

## **Introduction: Eugenics and the Modern World**

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The Oxford Handbook of the History of Eugenics

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Print Publication Date: Sep 2010      Subject: History, Contemporary History (post 1945)

Online Publication Date: Sep 2012      DOI: 10.1093/oxfordhb/9780195373141.013.0001

### **Abstract and Keywords**

This article summarizes both the history and the historiography of eugenics across the world and that indicates new lines of inquiry that have evolved in recent years. It demonstrates that eugenics rapidly has become a shared language and ambition in cultures and locations that were otherwise radically different. It discusses the complicated relationship between the unconditional advocacy of contraception by neo-Malthusians and the cautious ambivalence typical of eugenicists. This article extends the analysis of eugenics through gender by addressing the question of masculinity and the subjectivity of eugenic advocates. This article analyzes the transnational themes in eugenics and surveys the important question of place-based differences in eugenic aims, methods, policies, and outcome. Eugenics invokes a modern political history in which individuals have been subsumed within collectives and their perceived interests and soon became a signal for, and almost a symbol of, modernization.

Keywords: historiography, eugenics, political, transnational themes, modernization

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“□ □ day someone will write a history of the eugenic movement. The historian will have some puzzles to solve.”<sup>1</sup> So wrote Alexander Carr-Saunders (1886–1966), author of *Eugenics* (1926) and director of the London School of Economics (1937–1955). Carr-Saunders offered this reflection in his 1935 Galton Lecture for the Eugenics Society in England. It was republished by the *Eugenics Review* in 1968, two years after his death, at a time when eugenics had waned as a serious scientific and policy field but was reemerging as a controversial object of critique. Carr-Saunders would have been surprised by the sudden and sustained historical interest in the field that arose after his lecture was republished.<sup>2</sup> This volume is a result of that large wave of work, a book that

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summarizes both the history and the historiography of eugenics across the world and that indicates new lines of inquiry that have evolved in recent years.

The aim of most eugenics movements was to affect reproductive practice through the application of theories of heredity. Eugenic practice sometimes aimed to prevent life (sterilization, contraception, segregation, abortion in some instances); it aimed to bring about fitter life (environmental reforms, *puériculture* focused on the training and rearing of children, public health); it aimed to generate more life (pronatalist interventions, treatment of infertility, “euteleogenesis”). And at its most extreme, it ended life (the so-called euthanasia of the disabled, the non-treatment of neonates). Eugenics always had an evaluative logic at its core. Some human life was of more value—to the state, the nation, the race, future (p. 4) generations—than other human life, and thus its advocates sought to implement these practices differentially.

The idea of eugenics grew quickly from the 1880s, reaching its peak in the 1920s. The actual practices and their uptake differed considerably, as the geographically oriented chapters in this volume vividly demonstrate. Yet eugenics rapidly became a shared language and ambition in cultures and locations that were otherwise radically different. Nikolas Rose sees four terms delineating eugenics: “population, quality, territory, and nation.”<sup>3</sup> Each of these has a specific modern history, shaped by long-nineteenth-century global changes that accelerated in the dramatic and turbulent history of the early to mid-twentieth century. The emergence of widespread nationalism, important technological changes, and new ways of thinking about populations as a citizenry, as a labor force, and as the generator of future fitness combined to produce an environment sympathetic to claims that preceded Francis Galton, the originator of the term “eugenics,” but which he solidified, named, and publicized. Both the broad spread and the timing of the interest in eugenics suggests that it should be interpreted as much with respect to period as to place. Eugenics was, in central ways, about modernity.

## **What Was Eugenics?: Heredity, Reproduction, and Fitness**

From the late eighteenth century, scientists in many countries were intrigued by and actively explored mechanisms and patterns of human, plant, and animal heredity. The term *hérédité* was first used by French physicians in the 1830s, and in both Britain and the U.S. hereditary disease was a subject of study decades before the emergence of Darwinian theory.<sup>4</sup> But while evolutionary thought was popular in the first half of the nineteenth century, it was Darwin's work from the 1850s that foregrounded population-

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level ideas; his theories of natural and sexual selection put humans *in nature*, and subject *to* natural laws, critically undermining the argument for special creation.

Several authors in this collection (Diane Paul and James Moore; Nils Roll-Hansen; Philippa Levine) demonstrate the ways in which new developments in the biological sciences created the basis for eugenic ideas. Paul and Moore show that Darwin's *Origin of Species* (1859) profoundly influenced his cousin Galton's *Hereditary Genius* (1869), which in turn partly shaped *Descent of Man* (1871). Galton saw eugenics as a means to manipulate natural selection in humankind. Humans could—and should—“replace Natural Selection by other processes that are more merciful and not less effective. This is precisely the aim of Eugenics.” By 1908, he understood eugenics as a preferable alternative to natural selection among humans:

(p. 5) Its first object is to check the birth-rate of the Unfit, instead of allowing them to come into being, though doomed in large numbers to perish prematurely. The second object is the improvement of the race by furthering the productivity of the Fit by early marriages and healthful rearing of their children. Natural selection rests upon excessive production and wholesale destruction; Eugenics on bringing no more individuals into the world than can be properly cared for, and those only of the best stock.<sup>5</sup>

As this consideration of “excessive production” shows, Galton and Darwin were heavily reliant on Thomas Malthus's ideas about human population numbers. But if Darwin wrote of “man and nature” as they existed—as they were—then Galton wrote of “man and nature” as they might be, even as they *should* be, through active human intervention on a qualitative basis. The difference between Darwin's description and Galton's prescription was what, in essence, made eugenics political.

