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**THE ROBERT L. LEVINE
DISTINGUISHED LECTURE***

**FROM EUGENICS TO THE “NEW” GENETICS:
“THE PLAY’S THE THING” ****

*Karen H. Rothenberg****

INTRODUCTION

Genetics occupies a place in the public imagination with which few areas of science can compete. It is popularly understood to be the “science of life,” concerned with the essence of humanity: a subject that generates both awe and fear. These divergent emotions are encapsulated in the “promise versus peril” debate that has surrounded genetics since its early incarnation as eugenics, the science of being “well-born.” The promise of an end to human disease is countered by the peril embodied in the discriminatory capacity of genetic essentialism. This debate has become ingrained in popular culture, but its dramatic potential has been effectively realized in theatre.¹

* This Article is adapted from the Robert L. Levine Lecture, presented at Fordham University School of Law on March 10, 2010.

** This phrase is from Shakespeare’s *Hamlet*, in which Prince Hamlet’s rationale for thinking “the play’s the thing” is to reveal the dark-hearted nature of the uncle he suspected of murdering his father. By writing a play to be performed before King Claudius, his uncle, and into which specific lines about intent to commit regicide were strategically worked, the prince hoped to elicit a response from the king that would either verify or refute Prince Hamlet’s suspicions: “I’ll have grounds/More relative than this: the play’s the thing/Wherein I’ll catch the conscience of the king.” William Shakespeare, *Hamlet* act 2 sc. 2 (Tucker Brooke & Jack Randall Crawford eds., 1947). In this scene, Shakespeare acknowledges the power of drama to unearth the intricacies of human nature, and to elicit the audience to think about the ethical, moral, and social implications of certain actions.

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1. Tamsen Wolff recognized this link among eugenics, heredity, and early twentieth-century American drama in her book, *Mendel’s Theatre*. TAMSEN WOLFF, MENDEL’S THEATRE: HEREDITY, EUGENICS, AND EARLY TWENTIETH-CENTURY AMERICAN DRAMA

Plays have always been written and performed as expressions of social and cultural concerns. Drama is uniquely able to address salient issues and to manipulate the way they are perceived through characters with whom the audience identifies and sympathizes. In this way, theatre engages in a dialogue with public opinion and social policy. An examination of this relationship—with a focus on plays written during both the eugenic era and in recent years—should illuminate our understanding of the evolution of the ethical, legal, and social implications of genetics.² Plays are vehicles for

(2009). Wolff provides excellent in-depth analyses of plays during the eugenics era and in fact was a source for the selection of the eugenic plays, including *To-morrow*, *The Blood of the Fathers*, and *Strange Interlude*. *Id.*

2. In preparation for this project, many plays were reviewed that address heredity, eugenics, and genetics. *See, e.g.*, Eugène Brieux, *Damaged Goods* (John Pollock trans., A.C. Fifield 1914) (addressing the dire consequences of a respectable young man's decision to go ahead with his marriage despite being diagnosed with syphilis); Susan Glaspell, *The Verge* (Smill, Maynard & Co. 1922) (containing an ambiguous message that recognizes the empowering potential of hereditary experimentation but criticizes eugenically-prescribed social roles for women); Angelina Weld Grimké, *Rachel* (Corhill Co. 1920) (an anti-lynching play written by a black female playwright and poet in which the main character deprives herself of motherhood because she does not want to bring children into such a racist world); Henrik Johan Ibsen, *Ghosts* (R. Farquharson Sharp trans., E.P. Dutton & Co., 4th prt. 1917). *Ghosts* was a precursor to treatment of eugenics in theatre and an early example of the dramatic potential of heredity. Ibsen was particularly concerned with examining the effect of the past on the present, in this case, through congenital syphilis. There are many modern plays of varying quality, some commissioned, on the topic of genetics and evolution. *See, e.g.*, Kent R. Brown, *Designer Genes*, (Dramatic Publ'g Co. 2005) (addressing the ethical implications of science in an era of "designer children"); Caryl Churchill, *A Number* (Nick Hern Books 2004) (containing an interesting examination of issues raised by cloning: loss of human individuality, importance of environmental factors in shaping personality, and the extent of human similarity revealed by DNA); Carl Djerassi, *ICSI* (Univ. Wis. Press 2008) (describing a well-known scientist who defends the creation of ICSI—a new form of reproductive technology—on a talk show, and the play also delves into both the scientific aspects and societal implications); Carl Djerassi, *Immaculate Misconception* (Imperial Coll. Press 2000) (consisting of a scientist's attempts to integrate logic and emotion by injecting her lover's seed into her own egg in an ICSI experiment; the play questions the ethics of scientific research on reproductive technology); Carl Djerassi, *Taboos* (Univ. Wis. Press 2008) (addressing the ways in which new reproductive technologies can redefine the traditional notion of family within the context of a lesbian couple who conceive a child via *in vitro* fertilization); Peter Goodchild, *The Great Tennessee Monkey Trial* (L.A. Theatre Works 2006) (addressing the issues of fundamentalism versus evolution in the Scopes Monkey Trial); Lisa Loomer, *Expecting Isabel* (Dramatists Play Serv. 2005) (describing a couple that tries to start a family through various attempts at reproductive technologies and adoption while addressing hereditary and environmental influence on character); Jeff Nisker, *Orchids* (2005) (a musical about preimplantation genetic diagnosis); Kenneth Nowell, *Helix 999* (2006) (exploring implications of a genetics company that secretly created humans for the government); Seth Rozin, *Reinventing Eden* (2001) (describing a respected geneticist, whose life and career are thrown into question when investigations reveal that he once experimented on his own family); Portia Smith, *Genetics for Blondes* (2004) (a comedy that "separates the facts from mistruths and misconceptions in a way that even blondes can understand" (quoting *Genetics for Blondes*, SOHO THEATRE, <http://www.sohotheatre.com/pl350.html> (last visited Oct. 23, 2010))); Timberlake Wertenbaker, *After Darwin* (Faber & Faber 1998) (a fictional play-within-a-play based on Darwin's theory of evolution); Crispin Whittell, *Darwin in Malibu* (Dramatists Play Serv. 2007) (a comedic play that hypothesizes about a beach-bound Darwin, musing about life, death, and love with his friend, Thomas Huxley); Charles Wray, *Still Life* (Parthian Books 2005) (addressing the responsibility of the

exploring connections and parallels between eugenics and the “new” genetics, especially with respect to the role of women and their accountability for future generations.

One hundred years ago, eugenics was a major tool to help explain and control the “social ills” of the time.³ Eugenics became popular at a time of moral disorder, in which traditional race and gender hierarchies were threatened with change.⁴ The white middle class appeared to be threatened by a mushrooming immigrant population, and urbanization and new economic opportunities drew women into the cities, altering sexual mores and challenging traditional gender roles.⁵ Changes in American morality were associated with the perceived problem of racial degeneracy for which eugenics and its figurehead of white womanhood were presented as a panacea. From the Greek *eu* for “good” or “well” and *genesis*, “to be born” or “come into being,” eugenics sprouted from the renewed scientific interest in biological inheritance that was prompted by the rediscovery of Gregor Mendel’s work at the end of the nineteenth century.⁶ Contemporary playwrights seized on the popular fascination with heredity and the emerging notion of man’s ability to control it.⁷

In the United States, the relationship between theatre and the eugenics movement was especially pronounced, since the rise of eugenics coincided with the early twentieth century boom in show business. The movement itself embraced theatre as a promotional tool, touring the country with shows and exhibitions and funding propaganda plays.⁸ For example, at the Race Betterment Conference at the Panama Pacific International Exposition in 1915, “its directors commissioned a theatrical performance . . . Entitled ‘Redemption: A Masque of Race Betterment’ . . . centered on the struggle of the white race to rise above disease and degeneracy.”⁹

Plays dramatized the social debates about race, class, gender, sexuality, and disability. These debates usually entailed a disproportionate focus on the woman, specifically the mother. In the early twentieth century, women

individual to the betterment of humankind, and raising questions about the search for human perfection and extending life).

3. See generally TROY DUSTER, *BACKDOOR TO EUGENICS* (2d ed. 2003); DANIEL J. KEVLES, *IN THE NAME OF EUGENICS: GENETICS AND THE USES OF HUMAN HEREDITY* (1985); WENDY KLINE, *BUILDING A BETTER RACE* (2001); DIANE B. PAUL, *CONTROLLING HUMAN HEREDITY: 1865 TO THE PRESENT* (1995).

4. KLINE, *supra* note 3, at 2.

5. *Id.* at 9–10.

6. See generally WOLFF, *supra* note 1.

7. In fact, theatre’s obsession with the underlying question of fate goes back much further to the tragedies of the ancient Greeks. *Id.* at 7.

8. *Id.* at 87–89.

9. KLINE, *supra* note 3, at 17. During the opening scene, Womankind reminds Mankind that there “yet is work to be done in the world” before establishing a superior race. *Id.* (internal quotation omitted). However, Womankind gives birth to Neglected Child because she is “corrupted” by hedonistic pleasures and ignores her duty to better her race. *Id.* As a result, the child suffers from disease and dies. *Id.* By the end of the play, Womankind has given birth to Fortunate Child after resolving to “pledge [her] future to bringing up a race physically perfect and mentally enlightened.” *Id.* (internal quotation omitted). This performance was viewed by 5000 audience members who attended the Exposition. *Id.*

were not only the main targets of eugenics, but were also often its most vehement proponents.¹⁰ The two strands of biological control, “negative” and “positive” eugenics, were symbolized by the two opposing models of womanhood. The first was dedicated to the dysgenic threat of “the woman adrift” by preventing her procreation and eugenics, while the other encouraged the “mother of tomorrow,” the symbol of the eugenic ideal, to marry well and bear many children.¹¹ The eugenic focus on the woman did not escape playwrights, who consistently chose the female body as the site on which to explore notions of social responsibility and individual choice.

