and writes that at its conclusion, the audience rose to its feet and burst into loud applause (p. 206). Elizabeth Glendower Evans, a prominent Boston reformer and Hamilton's friend and contemporary who battled alongside Hamilton in the campaign to save Sacco and Vanzetti, described Hamilton's voice as having "a depth and

measured rhythm and a quality of breeding which makes her every word impressive" (as cited in Sicherman, 1984, p. 243). Dorothy Detzer, executive secretary of the Women's International League for Peace and Freedom, which Hamilton served as a board member, told Hamilton historian Barbara Sicherman, "I couldn't now tell you whether it was the substance and structure of her speech, or the charm with which she made it—that was the most appealing, and absorbing. She always held her audience. You knew at once that she spoke from a full mind and that whatever the subject, she had never exhausted it when she sat down" (Sicherman, 1984, p. 243). Upon presenting Hamilton with the Chi Omega Sorority's National Achievement Award, Eleanor Roosevelt observed, "When she rose and said that in her field she had encountered very little opposition, your instinctive reaction was that no one could help wanting to be of service to her" (as cited in Sicherman, 1984, p. 3).

In terms of rhetorical ability, Alice Hamilton may be one of the overlooked women of her era who deserve to be included among what Hogan has called the "great public advocates who led the rhetorical renaissance in the Age of Reform" (Hogan, 2003, p. 479). This study's in-depth analysis of Hamilton's rhetoric is a step in the direction of giving her the consideration she deserves, as well as helping to build the scholarship for the female rhetorical tradition that women deserve and scholars such as Karlyn Campbell have called for.[59]

Influence

In her profile of Alice Hamilton in the May 1926 issue of Harper's, Elizabeth Shepley Sergeant points to the influence that Hamilton had on the field of industrial

medicine as a result of the combination of her rhetorical ability and her professional competence. Sergeant (1926) writes,

> Certainly, this doctor is the woman in American public life whom one would most wish to present to a scientific Frenchman; if only to prove to him that I a land where professional women are borrowing, perforce, so many hard and objective qualities form the other sex, there is one lady of the old school who has made an exquisite and easy adjustment of both sides of life—the tough and the tender, the hard work and the human relations—without sacrificing the virtues of either. Alice Hamilton has neither renounced her inborn graciousness nor used it ignobly, and her mellow cultivation, her fine, exact, smooth-working mind, her perfect simplicity and humbleness of character, her honesty of speech tempered with consideration added to her complete competence in her subject, would fill a Frenchman with respect. But if he wished to know (as he would) why it is to this quiet woman more than to any scientist of the other sex that we owe the beginnings of our growing, if still imperfect knowledge of the horrible forms of disease, dissolution, and death which modern industry has sown like dragons' teeth across the whole country, I should ask him to listen to Doctor Hamilton's voice. A rich voice, drawing much, like her face and presence, from the generations behind, but with undertones of pity and irony which float out like harp notes when the springs of compassion are touched. These poignant notes—though they may have echoes of an ancient Irish tale of sorrow and revolt—seem born of the agony and fury of an age that values machines and their products: material objects like steel rails, smokeless powder, lead paint, knockless gasoline—before the brief and tender lives of men. (P. 764)

According to Sergeant, even by the first quarter of the twentieth century it was apparent that Hamilton, more than any other scientist male or female, was responsible for drawing the nation's attention to the horrors of industrial poisoning, and she did so by the power of her rhetoric. Beyond her appointment as the first female faculty member at Harvard in 1919 as an assistant professor in industrial medicine, and her acknowledged leadership in the field of industrial poisons that accompanied the 1925 publication of her book Industrial Poisons in the United States, and the 1934 publication of Industrial Toxicology, further evidence of her effectiveness as a spokesperson for the protection of America's workforce is the public recognition of Hamilton's contributions that steadily grew over her lifetime. In the last quarter of her life, in particular, she received significant acclaim:

in 1947, she was the first woman to receive the Albert Lasker Award, a prestigious honor recognizing her contributions to workers' health; in 1948, the University of Michigan, her alma mater, awarded her an honorary doctorate, and she gave the Cummings Memorial Lecture of the American Industrial Hygiene Association; in 1953, she received the Knudsen Award of the Industrial Medical Association; in 1954, she received the Elizabeth Blackwell Citation of the New York Infirmary; and in 1956, she was named New England Medical Woman of the Year (Sicherman, 1984, pp. 397-398). On her 100th birthday, President Richard Nixon (a man whose policies in regard to communists Hamilton had opposed and excoriated) sent Hamilton a telegram that credited her with paving the way for workmen's compensation through her achievements in industrial medicine (Sicherman, 1984, p. 416).

While today, hers is a name that very few Americans would recognize, every working person has benefited from the changes brought about by Hamilton's pioneering research and her discourse on industrial poisons. Three months after her death on September 22, 1970, Congress passed the Occupational Safety and Health Act, which for the first time gave the Federal Government the power to enforce healthier conditions in the American workplace. This legislation is a lasting tribute to Alice Hamilton's legacy of protecting the American worker through her deeds and her words.

Through this study of Hamilton's contribution to the rhetoric of reform of the Progressive Era, then, our understanding of the era itself and its influence on our present way of life is enlarged. For as Hogan (2003) and others have concluded,

> Historians may disagree whether historical progressivism was radical or conservative, "a democratic movement of popular political protest or a movement dominated by a few large businessmen and industrialists bent upon creating a centralized liberal state" (Dye, as cited in Hogan, 2003, p. 471). But nobody

> disputes that the "progressive tradition . . . has had en enduring influence on politics and government in the United States" (Milkis, as cited in Hogan, p. 471). From the income tax to the direct election of senators from a host of federal regulatory agencies to the beginnings of the welfare state itself, the legacy of the Progressive Era remains deeply ingrained in our political culture. (P. 471)

Alice Hamilton's demonstrated influence in helping to shape our present political culture in terms of protection of workers' health, combined with her rhetorical output and ability, are reasons enough to justify the importance of this (and further) study of her contribution to American public discourse. Nevertheless, additional reasons exist.

Inventiveness in Bridging the Gap Between Two Eras

In the passage previously quoted, Sergeant (1926) writes that Alice Hamilton "has made an exquisite and easy adjustment of both sides of life—the tough and the tender, the hard work and the human relations—without sacrificing the virtues of either." She goes on to say that Hamilton displays an "honesty of speech tempered with consideration added to her complete competence in her subject" in a "rich voice" that is drawn "from the generations behind," but with "poignant notes" that seem to be "born of the agony and fury of an age that values machines and their products. . .before the brief and tender lives of men" (p. 764). Sergeant's perceptive assessment of Hamilton goes to the heart of the issue dealt with in this study: how Hamilton, as the quintessential New Woman, responded rhetorically to the tremendous tensions at the turn of the nineteenth century within America itself, a nation undergoing seismic change politically, culturally, economically and spiritually; and in so doing, how she helped evolve the unique rhetorical genre of feminist-pragmatism that bridged the gap between two centuries, with their competing ideologies of faith and science and their competing views of a woman's rightful place in the world.

On a personal level, there could be no better example of the “transitional” woman than Alice Hamilton. She kept a foot in each world, retaining the best of late-Victorianism while taking full advantage of opportunities for women in the twentieth century. The essayist and editor Walter Lippmann once said of Hamilton, “In a platonic world she will represent the idea of feminism no amendments required. She has the most satisfying taste of all personalities I’ve ever met—wine and silver and homespun” (as cited in Sicherman, 1984, p. 2).

Hamilton’s genteel upbringing manifested itself in her attachment to hearth and home, her modesty about her achievements, and her scorn for modernism in literature and art (Sicherman, 1984, p. 2). At the same time, her own “modernism” was displayed in her choice of a career in medicine over a profession that would have been more socially acceptable for a woman of her class; in her decision to leave home to pursue a larger life, with greater opportunities for adventure and service; and ultimately, in her work on industrial poisons and at Harvard that took her to the heart of the male sphere. Undoubtedly, Hull House served as a kind of half-way house for Hamilton, helping her to make the transition from the world she grew up in, with its close, female relationships and intellectual atmosphere; and the new world she embraced, with its international world-view and opportunities to apply her knowledge in real-life situations. Nevertheless, the credit for the inner work that was required for the level of self-realization she achieved in her lifetime belongs entirely to Hamilton. In charting a path as a woman from the old, familiar, and limiting to the new, unknown and liberating, she suffered the existential loneliness of deciding “how far it is right to resist and how far I ought to

submit" (as cited in Sicherman, 1984, p. 76), a dilemma that still plagues the modern woman, but whose answer, as in Hamilton's case, can determine the course of a life.