Galton understood eugenics to be the rational planning of, and intervention into, human breeding, the application of “selection” to humans based on statistical probability and on an understanding of the mechanisms of heredity. In practice, this materialized both as individuals managing their own reproduction and as state and expert interventions into people's reproductive lives and choices. When in 1904 he wrote that eugenics was a field devoted to “the study of agencies under social control that may improve or impair the racial qualities of future generations, either physically or mentally,”<sup>6</sup> he expressed the twin sides of the eugenic coin: efforts to improve the fertility of some (positive eugenics) while curbing the fertility of others (negative eugenics), depending on which population and which socio-biological problem was being addressed. Many of the essays in this volume show how both “improvement” and “impairment” projects were simultaneously present in most eugenic movements, another reflection of the duality that characterizes both eugenics and its politico-cultural counterpart, modernity.

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Not surprisingly, marriage and reproductive activity were invariably central issues. But as John Waller has persuasively argued, the tendency to equate eugenics with Galton is an oversimplification.<sup>7</sup> There is without doubt a longer nineteenth-century history of concern with hereditary disease and of plans to manage marriage for the common good. Statisticians before Galton were motivated to compute the damage done by unfit marriages, suggesting that Galton's timing was ripe. Attempts by the experimental community founded in Oneida, New York, in 1848 to create ideal reproductive unions in a fully controlled way represents an early conflation of social and reproductive utopianism that predates Galtonian eugenics. Not a few regimes over the twentieth century sought similar reproductive control in far more complex and larger societies. Their leaders could only dream of the total submission to the larger good which the Oneida women professed: "We do not belong to *ourselves* in any respect...we have no rights or personal feelings in regard to child-bearing...we will, if necessary, become martyrs to science."<sup>8</sup>

Most women, however, needed rather more persuasion, and eugenics frequently interacted with the welfare structures emerging in the modern nation state. Advocates sought the promotion of marriage and the reproduction of individuals and families (p. 6) deemed desirable and fit through state-based financial incentives and endowments. In early-twentieth-century America, the psychologist Leta S. Hollingsworth (1886–1939) explicitly named "adequate compensation" as an "effective social device" that would encourage good child-bearing.<sup>9</sup> Galton envisioned a society in which the state aided the well-born in expanding their families, and in National Socialist Germany, among other states, such state aid materialized rapidly.

In many contexts there was strong support for marriage counseling and the physical and mental screening of intending couples before marriage. In some jurisdictions, legislation prevented the marriage of individuals with certain traits; the 1926 Soviet Civic Code, for example, prohibited marriages between mentally ill parties (see the chapter by Krementsov). Though it failed in more jurisdictions than it succeeded, there were numerous attempts by eugenic associations to make marriage screening compulsory, aiming to restrict the reproduction of those with conditions and diseases considered heritable: syphilis, leprosy, tuberculosis, epilepsy, alcoholism, and less specific conditions such as "criminality" or sexual "tendencies." Galton himself, as Paul and Moore point out in this volume, warned that the day would come when those who reproduced irresponsibly would be considered "enemies to the State."

Eugenics and racism have become almost interchangeable terms, but the association is perhaps too simplistic. Historical work on eugenics shows that much, if not most, eugenic intervention was directed at "degenerates" who already "belonged," racially or ethnically: "internal threats" or "the enemy within," whose continued presence diluted the race. In the Third Reich, the prime target for sterilization and euthanasia was the

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disabled or “feeble-minded” German, rather than the foreigner. For Australian lawmakers, it was the English insane who were to be excluded, through immigration restriction statutes and their eugenic clauses. In twentieth-century South Africa, as Saul Dubow shows, eugenics was often a battle over whiteness. In some American states, sterilization of whites was a critical procedure, a means of stabilizing respectable visions of whiteness in a changing demographic environment. To be sure, these were projects of racial nationalism and indeed racial purity—eugenics was never *not* about race—but the objects of intervention, the subjects understood to be “polluting,” were often not racial outsiders, but marginalized insiders whose very existence threatened national and class ideals. This was as much the case in emergent states such as Cuba, as Patience Schell's chapter shows, as in nations with a longer history.