By World War II, eugenics was repudiated as “pseudo-science” and, at least in the public mind, buried in disgrace. The discovery of the double helix in the 1950s gave rise to a new scientific paradigm, which was accompanied by a renewed interest in genetics.¹² By the height of its popularity in 1990, the Human Genome Project (HGP), a massive research initiative established with significant government funding, aimed to “map” the human genome. The HGP also acknowledged the need to investigate the ethical, social, and legal implications of genetics by allocating three to five percent of its budget toward exactly this kind of research.¹³ Heralded as the “new genetics,” the HGP’s remarkable technological advances have indeed put quite a distance between genetics and its maligned predecessor, eugenics.

Indeed, although almost a century has intervened between the height of the eugenics movement and the contemporary obsession with “new genetics,” a renewed reverence for science echoes debates of an earlier time: society is seeking biological explanations and solutions.¹⁴ Pressure

10. PAUL, *supra* note 3, at 55. Wendy Kline goes so far as to say that eugenics played a central role in modern reevaluations of female sexuality and morality. KLINE, *supra* note 3, at 6.

11. KLINE, *supra* note 3, at 16.

12. See generally JOSE VAN DIJCK, IMAGINATION: POPULAR IMAGES OF GENETICS 36 (1998).

13. HUMAN GENOME PROJECT INFORMATION: ETHICAL, LEGAL, AND SOCIAL RESEARCH ISSUES, available at http://www.ornl.gov/sci/techresources/Human_Genome/research/elsi.shtml (last visited Oct. 23, 2010).

14. DOROTHY NELKIN & M. SUSAN LINDEE, THE DNA MYSTIQUE: THE GENE AS A CULTURAL ICON 16 (1996). The science of genetics is extraordinarily complex and has therefore been filtered through popular culture to the public sphere, where its image may often bear little resemblance to scientific reality. There have been many science fiction films made about the genetic perils of manipulating and changing DNA. See, e.g., TWILIGHT PEOPLE (Four Assocs. Ltd. 1973); THE UNBORN (Califilm 1991); X-MEN (Twentieth Century Fox Film Corp. 2000). See generally David A. Kirby, *The Devil in Our DNA: A Brief History of Eugenics in Science Fiction Films*, 26 LITERATURE & MED. J. 83 (2007). Public interest has been consciously created through the popularization of genetics. Geneticists, journalists, authors, and playwrights have crowded the public perception with metaphors that simplify scientific ideas and relate them to everyday life. The common language of genetics is replete with references to codes, maps and blueprints. See VAN DIJCK, *supra* note 12, at 20. Ironically, this use of metaphor and analogy was equally important in the promotion of eugenic ideas in the early twentieth century, enabling its proponents to conflate the certainty of inherited physical traits with those that inform a person’s actions and to compare eugenic solutions to preventative medicine. KLINE, *supra* note 3, at 52; see also R. Alta Charo & Karen H. Rothenberg, “The Good Mother”: *The Limits of Reproductive Accountability and*

upon women is magnified as the responsibility for utilizing these solutions has shifted from the state to the individual. While western society now largely appreciates a woman’s right to govern her own body—at least to a point—this right is accompanied by implicit societal pressure. The growing availability of prenatal testing is accompanied by the sense of a woman’s social accountability for the kind of child she brings into the world.

In fact, as technology advanced, new questions were presented, and plays addressed the public hopes for a world without disease as well as the fears of one devoid of human individuality; they questioned what exactly could be inherited and what is determined by environment; they pointed to the potential for increased discrimination; they challenged individual and societal rights and responsibilities.

With the “new genetics,” the ethical, legal, and social implications of genetic technology have proliferated and become more complex since the eugenics movement first brought heredity into the public arena, yet the risks and potentialities it raises, and the controversies and arguments it ignites are remarkably similar.¹⁵ The persistent eugenic quest for a better human and the relentless advance of technology that makes it increasingly realizable continues to raise serious issues. What in fact is the essence of humanity? Who are we? These questions are ripe for popular culture and for our future. The recurrent themes undergirding persistent notions of heredity are consistently explored in theatre by playwrights acting as social commentators—simultaneously initiating, reflecting, affirming, shaping, and questioning the public perception of genetics.

To illustrate this view, this article is structured in the format of a play. Act I, “In the Time of Eugenics,” explores how eugenic ideals influenced women protagonists within early twentieth century dramas. The plays specifically addressed are Percy MacKaye’s *To-morrow*, G. Frank Lydston’s *Blood of the Fathers*, and Eugene O’Neill’s *Strange Interlude*. The intermission sets the stage for the convergence of the promise of emerging genetic technologies and the proliferation of civil rights movements. Act II then examines society’s embrace of the “new genetics” and how the promise and perils of this science have influenced society, especially the role of women. The plays examined in Act II are Jonathan Tolins’s *Twilight of the Golds*, Cassandra Medley’s *Relativity*, and Lisa Loomer’s *Distracted*. In analyzing these plays, this article aims to highlight the power of theatre to enhance our understanding of the complexities of the ethical, legal, and social implications of genetics.

ACT I: IN THE TIME OF EUGENICS

Throughout the nineteenth century, it was widely accepted that human characteristics and dispositions were influenced by environmental factors, but the rediscovery of Mendel’s pea plant experiments in 1900 led to new

Genetic Choice, in *WOMEN & PRENATAL TESTING: FACING THE CHALLENGES OF GENETIC TECHNOLOGY* 105 (Karen H. Rothenberg & Elizabeth J. Thomson eds., 1994).

15. See generally DUSTER, *supra* note 3.

research that favored biological inheritance. Its application to all living organisms, including humans, excited not only scientists and sociologists, but also playwrights and filmmakers, and propelled the effort to articulate a theory of heredity. Eugenics took the facts of heredity established by Mendel and his successors and applied it to the study and practice of breeding “better” humans, a kind of willed evolution, with a view toward improving the species.¹⁶ The movement attracted a wide range of supporters, from social radicals such as Margaret Sanger, who believed eugenics would further women’s rights, to conservatives who saw it as a way to curtail immigration and control the reproduction of certain types of women.¹⁷

Would eugenics in fact be a panacea for the threat of immigration, urbanization, economic woes, fears about changing gender roles, sexual mores, and racial degeneracy? A panacea for building a better race had diverse appeal. By the early twentieth century, eugenic ideas were widely accepted, pervading the work of contemporary writers such as Ernest Hemingway, F. Scott Fitzgerald, George Bernard Shaw, Jack London, and T.S. Eliot.¹⁸ It has been suggested that this literature “probably did more than any academic studies to popularize the concept of selective breeding.”¹⁹

Literature and eugenics also inspired the writing of two interesting propaganda plays in 1912. The first play, Percy MacKaye’s *To-morrow*,²⁰ centers on the daughter of a gardener, Peter Dale, who breeds genetically modified plants. In the preface, MacKaye writes, “In our age, which is opening new vistas of leadership for women, the concept and opportunity of woman as the creative arbiter, through selection, of our race and its future, must constitute a living theme for national thought and action.”²¹

Peter Dale’s quest for a perfect species is seamlessly applied to humans when his daughter, Mana, falls in love with a wealthy senator whose bloodline is marred by congenital blindness. MacKaye presents eugenics as unquestionable science and touches on several core eugenic ideas through the character of Professor Raeburn, who suggests that “[S]ound Americans” should be bred “as carefully—as . . . sheep and cattle. . . . [b]y forbidding the production of the worst stock, and by encouraging the production of the best.”²²

16. See WOLFF, *supra* note 1, at 95–97.

17. Overt female sexuality was equated with delinquency and linked to the problem of “race suicide.” Those concerned about the increasing laxity of female morality embraced the genetic explanation as well the eugenic solution. KLINE, *supra* note 3, at 20.

18. For example, Shaw’s prescription for the breeding of a “revolutionary elite” appears in two plays, *Man and Superman: A Comedy and a Philosophy* and *Back to Methuselah: A Metabiological Pentateuch*, which were well-received by a society receptive to eugenic thinking. See WOLFF, *supra* note 1, at 18.

19. PAUL, *supra* note 3, at 75.

20. Percy MacKaye, *To-morrow* (Frederick A. Stokes Co. 1912).

21. *Id.* at v.

22. *Id.* act 1 at 22.

Professor Raeburn’s idea of controlled heredity through selectively breeding humans using the methods of horticulturalists and stock breeders became a staple image of the eugenics movement. This was one of the many analogies that eugenicists relied on to promote their ideas in the face of tenuous scientific evidence. Though the “stock” of the father is just as important as that of the mother, it was most often the woman that the movement—and later the state—beseeched to marry and breed well.²³ In *To-morrow*, Mana is burdened with the choice of marrying the person she loves or the eugenically superior Mark, who, it turns out, was raised—not unlike a prize stud would be—by Mana’s father as a match for his perfect daughter.

To-morrow was concerned with the promise that eugenics would create a society free of crime and disease. Mana ultimately accepts her female duty to society by making the eugenically sensible choice of marrying Mark. She laments that society in general still allows “[t]he idiot to have offspring, the criminal to curse his birthright, the insane to instill madness in their children’s brains!”²⁴ This sentiment was widespread, counting among its illustrious supporters President Theodore Roosevelt, who asserted in 1914 that “eugenics is an excellent thing . . . I very much wish the wrong people could be prevented entirely from breeding Criminals should be sterilized, and feebleminded persons forbidden to leave offspring behind them.”²⁵

The eugenic argument habitually connected its idealistic goals with state intervention in the form of legislation. In *To-morrow*, Professor Raeburn proclaims the improving potential of Mendel’s theory as applied to humans: “To-day we stand only at the outer gate, but we have the key which may unlock a vast kingdom of human happiness: the law of Mendel. Our Eugenics Bill provides that the government shall help to conquer that kingdom by three means: investigation, education, legislation.”²⁶

He declares what would in fact be the social policy in our country for years to come:

- One, investigate heredity, especially the behavioral traits of marginalized social groups;
- Two, educate women so they know how to select the best mate for reproduction;

23. See WOLFF, *supra* note 1, at 125.

24. MacKaye, *supra* note 20, act 3 at 163.

25. WOLFF, *supra* note 1, at 152–53 (quoting Theodore Roosevelt, *Twisted Eugenics*, OUTLOOK, Jan. 3, 1914, at 30, 32, available at <http://www.theodore-roosevelt.com/images/research/treditorials/o125.pdf>).