Hamilton often submitted to unequal treatment as a woman, from her days as a student in Germany to her years teaching at Harvard. She even managed to keep a sense of humor about the indignities she endured, assuring the backers of her appointment as the first female faculty member at Harvard, for example, that she would never "demand my quota of football tickets" or "embarrass the faculty by marching in the commencement procession and sitting on the platform" (Hamilton, 1943, p. 253). Yet, at the same time, Hamilton publicly, vigorously resisted what she considered to be the enslavement of the working classes in American industries, the abuses of the legal system in the treatment of the foreign-born, and insanity of war. A study of her rhetorical career suggests that the longer Alice Hamilton lived, the more willing she became to risk the disapprobation of others in claiming her own voice. She did so, however, without renouncing her "inborn graciousness" or using it "ignobly" (Sergeant, 1926, p. 764). Hamilton was herself a blend of late-Victorian gentility and twentieth-century scientific expertise, and she brought both to bear on the problems of industrial America during the Progressive Era.

Nancy S. Dye (1991) argues that "the Progressive Era marks the beginning of contemporary America, and within it we can trace the roots of institutions, policies, and values that still define the United States as a nation nearly a century later" (p. 9). In this study of Alice Hamilton's rhetoric, I have taken Dye's idea a step further by demonstrating that the Progressive Era's feminist-pragmatist discourse marks the emergence of the contemporary American woman from her late-Victorian roots; and I

suggest in part three of this concluding chapter that evidence exists to suggest that within feminist-pragmatist discourse we can trace the roots of rhetorical constraints that still define and challenge women nearly a century later. As Campbell (1989a) has remarked, "When women began to speak outside the home on moral issues and on matters of public policy, they faced obstacles unknown to men" (p. 1). Through this examination of Hamilton's rhetoric, we can observe her inventiveness in adapting her discourse to the cultural and material constraints of her rhetorical situation, particularly those constraints "unknown to men." For example, we see Hamilton's pragmatism in balancing her rhetoric with both "the tough and the tender, the hard work and the human relations" to sidestep a head-on collision with a patriarchal society that had the power to maintain the status quo, including separate male and female spheres and sanctions against female rhetors. At the same time, often in the same piece of discourse, we observe Hamilton transcending that imbalance of power by employing her "complete competence" in the language and logic of science and the reason of Western logic to persuade audiences that increasingly disdained Victorian, "feminine" sentimentality and had faith in rational, "masculine" science. Hamilton did so without abandoning the refinements of speech of "the generations behind" or the values that bound Americans together, despite their many differences, across the nineteenth and twentieth centuries. For example, through her strategic use of perfectionism in her rhetoric, Hamilton struck the "poignant notes" of Americans' shared belief in democratic ideals and in the inviolable, knowable laws of nature, including the value of "the brief and tender lives of men." She employed narrative logic to further exploit Americans' belief in these shared values, reaching out to other women and to men with stories that offered the opportunity for identification with stories

from their own experiences, and with arguments that contained truths they believed in their heart-of-hearts.

By deftly employing balance, transcendence, multiple logics, and perfectionism in her discourse to varying degrees, depending upon her audience, and in concert with one another, Hamilton was charting a rhetorical path for herself and other New Women. It was a path that allowed these women to achieve their goals of both helping to create and participating in a deliberative, inclusive democracy, while at the same time avoiding the pitfalls of the more militant rhetoric of first wave of feminism, a movement that, despite its rhetorical and social significance, had failed to achieve many of its political goals. Borda's (2003) assertion that "It would indeed be surprising if, as Flexner and others have suggested, the women's moment stood still as 'convulsive reform movements swept across the American landscape from the 1890s to 1917'" (p. 339) is supported by this study's revelation of a genre of feminist rhetoric whose exigency was the desire on the part of Hamilton and others to be an effective part of the era's reform movements. In fact, it could be argued that the feminist-pragmatist rhetorical genre was a rhetorical manifestation of what Borda (2003) has described as "a revivalistic vision of democracy and idealism tempered by political pragmatism" that was cultivated by the intersection between the women's movement and the reform impulse of progressivism (p. 340). At the very least, explication of Hamilton's discourse provides us insight into the "difference" feminism (Elshtain, 2002b) she and other feminist-pragmatists espoused and which is discussed in Chapter 4, Part 5. Hamilton's pacifism and anti-militarism, for example, were manifestations of her belief in the superiority of the "feminine" values of nurturance and protection over the "masculine" values of dominance and aggression. This

study has demonstrated how she employed balance, transcendence, multiple logics and transcendence to persuade her audiences to turn against war and to support the peaceful resolution of grievances.

Hamilton as Exemplar of the Feminist-Pragmatist Genre

One of the hazards of discounting turn-of-the-nineteenth-century feminism on the basis of its lack of contribution to woman suffrage and the women's rights movement is that its contribution to other, equally important areas of women's history can easily be overlooked. For example, as this study has noted, beyond their readily acknowledged role in the social reform movement of the Progressive Era, feminist-pragmatists made significant contributions to the development of the Chicago School of Pragmatism, an achievement largely credited to men in the University of Chicago's Department of Sociology (Deegan, 1990). In recovering feminist history, to minimize the significance of any period of time, or the activities of women during that period, because of a single-minded vision about what was important is also to put at risk the possibility of finding of the unexpected, the serendipitous. Alice Hamilton is a case in point. What turned up from an in-depth examination of the discourse of this exemplar of feminist-pragmatism was, in fact, both unexpected and fortunate—a genre of rhetoric with distinct, recognizable, and interdependent characteristics that came into being in response to the unique rhetorical situation (Bitzer, 1968) confronting Hamilton and other New Women. The genre is significant in the history of American public address because it is a product of the first generation of college-educated, professional women in America as they entered the public sphere, and thus it marks the rhetorical emergence of the modern women as we know her today.

The feminist-pragmatist genre is the unique creation of a particular cohort of New Women at a pivotal point in American history, a group that Allen (2003) suggests has been overlooked in studies of Progressivism. Personally, professionally and rhetorically, these women had no role models to follow, no other speakers they could emulate. No group of women before them had lived the independent lives that they were living, had done professionally what they were doing, or had said publicly what they were saying. They were, as Hamilton (1943) herself put it, "groping and seeking" (p. 57) when they began their efforts to address the many ills of society during the last decade of the nineteenth century. The genre of discourse they evolved as they brought their professional expertise to bear on the challenges of life in modern America for the first time was a pragmatic blending of the old and the new, of the feminine and the masculine, of emotion and reason, of faith and science. It was, in effect, a rhetorical representation of the transitional era of which they were a part in a nation turned upside down by rapid, all-encompassing change.

The illumination of this genre contributes to the creation of a history of the Western female rhetorical tradition called for by Campbell (1989a) by providing rhetorical scholars with a new angle of vision from which to appreciate the modern woman's earliest attempts at using "all available means of persuasion" in public address. It also gives rhetorical scholars a framework from which to evaluate to what degree, if any, the genre endures today in women's speech or how it has influenced that speech.

It is my hope that if this study accomplishes nothing else, it will invite further investigation of the discourse of an extraordinary group of women who, as Elshtain (2002a) has pointed out in regard to Jane Addams, have not received their due. Feminist-

pragmatists were pioneers in every sense of the word. They were perhaps the first cohort of American feminists to resist defining themselves personally, economically or politically either in terms of what men could do for them or what men could withhold from them. Instead, feminist-pragmatists found their self-definition in their efforts "to construct the world anew and to conform it to their own ideals" (Addams, 1910, p. 88). In pragmatically refusing to define themselves only in terms of what they could not do in American society, feminist-pragmatists freed themselves to pursue ideas and ideals larger than themselves, larger even than their own nation. It is nothing short of astounding to realize, for example, that Jane Addams had achieved international fame and influence comparable to that of Oprah Winfrey today, decades before women in America had the franchise or before radio, television or the airplane had been invented. Consider as well the magnitude of the accomplishment by Addams and Hamilton of helping to convene a peace conference in 1915 of 1,500 women from around the world and of subsequently being received by the heads of state of every nation involved in World War I, including the president of the United States, to discuss ideas for achieving peace. No generation of American women before or since can claim such public stature. The persuasion of these powerful women merits careful and ongoing attention by students of public address beyond what exists today. This study, with its identification of a feminist-pragmatist genre of rhetoric, is one more step in that direction.