Although eugenics was sometimes applied with rural, peasant, and indigenous populations in mind,<sup>10</sup> more often it concerned the urban “problem populations” of industrialization. In Britain, in particular, eugenics addressed the class issues that had come to dominate domestic British thinking. The urban poor, already regarded as a tenacious problem population, became the focus of a wide range of research.<sup>11</sup> Solutions to the problem of poverty were, in essence, twentieth-century scientific extensions of nineteenth-century social and legislative reform on “pauperism,” in which scientific “proofs” of weakness and inferiority bolstered existing moral condemnation. While the massed and urban poor were the main eugenic “problem (p. 7) population” in Britain, the presence of the empire ensured that racial concerns were never wholly muted. Indeed, Dan Stone has argued that race and class were inseparable in the writings of British eugenics advocates. His emphasis on “ethnic exclusivity” is an important corrective to the more common view of British eugenics as driven predominantly by class prejudices.<sup>12</sup>

Wendy Kline shows in this volume that it was poor rural whites, southern European immigrants, and African Americans only a generation or two from slavery who were considered “problem populations” in Progressive Era America. And when eugenicists turned to the postwar global problem of the “Third World,” they imagined a globalized pauper class whose advance demanded intervention, action, and expertise. As Susanne Klausen and Alison Bashford's chapter suggests, it was this interest in managing and intervening in the reproductive lives of one particular social group—the poor—that most directly linked neo-Malthusians and eugenicists.

In places as different as the United States, colonized areas of Africa, and Germany, “undesirable” marriage was also understood in racial terms, and anti-miscegenation laws were increasingly driven by eugenic rationales.<sup>13</sup> As Dan Stone and Dirk Moses point out in this volume, anxieties about interracial marriage were frequently linked to colonial

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rule. Fears over racial mixing reached their nadir in apartheid South Africa, but as Saul Dubow's chapter shows, apartheid was the endpoint of several generations of work, much of it eugenic and scientific, on the perceived problems of race-mixing. Nonetheless, the presence of apartheid politics was not a necessary precondition for hostility to race-mixing. Hans Pols's chapter discusses the race-crossing research undertaken by Ernst Rodenwaldt in the Dutch East Indies, which he took back to Nazi Germany in 1934. And in Australia, scientific policy-makers closely considered the "half-caste problem," implementing a process of biological and cultural assimilation influenced by eugenic ideas. "Half-caste" children were removed from their indigenous families into institutions and then into white communities, with the ultimate aim of "breeding out the colour," as it was often put. Even in non-colonial national contexts with a high degree of social homogeneity, racial "insiders" could become "outsiders" in eugenic initiatives. Véronique Mottier discusses the extensive program of child removal in Switzerland, and Mattias Tydén, the eugenic work of Swedish researchers on the northern Sami minority.<sup>14</sup>

Concerns with population encompassed not only an interest in improving and revitalizing populations to inhabit a modern world, but also the obvious, if sinister, corollary that some populations would be unfit to do so. The prospect of extinction—made so much more viable by new evolutionary theories in the nineteenth century—was applied by eugenically inflected anthropologists to human societies considered too primitive for modern survival (see chapters by Philippa Levine, Mathew Thomson, A. Dirk Moses and Dan Stone). In some contexts, "primitive" societies where weak offspring were not nursed were admired as naturally eugenic, as Saul Dubow points out.

Quantitative and qualitative aspects of population management were almost always entwined, as Schneider showed in his important early study of French eugenics.<sup>15</sup>

Susanne Klausen and Alison Bashford discuss here the complicated relationship (p. 8) between the unconditional advocacy of contraception by neo-Malthusians and the cautious ambivalence typical of eugenicists. Eugenic advocates were often concerned with the decline of the middle-class birth rate attributed to contraception, but were simultaneously interested in the provision of contraception to working-class and some non-white populations. In certain colonial and national contexts, eugenics and managed birth control campaigns were virtually indistinguishable, as Sarah Hodges shows for South Asia and Yuehtsen Juliette Chung for Hong Kong. In India, Hodges suggests, organized nationalist feminism articulated some of the strongest advocacy for eugenics in the region, premised on the tight relationship between eugenics and birth control. Sunil Amrith discusses postcolonial renditions of this connection, where the newly independent state of Singapore (like modern China) proceeded strongly with birth control as part of its population policy.

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Since eugenics was always concerned with reproductive sex, it was also always about gender, an insight rendered place-specific in chapters by Lucy Bland and Lesley Hall on Britain, Carolyn Strange and Jennifer Stephen on Canada, and Stephen Garton on Australia and New Zealand. Whether arguing for the maintenance of traditional gender roles and thereby increasing the number of fitter families, or for radically new heterosexual formations, eugenics and “the woman question” were inevitably linked. Nor should we be surprised at the sometimes close association between eugenics and the radical politics of sexology in the early twentieth century.<sup>16</sup> In her chapter, Alexandra Stern extends the analysis of eugenics through gender by addressing the question of masculinity and the subjectivity of eugenic advocates.

Eugenics often dovetailed with broad public health and hygiene practices. In eastern Europe, for example, eugenics supporters lobbied for greater spending on public health (see Maria Bucur in this volume), while in early twentieth-century China social hygienists were active in the medical profession, in voluntary organizations such as the YMCA, and in the rapidly expanding nationalist movement (see Chung in this volume). The emphasis on public health was especially, albeit not exclusively, found in national and colonial sites where Lamarckian ideas were dominant, such as France and Latin America. That said, even in the strictest Mendelian versions of eugenics, efforts constantly crossed over into the public health arena and into the management of infectious diseases. The twentieth century saw the adoption in many places of compulsory notification of those with sexually transmissible diseases, leprosy, or tuberculosis, a practice that dovetailed logically with systems for preventing disease carriers from marrying.