26. MacKaye, *supra* note 20, act 1 at 23. This attitude clearly reflects the thoughts of Charles Davenport, a leading geneticist and perhaps the most well-known member of the eugenics movement, who advocated the responsibility of the state to act on the “discoveries” of eugenic science. WOLFF, *supra* note 1, at 64.

- And three, legislate sterilization on the proven “inferior” stock, especially women.²⁷

This was his prediction, and it became the reality of tomorrow.

During the same year that *To-morrow* was produced, G. Frank Lydston, a prominent surgeon, wrote *The Blood of the Fathers: A Play in Four Acts*.²⁸ In his preface, Lydston credited one of literature’s most famous eugenicists, Bernard Shaw, for his belief that “[d]ramatic form is most effective in driving home a social lesson.”²⁹ Lydston decries society’s role in perpetuating the existence of criminals, the feebleminded, alcoholics, and so on,³⁰ contending that it is society that pays the price when it counts such aberrations among its members.³¹ Lydston observes that “[w]e go on marrying and giving in marriage criminals, lunatics, epileptics, inebriates and syphilitics and breeding more of their kind!” instead of “rop[ing] off” the pit, [to] protect the fools from themselves, Society itself from the fools and, above all, protect from Society generations yet unborn.”³² The author goes on to define the precise message of his play: “Is this play a plea for marriage control and regulation? It is. . . . Is it a plea for the protection of the unborn? It is. Is it a plea for the sterilization of degenerates? It is.”³³

The protagonist is Dr. Allyn, whose interests are rather similar to those of Dr. Lydston. Dr. Allyn is obsessed with studying the family backgrounds of criminals whose existence, he is convinced, is the result of social irresponsibility and what he calls “remorseless heredity.”³⁴ When he finds out that his fiancée is the product of an insane mother who committed suicide and a criminal father, he is distraught but decides, against his better judgment, to go ahead with the marriage. When his wife disgraces him by stealing a valuable ornament at a high society party, Dr. Allyn understands it as “[t]he Nemesis of tainted blood [taking] its toll.”³⁵ Confronted, his wife turns mad and kills herself, and the doctor finds solace in the narrow escape of their unborn children. In the final scene, he laments over his dead wife: “The blood of the fathers! . . . You set things right—and you did it in the only way. The blood of the fathers! And our children yet unborn—and

27. MacKaye, *supra* note 20, act 1 at 23. The most pernicious manifestation of state intervention was in forced sterilizations, which were overwhelmingly practiced on women. Roberta Cepko, *Involuntary Sterilization of Mentally Disabled Women*, 8 BERKELEY WOMEN’S L.J. 122, 123 (1993).

28. G. Frank Lydston, *The Blood of the Fathers: A Play in Four Acts* (The Riverton Press 1912).

29. *Id.* at 12.

30. *Id.* at 9.

31. *Id.* Understanding characteristics as predetermined and unchangeable was reflected in policy and was likewise used to undermine the need for social welfare and rehabilitation, suggesting that no social system could omit or cure its anti-social elements. NELKIN & LINDEE, *supra* note 14, at 101.

32. Lydston, *supra* note 28, at 9–10.

33. *Id.* at 11; *see also* WOLFF, *supra* note 1, at 70–71.

34. Lydston, *supra* note 28, act 2 at 176.

35. *Id.* act 1 at 132.

our children’s children—they, too, thank God! are saved—and in the only way.”³⁶

The Blood of the Fathers clearly attributes social ills to heredity, dismissing the determinative effects of environment and therefore implying the certainty of biomedical solutions. The power of the germplasm, which the modern gene has now assumed, was invoked to account for crimes both petty and serious.

The idea of “inherited criminality and insanity presented in popular narratives” like *The Blood of the Fathers* and *To-morrow* “suggested the legitimacy of state intervention.”³⁷ As part of a movement to influence policy and legislation, the acceptance of state-sanctioned biological control should be understood in the context of the economic depression, which saw budgets for social care initiatives slashed and made people more receptive to cheaper alternatives. This involved imposing a duty upon women to prevent the birth of children who might grow to be “feebleminded,” while requiring society to address the problem of those already in existence.³⁸

Eugenicists such as Henry Goddard believed that women were particularly suited to the task of promoting eugenics and identifying dysgenic traits. Middle-class women who worked for social reform often included eugenics as a natural part of their activism aimed at obtaining greater state intervention. The eugenic focus on the family “and its theme of sacrifice on behalf of large impersonal ends especially resonated with women.”³⁹ While theatrical practices informed the training and research practices of American eugenics fieldworkers, they played an even larger part in the popularization and dispersal of eugenic theory.⁴⁰

In fact, in 1912, Goddard published *The Kallikak Family: A Study in the Heredity of Feeble-mindedness*, an extended case study of the dysgenic branch of a large family with a history of “feeble-mindedness,” which argued that various mental disabilities were hereditary and suggested social checks on the reproduction of the “unfit.”⁴¹ The book was extraordinarily

36. *Id.* act 4 at 241.

37. NELKIN & LINDEE, *supra* note 14, at 23.

38. In 1915, a high-profile court ruling on what was popularly known as the Bollinger Baby case, demonstrated the widespread and diverse support for withholding treatment from defective newborns. *See generally* MARTIN S. PERNICK, *THE BLACK STORK: EUGENICS AND THE DEATH OF “DEFECTIVE” BABIES IN AMERICAN MEDICINE AND MOTION PICTURES SINCE 1915* (1996). Dr. Harry Haiselden refused to perform life-saving operations on babies with abnormalities, persuading parents that it was in their own interests as well as those of the infants. In 1916, Dr. Haiselden starred in *The Black Stork*, a popular film that warned against dysgenic marriages and promoted eugenic euthanasia in cases of defective infants. *See id.*

39. PAUL, *supra* note 3, at 57.

40. *See* WOLFF, *supra* note 1, at 60–65.

41. Deborah Kallikak, after being placed at the Vineland Training School for Backward and Feeble-Minded Children, became a charming and capable young woman with no apparent defects. Despite her teachers’ protests, Goddard concluded that Deborah’s biological inheritance was such that her feeble-mindedness was merely concealed, and therefore an even greater threat to society. Goddard’s diagnostic category of “moron” conflated race and gender anxieties, linked mental and moral deficiency and race suicide, and filled institutions across the country. The dubious methods of Goddard and his

popular throughout the country and was almost made into a Broadway play.⁴² Goddard was enthusiastic about this prospect when first approached by a Broadway agent in 1913, but wanted to be “assured that the play would be one that would carry the moral lessons” of the book.⁴³ This attempt to create a propaganda play, if written, was never produced.⁴⁴

In the United States, where the height of the eugenics movement coincided with massive immigration, eugenic threats were addressed from outside as well as from within. Eugenicists saw the assimilation of races as a threat to the purity of the national blood and frequently propounded racist, nativist, and elitist views.⁴⁵ For example, Goddard routinely identified immigrants arriving at Ellis Island as feebleminded on sight and called for stricter immigration laws as a result. His well-received and supposedly scientific research had an influence on public policy. In 1913, deportation on grounds of mental deficiency rose by 350 percent and by 570 percent the following year.⁴⁶

Furthermore, Harry Laughlin, the director of the Eugenic Records Office, testified as an expert agent for the Committee on Immigration and Naturalization of the U.S. House of Representatives to “prove” that immigrants from Eastern and Southern European countries were “exporting” defective genes into the U.S. population. Based in part on this “scientific” testimony, the federal government passed the Immigration Act of 1924⁴⁷ that stemmed the flow of arrivals into the U.S. by establishing a two percent quota from “undesirable” countries.⁴⁸ When President Calvin

assistants raise the question of who is qualified to define abnormality and prescribe treatment. In this case, many thousands of women were condemned to sterilization and institutionalization on the basis of their “feebleminded” look. See WOLFF, *supra* note 1, at 79–86; KLINE, *supra* note 3 at 24–25.

42. See WOLFF, *supra* note 1, at 86.

43. *Id.*

44. *Id.* Interest in making this book into a play persisted; in 1926, Goddard received a play based on his book entitled *The Seed*. Wolff suggests that ultimately neither play reached production stages because Goddard was “aware[] that [the] audience[] may not see what he hopes or expects they will see. He was particularly concerned about how a theatrical production might accurately present the feebleminded on the stage.” *Id.*

45. Eugenicists disapproved of miscegenation. See, e.g., *Loving v. Virginia*, 388 U.S. 1, 6 n.5 (1961) (citing ALA. CONST. art. 4, § 102 (1958); FLA. CONST. art. 16, § 24 (1965); MISS. CONST. art. XIV, § 263 (1956); N.C. CONST. art. XIV, § 8 (1953); S.C. CONST. art. III, § 33 (1962); TENN. CONST. art. 11, § 14; ALA. CODE, tit. 14, § 360 (1958); ARK. STAT. ANN. § 55-104 (1947); DEL. CODE ANN., tit. 13, § 101 (1953); FLA. STAT. § 741.11 (1965); GA. CODE ANN. § 53-106 (1961); KY. REV. STAT. ANN. § 402.020 (Supp. 1966); LA. REV. STAT. § 14:79 (1950); MISS. CODE ANN. § 459 (1956); MO. REV. STAT. § 451.020 (Supp. 1966); N.C. GEN. STAT. § 14-181 (1953); OKLA. STAT. tit. 43, § 12 (Supp. 1965); S.C. CODE ANN. § 20-7 (1962); TENN. CODE ANN. § 36-402 (1955); TEX. PENAL CODE, ART. § 492 (1952); W. VA. CODE ANN. § 4697 (1961)); see also VA. CODE ANN. § 20-57 (1960). Eugenicists related certain kinds of behavior to mixed blood. Oscar Hammerstein and Jerome Kern’s 1927 musical, *Show Boat*, is a good example of racial marginalization in theatre and its main character, an actress called Julie, is revealed to be a mulatto, reinforcing the idea that people of mixed race were genetically predisposed to performance. WOLFF, *supra* note 1, at 169, 181–83.