Learning from Alice Hamilton

From my perspective, Alice Hamilton's path to *authoritas* is one that is surprisingly familiar for women today. One cannot study her rhetoric without recognizing, with chagrin and some consternation, how little has changed in the nearly

100 years since Hamilton began her speaking career. Women are still struggling with how to balance what Sergeant (1926) called the "tough and the tender, the hard work and the human relations" (p. 764) as they stake their claim as persuaders on issues of public concern. The vehemence of the attacks on then-First Lady Hillary Clinton, for example, from the moment she had the audacity to propose healthcare reform, had her public relations handlers in a mad scramble to set up "photo ops" of her in the kitchen baking chocolate chip cookies to assure America that the President's wife was, indeed, a "true woman," her law degree notwithstanding. Given the extreme partisanship of American politics, it might be tempting to chalk up the attacks on Clinton to just that aspect of American society; but it wouldn't explain why a widely read, award-winning, feminist newspaper columnist like Martha Ezzard (2003) would find it necessary to counsel Martha Burk in print that challenging women's exclusion from the August National Golf Club was "the right principle, the wrong forum" (p. A15), by which she meant that women need to carefully pick and chose their public battles on an uneven political and rhetorical playing field. Alice Hamilton would probably have agreed with Ezzard. As Hamilton herself once observed, "So far men have never given us a fair field"; and in her sixties, she wryly commented, "My idea is that the American man gives over to the woman all the things he is profoundly disinterested in, and keeps business and politics to himself" (as cited in Sicherman, 1984, p. 3).

In arguing that there is much to be learned today from a study of reformers of the Progressive Era, Kevin Mattson (1998b) writes, "The past lives on in the present, no matter what we might think, and traditions do inform our own efforts. To understand this better broadens our sense of what is possible today and what sources of inspiration we

can draw upon for hope" (p. 1). Beyond Hamilton's importance as an individual whose voice helped to change the industrial workplace and whose discourse contributes to our understanding of American and feminist history, women today may also find inspiration and hope from this study's examination of how Hamilton, to borrow from the Apostle Paul, "worked out her own salvation" as a professional woman, an activist and a public speaker in a transitional era for women. There is much in Alice Hamilton to be admired, and two particular lessons from her life leap to the foreground.

The first is that for Hamilton, equality began as a state of mind, an attitude she held about herself. Even as she supported woman suffrage, for example, she didn't allow its absence to stand in the way of her pursuit of her highest ambitions, her destiny. When, after much searching, she saw the life she wanted, investigating industrial poisons, she pursued it vigorously, apparently undaunted by the fact that it took her to the heart of the man's sphere to do a "man's work." It wasn't a matter that ignorance was bliss. Hamilton was in her forties when she found her calling. As a pioneering New Woman, she was fully aware of the uneven playing field that women faced professionally, writing in her autobiography,

> Most people think that women in medicine have now attained equality with men—but that is true in one country only, Russia. In the United States, a woman finds it harder to gain entrance to the medical schools than does a man, much harder to get her internship in a first-class hospital, and difficult if not impossible to get on the staff of an important hospital. Yet without such hospital connections she can never hope to reach the highest ranks in her profession. (Hamilton, 1943, p. 268)

But perhaps Hamilton drew courage from a larger perspective she had on the matter of inequality. In her autobiography, she also wrote, "In settlement life it is impossible not to see how deep and fundamental are the inequalities in our democratic country" (p. 75).

Hamilton threw herself into addressing inequalities that were larger than her individual life and larger than those of her sex. In a 1958 interview of former Hull-House alums and residents conducted by historian Anne Firor Scott, Hamilton, by then nearly 90, commented, “Women did so much more before they had the vote! It was the women who really were the reformers in Chicago. Miss Addams and Mrs. Bowen could always count on the Chicago women’s clubs. . . . Nowadays those things are purely social” (as cited in Elshtain, 2002a, p. 152).

It is fair to ask, “Could Hamilton have done more to fight for women’s suffrage?” Undoubtedly; but while she didn’t shrink from making known her views on the issue, she chose to dedicate her energies to other causes and was not active in the suffrage campaign. Women today might also find fault with her stance on an Equal Rights Amendment proposed in the 1920s, as did militant feminists of her own day. On that matter, Hamilton was in good company. Jane Addams and other prominent feminist-pragmatists were simply unwilling to support legislation they believed would strip working women of hard-won, practical protections regulating hours and working conditions already secured in state law. To Hamilton’s credit, when she became convinced that the threats to working women from an Equal Rights Amendment no longer existed, she changed her position on the legislation. In 1952, she lent her support to the second attempt at an Equal Rights Amendment in a short, much-publicized statement that appeared in full on May 22 in the New York Herald Tribune (Sicherman, 1984, p. 385).

Whatever her politics, the issue remains that not only did Hamilton not allow inequality under the law stand in the way of her dreams, as a “difference” feminist and a

feminist-pragmatist Hamilton found a way to make her gender work for her. In her autobiography, she wrote, “When I went into industrial medicine I often felt that my sex was a help, not a handicap. Employers and doctors both appeared more willing to listen to me as I told them their duty toward their employees and patients than they would have if I had been a man” (Hamilton, 1943, p. 269). She developed a genre of public communication that reckoned with what she believed were in-born differences between men and women and that took her rhetorical situation, including political inequalities between the sexes, into account. While today, we might argue with Hamilton over the fine points of “nature” versus “nurture” in the differences between the sexes, or over how much accommodation a women rhetor should make in the face of patriarchal hegemony, we can still be inspired by her courage as a transitional New Woman in pressing forward into the male sphere and, in the process, blazing a path that helped to create a better world for all working people in America.

A second lesson from Hamilton’s life worth emulating is her commitment to the truth. As this study has demonstrated, she was unrelenting in her pursuit of truth, which she found both in science and in the transcendent, universal, inviolable laws of nature that she believed resided in the hearts of all people. A key element in her rhetorical power and in the professional respect she enjoyed, however, was her practice of a rigorous personal commitment to truth that would not allow her cover up her own mistakes. Three examples found in her public discourse come to mind. The first is her insistence on correcting the record regarding the cause of the typhoid epidemic in the nineteenth ward, which she had attributed to house flies and open sewage in a 1903 article in the Journal of the American Medical Association. As discussed in Chapter 3, while the Chicago Board

of Health wished to keep the actual, more embarrassing cause a secret (a broken sewage main had dumped raw sewage into the drinking water supply), Hamilton went public repeatedly to explain the truth about her much-heralded accomplishment. While the flies she tested were indeed carrying the typhoid bacillus, they were not the immediate cause of the outbreak. Hamilton would not allow others to give her credit where credit was not due.

That same commitment to absolutely honesty is evident in her recounting of travels in 1915 to the European war capitals to offer the peace plan proposed by the International Congress of Women at The Hague. As a speaker of the German language, Hamilton had responsibility for retrieving the passports of her entourage of women in German-occupied Belgium. Hamilton (1943) wrote,

> It was my job to deal with the German officer in charge of that department, a gay young gentleman from Munich, and I found myself chatting with him about my student days in that city and receiving with equal gaiety his laughing assurances that all Germans were not heartless brutes. The others were shocked at my hypocrisy and I suddenly realized another of the efforts of living under tyranny—it makes liars out of decently truthful people. For I wanted our passports more than I wanted to tell the truth. (P. 169)

In a third instance, also recounted in her autobiography, Hamilton described her embarrassment at being "taken in" through a correspondence with a wily prostitute who had read Jane Addams' A New Conscience and an Ancient Evil. The prostitute, "Adelaide," "pictured herself as a captive bird beating her wings against the bars, and I was full of pity and of eagerness to free her from the life she loathed," Hamilton (1943, p. 92) wrote. On a trip to Toledo, where "Adelaide" resided, Hamilton stopped in for a visit and discovered not a "helpless victim of man's lust" (p. 91) but rather "a woman of

mature years, handsome, dignified, entirely mistress of herself" who "had no intention of leaving it [the brothel] if it meant earning her own living" (p. 92).

Hamilton's willingness to own up to her limitations and to learn from her mistakes allowed her to see things as they were, free of sentimentality, and earned her a reputation for honesty and trustworthiness (Sicherman, 1984; Sergeant, 1924). With some effort and under the tutelage of Julia Lathrop, Hamilton also learned to apply that honesty in her public and private communication regarding industrial poisons and other issues that required her to confront others with uncomfortable truths. Through her example, Hamilton demonstrated that a price of *authoritas* is a commitment to telling the truth and bearing the consequences.