Eugenics took the form of mass education that encouraged individual responsibility for sexual and reproductive conduct and for healthy conduct that would benefit a larger collective. Populist campaigns in many settings rewarded eugenic motherhood through “fitter family” competitions. At the same time, eugenics influenced contemporary debates about educability and thus the worth of education. The development of psychometric testing in the early twentieth century (see Thomson and Dubow in particular) was frequently linked to eugenic ideals and concerns. In colonial contexts, as Chloe Campbell's chapter on Kenya demonstrates, (p. 9) entire indigenous populations could be labeled as ineducable and naturally feebleminded, making their education an expensive irrelevance to the state.

Among the best-known and more radical manifestations of eugenics was the segregation and sterilization of those deemed “defective” to ensure that they did not pass on their defects to the next generation. As Thomson shows, eugenics was closely linked to a much longer history of institutionalization, in particular the proliferation of asylums from the nineteenth century.<sup>17</sup> It was the institutionalized who were most subject to the proliferating practice of sterilization. Conversely, sterilization was commonly understood

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to be an advantageous and economically efficient alternative to segregation, minimizing the need for, and the longer-term costs of, the latter. Sterilization was fairly widespread by the 1930s, permitted by legislation in many U.S. and Canadian states and provinces, in the Swiss canton of Vaud, in Scandinavian countries, in Germany, Japan, and Veracruz (Mexico), as well as in Czechoslovakia, Yugoslavia, Hungary, Turkey, Latvia, and Cuba. In some places—Russia being a good example—eugenic advocates were nonetheless hostile to the principle of sterilization.

At its most radical, eugenics manifested as both passive withholding of treatment from, and active killing of, disabled people. The German Darwinist Ernst Haeckel had advocated eugenic euthanasia as early as 1868, and in liberal Britain the eugenicist Dr. Robert Rentoul was euthanasia's best-known proponent. Such a practice was undertaken privately by physicians on newborns, probably everywhere, but very publicly in the United States in the early twentieth century when Dr. Harry Haiselden (1870–1919) withheld treatment for deformed newborns in Chicago and actively promoted this eugenic practice as in the interest of the infant, the family, and society.<sup>18</sup> Active “euthanasia” of disabled people on a large scale was authorized by a 1939 Reich Ministry of the Interior decree in Germany, first targeting neonates and children, and subsequently expanding to adult asylum populations.<sup>19</sup>

Eugenics was centrally an evaluative project for the classification of humans. The designations “fit” and “unfit” applied both to populations and to individuals, and eugenic literature is packed with data on human hierarchies, some of it statistical, some of it visual, all of it confident in its ability to evaluate, classify, and fix the characteristics and qualities of humans. Anthropometric photography—much lauded by late nineteenth-century anthropologists and naturalists—measured the particulars of bodies, while the new intelligence testing of the early twentieth century (developed first in France and spreading quickly) determined mental capacity. Where Galton had quantified, in the first instance, the existence and inheritance of “genius,” the new testing was often, as in the United States, more concerned with identifying “feeble-mindedness,” which was regarded as a heritable condition. The Eugenics Record Office, founded in the United States in 1910, compiled a vast database and repository of information on American individuals and families. Records and data were essential to the eugenics project (see Paul Weindling in this volume).

Eugenics experts always had one eye on past generations and one eye on future generations, for what had come before augured what could or would follow. Genealogy—family trees—captured and symbolized this Janus-faced characteristic (p. 10) of eugenics: any individual both received, and potentially passed on, flawed and/or beneficial attributes. One of the commonest images in eugenic publications was the family tree, the “pedigree chart,” which tracked the history of talented families, defective families,

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racially hybrid families, or of leprous, tubercular, epileptic, criminal, and alcoholic families. The pedigree chart was, as Pauline Mazumdar has written, both the research and propaganda methodology of eugenics, especially in its early years.<sup>20</sup> Social and scientific work on genealogy and heredity, on dominant and recessive genes, was eugenics' core business, famously the studies of the Jukes and the Kallikaks, less famously families afflicted with Huntington's disease.<sup>21</sup> Not infrequently, such modern projects were grafted onto preexisting cultural, religious, or folk practice about marriage and family lines. Galton and Darwin were both deeply interested in and concerned about their culture's practice of consanguineous marriage (and Darwin, of course, was himself in such a marriage, having married his first cousin, Emma Wedgwood [1808–1896]), which seemed to bring benefits of familial purity, but problems as well. In his chapter on eugenics and the Jews, Raphael Falk writes about the enthusiasm of some early-twentieth-century rabbis for eugenics, who linked the new science to “breeding problems [that] have always occupied an important role in Jewish life.” Many, he writes, claimed a central and long-standing role for eugenics in Jewish tradition.

Galton's work was from the first about genealogy. His earliest eugenic research traced families who possessed what he called “hereditary genius,” and with biometrician Karl Pearson (1857–1936), he refined mathematical predictions of the characteristics of later generations, in order to effect change.<sup>22</sup> Pearson—whom historian Judith Walkowitz describes as a man for whom “biology had absolutely determining power”<sup>23</sup>—was the first Galton Chair of Eugenics (later Genetics) in University College London's Department of Applied Statistics; his institutional legacy was enshrined in the journal he founded, *Biometrika*. The actuarial aspect of this work was not lost on life insurance companies, who regularly drew on eugenics research. Conversely, the data held by life insurance companies—about probability of illness and death within families—was of considerable value to eugenic researchers.