46. WOLFF, *supra* note 1, at 83.

47. Ch. 190, 43 Stat. 153 (repealed 1952).

48. Such countries included various Eastern European countries and Italy. DUSTER, *supra* note 3, at 13.

Coolidge signed the Act, he remarked that “America must be kept American,” thereby reaffirming the influence of eugenics.⁴⁹

That same year, hereditary theory was also relied on in the courtroom. In the famous *Leopold and Loeb*⁵⁰ case, the trial lawyer Clarence Darrow blamed the murder of a young man on the genes of his killers. In defense of Loeb, Darrow told the jury, “I do not know what remote ancestor may have sent down the seed that corrupted him. . . . All I know is, it is true, and there is not a biologist in the world who will not say I am right.”⁵¹ Interestingly, outside of the courtroom, Darrow was one of the few non-Catholic critics of eugenics, but the confidence with which he was able to make this claim in court attests to the prevalence of eugenic thought.⁵² Just two years later, Darrow would serve as the defense lawyer in the famous Scopes Monkey Trial,⁵³ unsuccessfully challenging the constitutionality of the Tennessee law prohibiting the teaching of Darwin’s theory of evolution in public schools.⁵⁴

Science and heredity would also take center stage in the 1927 U.S. Supreme Court decision, *Buck v. Bell*,⁵⁵ upholding the constitutionality of Virginia’s sterilization law.⁵⁶ Writing for the Court, Justice Oliver Wendell Holmes, Jr., an advocate of eugenics, proclaimed that “[t]hree generations of imbeciles are enough” to justify the sterilization of Carrie Buck.⁵⁷ The Court found that Carrie and her mother were sexually immoral, both having children out of wedlock, and that all three generations, including Carrie’s seven-month-old child, were “feeble-minded.”⁵⁸ In fact, there was no evidence of the Bucks’ “feeble-mindedness,”⁵⁹ but her “promiscuity” was equated with mental deficiency, a position that would promote sterilization of women for many decades to come.⁶⁰

49. *Id.* at 14. From its inception, then, the heredity theory ingrained in the eugenics movement was an adaptable one, ready to be appropriated by a variety of actors with diverse social and political agendas. WOLFF, *supra* note 1, at 5.

50. See Scott W. Howe, *Reassessing the Individualization Mandate in Capital Sentencing: Darrow’s Defense of Leopold and Loeb*, 79 IOWA L. REV. 989, 994–1012 (1994).

51. PAUL, *supra* note 3, at 42 (quotations omitted).

52. *Id.*

53. *Scopes v. State*, 278 S.W. 57 (Tenn. 1925).

54. This trial is ideally suited for reenactments in theatre; its most famous theatrical incarnation, *Inherit the Wind*, a 1955 play by Jerome Lawrence and Robert Edwin Lee, has also been made into films. *INHERIT THE WIND* (Stanley Kramer Prods. 1960). Another audio play by L.A. Theatre Works, called *The Great Tennessee Monkey Trial*, provides a more recent adaptation of the trial transcripts. *The Great Tennessee Monkey Trial, Teacher’s Study Guide*, L.A. THEATRE WORKS, <http://www.latw.org/acrobat/monkey.pdf>.

55. 274 U.S. 200 (1927).

56. *Id.* at 208. The first state to pass a sterilization bill was Indiana in 1907, and California enacted its first eugenic-sterilization laws in 1909. KLINE, *supra* note 3, at 50.

57. *Buck*, 274 U.S. at 207. See generally PAUL A. LOMBARDO, *THREE GENERATIONS, NO IMBECILES: EUGENICS, THE SUPREME COURT, AND BUCK V. BELL* (2008).

58. *Id.* at 206.

59. LOMBARDO, *supra* note 57, at 137.

60. *Buck* became the green light for states around the country to pursue sterilizations, especially of the feeble-minded. Within four years of *Buck*, seventeen states had enacted or revised their laws to promote sterilization as a social policy. The number of sterilizations

By defining feeble-mindedness as biological products of “bad blood,” eugenics shifted the focus from human action to the criminalization of the body itself. The body in question, as the focus of legislation and of plays, is overwhelmingly the female reproductive body. While pro-eugenic literature stressed the woman’s responsibility to breed better babies, more skeptical observers noted that this responsibility was undermining a woman’s right to become a mother. By suggesting that the unsavory elements of the human community could be eliminated through laws restricting their reproduction, eugenic ideas relieved society of its culpability by shifting blame onto women that knowingly bear “imperfect” children.

The link between a woman’s social duty and her happiness is explored by Eugene O’Neill in his play *Strange Interlude*,⁶¹ first performed in 1928, a year after *Buck v. Bell* was decided. *Strange Interlude* offers a more nuanced and critical presentation of eugenic ideas than many earlier plays, reflecting the gradual acknowledgment of the tension inherent in much of the movement’s thinking.⁶² The influence of the contemporary popularity of eugenics is most obvious in the principal storyline. The focus of the play is on the reproductive role of the woman, divided into nine acts to reflect the gestation period.⁶³ This play centers around Nina Evans, her husband Sam Evans, who is oblivious to his family history of insanity, their friend and her lover, Ned Darrell, and her oldest friend, Charlie Marsden.

Nina’s mother-in-law, Mrs. Evans, is very upset when she learns Nina is pregnant. She declares to her that keeping the baby “would be a crime worse than murder”⁶⁴—an argument that recalls *The Blood of the Fathers*⁶⁵—because giving birth to a child will carry on the insanity of Sam’s family and will also make Sam crazy in the meantime. She convinces Nina to abort and to have a baby with their mutual friend, Darrell, but Nina is to act as if the child were Sam’s, declaring to Nina that

from 1931–1939 nearly tripled those performed during the 1920s. Over the years, state sterilization laws resulted in the compulsory sterilization of an estimated 63,000 Americans and justified, in particular, the state’s power over the female body as a form of social control. MARK H. HALLER, EUGENICS: HEREDITARIAN ATTITUDES IN AMERICAN THOUGHT 140 (1963); KLINE, *supra* note 3, at 107; JACQUELINE VAUGHN SWITZER, DISABLED RIGHTS: AMERICAN DISABILITY POLICY AND THE FIGHT FOR EQUALITY 38 (2003).

61. Eugene O’Neill, *Strange Interlude* (Boni + Liveright, Inc. 1928). *See generally* WOLFF, *supra* note 1, at 141–67.

62. An earlier example of a play exploring themes of heredity and eugenics is *The Verge*, written by Susan Glaspell in 1922. Like *Strange Interlude*, *The Verge* centers on a female character and the peripheral men who surround her. The main character, Claire, rebels against the eugenic idea of creating a better species, both in her experimentation with breeding plants and in her own attitude to motherhood, which she rejects. Her attempts to recreate herself eventually drive her mad. Eugene O’Neill was a disciple of Glaspell, and it is likely that *Strange Interlude* was influenced by *The Verge*. WOLFF, *supra* note 1, at 140, 145.

63. *Id.*

64. O’Neill, *supra* note 61.

65. *See supra* note 28 and accompanying text.

Darrell is “a healthy man to breed by, same’s we do with stock, to give the man a healthy child”⁶⁶—again reminiscent of propaganda plays.

Nina explains to Darrell why she had an abortion and why she now needs his help to make Sam happy: “You see, Sam’s great-grandfather was insane, and Sam’s grandmother died in an asylum, and Sam’s father had lost his mind for years before he died, and an aunt who is still alive is crazy. So of course I had to agree it would be wrong—and I had an operation [the abortion].”⁶⁷ The abortion wasn’t wrong—even though it was illegal in 1928—the wrong would have been giving birth to this baby.

Darrell agrees to Nina’s request, in part out of his love for her. Their son grows up thinking Sam is his biological father. This is the ultimate sacrifice for both Nina and Darrell. And Sam never becomes insane. In fact, he becomes incredibly successful. As the years go on, Nina is never happy because she cannot control all that is going on around her.

Strange Interlude was certainly the most successful play to deal directly with the subject of eugenics, running almost a year and half and winning a Pulitzer Prize.⁶⁸ Though eugenics is never explicitly mentioned, critics easily identified it as the play’s main subject.⁶⁹ O’Neill’s play, and the critical acclaim it received,⁷⁰ perpetuated not only the eugenic ideas that it explores, but also their contradictions.⁷¹

O’Neill’s characters certainly adopt the fashionable idea that one must take control of one’s own biological destiny, but the happiness engendered by their actions is fleeting. O’Neill questions the social pressure on women to provide their husbands and society in general with fit and normal children. Nina is only briefly happy when she is pregnant, but her constant paranoia of losing her power over the men in her life, most importantly her

66. O’Neill, *supra* note 61.

67. *Id.*

68. See WOLFF, *supra* note 1, at 141. In 1932, the play was made into a film starring Clark Gable and Norma Shearer. *STRANGE INTERLUDE* (Metro-Goldwyn-Mayer 1932).

69. Walter Winchell called his review “Another Eugenic O’Neill Baby.” WOLFF, *supra* note 1, at 142.

70. The responses to the 1963 and 1985 revivals of *Strange Interlude* were less ready to identify its eugenic message. Indeed, more recent productions have emphasized Nina’s insanity and the unhappiness of women in relationships more than with the formerly central idea of heredity. The Actors Studio production in 1963 starred Jane Fonda and received mixed reviews. Few critics of the 1984–1985 stage and television revival mentioned the eugenic subject matter and several noted that what O’Neill had written as a serious drama had become a comedy. See generally Walter Kerr, *Stage View: This “Interlude” Gets a Strange Response*, N.Y. TIMES, Mar. 3, 1985, available at <http://www.nytimes.com/1985/03/03/theater/stage-view-this-interlude-gets-a-strange-response.html>. Reviewers of the Neo-Futurist production of 2009 also neglected the eugenic content. Chris Jones, “*Strange Interlude*” *Indeed; It’s 1 a.m. and I Just Got Back from the Goodman*, CHI. TRIB., Mar. 7, 2009, available at http://leisureblogs.chicagotribune.com/the_theater_loop/2009/03/neofuturists-strange-interlude-wraps-up-oneill-fest-at-goodman.html.

71. The play was not universally acclaimed; the mayor of Boston banned *Strange Interlude* from the city because of its depiction of abortion. Harvard University students launched a petition against the ban. *Petition Against Play Ban Starts*, HARVARD CRIMSON, Sept. 27, 1929.

son, results in the play ending with her as a pathetic shadow of her former self.