What, then, can we learn from Alice Hamilton? Perhaps it is that her feminist-pragmatist rhetoric is both representative of the genre and suggestive of its generic potential. Feminist-pragmatism is a way of being in the world, as well as a way of speaking in the world. It will remain a part of the American rhetorical tradition and an available rhetorical choice for the modern and post-modern rhetor as long as there are individuals who seek to broadly extend democracy by uniting "feminine" values with "masculine" rationality within a patriarchal society that only begrudgingly grants women the right to speak; and who are willing to accept practical results rather than ideal outcomes as they strive, like Hamilton, to make knowledge's wisdom prevail.

References

Addams, J. (1881, July). Cassandra. Valedictory, Rockford Seminary Magazine. In J.B. Elshtain (Ed.), The Jane Addams reader (pp. 10-13).

Addams, J. (1892). The subjective necessity for social settlements. In J. B. Elshtain (Ed.), The Jane Addams reader (pp. 14-28). New York: Basic Books.

Addams, J. (1916). Twenty years at Hull-House. NY: The Macmillan Company. (Original work published in 1910)

Addams, J. (2002). Peace and bread in time of war. Urbana and Chicago: University of Illinois Press. (Original work published 1922)

Addams, J., Balch, E. G., & Hamilton, A. (2003). Women at The Hague. The International Congress of Women and its results. Urbana and Chicago: University of Illinois Press. (Original work published 1915)

Allen, J. (2003). Charlotte Perkins Gilman, progressivism, and feminism, 1890-1935. In J.M Hogan (Ed.), Rhetoric and reform in the Progressive Era: A rhetorical history of the United States. (Vol. VI, pp. 427-469). East Lansing, MI: Michigan State University Press.

Black, E. (1978). Rhetorical criticism. A study in method. Madison, WI: The University of Wisconsin Press.

Black, E. (1992). Rhetorical questions. Chicago: The University of Chicago Press.

Boase, P. (Ed.). (1980). The rhetoric of protest and reform. 1878-1898. Athens, OH: Ohio University Press.

Borda, J. (2003). Woman suffrage in the Progressive Era: A coming of age. In J.M Hogan (Ed.), Rhetoric and reform in the Progressive Era: A rhetorical history of the

United States. (Vol. VI, pp. 339-386). East Lansing, MI: Michigan State University Press.

Bradley, P. (1995). The Boston Gazette and slavery as revolutionary propaganda. Journalism and Mass Communication Quarterly, 72, (581-596).

Brommel, B. J. (1978). Eugene V. Debs. Spokesman for labor and socialism. Chicago: Charles H. Kerr Publishing.

Buenker, J. D. (1973) Urban liberalism and Progressive reform. NY: Charles Scribner's Sons.

Burgchardt, C. R. (Ed.). (2000). Readings in rhetorical criticism. State College, PA: Strata Publishing.

Burgchardt, C. R. (2003). From Hull House to The Hague: Jane Addams's rhetoric of pacifism, 1898-1917. In J. M Hogan (Ed.) Rhetoric and reform in the Progressive Era: A rhetorical history of the United States. (Vol. VI, pp. 387-426). East Lansing, MI: Michigan State University Press.

Burke, K. (1953). Counter-statement. Los Altos, CA: Hermes Publications. (Original work published 1931).

Burke, K. (1969). A rhetoric of motives. Berkeley: University of California Press.

Campbell, K. (1989a). Man cannot speak for her: A critical study of early feminist rhetoric. (Vol.1). NY: Greenwood Press.

Campbell, K. (1989b). Man cannot speak for her: Key texts of the early feminists. (Vol. 2). NY: Greenwood Press.

Campbell, K., & Jamieson, K. (Eds.). Form and genre: shaping rhetorical action. (1978). Falls Church, VA: Speech Communication Association.

Cook, W.A. (1988). An impression of Alice Hamilton – physician, industrial hygienist, crusader and friend. American Industrial Hygiene Association Journal, 49, 306-310.

Cooper, J. M. (1990). Pivotal decades. The United States, 1900-1920). NY: W. W. Norton.

Corn, J. K. (1976). Alice Hamilton, M.D., and women's welfare. The New England Journal of Medicine, 294, 316-318.

Danbom, D. (1987). "The world of hope": Progressives and the struggle for an ethical public life. Philadelphia: Temple University Press.

Darsey, J.F. (1988). The legend of Eugene Debs: Prophetic ethos as radical argument. Quarterly Journal of Speech, 74, 434-452,

Darsey, J. F. (1997). The prophetic tradition and radical rhetoric in America. NY: New York University Press.

De Beauvoir, S. (1952). The second sex (H. M. Parshley, Trans.). NY: Knopf. (Original published 1949). Retrieved June 14, 2005, from the World Wide Web: http://www.marxists.org/reference/subject/philosophy/works/fr/2ndsex.htm

Deegan, M. J. (1996). "Dear Love, Dear Love": Feminist pragmatism and the Chicago female world of love and ritual. Gender and Society, 10, 590-607.

Deegan, M. J. (1990). Jane Addams and the men of the Chicago School, 1892-1918. New Brunswick: Transaction Books.

Dewey, J. (1983). In J. A. Boydston (Ed.) John Dewey, the middle works. Vol. 14, 1922. Human nature and conduct. Carbondale: Southern Illinois University Press.

Dos Passos, J. (1960). USA. Boston: Houghton-Mifflin. (Original work published 1938)

Donovan, J. (1985). Feminist theory: The intellectual traditions of American feminism. NY: Frederick Ungar Publishing.

Dye, N. S. (1991). Introduction to N. Frankel & N. S. Dye (Eds.) Gender, Class, Race, and Reform in the Progressive Era. (P. 9). Lexington: University Press of Kentucky.

Elshtain, J. B. (2002a). Jane Addams and the dream of American democracy. NY: Basic Books.

Elshtain, J. B. (2002b). The Jane Addams reader. NY: Basic Books.

Emerson, R.W. (1836). Nature. Retrieved October 8, 2005, from the World Wide Web: http://www.rwe.org/works/Nature__complete.htm

Ethington, P. (1999). The metropolis and multicultural ethics: Direct democracy versus deliberative democracy. In S. Milkis & J. Mileur (Eds.), Progressivism and the new democracy (pp. 192-225). Amherst: U. of Massachusetts Press.

Ezzard, M. (2003, April 8). Why Burk's battle elicits ambivalence. The Atlanta Journal-Constitution, p. A15.

Feffer, A. (1993). The Chicago pragmatists and American progressivism. Ithaca, NY: Cornell University Press.

Felton, J.S. (1972, February). Alice Hamilton, M.D. – a century of devotion to humanity. Journal of Occupational Medicine: Official Publication of the Industrial Medical Association, 14, 106-110.

Flexner, E., & Fitzpatrick, E. (1996). Century of struggle. The woman's rights movement in the United States. Cambridge, MA: The Belknap Press of Harvard University Press. (Original work published 1959)

Freedman, E. (1979). Separatism as strategy: female institution building and American feminism. Feminist Studies, 5, 512-529.

Gottlieb, R. (1993). Forcing the spring: the transformation of the American environmental movement. Washington, D.C.: Island Press.

Grant, M. P. (1967). Alice Hamilton. Pioneer doctor in industrial medicine. NY: Abelard-Schuman.

Hamilton, A. (1907, March 9). The social settlement and public health. Charities and the Commons, 17, 1037-1040.

Hamilton, A. (1908, September 5). Industrial diseases, with special reference to the trades in which women are employed. Charities and the Commons, 20, 655-659.

Hamilton, A. (1911). Occupational diseases. Proceedings of the National Conference of Charities and Correction, 197-207. Boston, MA: Press of Geo. H. Ellis.

Hamilton, A. (1912a). Lead poisoning in potteries, tile works, and porcelain enameled sanitary ware factories. Bulletin of the United States Bureau of Labor, No. 104.

Hamilton, A. (1912b, June 1). What one stockholder did. The Survey, 28, 387-389.

Hamilton, A. (1913). Hygiene of the painters' trade. Bulletin of the United States Bureau of Labor Statistics, No. 120, Industrial Accidents and Hygiene Series.

Hamilton, A. (1914). Lead poisoning in the smelting and refining of lead. Bulletin of the U.S. Bureau of Labor Statistics, No. 141.

Hamilton, A. (1915, August 7). At the war capitals. The Survey, 34, 417-422.

Hamilton, A. (1916a, June 17). The attitude of social workers toward the war. The Survey, 36, 307-308.