If eugenics was about the problems of inheriting the past, it was also about the optimistic possibilities of planning future generations. There was a power in eugenic promise—perfectibility, improvement, the benefits that would accrue from rational planning. Despite the persistence of a degenerationist discourse, eugenics was thus marked by considerable optimism: it was an active creed, an *applied* science. The first pedigrees Galton composed were not of epileptic families, but of the Wedgwood-Darwin-Galton family to which he himself belonged; these studies traced the inheritance of ability. Meliorist terms such as “race betterment” and “race improvement” were titles commonly chosen by and for eugenic associations, especially those with a greater lay and community membership. Eugenics was premised on a belief that science was of necessity reformist in its intentions and aspirations. Thus Cyrus Schayegh notes in his chapter that Reza Shah's modernist plans for a new Iran focused attention on sociocultural reforms

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effected through bio-medicine. In Soviet Russia, eugenics focused far more on helping and improving the “fit” rather than (p. 11) worrying about the effects of leaving the “unfit” to their own devices. And as Nikolai Krementsov's chapter shows, this unusual emphasis also offered an outlet for an acceptance of some forms of mental illness (what Russian scientists dubbed “pathography”), which linked creativity and mental instability. From family planning to national planning, eugenics often appeared beneficial for future populations.

## **When Was Eugenics? Modernity and the Nation State**

Eugenics as a distinct theory emerged in the 1880s, thrived in the years before and after World War I, came under considerable scientific criticism in the 1930s, and suffered more disabling political criticism after World War II. But as Bashford's epilogue indicates, eugenics continued in various forms as part of the scientific and social development of later-twentieth-century genetics and reproductive technologies.

Writers in the early twentieth century often drew a long genealogy for eugenic ideas and practice, writing about ancient traditions of the withdrawal of aid to weakly children and adults.<sup>24</sup> Eugenics thus gained authority by creating a classical lineage for itself. But modern eugenics was also understood by its advocates to be especially humanitarian compared to the ancients. Galton was insistent that the whole point of eugenics was to substitute “humane” methods for both inhumane practices such as infanticide and for the cruelties, as he saw it, inherent in natural selection. Scholars, too, have located eugenics firmly as an expression and a manifestation of modernity. Frank Dikötter suggests that “Eugenics was not so much a clear set of scientific principles as a ‘modern’ way of talking about social problems in biologizing terms.”<sup>25</sup> What, then, was it in the modern period that was so productive of, and receptive to, eugenic practices and eugenic ideas?

Over the nineteenth century the idea of the state, as well as its practices, underwent massive change. Populations—people and their bodies—increasingly became the business of government, to be improved physically and morally. Statistics—originally the “science of the state”—was brought into the fold of biology in new ways, extending long-standing government interest in “vital statistics.” Nineteenth-century governments had become centrally concerned with the size of their populations, and statistics provided them with myriad lifestyle and census-style data.

Though the measures recognizable under the eugenic banner were not always state-initiated, one of the more striking aspects of eugenics is that its presuppositions and

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premises frequently did feed state policy; the science behind, and the practical applications of, eugenics were taken seriously by states across the globe, especially in the first half of the twentieth century. In many places the state's responsibility for citizens and subjects was freshly assessed, with not a few nations assuming increasing responsibility for health, longevity, and welfare. As nationalism expanded (p. 12) its reach, expectations that states would change and grow catalyzed new notions of the relationship between the individual and the polity.

Eugenics is commonly associated with World War II because of the atrocities committed under Nazi rule. But eugenics historically has at least as much to do with the years around World War I, and the major new political configurations of people and territory it precipitated. Thus, if early historians of eugenics understood the field primarily through the lens of the history of science, a more recent generation takes eugenics to be primarily concerned with the nation and nationalism of the modern period.<sup>26</sup> New kinds of states were emerging everywhere in the modern world. Older empires collapsed and new nations—often ethnically imagined and constituted—were formed and reformed in their place. Maria Bucur's chapter on eastern Europe is a fine example of just how closely eugenics could match and enshrine the aspirations of new nation-states anxious to establish their legitimacy. In a different hemisphere, the Spanish-American War saw the decline of Spanish imperialism and the creation of new domains of U.S. imperial influence, closely attended by health, hygiene, and population questions. In the late nineteenth and early twentieth centuries, a series of states emerged in Central and South America in which population and reproduction were key governance issues, especially in newly proclaimed republics, as the chapters by Patience Schell and by Gilberto Hochman, Nísia Trindade Lima, and Marcos Chor Maio demonstrate. In the same period, Japanese modernization manifested itself as nationalism, again with an attendant concern for population quality and quantity. Jennifer Robertson's chapter shows the extensive Japanese interest in race, nation, and eugenics.<sup>27</sup> Across the British and French Empires, colonial rule continued after World War I, but these empires were increasingly faced with anti-colonial nationalist activity. The latter was as likely to embrace as to reject population and eugenic thinking.