Thus, O'Neill affirms, in part, the eugenic link between motherhood and a woman's happiness while demonstrating the impossibility of controlling fate. Furthermore, he questions the importance of heredity through the product of Nina and Darrell's affair, the son who bears more resemblance to Nina's first love and his namesake, Gordon, than to either biological parent.

In the reciprocal relationship between popular culture, public opinion, and policy, plays not only informed but reacted to scientific and political developments. Eugenic legislation led several writers to counter the positive depictions of eugenics with plays and films that questioned a number of its tenets and explored the peril it held.

The 1934 film, *Tomorrow's Children*,⁷² can be seen as a direct response to state-sponsored sterilization programs advanced by the legacy of *Buck v. Bell*. Though accepting of hereditary theory, the film challenges the role of the state in enforcing it through law, asking in its opening titles, "Has the state the right to deny children to a woman?"⁷³ Once again the protagonist is a woman: Alice is a normal, hardworking girl who supports her alcoholic parents and disabled siblings. A social worker sent to assess her family's financial needs conditions any assistance on the sterilization of the mother, father, and Alice, since she has their "blood in her veins."⁷⁴ When Alice and her fiancé appeal to a judge, they are supported by a concerned doctor who can see that Alice is different from her family, an observation that leads him to ask the question that belies the apparent certainty of eugenics and now genetics: "Is science always right?"⁷⁵ Ultimately, Alice is saved from her fate by her mother's revelation that she is adopted, thereby releasing her from the "family taint." The message, therefore, is not one that questions the concept of heredity underpinning eugenics; rather, it reflects the public concern over the state's capacity for biological control and the need to get the facts right.

Popular culture and legislation reflected the gradual evolution in societal perceptions of individual rights and standards. Throughout the 1930s, eugenics was redefined to minimize the importance of heredity and offer "selective sterilization" as a solution to female sexuality and bad parenting.⁷⁶ Eugenicians adapted to this shift by focusing on maternal care rather than heredity and prescribing sterilization for potentially unsuitable

72. TOMORROW'S CHILDREN (Bryan Foy Prods. 1934).

73. *Id.*

74. *See id.*

75. *Id.* The doctor is opposed by the unwavering judge, who asks, "Do you agree that this girl should be allowed to bring more children like that into the world?" alluding to a woman's duty to society. *Id.*

76. KLINE, *supra* note 3, at 110. However, the 1930s did not see the complete dismantling of the eugenics movement; eugenics leaped further into the public eye with the case of Ann Cooper Hewitt, a sexually rebellious young woman who sued her mother and two surgeons for sterilizing her without her knowledge in 1936. *Id.* at 95. The case received massive press coverage and emphasized the importance of motherhood and the American family in a tumultuous decade.

mothers, especially the “feeble-minded,” regardless of the origin of their malady.⁷⁷

Although the German Nazi Party was inspired in part by the American eugenics movement,⁷⁸ its use of eugenic arguments to justify the discrimination and persecution of disabled people and minority races caused public enthusiasm to wane in the United States. By the 1940s, the eugenics movement was associated with bad science and racism.⁷⁹ Some geneticists remarked that the cleavage between genetics and eugenics was “chiefly due to the feeling on the part of many geneticists that eugenical research was not always activated by purely disinterested scientific motives, but was influenced by social and political considerations tending to bring about too rapid application of incompletely proved theses.”⁸⁰ Society began to reflect that environmental factors “played a much greater part in man’s makeup than earlier eugenists were willing to admit.”⁸¹ In this period, the common depiction of biological determinism in plays, novels, and books that addressed eugenics was supplanted by narratives of cultural determinism.⁸²

Arguably, another signal of the waning influence of eugenics is the Supreme Court’s decision in the 1942 case, *Skinner v. Oklahoma*,⁸³ holding that Oklahoma’s sterilization statute was unconstitutional.⁸⁴ The Court warned that “in evil or reckless hands,” entire “races or types” might “wither and disappear.”⁸⁵

Popular distaste for the legacy of eugenics caused scientists to hail a new kind of genetic research, supposedly unrelated to the movement that had

77. *Id.* at 102–03.

78. Nazi eugenicists used Harry Laughlin’s work, and lawyers of Nazi doctors at the Nuremberg trials even read from the *Buck* opinion and cited it as a precedent in their defense. See LOMBARDO, *supra* note 57, at xii–xiii.

79. Some ardent eugenicists continued, however, to admire the application of their ideas abroad: C.M. Goethe wrote to Harry Laughlin in 1935, impressed “that Germany, by sterilization, and by stimulating birthrates among the eugenically highpowered, is gaining an advantage over us as to future leadership.” Letter from C.M. Goethe to Harry Laughlin (Jan. 12, 1935), available at http://www.eugenicsarchive.org/eugenics/topics_fs.pl?theme=41&search=germany%20future%20leadership&matches=1038.

80. Letter from L.C. Dunn, Professor of Genetics, Columbia Univ., to John C. Merriam, (July 3, 1935), available at http://www.eugenicsarchive.org/eugenics/topics_fs.pl?theme=25&search=merriam%20dunn&matches=1095,1092,1094,1096,1093. See Lombardo, *supra* note 57, at 199.

81. HALLER, *supra* note 60, at 7.

82. NELKIN & LINDEE, *supra* note 14, at 34.

83. 316 U.S. 535 (1942). See generally VICTORIA F. NOURSE, IN RECKLESS HANDS: *SKINNER V. OKLAHOMA* AND THE NEAR TRIUMPH OF AMERICAN EUGENICS (2008).

84. *Skinner*, 316 U.S. at 543. The Supreme Court found that the sterilization statute, as written, could not be applied to Jack T. Skinner, a convicted felon. *Skinner* also dealt with a class issue, as the Oklahoma law stated that a criminal could be sterilized only if he committed a certain type of felony (blue-collar or lower class crimes); if the criminal had been convicted a white-collar felony three times, he would not be subject to the sterilization law. See *id.*

85. *Id.* at 541; see also NOURSE, *supra* note 83, at 15. However, the case did not overrule *Buck v. Bell*, 274 U.S. 200, 207 (1927), and for the “feeble-minded,” sterilizations continued for generations, especially among poor, black women in the South.

preceded it. In 1951, scientist James Neel announced that “what we are really discussing is a new eugenics, where I define eugenics simply as a collection of policies designed to improve the genetic well-being of our species.”⁸⁶ With eugenics discredited, a new type of science would evolve.

INTERMISSION: SETTING THE STAGE FOR THE NEW GENETICS

The discovery of the double helix in 1953 dramatically changed the way the scientific community thought about “improv[ing] the genetic well-being of our species.”⁸⁷ The public relations campaign that accompanied the discovery of the double helix was particularly successful in creating an image of a science completely distinct from eugenics.⁸⁸ While eugenics had fought the social cost of physical and behavioral deviance, genetics sought to eradicate human suffering. The legacy of eugenics was, for some time, successfully shrugged off, and public interest in this medicalized brand of science was consciously created through the popularization of genetics, which engendered a fascination with DNA and its possibilities for improving the quality of life.

Also during this period, historically marginalized groups were becoming more visible in demanding basic civil liberties. The first major breakthrough in racial equality was the Supreme Court’s landmark 1954 decision *Brown v. Board of Education*,⁸⁹ which declared that “separate but equal” in public schools was unconstitutional. Ten years later, Congress passed the Civil Rights Act,⁹⁰ thereby prohibiting racial segregation in various other environments.⁹¹ Furthermore, in 1965, Congress passed the Immigration and Nationality Act,⁹² thereby ending the immigration quotas established by the 1924 Act.⁹³ As President John F. Kennedy declared in his immigration speech to Congress in 1963, the 1924 Act “neither satisfies a national need nor accomplishes an international purpose. In an age of interdependence among nations, such a system is an anachronism for it discriminates among applicants for admission into the United States on the basis of the accident of birth.”⁹⁴ In addition, Supreme Court cases such as *Loving v. Virginia*⁹⁵ in 1967 helped to establish a new miscegenation

86. PAUL, *supra* note 3, at 124.

87. *Id.*

88. VAN DIJCK, *supra* note 12, at 34–35.

89. 347 U.S. 483, 495 (1954).

90. Civil Rights Act of 1964, Pub. L. No. 88-352, 78 Stat. 241 (codified as amended in scattered sections of 5, 28, and 42 U.S.C. (2006)).

91. The Act also gave many rights to women including non-discrimination in the workplace. *See id.* *See also* Marcia L. McCormick, *The Truth is Out There: Revamping Federal Antidiscrimination Enforcement for the Twenty-First Century*, 30 Berkeley J. Emp. & Lab. L. 193, 223 & n.182 (2009).

92. Immigration and Nationality Act of 1965, Pub. L. No. 89-236, 79 Stat. 911.

93. *See supra* note 48 and accompanying text.

94. *Three Decades of Mass Immigration: The Legacy of the 1965 Immigration Act*, CENTER FOR IMMIGRATION STUDIES, <http://www.cis.org/articles/1995/back395.html> (last visited Oct. 23, 2010) (quoting Letter to the President of the Senate and the Speaker of the House on Revision of the Immigration Laws, 1 PUB. PAPERS 594–97 (July 23, 1964)).

95. 388 U.S. 1 (1967).

discourse, deeming the Virginian Racial Integrity Act of 1924 that criminalized interracial marriages unconstitutional.⁹⁶

It was also during this period that the women’s rights movement gained momentum. Genetics raised new concerns over the future of women’s reproductive roles, especially since the knowledge and power lay in the overwhelmingly male geneticists’ hands. Feminist political groups protested against the patriarchal society that allowed the commercialization of biotechnology,⁹⁷ and feminist writers became particularly prolific in the science fiction genre with which the literary exploration of genetics came to be identified.⁹⁸ At the same time, women were gaining significant rights. For example, in 1973, women were given new reproductive freedom when the Supreme Court ruled in the case of *Roe v. Wade*⁹⁹ that a woman had the right to obtain an abortion without state interference within the first trimester of her pregnancy.¹⁰⁰

Greater access to abortion coincided with the evolution of genetic screening and genetic counseling. For example, in the 1980s, state laws promoted prenatal and carrier genetic screening,¹⁰¹ including testing for sickle cell anemia and Tay-Sachs disease, afflictions typically associated with two vulnerable groups of the population: African-Americans and Jews, respectively.¹⁰² Genetics has imbued itself with the promise to end disease; prenatal testing could diagnose many conditions, but only a small number could be treated or cured.¹⁰³ Thus, the woman’s right to choose abortion

96. *Id.* at 12.