Hamilton, A. (1916b, September 30). Wartime economy and hours of work. The Survey, 36, 638-639.

Hamilton, A. (1917, February 3). Prostitutes and tuberculosis. The Survey, 37, 516-517.

Hamilton, A. (1919a, June 25). Angels of victory. The New Republic, 244-245. Boston, MA: Schlesinger Library, Radcliffe Institute, Harvard University, Alice Hamilton Collection, Box 1, Folder 22.

Hamilton, A. (1919b). Inorganic poisons, other than lead, in American industries. The Journal of Industrial Hygiene, 1, 89-102.

Hamilton, A. (1919c). Women in the lead industries. Bulletin of the United States Bureau of Labor Statistics, No. 253, Industrial Accidents and Hygiene Series.

Hamilton, A. (1924, August). Protection for women workers. The Forum, LXXII (2), 152-160.

Hamilton, A. (1925a, February 21). What the American woman thinks: A doctor's word on war. The Woman Citizen, 15.

Hamilton, A. (1925b, July 11). What the American woman thinks: Concerning motor car gasoline. The Woman Citizen, 14, 28.

Hamilton, A. (1927, January). Witchcraft in West Polk Street. The American Mercury, X (37), 71-75.

Hamilton, A. (1929a). Industrial poisons in the United States. New York: Macmillan.

Hamilton, A. (1929b, August 23). Untitled speech presented at Madison Square Garden commemorating the deaths of Sacco and Vanzetti. Boston, MA: Schlesinger Library, Radcliffe Institute, Harvard University, Alice Hamilton Collection, Box 1, Folder 12.

Hamilton, A. (1929c, October). Nineteen years in the poisonous trades. Harper's Magazine, 159, 580-591.

Hamilton, A. (1931, October). What about the lawyers? Harper's Magazine, 163, 542-549.

Hamilton, A. (1932, October). American and foreign labor legislation: a comparison. Social Forces, 11, 113-119. Retrieved April 7, 2002, from GALILEO online database (JSTOR).

Hamilton, A. (1933, September). Below the surface. Survey Graphic, 449-454, 486. Boston, MA: Schlesinger Library, Radcliffe Institute, Harvard University, Alice Hamilton Collection, Box 1, Folder 22.

Hamilton, A. (1934, January). The plight of the German intellectuals. Harper's Magazine, 159-169. Boston, MA: Schlesinger Library, Radcliffe Institute, Harvard University, Alice Hamilton Collection, Box 1, Folder 22.

Hamilton, A. (1940, December 14). Shall we feed Hitler's victims? The Nation, 596-597. Boston, MA: Schlesinger Library, Radcliffe Institute, Harvard University, Alice Hamilton Collection, Box 1, Folder 22.

Hamilton, A. (1943). Exploring the dangerous trades: the autobiography of Alice Hamilton. Boston, MA: Little, Brown.

Hamilton, A. (1944). New problems in the field of the industrial toxicologist. California and Western Medicine, 61, 55-60.

Hamilton, A., & Hardy, H. (1974). Industrial toxicology. Acton, MA: Publishing Sciences Group, Inc. (Original work published 1934).

Hamilton, A. (1985). Landmark article in occupational medicine. Forty years in the poisonous trades. American Journal of Industrial Medicine, 7, 3-18. (Original work published in 1948)

Hart, R. P. (1997). Modern rhetorical criticism. Needham Heights, MA: Allyn and Bacon.

Haslett, D. (1997). Hull House and the birth control movement: An untold story. Affilia: Journal of Women & Social Work, 12, 261-278. Retrieved April 12, 2002, from GALILEO online database (EBSCOhost).

Heysse, T. (1997). Why logic doesn't matter in the (philosophical) study of argumentation. Argumentation, 11, 221-224.

Hofstadter, R. (1956). The age of reform. From Bryan to F. D. R. NY: Alfred A. Knopf. (Original work published 1955).

Hogan, J. M. (2003a). Conclusion: Memories and legacies of the Progressive Era. In J. M Hogan (Ed.), Rhetoric and reform in the Progressive Era: A rhetorical history of the United States. (Vol. VI, pp. 471-483). East Lansing, MI: Michigan State University Press.

Hogan, J. M. (2003b). Introduction: Rhetoric and reform in the Progressive Era. In J. M Hogan (Ed.), Rhetoric and reform in the Progressive Era: A rhetorical history of the United States. (Vol. VI, pp. ix-xxiv). East Lansing, MI: Michigan State University Press.

Jamieson, K. (1976, December). Antecedent genre as rhetorical constraint. Quarterly Journal of Speech, 61, 406-415.

Kraig, R. (2003).The second oratorical renaissance. In J. M Hogan (Ed.), Rhetoric and reform in the Progressive Era: A rhetorical history of the United States. (Vol. VI, pp. 1-48). East Lansing, MI: Michigan State University Press.

Leff, M., & Mohrmann, G. (2000). Lincoln at Cooper Union: A rhetorical analysis of the text. In C. Burgchardt (Ed.), Readings in rhetorical criticism (pp. 176-188). State College, PA: Strata Publishing.

Lick, H.B. (1998, November). The 1998 Donald E. Cummings Memorial Award lecture. The industrial hygiene paradox, dilemmas, and a vision for the future. American Industrial Hygiene Association Journal 59, 753-757.

Linn, J. W. (2000). Jane Addams. A biography. Urbana/Chicago: University of Illinois Press. (Original work published 1935)

Madaus, M. (1997). Women's role in creating the field of health and safety communication. Technical Communication Quarterly, 6, 261-80. Retrieved February 23, 2002, from ERIC online database (ERIC No. EJ 556 743).

Mattson, K. (1998a). Creating a democratic public: The struggle for urban democracy during the Progressive Era. University Park: Pennsylvania State University Press.

Mattson, K. (1998b). Doing democracy: An exploration of Progressive-era reform and its legacy for American politics. National Civic Review, 87 (4), 1-7. Retrieved 2005 from GALILEO online database Academic Search Premier.

McDonough, J. (1999, September). Women reformers in the progressive era. Social Education, 63, 315-319.

Milkis, S. M., & Mileur, J. M. (Eds.). (1999). Progressivism and the new democracy. Amherst: University of Massachusetts Press.

Morris, C. E. III, & Browne, S. H. (Eds.). (2001). Readings on the rhetoric of social protest. State College, PA: Strata Publishing.

Nisbit, R. (1980). History of the idea of progress. New York: Basic Books.

Perelman, C., & Olbrechts-Tyteca, L. (1969). The new rhetoric: A treatise on argumentation. Notre Dame: University of Notre Dame Press.

Roosevelt, T. (1906). The man with the muckrake. Retrieved October 7, 2005, from the World Wide Web: http://www.c-span.org/classroom/pov/povlp_schiavone2.asp

Scott, A. F., & Scott, A. M. (1975). One half the people: the fight for woman suffrage. Philadelphia/New York/Toronto: J. B. Lippincott Company.

Sicherman, B. (1984). Alice Hamilton, a life in letters. Cambridge, MA: Harvard University Press.

Simons, H., & Aghazarian, A. (Eds.). (1986). Form, genre, and the study of political discourse. Columbia, S.C.: The University of South Carolina Press.

Simons, H. (1986). Persuasion: Understanding, practice and analysis. New York: Random House.

Simons, H. (Ed.). (1989). Rhetoric in the human sciences. London: Sage Publications.

Simons, H. (1970, February). Requirements, problems and strategies: a theory of persuasion for social movements. Quarterly Journal of Speech, 56, 1-11.

Slaight, W. R. (1973). Alice Hamilton: first lady of industrial medicine. (Doctoral dissertation, Case Western Reserve University, 1973). Digital Dissertations UMI ProQuest, AAT 7416524.

Smith-Rosenberg, C. (1985). Disorderly conduct. Visions of gender in Victorian America. NY: Alfred A. Knopf.

Stewart, C. J., Smith, C. A., & Denton, Jr., R. E. (Eds.) (2001). Persuasion and social movements. Prospect Heights, ILL: Waveland Press.

Tarbell, I. (1939). All in the day's work. NY: MacMillan.

Thomas, J.L. Romantic reform in America, 1815-1865. American Quarterly, 17 (4), 656-681.

Toulmin, S. E. (2003). The uses of argument. Cambridge, UK: Cambridge University Press. (Original work published 1958).

Wilson, C. P. (1985). The labor of words. Literary professionalism in the Progressive Era. Athens, GA: The University of Georgia Press.

Wilson, R. J. (1968). In quest of community: social philosophy in the United States, 1860-1920. NY: John Wiley and Sons.