The end of World War II saw another wave of nation-building; population planning—sometimes called “eugenic,” sometimes not—was often part of core business. In this vein, eugenics could manifest itself as an aspect of colonial governance, or prove useful for anti-colonial nationalists as they dreamed of, and then implemented, independence. It was population planning, for example, that drove the five-year plans for a new, modernized India. It was “a scientific approach to all our problems and to life itself,” as Nehru put it.<sup>28</sup> Sunil Amrith's chapter on eugenics in postcolonial Southeast Asia and

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Sarah Hodges's chapter on Indian eugenics both demonstrate how population planning could transfer easily from colonial to independent national regimes.

In the early to mid-twentieth century, scientifically authorized projects of race and racial purity were mapped onto this extensive new nation-building. Homogeneity (*homo-gene*—of the same kind) was characteristically privileged over heterogeneity and became a signature element for the imagining and, in many cases, the establishment of new “racial” nations. Australia is a good example of an early-twentieth-century “racial” nation, where eugenic language took considerable hold, as Garton's chapter demonstrates. In many arenas, blood type determined belonging to territory and nation, as Bucur explains for eastern Europe. Likewise, Robertson's chapter (p. 13) demonstrates how profoundly the idea of blood purity was “an organizing metaphor” for deciding exactly who was Japanese. Some Zionists, as Raphael Falk's chapter shows, used blood as a claim for a Jewish homeland. Before chromosome-based technologies, blood typing was paramount in technical attempts to classify, include, and exclude groups of people.<sup>29</sup> This new science of blood typing had strong links to older notions of blood as a distinguishing characteristic, whether distinguishing on the basis of class, race, or other sorts of classification. In these ways, eugenics was central to the modern project of racial nationalism and national rejuvenation.

In the turbulent years of the early twentieth century, eugenics offered particular technologies that might be taken up by states, as nations were built and rebuilt, generated and regenerated by scientists, statesmen, and political and economic planners. Véronique Mottier explores the very different *kinds* of states in which eugenics was able to flourish: liberal, totalitarian, social democratic, socialist. Despite the popular link drawn constantly between eugenics and the Nazi regime, there was probably as strong a connection between eugenics and the left, and to progressive and reform politics.<sup>30</sup> The optimism of eugenics, and its aspiration to apply scientific ideas actively, was among the reasons it so frequently attracted progressives and liberals.

Thus, in each of these kinds of modern states—even liberal states—eugenic discourse encouraged hygienic practices for the perceived larger good. As Amir Weiner has succinctly put it: “No longer were self-improvement and perfection the pursuit of the selected few, mainly religious orders...In the modern state, each and every individual counted.”<sup>31</sup> Citizens and subjects were to streamline themselves, their families, and their bodies for their new modern state. What Ayça Alemdaroğlu argues of modernizing Turkey is more widely applicable: “Imagining...society as a national organic unity prioritized the duties of citizens over their rights.”<sup>32</sup> As we have seen, it was typically the powerless and disenfranchised who were rendered problematic and who were likeliest to experience the effects of eugenic philosophy and practice—rural populations, women, non-white people,

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the urban underclass. At the same time, these populations were increasingly understood in terms of what Maria Bucur calls “biological capital.”

On the one hand, then, eugenics invokes a modern political history in which individuals have been subsumed within collectives and their perceived interests. Eugenic advocates typically had population-level aims firmly in sight, and were concerned less with making individuals happier, healthier, or fitter for their own sake (although for many, this was a perfectly desirable side effect) than with making a significant difference to the physical constitution of future generations. Yet the materialization of the population-level change necessarily entailed intervention into individual lives, mostly though not exclusively managed or promoted by the modern or modernizing state, whether directly or indirectly.

On the other hand, eugenics remains an important part of the history of the modern subject, especially the modern liberal subject whose emerging individual rights—to reproduction, to health, to bodily integrity—were not infrequently asserted and argued in legal cases specifically about eugenic practice, sometimes (p. 14) successfully, sometimes not. The history of eugenic sterilization in particular is a key component of the development of a discourse of “rights” in which reproduction has, in many countries, come to be comprehended.<sup>33</sup> Similar issues arose around the legal concept of consent when Nazi experimentation (including sterilization) was assessed in the postwar Nuremberg trials, as Weindling discusses in this volume.<sup>34</sup>

Eugenics, then, arose out of a constellation of recognizably modern issues, but it soon became a signal for, and almost a symbol of, modernization. States keen to display a commitment to modern planning implemented hygiene and public health measures. Nation-states—China, Japan, and in eastern Europe—and the professionals and experts supporting them, whose reputations depended on their being seen as modernizing, took up eugenics enthusiastically. The modern state's increasing interest and involvement in health practices served as an incentive for doctors to encourage eugenic practices that would increase their status as well as the resources allocated to their work. As many of the chapters that follow reveal, doctors and other medical professionals were often central supporters and advocates of eugenic practices from disease notification to public health campaigns aimed at expanding public understanding of hereditary diseases.