97. Along with environmentalists and bioethicists, feminists challenged scientists’ monopoly on a field that seemed to affect everyone, seeking to redefine genetics as a social and political issue. The Feminist International Network of Resistance to Reproductive and Genetic Engineering protested against the capitalist and patriarchal society that allowed the commercialization of biotechnology, thereby establishing a dichotomy between the natural female body and the chauvinistic brand of science that sought to corrupt it. See VAN DIJCK, *supra* note 12, at 84–90.

98. Some envisaged a dystopian world in which women were reduced to breeders while others imagined the emancipation of women and minorities through genetic technology. See, e.g., MARGE PIERCY, *WOMAN ON THE EDGE OF TIME* (1977); KATE WILHELM, *WHERE LATE THE SWEET BIRDS SANG* (1976). Both writers reflect on the politicization of genetics, the former equating it with male oppression and the latter predicting the democratization of biotechnology and the consequent eradication of sexual and racial difference. See PIERCY, *supra*; WILHELM, *supra*.

99. 410 U.S. 113 (1973).

100. Though no federal law permitted abortion prior to 1973, many state laws allowed for abortion of “defective” fetuses. States that had such laws included Kansas, Utah, Maryland, Iowa, and Tennessee. Martha Field, *Killing “The Handicapped”—Before and After Birth*, 16 HARV. WOMEN’S L.J. 79, 110–11 (1993).

101. DUSTER, *supra* note 3, at 39.

102. DUSTER, *supra* note 3, at 45–48.

103. The disability movement, which began in the 1940s and 1950s, gained significant strides in the 1970s with the adoption of two significant pieces of legislation: Rehabilitation Act of 1973, 29 U.S.C. § 701 (2006), and Education for All Handicapped Children Act, Pub. L. No. 94-142, 89 Stat. 773 (codified as amended at 20 U.S.C. §§ 1400-1482 (2006)) (later renamed the Individuals with Disabilities Education Act (IDEA), 20 U.S.C. §§ 1400–1501 (2006)). However, the landmark piece of legislation came in 1990, with the passage of the Americans with Disabilities Act (ADA), 42 U.S.C. §§ 12101–213 (2006). The ADA prohibits discrimination based on disability and requires employers and places of public

for a “genetic defect” sometimes directly conflicted with another rights movement emerging during this time: the disability rights movement. This conflict raised such fundamental issues as the value of life and the limits of choice.

Such new advances within civil rights and scientific progress called for the examination of a field previously neglected: bioethics. The formalization of bioethics as a subject of study primed the public for intensified scrutiny of the interplay between science, policy, and the people they affected.¹⁰⁴ Increasing numbers of interested academics joined in the ethical debates on genetics and science. The advent of bioethics rejuvenated the promise versus peril debate within the context of a growing awareness of an individual’s civil rights.

Blacks and other minorities, women, the disabled, and gays¹⁰⁵—the very populations targeted in the eugenics movement—were building momentum for their own civil rights movements. During the 1970s and 1980s, genetic influence, biodeterminism, and bioethics began to claim a place in the public imagination.¹⁰⁶ This allowed society and the bioethics community to

accommodation to make “reasonable modifications” to ensure fair treatment and accessibility to all members of the public. 42 U.S.C. § 12182(b)(2)(A)(ii) (2006).

104. In 1972, news broke about the Tuskegee Syphilis experiment, which studied the natural progression of the untreated disease in impoverished African American sharecroppers. When the experiment made national headlines, the public was outraged by its ethical contraventions. As a result of the Tuskegee experiment, Congress passed the National Research Act and established the National Committee for the Protection of Human Subjects of Biomedical and Behavioral Research. *Research Ethics: The Tuskegee Syphilis Study*, TUSKEGEE UNIVERSITY, <http://www.tuskegee.edu/global/story.asp?s=1207598> (last visited Oct. 23, 2010). When the experiment made national headlines, the public was outraged by its ethical contraventions. As a result of the Tuskegee experiment, Congress passed the National Research Act of 1974 and established the National Committee for the Protection of Human Subjects of Biomedical and Behavioral Research. *See, e.g.*, ROBERT J. LEVINE, *ETHICS AND REGULATION OF CLINICAL RESEARCH* 69–70 (1986).

105. The gay rights movement first picked up steam in the 1960s and 1970s, with landmark victories such as the Stonewall Uprising in New York and the election of Harvey Milk, an openly gay man, to office in San Francisco. *See* MILKFOUNDATION.ORG, HOME OF THE HARVEY B. MILK FOUNDATION, <http://milkfoundation.org/> (last visited Oct. 23, 2010); *Stonewall Rebellion*, N.Y. TIMES: TIMES TOPICS (Apr. 10, 2009), http://topics.nytimes.com/topics/reference/timestopics/subjects/s/stonewall_rebellion/index.html. Various legislation on the state and federal level now prohibits discrimination on the basis of sexual orientation. *See Facts about Discrimination Based on Sexual Orientation, Status as a Parent, Marital Status, and Political Affiliation*, U.S. EQUAL EMPLOYMENT OPPORTUNITY COMMISSION, http://www.eeoc.gov/facts/fs-orientation_parent_marital_political.html (last visited Oct. 23, 2010). *See, e.g.*, Julie A. Baird, *Playing It Straight: An Analysis of Current Legal Protections to Combat Homophobia and Sexual Orientation Discrimination in Intercollegiate Athletics*, 17 BERKELEY WOMEN'S L.J. 31, 35–36 (2002); *see also* CAL. GOV'T CODE § 12940 (2010); CAL. INS. CODE § 10141 (2010); CONN. GEN. STAT. § 46A-81C (2009); MD. CODE ANN., STATE GOV'T, § 20-304, 20–606. Moreover, the Supreme Court, in the 2003 case of *Lawrence v. Texas*, held that a Texas statute criminalizing sodomy was unconstitutional because it resulted in an invasion of an individual’s right to privacy. 539 U.S. 558, 579 (2003). This case overturned the Court’s previous decision in the 1986 case of *Bowers v. Hardwick*, 478 U.S. 186 (1986), which upheld the validity of a Georgia statute that criminalized sodomy.

106. Bioethics became valued in genetics “because it applied abstract reasoning and precise definition to particular situations and questions that these new technologies and

heighten its interest in better understanding the perils of more and more genetic information.

ACT II: THE “NEW” GENETICS

The development of a “new” genetics, together with concerns about bioethics, had set the stage for the initiation of the HGP and a major societal challenge: how do we allow the promise of science to move forward and at the same time keep in check the perils of what we learn? As part of the significant interest in mapping the human genome, in 1990, the HGP allocated federal funding to establish the Ethical, Legal, and Social Implications (ELSI) program.¹⁰⁷ The ELSI program constituted the first time government funding had been earmarked to research policy implications for genetic research. Previously, the ethical, legal, and social analysis of the consequences of a scientific revolution often were relegated to groups outside the scientific mainstream or lay dormant until a crisis developed. This time, the intention was to “inspire a cohort of ethicists, social scientists, legal scholars, theologians, and others to address the coming dilemmas associated with increased knowledge about the genome, from social and legal discrimination on the basis of genetics to more philosophical issues such as genetic determinism.”¹⁰⁸ According to the Director of the National Institutes of Health,

The current goals of the ELSI program are to improve the understanding of these issues through research and education, to stimulate informed public discussion, and to develop policy options intended to ensure that genetic information is used for the benefit of individuals and society. Because genetic information is personal, powerful, and potentially predictive, it can be used to stigmatize and discriminate against people.¹⁰⁹

forms of knowledge posed, valuing informed choice, scientific progress and equity of access to genetic services.” ANNE KERR & TOM SHAKESPEARE, *GENETIC POLITICS: FROM EUGENICS TO GENOME* 164 (2002).

107. Two Ethical, Legal, and Social Implications research grants relevant to this project include the “Genetics in Literature, Film, and Popular Culture” grant for Jay Clayton at the Center for Genetics and Health Policy, Vanderbilt University supported a working group of scholars in literature, film, and media studies to examine the representation of genetics in literary and popular culture: the “Human Heredity in American Popular Culture” grant for Dorothy Nelkin at New York University explored the meaning of human genetics in popular culture, within the context of changing ideas about heredity and eugenics since the turn of the century. See *ELSI Research Program*, NATIONAL INSTITUTES OF HEALTH: NATIONAL HUMAN GENOME RESEARCH INSTITUTE, <http://www.genome.gov/10001618> (last visited Oct. 23, 2010).

108. Francis S. Collins & Victor A. McKusick, *Implications of the Human Genome Project for Medical Science*, 285 J. AM. MED. ASS’N 5 (2001).

109. *Advances in Genetics Research and Technologies: Challenges for Public Policy: Hearing Before the S. Comm. on Labor and Human Res.*, 104th Cong. (1996) (statement of Francis S. Collins, Director, National Center for Human Genome Research), available at <http://www.hhs.gov/asl/testify/t960725a.html>.

In 2008, after more than a decade of debate, Congress passed the Genetic Information Nondiscrimination Act (GINA),¹¹⁰ which prohibits health insurance providers from discriminating on grounds based on genetic testing. It also forbids employers from discriminating based on genetic testing and intentionally obtaining genetic information about job applicants. Though GINA does make some headway into addressing concerns about the misuse of genetic information by employers and health insurers, it does not address wider societal concerns, including the reproductive implications of genetic information.

The debates that surround these implications continue to be explored by bioethicists and through popular culture. In fact, many of the same debates and questions that surrounded the eugenics movement have been raised by the HGP, genetic screening, and genetic engineering. The essential vision of a better society through regulating reproduction has endured. The HGP holds the implicit promise of ending human disease. Yet it also raises familiar questions about the social perception of normality and the potential for discrimination on the basis of race, disability, sexuality, class, and gender.