Wrage, E. J. (2000/1947). Public address: A study in social and intellectual history. In C. R. Burgchardt (Ed.), Readings in rhetorical criticism (pp. 29-35). State College, PA: Strata Publishing.

Young, A. N. (1983). Interpreting the dangerous trades: workers' health in America and the career of Alice Hamilton, 1910-1935. (Doctoral dissertation, Brown University, 1982). Digital Dissertations UMI ProQuest, AAT 8228357.

Winthrop, J. (1630). A model of Christian charity. Collections of the Massachusetts Historical Society (Boston, 1838), 3rd series 7:31-48. Retrieved August 25, 2004, from the World Wide Web: http://history.hanover.edu/texts/winthmod.html

---

[1] I use Wrage's term with some critical license here, to indicate its lack of familiarity to scholars and the public. While Wrage used "fugitive literature" to describe the public speech of ordinary people, I extend the term to include the work of Alice Hamilton, a lesser-known woman of Hull House, thus, "ordinary," in that sense only.

[2] Alice Hamilton writes that her paternal grandmother, Emerine Hamilton, continued throughout her life to refer to her trips back home to Aurora, Ohio as "going in" and returning to Fort Wayne as "going out" (Hamilton, 1943, p. 23).

[3] Campbell (1989a) claims that woman's rights agitation was largely a by-product of women's involvement in other reform efforts, such as the temperance movement. Women recognized that before they could be effective as reformers, they would have to secure their own rights (p. 4). Smith-Rosenberg (1985) sees it differently; suggesting that some nineteenth-century women channeled their frustration with women's restricted roles into the moral-reform crusades (p. 109). In either case, Emerine Hamilton apparently had the support of her husband on the issue of woman suffrage. In 1847, Allen Hamilton led a successful move to give women the right to vote in First Presbyterian Church affairs, where Emerine Hamilton was a leader (Sicherman, 1984, p. 15).
[4] At her death in 1889, Emerine Hamilton left $500 each to Anthony and to Lucy Stone to support the cause of suffrage (Sicherman, 1984, p.15).
[5] Following business and political failures in later life that stressed the family financially, Montgomery Hamilton retreated into books and alcohol, becoming a burden to his wife and children. In keeping with her late-Victorian upbringing, Alice Hamilton made no mention of this in her autobiography (Sicherman, 1984, p. 21).
[6] Throughout this paper, I use Karlyn Kohrs Campbell's (1989a) definition of feminism from her study of early feminist rhetoric: "Feminism here is inclusive and catholic, referring to all those who worked for the legal, economic, and political advancement of women, beginning in the 1830s" (p. 3).
[7] One could reasonably assume that some public speaking by her grandfather and father was involved in their pursuit of elective office; but Alice Hamilton makes no reference to such events in her autobiography.
[8] The "family claim" is a term coined by Jane Addams in Democracy and Social Ethics to describe the nineteenth century societal expectation that even educated young women would return home to pursue marriage and family rather than use their education and abilities to play a role in the larger society.
[9] I take as my authority the judgment of none other than Jane Addams, who identified Alice Hamilton, Florence Kelley and Julia Lathrop on her personal, short list of the greatest women of the twentieth century. Addams dedicated one of her most important books, The Excellent Becomes the Permanent, to Hamilton. (Linn, 2000/1935, pp. 396, 398 and 404).
[10] Arthur ("Quint") Hamilton (1886-1967), the last of the Hamilton children and the only son, was also successful. He became a professor of French and Spanish at the University of Illinois at Urbana and wrote three books on French and Spanish life and literature. He was the only one of the five Hamilton siblings to marry (Sicherman, 1984, p. 13).
[11] She emphasized the "medical" over the "missionary," believing herself not good enough to be a "real" missionary (Hamilton, 1943, p. 26).
[12] The first woman to receive a medical degree in the United States was Elizabeth Blackwell in 1849. By the 1890s, when Alice Hamilton was studying medicine, there were more than 4,500 registered female physicians in the United States (Sicherman, 1984, p. 34).
[13] Canadian-born Osler was the best-known English-speaking physician at the turn-of-the-century. His 1892 textbook, The Principles and Practice of Medicine, was continuously revised and was considered authoritative for more than 30 years (www.medcor.mcgill.ca/~oslerweb/history.html).
[14] On May 1, 1886, a strike organized by the International Working Peoples Association took place across the United States in support of the eight-hour workday. Some 340,000 people took part. On May 3, 1886, the IWPA in Chicago held a rally outside the McCormick Harvester Works, supporting the company's striking workers. The police opened fire on the crowd, killing four workers. On May 4, 1886, a protest rally against the killings was held at Chicago's Haymarket Square. As the police attempted to disperse the crowd of 3,000, an unidentified person threw a bomb that killed eight men and wounded 67 more. Eight men were arrested, tried and convicted for conspiracy to commit murder on the basis that their rhetoric had led to the bomb-throwing. Four of the eight were subsequently hanged, one committed suicide while in jail, and three were sentenced to life in prison. In 1893, Governor John Peter Altgeld of Illinois granted an "absolute pardon" to the three remaining prisoners. In a statement released to the public, Altgeld excoriated the police and city officials for fomenting the incident for their own ends (retrieved July 31, 2003, from the World Wide Web: www.spartacus.schoolnet.co.uk/USAhaymarket.htm).
[15] Both Alice Hamilton and Jane Addams hyphenate Hull House in their writings. The hyphen has been dropped in the writing of Sicherman and others.
[16] The social hygiene movement was aimed at eradicating prostitution and venereal disease through education and legislation. Yarros founded the American Social Hygiene Association, and at the urging of

Margaret Sanger, opened the nation's second birth control clinic, in Chicago (Lasch, retrieved online August 1, 2003, at http://www.awomanaweek.com/yarros.htm).

[17] Research by biographer Barbara Sicherman (1984) supports Alice Hamilton's criticisms of New England Hospital for Women and Children. In 1894, two attending physicians were asked to resign, including one that Alice Hamilton had privately called incompetent. That same year, the Board of Physicians declared the hospital "'in a state of dry rot,'" that only "'strong measures'" could fix, Sicherman writes (p. 73).

[18] Simon Flexner (1863-1946), was a leading expert in pathology and bacteriology, renowned for his research on cerebrospinal meningitis, polio and infantile paralysis. Many consider Flexner's stewardship of the Rockefeller Institute as his greatest contribution to medical and scientific research (Simon Flexner Paper, American Philosophical Society, retrieved August 4, 2003, from the World Wide Web: http://www.amphilsoc.org/library/mole/f/flexner.htm).

[19] Addams used "The Snare of Preparation" as the title of a chapter in Twenty Years at Hull House, but she credits Tolstoy with the term, as well as its general definition.

[20] In 1890, less than three percent of the population of the United States (male or female) attended college (Sicherman, 1984, p. 8). The number of professional degrees awarded to women increased by 226 percent between 1890 and 1920, three times the rate of increase for men (Freedman, 1979, p. 518).

[21] In l896, Alice Hamilton made the mistake of sharing her views with Allen Hamilton. The two engaged in lengthy, heated and humorous debate over the issue, with Allen Hamilton calling Alice Hamilton an "unconscious hypocrite" whose views resembled Miss Porter's. Two years later, Allen Hamilton sent Alice Hamilton Charlotte Perkins Gilman's book, Women and Economics, which argued that a woman must be self-supporting to be truly independent. By then, Alice Hamilton had mellowed on the subject and expressed admiration for the book and for Perkins, whom she had personally met (Sicherman, 1984).

[22] Roughly dated between the turn of the century and the beginning of World War I, the "Progressive Era" is a contested term. Hofstadter (1956/1955) defines Progressivism as "that broader impulse toward criticism and change that was everywhere so conspicuous after 1900 […] (p. 5). Hamby (1999) writes, "Progressivism had roots in the aspirations, anxieties, and material needs of groups too diverse to feel a sense of mutual identification […]. It had no umbrella organization, no union, no political party that could unite its membership. Its diversity was a source of strength when circumstances and leaders provided a common vision, but a chronic weakness when they could not" (p. 53).

[23] Alice Hamilton would comment in an interview many years later, "Women did so much more before they had the vote! It was the women who were really the reformers in Chicago. In those days, Miss Addams and Mrs. Bowen could always count on the Chicago women's clubs […]. Nowadays those things are purely social" (Scott, 1958, as cited in Elshtain, 2002, p. 152).