Marius Turda and Paul Weindling have argued that the “modernity” model for understanding eugenics is most appropriate in the case of Britain. In central and southeastern Europe they see other forces at work: “eugenic movements...reflected the aspirations of a segment of trained professionals dependent upon the state for funding and legitimacy, and whose main goal was the strengthening of their newly created national states.”<sup>35</sup> Maria Bucur and Maria Sophia Quine, too, stress this goal, one that we would argue quite precisely defines eugenics as a moment of modernity. Indeed, as Cyrus

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Schayegh shows, the aspirations of elite professionals for whom nationalism was an opportunity was manifest not just in European settings but elsewhere in the world—in this case, Iran—suggesting that a global push to modernity helped shape eugenic practice. The formation of nation-states—and in particular the focus on their population's potential at a biological level—*was* an essential element of modernity.

Modernity manifested in—and as—culture, as well as in and as politics and science. Historians of material and mass culture, of literature, and of film have increasingly understood eugenics as a key expression of modernity. Christina Codgell has analyzed the place of eugenics in 1930s design; Martin Pernick links eugenics and the motion picture; Daylanne English has explored the place of eugenics in the Harlem Renaissance; Angelique Richardson looks at eugenics in late-nineteenth-century women's writings.<sup>36</sup> Wendy Kline's chapter shows how, in popular cultural forms, eugenics reached well beyond the constituencies of medicine and politics to become a well-known and popularly supported movement in the United States.

Sociologists of modernity have also found eugenics of interest. As Mottier notes, Zygmunt Bauman writes of the modern state as a “gardening state,” weeding and cultivating, selecting out and selecting in the unfit and the fit, the lives deemed not worth reproducing, and even the lives, by expert assessment, deemed not worth living.<sup>37</sup> Bauman argues that the Holocaust, with its emphatic, even obsessive (p. 15) order-making and taxonomizing, was the apogee of modernity. Michel Foucault likewise wrote about a “eugenic ordering of society” fed by “mythical concern with protecting the purity of the blood and ensuring the triumph of the race.”<sup>38</sup> “Bio-politics”—the modern optimization of life—has influenced a generation of eugenics scholars and is especially present among recent historians of European eugenics.<sup>39</sup> Bio-politics speaks to the relation between social organization and social power on the one hand, and population and generation of life as the raw material of the social world, on the other. From intervention into the smallest units of life—genes and later molecular biology—to the largest unit of life—species and their interactions—eugenics was always and centrally about life.

For sociologists and political philosophers, then, as well as for historians of science, education, social policy, and culture, eugenics emerged out of, and came to stand for, modernity. It has done so in large part because of the strong popular and scholarly connection drawn even now between eugenics, German National Socialism, and the Holocaust. Our volume shows, however, that the link between modernity and eugenics was about period as much as place; it is less the Nazi version of eugenics than the familiarity of those practices across so many nations and cultures that is the truly astounding element in the history of eugenics.

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## Where Was Eugenics? Local and Global Geographies

This book is structured by two aspects of the question of eugenics and place. On the one hand, we recognize the phenomenal transnational uptake of eugenic ideas more or less simultaneously across many parts of the world. Part I analyzes these transnational themes in eugenics. Part II surveys the important question of place-based differences in eugenic aims, methods, policies, and outcome. The geography of eugenics was national in the first instance. But regional and, in some instances, interregional, cultural-scientific alliances were increasingly significant.

Thoughtful historical commentators often understood eugenics as transnational, even global. The cosmopolitan Indian economist Benoy Kumar Sarkar commented in 1936 for example, on the “family likeness” among national “fitness” campaigns: Czech national fitness campaigns, Fascist Italy’s “sanitary rejuvenation,” and the youth movement of postwar Germany. “India,” he wrote, “has thus been touched by the worldwide endeavours of today directed as they are towards race-betterment and conscious ‘planning’ of physical manhood.”<sup>40</sup> His comments highlight the astounding similarity of eugenic ambitions and agendas internationally. In part this stemmed from the modern possibilities of connection: scientific ideas, people, and organizations quickly crossing oceans, exchanging scientific information in journals and papers in any number of new media.

(p. 16) Human movement across the globe on a hitherto unforeseen scale was as much an object of eugenic inquiry and intervention as it was a vehicle for the transmission of eugenic ideas and debate. Forced and free migrations and massive diasporic labor movements prompted ever-tighter restrictions on immigration. Eugenics found another outlet in immigration regulations that attended to heredity and to race in new and distinctly modern modes (see chapters by Cyrus Schayegh; Alison Bashford; Patience Schell; A. Dirk Moses and Dan Stone). Movement of this sort could also feed into eugenic thought in curious ways. Sarah Hodges shows in her chapter how communal unrest in India was sometimes expressed in terms of an originary and an invading race, the latter (in this instance, Indian Muslims) disparaged as essentially foreign and not “naturally” Indian.