These ethical and societal issues are being brought to life by modern writers and dramatists. For example, in his 1992 play, *The Twilight of the Golds*,¹¹¹ Jonathan Tolins examines the potential exercise of prejudice in the decisions surrounding genetics. Tolins was prompted to hypothesize about the effects of testing on a liberal Jewish family like his own after reading two separate studies, “one purporting to find a scientific basis for inborn homosexuality and another isolating differences in a region of the brain between homosexual and heterosexual men.”¹¹² When the play was first produced in Washington, D.C., it was described as “chillingly prescient,” since it coincided with a breakthrough study that linked male homosexuality to part of the X chromosome.¹¹³ The plot centers on the character of Suzanne who finds out, through fictional cutting edge technology performed in her husband Rob’s lab, that her fetus is very likely to be gay. But early on in the play, even before she gets tested, Tolins sets up the tension between David, Suzanne’s gay brother, who serves as the narrator, and her husband, Rob. David says, “Face it, Rob, this is eugenics. It’s blatant Nazi philosophy.”¹¹⁴ Rob replies, “Oh, here we go. Every time

110. Genetic Information Nondiscrimination Act of 2008, Pub. L. No. 110-233, 122 Stat. 881.

111. Jonathan Tolins, *The Twilight Of The Golds: A Play In Two Acts* (Samuel French, Inc. 1992).

112. Alvin Klein, *Young Playwright Feels Critics’ Sting*, N.Y. TIMES, Nov. 7, 1993, available at <http://www.nytimes.com/1993/11/07/nyregion/young-playwright-feels-critics-stings.html?pagewanted=1>.

113. The most famous study on the alleged “gay gene” was published in 1993 by Dean Hamer, claiming that homosexuality was connected with the Xq28 gene. See Dean Hamer et al., *A Linkage Between DNA Markers on the X Chromosome and Male Sexual Orientation*, 261 SCIENCE, July 16, 1993.

114. Tolins, *supra* note 111, act 1 at 41.

there is the slightest scientific advance, some knee-jerk liberal starts shouting about the Nazis. We’re just trying to make life better.”¹¹⁵

The moral dilemma engendered by the concept of genetic testing is articulated through the argument between geneticist Rob, whose work on the HGP leads him to envisage a future in which much needless suffering can be avoided through prenatal testing, and David, who compares Rob’s work to Nazi eugenics. Rob’s company has developed advanced procedures for individual gene identification that would theoretically enable them to cure genetic diseases or, more immediately, to allow parents to terminate fetuses with “problems or abnormalities.” David argues that “it’s not our place to create,” a view echoed in a more conservative strain by Rob’s Orthodox Jewish parents who warn him not to play God. Rob retorts that Nature often fails while science can achieve a “better world.” Alluding to the deceptive perception of genetics as an infallible “code” that defines every human characteristic, Rob admits “it’s not like we can point to one gene and say ‘aha.’ It’s the whole composite of evidence that’s open to interpretation.”¹¹⁶ Nevertheless, he says that the conclusion is ninety percent certain.¹¹⁷

Faced with the test results, Suzanne wonders if they could raise the baby in a way that would prevent his homosexuality, but Rob answers, “judging by . . . the statistical evidence, we’d have a lot of nature to nurture against.”¹¹⁸ In anguish, she exclaims, “If only it were deformed . . . it wouldn’t be so complicated . . .,” alluding to the social acceptability of abortion in the event of physical disease.¹¹⁹ Suzanne’s liberal Jewish parents support her decision to abort, which creates an irreparable rift between them and David. He equates the abortion with his family’s rejection of him, despite their claims to the contrary.¹²⁰

When David assures his mother that he is happy as a gay man she insists that “[i]n this society, anyone would rather . . .” and David inserts “be you.”¹²¹ David asks Suzanne, “[W]hat if you found out the kid was going to be ugly, or smell bad, or have an annoying laugh, or need really thick glasses . . . [w]here do we stop? . . . So now we have this technology, what are we going to do with it?”¹²²

The burden of genetic testing rests squarely with the woman. The greater knowledge that these technologies provide is accompanied by greater pressure to do as much as possible to give birth to a “perfect and healthy” child.¹²³ Suzanne is torn between the pressure from her husband, her

115. *Id.*

116. *Id.* act 1 at 56.

117. *Id.*

118. *Id.* act 1 at 57.

119. *Id.* act 1 at 58.

120. *Id.* act 1 at 66–67.

121. *Id.* act 1 at 66.

122. *Id.* act 1 at 78.

123. Such scientific developments raise the familiar question: are some lives not worth living? Some women do not perceive they have a choice in accepting genetic testing; rather, they are presented with an illusion of choice. Conversely, many other women are denied the

parents, and society, and her love and respect for David. When she finally decides to abort at five months, it leads to complications that require her to have a hysterectomy. David, once very close to both his sister and parents, never speaks to them again.

In an interview, Tolins said that his play asks how “we [are] going to live together if we are suddenly given [a] godlike ability to reshape humanity? What criteria are we going to use if we want those we consider undesirable to die?”¹²⁴ His aim is to raise the moral questions posed by genetic engineering and to imagine how an educated, liberal family might deal with them. “The issue is, what would happen if you could say to someone, your child is going to be a particular way and you have a chance to quietly, without any repercussions, decide to wait for the next one.”¹²⁵ Though the research on the “gay gene”¹²⁶ has been discredited,¹²⁷ Tolins expresses a prevalent concern for the discriminatory potential of genetic testing, challenging, in this case, the idea that the medical basis of homosexuality would increase tolerance toward gays. Though the existence of a gay gene would shift the responsibility from a person’s actions to their genetic makeup, it could also lead to the biological control of homosexuality.

The setting of a Jewish family allows the playwright to demonstrate what he sees as a thin line between genetics and Nazi-style eugenics and to worry that even Jews, who have been the victims of the grotesque manipulation of science, could be guilty of fatal prejudice if given the chance. Tolins imagines, and warns of, a (not-too-distant) future in which prenatal genetic screening is commonplace and gene-based discrimination is a very real threat.

The message embodied in Suzanne’s ultimate fate is clear: her meddling with nature results in the permanent loss of her reproductive rights, since she will never be able to give birth. This retributive ending is a device that is consistently used by writers to emphasize the perils attached to genetic technologies. It is also reminiscent of earlier plays and works of fiction, such as *Strange Interlude*, in that the site of the debate is again the female

choice because they do not have access to testing services. See Karen H. Rothenberg, *The Law's Response to Reproductive Genetic Testing: Questioning Assumptions About Choice, Causation, and Control*, 8 FETAL DIAGNOSIS & THERAPY 160, 161 (1993).

124. Klein, *supra* note 112.

125. Natalie Angier, *Theater; Playing God, With Science as Midwife*, N.Y. TIMES, Oct. 17, 1993.

126. Hamer, *supra* note 113.

127. Hamer’s study has been critiqued for methodology and sample selection problems. Moreover, subsequent studies have been unable to confirm Hamer’s results. Eliot Marshall, *NIH “Gay Gene” Study Questioned*, Vol. 268, SCIENCE, June 30, 1995, see also Erica Goode, *Study Questions Gene Influence on Male Homosexuality*, N.Y. TIMES, Apr. 23, 1999, available at <http://www.nytimes.com/1999/04/23/us/study-questions-gene-influence-on-male-homosexuality.html>. Nevertheless, the search for a biological explanation to homosexuality continues, and other studies have connected homosexuality to various other regions of the genetic code. Richard Horton, *Is Homosexuality Inherited?*, FRONTLINE (July 1995), <http://www.pbs.org/wgbh/pages/frontline/shows/assault/genetics/nyreview.html>. See Dean Hamer & Peter Copeland, *LIVING WITH OUR GENES* 193–96 (1998).

body, and despite her husband’s role in encouraging the test and subsequent abortion, it is Suzanne who suffers the consequences.¹²⁸

Interestingly, the film version of Tolins’ play rewrites the ending,¹²⁹ perhaps to accommodate mainstream America’s aversion to being presented with abortion. In the film, Suzanne realizes that she does in fact want to keep the baby and leaves Rob when he expresses ambivalence. Although he is led to question his profession and eventually quits his job at the laboratory, admitting that he wishes he had not allowed the screening, Rob’s involvement in the HGP and his inclination to use his knowledge to terminate his baby effectively result in the disintegration of his marriage. In the film, Suzanne decides not to abort and reunites with her brother; it ends with a flash forward to the baby’s happy childhood.

Twilight of the Golds was not the only film released in the 1990s to address the debate surrounding genetic research. *Gattaca*, the most well-known film from that era, depicts a future in which genetic testing results in discrimination.¹³⁰ *Gattaca*’s society is dominated by genetic determinism, divided into the genetically superior (valids) and the inferior (in-valids). *Gattaca* questions the status of the gene as the source of human identity through the character of Vincent, an unenhanced individual who impersonates Jerome, a perfect specimen, in order to work at the prestigious Gattaca Corporation. Vincent’s lowly status is determined by his parents’ choice not to partake in prenatal genetic engineering. Ultimately, Vincent proves to be more successful than all the genetically-enhanced characters; thus, *Gattaca* dismisses the practice of genetic discrimination by rejecting the genetic determinism on which it is based.¹³¹ *Gattaca* rekindled the “promise versus peril” debate of genetic research within public discourse, a theme carried further in theatre.

Cassandra Medley’s 2006 play, *Relativity*,¹³² expresses the popular ambivalence towards the inherent promise and peril of genetics. The promise in this case is seen in the research of Kalima, a bio-geneticist working at the cutting edge of organ replication technology. The peril is articulated by Kalima’s mother Claire, a psychotherapist who runs an institute promoting the cause of “Melanin Theory.” Melanin Theory refutes the evidence that races are genetically undifferentiated, arguing that excess melanin in black people enhances their intelligence, creativity, and physical prowess. Claire constantly tries to co-opt her daughter’s research into her own work but Kalima is increasingly wary of her mother’s brand of pseudo-

128. See, e.g. ROBIN GREGG, PREGNANCY IN A HIGH-TECH AGE: PARADOXES OF CHOICE (1995); Robin Gregg, “Choice” as a Double-Edged Sword: Information, Guilt and Mother-Blaming in a High-Tech Age, 20(3) WOMEN & HEALTH 53 (1993); see also Rothenberg, *supra* note 123, at 163.