[24] Richard Ely, director of the School of Economics at the University of Wisconsin who championed a socialist approach to righting the wrongs done to laborers in an unrestrained capitalistic economy (1854-1943), had a long and distinguished academic career. He was a founding member of the American Economic Association and the Institute for Economic Research. He founded and edited the Journal of Land and Public Utility Economics and authored several books; but he also wrote pieces in popular magazines for the mainstream public, including Harper's, Atlantic Monthly, and Century. In 1894, Ely was accused by an ex-officio member of the university's Board of Regents of teaching socialism and promoting labor strikes. The university firmly supported Ely, dismissing all charges and publishing a statement defending academic freedom. (Reps, retrieved August 4, 2003, from the World Wide Web: http://www.library.cornell.edu/Reps/DOCS/pullman.htm).

[25] There appears to be no record of the speech that Jane Addams gave in the spring of 1895 at the Methodist Church in Fort Wayne. I queried Jane Addams expert Jean Bethke Elshtain (2002a, 2002b) about the matter, she replied, "I suspect that what JA did in the talk you reference that so inspired Alice Hamilton was a version of the essay she presented at the School of Applied Ethics, 1892, in Plymouth, Mass., namely, "The Subjective Necessity for Social Settlements." She reused her public presentations often as she trekked all over the country delivering speeches" (personal correspondence dated May 6, 2004).

[26] The Homestead strike of 1892 was a bitterly fought labor dispute between workers belonging to the Amalgamated Association of Iron and Steel Workers and the Carnegie Company in Homestead, Pennsylvania, just east of Pittsburgh. During negotiations for a new contract with unionized workers at Homestead, Andrew Carnegie departed for Scotland, leaving the company's general manager, Henry C. Frick, in charge. Known for his ruthless anti-union policy and determined to break the strike, Frick fenced in the steel mill with barbed wire while contract negotiations were still underway. When the contract

expired without a new agreement, Frick shut down the mill, locking out the entire work force. The army of 300 armed detectives Frick had hired from the Pinkerton's National Detective Agency of New York arrived at the mill, and a shoot-out between workers and the "Pinkertons" took place, costing the lives of seven workers and three Pinkertons. The strike was broken when the National Guard was called in by the Governor of Pennsylvania. The victory by Carnegie and Frick helped to prevent the organization of the steel mills for the next 40 years (Goldner, C., retrieved September 4, 2003, from the World Wide Web: http://www.bgsu.edu/departments/acs/1890s/carnegie/strike.html).

[27] In Jane Addams and the Men of the Chicago School, Deegan (1990/1988) laments the lack of scholarship acknowledging Jane Addams' and Hull House's contributions to the philosophy of American pragmatism. Feminist-pragmatism also traces its roots to the school of pragmatism that originated at Harvard with Charles Pierce, James Royce, and William James, and whose central concern is "the human capacity for intelligent, purposive behavior" (p. 247). According to Morris, the factors in American society from the 1850s-1930s that supported the development of American pragmatism were: "1) the prestige which science and the scientific method enjoyed in the mid-nineteenth century; 2) the corresponding strength of empiricism in the then current philosophy; 3) the acceptance of biological evolution; 4) the acceptance of the ideals of American democracy" (as cited in Deegan, 1990/1988, p. 247). Jane Addams had contact with Harvard pragmatism, having shared a speaking platform with William James. They continued their contacts, and he considered Addams' Democracy and Social Ethics to be one of the great books of their time (p. 254).

[28] Hull House Maps and Papers describes the ethnic make-up and the living and working conditions of the nineteenth ward of Chicago, where Hull House is located. It was a groundbreaking study in its time.

[29] Sentimentality was often associated with Victorian novels written for women by women in the eighteenth century. In actual fact, sentimental works were not written exclusively by or for women and appeared as pamphlets, books and tracts that that addressed some of the most pressing issues of the day, such as slavery (Hartnett (2002). While sentimental novels often dealt with serious social issues of particular concern to women, the stories were told in a characteristic style: "immersion in the world of emotion, seeing history through personal experience, saturating the text with relentlessly intense prose marked by exclamation pints, tears, grueling repetition, and melodramatic emplotment" (Hartnett, 2002, p. 10).

[30]Black (1992) derides the style as both escapist and fascist, while Browne (1994) describes it as a kind of moralistic masturbation, resulting in nothing but its own exhaustion. Literary critic Jane Tompkins (1985) and rhetorical critic Stephen Hartnett (2002) are among those calling for re-evaluation of the sentimental style within its historical context and purpose, in particular, its use as a vehicle through which "antebellum rhetors sought to produce political transformations through emotional appeals" (Hartnett, 2002, p. 5).

[31] In the twentieth century, Tompkins (1985) argued that the exclusion of sentimental novelists of the nineteenth century from the canon of American literature reflects the biases of a "male-dominated scholarly tradition" that controls both the canon [. . .] and the critical perspective that interprets the canon for society" (p. 123). In this century, Harnett (2002) suggests that Black's interpretation of the sentimental style as both escapism and repression is a contradiction that reproduces "one of the oldest misogynist myths of American culture" (p.2).

[32]Approaching this issue from the perspective of social movements' theory, it is likely that Alice Hamilton's oversight resulted from the fact that the industrial hygiene movement was in the "early genesis" stage, "a transitional phase between private and public expression" that may last for "months, years or decades" (Stewart, Smith & Denton, 2001, pp. 130-131). During this stage, the attention of people, their leaders and institutions and media are focused elsewhere on other issues when individuals, "often scattered geographically and unknown to one another at first, perceive an 'imperfection' in the existing order" (p. 130); an "imperfection marked by some degree of urgency [. . .] ; a problem or defect, something other than it should be" (Bitzer, 1980, as cited in Stewart, Smith & Denton, 2001, p. 131). As consciousness of the "imperfection" is raised during the genesis stage, early leaders (often seen as intellectuals or prophets, more "educators" than "rabble-rousers") produce rhetoric that is designed to "transform perceptions of reality" and "create interest within an audience for perceiving and solving the problem" (p. 131).

[33] The weakness of speaking of Progressivism as a unified way of thinking or a party platform is nowhere more evident than over the issue of American involvement in World War I (Hamby, 1999; Hosfstadter, 1956/1955). Those who called themselves Progressives were as far apart in their views of America's role as an emerging world power as the militaristic realist Teddy Roosevelt; the utopian idealist Woodrow Wilson; and the isolationist Robert LaFollette. What Progressives generally had in common was a view of America

as a moral force in the world (Hamby, 1999). Employing the rhetoric of Progressivism, then, each group could successfully argue its position.

[34] Mary Rozet Smith was Jane Addams' closest friend and a financial supporter of Hull House. Smith preferred to remain in the background in her work at Hull House; but in her autobiography, Alice Hamilton (1943) called her "a supremely lovely figure" and "the most universally beloved person I have ever known" (p. 67).

[35] Returning to the United States with Addams in 1915, Hamilton would learn a difficult lesson about the risk involved in taking on the role of public persuader. That summer, Addams gave a speech at Carnegie Hall in New York City on her impressions from her travels on behalf of the Congress. During the presentation, she made a rhetorical error that laid the groundwork for her later censure by the nation for her pacifism. In attempting to convey the innate desire for peace and the price of war that she witnessed among the nations she had visited, she repeated something that she had heard many times during her sojourn: that English soldiers fortified themselves with rum and German soldiers with small doses of ether to brace themselves for bayonet charges, the worst form of warfare. The response to this statement was immediate and devastating. American journalists misconstrued Addams's remark as an attack on the honor of Allied soldiers, and overnight she went from being venerated as "Saint Jane" to being criticized in the press as "a silly, vain, impertinent old maid who . . . is now meddling with matters far beyond her capacity" (Sicherman, 1984, p. 194). Alice Hamilton supported Addams through this trauma and the repercussions that followed, encouraging her not to be intimidated and to "keep on saying things even more positively, no matter what you are called, for in the end it will count" (pp. 194-198). Americans, she said, romanticized the war and resented anyone who dared to tinker with that fantasy (Hamilton, 1943). The lesson may have tempered Hamilton's own anti-war rhetoric in the short-term, given her employment with the Federal Government at the time; but in the long-term she became increasingly emboldened to follow her own advice. Alice Hamilton spoke out vigorously and publicly against war into her nineties: in 1963 she signed an open letter to President Kennedy asking that troops be withdrawn from Vietnam (Sicherman, 1984, p. 414).

[36] Jurgen Habermas' (1975, as cited in Darsey, 1997) explanation of crisis as a time "when members of society experience structural alterations as critical for continued existence and feel their social identity threatened" precisely describes the situation in America for both "natives" and immigrants following the Industrial Revolution.

[37] For example, in the decade from 1880 to 1890, Chicago more than doubled its population, and the Twin Cities tripled theirs (Hofstadter, 1956/1955, p. 173).

[38] For an excellent discussion of reform rhetoric as a response to a perceived crisis in social integration, see the chapter two of James F. Darsey's The Prophetic Tradition and Radical Rhetoric in America (New York: New York University Press, 1997).

[39] Robert Alexander Kraig calls the period between William Jennings Bryan's "Cross of Gold" speech at the 1896 Democratic National Convention and Woodrow Wilson's "swing around the circle" on behalf of the League of Nations in 1919, American oratory's second renaissance, comparable to the golden age of American oratory before the Civil War. He writes, "In the first decade of the new century, the enlarged political importance of oratory was most apparent in the increasingly spectacular conduct of presidential campaigns, the emergence of the Chautauqua circuit as a major agency of political reform, and the techniques used by insurgent leaders to defeat political machines in a number of states (Kraig, 2003, p. 19).

[40] Sidney Milkis 1999) writes that "progressives sought to close the space between the cup of power and the lips of the people, championing government *of* the People directly *by* the People." They were in search of a "pure democracy," he continues, and reconstituting the public sphere was essential to the process (p. 7).

[41] Bitzer's (1968) assertion that "a work of rhetoric is pragmatic; it comes into existence for the sake of something beyond itself; it functions ultimately to produce action or change in the world" (p. 61) succinctly describes the rhetorical motivation of feminist-pragmatists.

[42] Her early reform writing appeared in specialized magazines, The Commons, a monthly publication of settlement workers; Charities and the Commons, the magazine that resulted from the merger of The Commons and Charities, a magazine aimed at charity organization workers; and in The Survey, the new name given to Charities and the Commons by editor Paul Kellogg to reflect its Progressive information-gathering orientation and its independence from charitable organizations.

[43] On May 26, 2004, in response to a question I posed regarding her approach in writing Jane Addams and the Dream of American Democracy, Jean Bethke Elshtain replied, "I really intended the book as a sympathetic exploration of a singular life through her own self-understanding as embodied in her published work--largely though not exclusively. The rhetorical issues enter in, of course, because JA was engaged in the art of persuasion as a public citizen in a democratic society. I would say that she reasoned prudentially or pragmatically within the framework of certain perduring principles. In other words, her perspective wasn't pragmatism all the way down, but, rather, it began with a series of moral truths and commitments. But, JA realized, their application must always be pragmatic."

[44] At age 96, Alice Hamilton wrote an article about the year she spent studying in Germany that appeared in the March 1965 issue of the Atlantic Monthly. It appears to have been her last published discourse. It contained a factual error, which led her to declare, "Well, this is my last writing effort, and high time! Seeing I am already within four years of 100" (Sicherman, 1984, p. 414).

[45] The Smith Act of 1940 made it illegal to advocate for, or be a member of an organization that supported, the overthrow of the American government.

[46] Expose journalism known as "muckraking," though not an invention of the Progressive Era, reached its peak during the period because of the national reach achieved by publications as a result of industrialization and urbanization. Between 1870 and 1909, for example, the circulation of daily newspapers in the United States increased from 2,800,000 to 24,200,000. It was, however, inexpensive popular magazines that borrowed their style from newspaper journalism that specialized in muckraking, some reaching as many as one million readers. Ida Tarbell, Lincoln Stefans, Ray Stannard Baker, and Upton Sinclair were among those who made names for themselves writing muckraking articles for new magazines such as McClure's and Hampton's (Hofstadter, 1956/1955, p. 187-191; Wilson, 1985). These writers also helped introduce a style of writing that Hofstadter (1955/1956) calls "realism" (p. 196) and Wilson (1985), "popular naturalism" (pp. xi, 203), a "masculine" writing style that replaced the "feminized" Victorian writing style (p. xiv).

[47] The article, "Industrial Diseases, With Special Reference to the Trades in Which Women are Employed," appeared in Charities and the Commons, a hybrid of two specialty magazines, Charities, a magazine for the philanthropically-minded, and The Commons, a magazine for settlement workers. The magazine's content reflected the change in thinking during the Progressive Era that poverty was the result of corrupt, oppressive institutions and unjust economic structures rather than individual failings (2004, http://newdeal.feri.org/sg/sg2htm). "Industrial Diseases" was one of the first articles on the subject published in the United States.

[48] In a speech entitled "A Slave's Appeal," for example, Elizabeth Cady Stanton (1860) had excoriated the New York State Legislature for having on its books laws concerning women that "in cruelty and tyranny [. . .] are not surpassed by any slaveholding code in the Southern States" (as cited in Campbell, 1989b, p. 172). In 1872-73, Stanton's protégé, Susan B. Anthony, used the slave analogy in a speech, delivered more than forty times, defending her act of voting in the 1872 election. The argument was so incendiary in the post-Civil War era that the presiding judge directed the jury to a guilty verdict, then imposed a light sentence that was never carried out (Campbell, 1989b, p. 279).

[49] R. Jackson Wilson (1968) writes that Edward Alsworth Ross, author of Social Control: a Survey of the Foundations of Order (1901), claims to have coined the phrase "race suicide" in describing the threat that living in a socialized, industrialized state posed for America's the independent Aryan stock of old America and the West. Ross' acquaintance, President Theodore Roosevelt, used the term in public speech (Wilson, 1968, p. 111).

[50] Adding further weight to Alice Hamilton's criticisms with her audience was the fact that the venue for the speech was an enactment of the truth of her claims: The memorial service was held in New York because the bitter prejudice and lack of fairness that had engulfed the Sacco and Vanzetti trial prevented organizers from securing a venue in Boston, even a year after the pair's execution.

[51] Ida Tarbell, a muckraker who became famous for a series in McClure's in which she exposed the excesses of Standard Oil, said of her readers, "I soon found that most of them wanted attacks. They had little interest in balanced findings" (Tarbell, 1939, p. 242).

[52] Doris Stevens was a supporter of Alice Paul, founder of the National Woman's Party, and later, her biographer (Retrieved October 27, 2003, from the World Wide Web at http://womhist.bingham.edu/era/doc18.htm).

[53] It can safely be assumed that men comprised nearly all, if not all, of Alice Hamilton's audience given that she gave this speech in 1919, the year she was appointed as the first female faculty member at Harvard University. Harvard did not allow women as students until 1943.

[54] Sir Thomas Oliver of England was considered by many to be the world's foremost expert on industrial poisons, the only person who knew more than Alice Hamilton herself (Sicherman, 1984, p. 153). In fact, Alice Hamilton's reading of Oliver's 1902 textbook, Dangerous Trades, was a pivotal event in her decision to pursue this specialty (Sicherman, 1984; Hamilton, 1943).

[55] Campbell (1989a) has identified narrative as part of a feminine rhetorical style of discourse that is personal in tone, relies on storytelling and personal experience, tends to be structured inductively, and invites audience participation. She points out that the feminine style is not now a style exclusive to women. Rather, it is a style that evolved out of the experiences of women coping with the "conflicting demands of the podium," i.e., that they display rationality and expertise without being judged "masculine, unwomanly, aggressive and cold" (pp.12-13).

[56] The chapters in Women at the Hague (1972/1915) originally appeared as separate articles, but were compiled in book form because of the broad interest they engendered (p. v).

[57] According to Alice Hamilton (1931), "Averbuch was a Russian Jew, a revolutionist, who was shot to death by the Chief of Police when he presented himself at the latter's door for some purpose which he never had time to declare. There was great excitement on the part of the police and the newspapers and every effort was made to prove that Averbuch was a would-be assassin and his act part of a wide-spread anarchist conspiracy" (p. 544-545). An autopsy performed by the leading pathologist in Chicago revealed that "All but one of the wounds in the lad's body were in the back and made by shots fired as he lay prone on his face (p. 545).

[58] In a later recapitulation of the argument in her autobiography, Alice Hamilton (1943) refined this claim, writing that, "The American system which most needs reform is the system of criminal law" (p. 101).

[59] An excellent place for students of public address to begin in evaluating the rhetorical ability of Alice Hamilton is her 1929 speech at Madison Square Garden commemorating the deaths of Sacco and Vanzetti. It contains all the elements of the feminist-pragmatist genre, but is also a very moving piece of writing. Based on the critiques of her speaking ability, she no doubt did the speech justice in her presentation as well.