129. TWILIGHT OF THE GOLDS (Below the Belt Entm’t 1996).

130. GATTACA (Columbia Pictures Corp. 1997).

131. The film’s message, summarized in the tagline, is that “there is no gene for the human spirit.” *Id.*

132. Cassandra Medley, *Relativity* (2006), audio play available at <http://castroller.com/podcasts/LaTheatreWorks/349595-LA%20Theatre%20Works%20Relativity%20April%205,%202008,%20Part%201>.

science. Claire foresees a world in which the wealthy would be able to buy their “blond-blue-eyed baby,” while natural birth becomes the preserve of the poor, thus further ingraining social and racial inequality. Claire is able to invoke history in her fears for the future. The contemporary commoditization of children recalls the eugenic call to produce “Better Babies.” Malik, Claire’s “significant other,” both professionally and personally, recalls the history of unethical human experimentation on blacks, and the eugenic policies adopted by the Nazis: “And now, now, ‘they’ wanna design ‘super, superior, human beings,’ well, you know something? So did the Nazis . . . Hitler himself pointed out that his Nazi theories were founded on the American Eugenics Movement, founded right here in these so-called United States.”¹³³

Though the audience is clearly intended to sympathize with Kalima’s proven science, the ethical implications are raised by the protagonist’s own doubts. Her mother’s allusion to history, throughout which science has been used to justify racial subjugation, is persuasive. The science that is supposed to underpin the Melanin theory is clearly faulty, but the fears expressed by its proponents are legitimate. One need only refer to the example that Malik uses to recall the ways in which genetic information, by instituting difference, has been used to discriminate. Though the Nazi appropriation of eugenics was based on a false concept of race, it was one that was widely accepted at the time.

Scientific research does not happen in a vacuum; it is communicated to the public imagination through journalists, authors, and playwrights who construct it within the context of contemporary cultural and social concerns. Thus, genetics is used and manipulated to promote a political, rather than simply scientific, agenda. Nazi eugenics distorted genetic science in order to validate its racial policies. Race is always defined in relation to “the other,” which inevitably becomes bound up with status and superiority, often leading to racism.

Though the melanin science sounds extreme, the way the characters express their fears for the future explains why many people, especially those with a history of being oppressed, are deeply suspicious of what passes for scientific progress. Claire contrasts the western world’s enthusiasm for science that will deliver them designer babies with their complacency to the plight of Africa’s population, which she describes as a “genocide of AIDS.”¹³⁴ “Any advanced genetic technology for curing diseases will be made affordable to ‘them,’ the non-melanated before most of you even have a chance at it! Why is it that so many scientific advances for ‘them’ turn out to be drawbacks for ‘us?’”¹³⁵

It is difficult to disregard the fears that Claire expresses. The eugenics movement was concerned with reproducing the right kind of person and that generally entailed a certain social class and race. Indeed, based on a

133. *Id.* act 2 sc.1.

134. *Id.*

135. *Id.*

neo-Malthusian argument, eugenicists argued that poverty should not be alleviated in developing countries because the poor should basically be allowed to die out.¹³⁶ More subtly, but with no less extreme results, the cost of genetic technology limits its access to those with financial means and excludes whole continents from its benefits.

Suggesting the inherent discriminatory potential of genetics, Claire asks, “Are they gonna select for ‘our’ traits, or favor selection of “blond blue-eyed traits as they develop these ‘designer babies’?”¹³⁷ It is not only the ethical implications of Kalima’s genetic research that are questioned; Claire’s critics accuse her of “backwards racism” and, indeed, her mild black supremacy and desire to propagate a pure black race is reminiscent of eugenic rhetoric, condemning miscegenation for diluting the melanin, which she identifies as the essence of being black. There is also a special emphasis on the black woman’s duty to ensure the continuation of the race, reflected in Kalima’s guilt over her sexual relationship with a white colleague.

Thus, while genetics can and has been used to marginalize certain groups, it also continues to be appropriated to champion group differences. Both perspectives define biology as the determiner of social worth. As Medley demonstrates, it is almost inconsequential that genetics disproves the existence of race. It exists as a social construct, and one that still concerns people. In a society that continues to be preoccupied with racial categories, genetics provides a scientific basis for “natural” differences. The widespread acceptance of these predetermined characteristics that define certain individuals and groups as different justifies social policies built on the notion that genetics enables us to codify normality and deviance. Thus, society has appropriated DNA to support existing categories of race, class, and ethnicity, suggesting that every human has a genetic destiny and thereby diminishing the importance of environment and opportunity in shaping life.

Lisa Loomer addresses the notions of conformity and difference that are so bound up with genetics in her 2009 play, *Distracted*.¹³⁸ Through Mama, the central character, Loomer questions the role of heredity and environment in determining personality as well as society’s growing propensity to treat difference as something to be remedied by medication. Mama epitomizes the frantic American mother, loving her hyperactive and troublesome son, Jesse, willing to try anything to make his life easier, and concerned that she is somehow to blame for the traits that make him different. When Jesse is diagnosed with Attention Deficit Hyperactivity Disorder (ADHD or ADD), Mama receives advice from two neighbors who talk about the variety of medication their children are on with extraordinary complacency. Embodying a society obsessed with explaining, categorizing,

136. See, e.g., Paula Abrams, *Reservations about Women: Population Policy and Reproductive Rights*, 29 *Cornell Int'l L.J.* 1, 4 (1996).

137. Medley, *supra note 141*, act 2, sc. 1.

138. Lisa Loomer, *Distracted* (Dramatists Play Serv. Inc. 2009) (on file with the Fordham Law Review).

and treating difference, one neighbor says of the other: “[S]he’s a little obsessive compulsive, isn’t she? I wonder if that’s why her son has the Anxiety Disorder.”¹³⁹ When Mama inquires about the possible genetic connection, Sherry answers her with the exclamation, “Please. Everything is genetic. Everything!”¹⁴⁰

Finding Jesse’s behavior at home and at school a terrible strain on their relationship, Mama and Dad blame each other. Mama shouts, “YOU HAVE ADD! . . . [W]hich is HEREDITARY! . . . Which is why our son has it!” Dad counters, “Let’s talk about ADD. Let’s talk about your mother! Can a person get a word in edgewise with that woman? Does she ever finish a thought?”¹⁴¹

Through the exchanges between characters, Loomer questions a number of social conventions. She challenges society’s dependency on medication through Dad, who constantly avers that he does not want to put his son on drugs. She also addresses the familial and social pressure that is put on women, through the relationship between Mama, her family, her neighbors, her son’s teacher, and a number of doctors and psychiatrists. Mama is made to feel that she has a responsibility both to her son and to society in controlling and modifying Jesse’s behavior.

This pressure is expressed through the characters’ thoughts, which are addressed directly to the audience. In one aside, Jesse’s teacher, Mrs. Holly, says “It’s probably your fault. You’re a terrible mother,”¹⁴² and at another point mutters, “You know the other mothers are whispering about you.”¹⁴³ When Mama finally bows under pressure and puts Jesse on medication, he becomes a quiet, depressed child. Mrs. Holly rejoices that he is no longer a disruption in her class, and the doctors counsel that success is just a matter of achieving the right combination of drugs, but both parents are distraught at the change in their son.

By eradicating the supposed disorder that made Jesse different, Mama had taken away all the characteristics that made him unique. Eventually, and despite the disapproval of her neighbors, she decides to take him off the drugs and to tackle his behavior by paying more attention to him and enjoying his eccentricities.

As Loomer says, *Distracted* is the mother’s story; she starts off the play as

[S]omeone who believes that if you ask the right questions, if you go to the right experts you can fix things . . . This may not be something she can fix. It may not even be something that needs to be fixed. What she learns

139. *Id.* at 22.

140. *Id.*

141. *Id.*

142. *Id.* at 40.

143. *Id.* at 45.

is to think less in terms of the problem child and be more present with the child, with who he is.”¹⁴⁴

Loomer was prompted to write *Distracted* after noticing that a growing number of children were being diagnosed with behavioral disorders. She wondered what accounted for this change—whether it was an increasingly powerful drugs industry, a real environmental change, or society’s tendency to see difference as dysfunction.

CONCLUSION

Society’s quest to produce a better kind of human being has captured the imagination of both science and theatre: “the powers attributed to heredity in both the historical and contemporary contexts reflect cultural and social agendas more than they do the state of scientific knowledge.”¹⁴⁵ Some observers distinguish state coercion of eugenics from the individual choice of genetics. Others may argue that eugenics and genetics essentially aim for the same goal, regardless of whether it is mediated by society or by the individual.¹⁴⁶ Now that scientists have developed hundreds and hundreds of genetic tests, society has even more questions than answers. What will these tests mean for the future? What new promises will they bring? What will be the perils? Will the state tell us what we have to be tested for? Will the state tell us whether we can parent? Will the state tell us whether we cannot parent? Probably not. But will we have a more subtle form of social control, in which the pregnant woman who does not get tested, or even the woman that does, is being questioned about her responsibility and accountability for future generations?¹⁴⁷

These are very complex issues with no easy answers. Yet as Victor Branford, the sociologist, proclaimed almost one hundred years ago in his article, *The Eugenic Theatre*: theatre has the unique ability to use “scientific knowledge . . . joyfully for a deeper understanding of the present and preparation for a nobler future.”¹⁴⁸ So one *thing* is clear: the ethical, legal, and social implications of genetics will continue to provide great inspiration for future *plays*.

144. Erik Piepenburg, *Living in an A.D.D. World: Lisa Loomer Talks About ‘Distracted’*, N.Y. TIMES ARTS BEAT: THE CULTURE AT LARGE (Mar. 4, 2009, 4:20 PM), <http://artsbeat.blogs.nytimes.com/2009/03/04/living-in-an-add-world-lisa-loomer-talks-about-distracted/>.

145. NELKIN & LINDEE, *supra* note 14, at 21.

146. *See generally* DUSTER, *supra* note 3.

147. Rothenberg, *supra* note 123, at 163.

148. WOLFF, *supra* note 1, at 111. Branford further proclaimed that this endeavor needed “the creative genius of poet and dramatist . . . and nothing else will do.” *Id.* (quoting Victor Branford, *The Eugenic Theatre*, 230).