The “place” of eugenics, then, was as much a newly international world, as it was the place of new nations. Bashford’s chapter explores both the international eugenic associations and the place of eugenics in the League of Nations and, later, the United Nations. In an exemplary instance of the transnationalism of eugenics, Quine analyzes connections between southern Europe and southern and central America. This was

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formalized as an association of Latin eugenics that explicitly differentiated itself from an Anglophone North American and British eugenics, and to some extent from Scandinavian and German eugenics. A newly imagined “pan-American” region was important, writes Schell of Cuba, Mexico, and Puerto Rico. Not dissimilarly, but less formally, a Francophone eugenics linked experts in France, Quebec, and as Schayegh shows, Iran as well. In such instances, the personal connections between Iranian experts trained in France, or, to take another example, Japanese experts trained in Germany, were critical in the global flow of eugenic ideas.

Eugenic practices were produced by a vast amount of eugenic theory, deriving from any number of nineteenth-century sciences. It was probably the scientific theory that was the most global element of eugenics: a language shared, even if conclusions differed. There were some clear place-bound trends in scientific ideas, however. Historians have traced different national receptions of, and tendencies toward Lamarckian and Mendelian theories of heredity. Nils Roll-Hansen's chapter explains the divergent theories of heredity, and many other chapters analyze the varying implications of derivative social policy. In general, Lamarckian-inclined scientific cultures were more concerned with environmental and public health and hygiene interventions, as Schayegh shows in Iran, Richard Fogarty and Michael Osborne in France, Hochman et al. in Brazil. But chapters here also complicate these long-held views on eugenics as well. Chung's research on China and Hong Kong indicates that these divisions cannot solely be ascribed to national preferences. In China, for instance, differing eugenic camps promoted radically different policies. Social hygienists and nationalists sought—and found—reconciliations between these competing theoretical models. In the early years of the Soviet Union, as Kremontsov shows, eugenicists liberally combined disparate elements of eugenic thought to create their own brand of the science. In the Soviet Union, the political role of eugenics was particularly marked in an era in which Lamarckian theories were championed as properly socialist and Russian geneticists increasingly feared (p. 17) for their lives. Indeed, Kremontsov's analysis of Russian eugenics makes clear that eugenics could flourish even in environments where few of the major texts of the movement were ever published.

Broad differences between environmental and biological approaches in different contexts are suggested by the terms used for eugenics. Some national cultures used the word “eugenics,” derived from *eu* (well or good) and *genus* (born). Other national policy and science groups preferred terms deriving from a root meaning “to cultivate” or “to care for,” rather than “to be born”: *puériculture* was often used in Francophone contexts, where the term came to mean infant or child health, or methods of rearing and training children.<sup>41</sup> The more generic “homiculture” was also widely used in place of eugenics in Latin America. With a sense of active tilling and tending, *homiculture*, *puériculture*, and

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viriculture—broadly consistent with Lamarckian approaches to heredity—held a more social meaning than the biologically oriented “eugenics.” Indeed, Galton had early considered “viriculture” as a possible term for his new science.<sup>42</sup> Even earlier, the strange term “stirpiculture” was used to signal the breeding of special stocks, or family lines, with respect to humans. In the late 1840s the leader of the utopian Oneida community in New York, John Humphrey Noyes (1811–1886) used “stirpiculture” to describe his plans and activities for “intelligent, well-ordered procreation,” claiming that “scientific combination will be applied to human generation as freely and successfully as it is to that of other animals.” This was a plan he and his community put systematically into practice between 1865 and 1878.<sup>43</sup> In this instance, the term “stirp”—broadly meaning a line of descent from a single ancestor, or primary bearer of heredity, and used briefly by Galton—was as significant as the term “culture.”

Hygiene was another important term linked to place in the history of eugenics. As Turda's chapter shows, *Rassenhygiene* was deployed first by the German biologist Alfred Ploetz (1860–1940) in 1895, and the term was picked up in Anglophone settings: the Racial Hygiene Association of New South Wales, for example, was an Australian eugenic-feminist organization, which retained its title until 1960. In English-speaking contexts, race was a slippery concept, sometimes meaning “white people,” sometimes “English-speaking peoples of the world,” but also sometimes “human species.” In India, Hodges tells us, “race” and “nation” were terms used largely interchangeably. By the late 1930s, especially during and after World War II, “racial hygiene” came to signal German eugenics specifically, and English eugenicists typically distanced themselves from such associations.

Although eugenic aspirations and ambitions were remarkably common, shared, and agreed across the globe, the methods by which they were realized were often distinct points of difference and comparison. Because eugenics dealt with life and death, the stakes were high and organized religions were involved at both doctrinal and institutional levels, shaping one of the major geographical axes of difference in the history of eugenics. Many of the chapters discuss the significant gap between Protestant- and Catholic-dominated contexts. Catholic opposition was not always directed to eugenics *per se*, but rather to the specific practices that rendered sex non-reproductive and thus ran up against Catholic doctrine on the sanctity of life and the function of heterosexual marriage: sterilization especially but also contraception. As the chapters by Mottier, (p. 18) Klausen and Bashford, Schell, and Strange and Stephen discuss, Catholic opposition was organized, strong, and successful in a variety of settings. But it must be remembered that the sterilization procedures so antithetical to Catholic doctrine were highly questionable, even in Protestant and secular states. Moreover, religious unease with eugenics was not limited to Catholics and the Catholic world. In South Africa, pious

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Afrikaner nationalists feared the implicit challenge to a literal interpretation of the Bible that eugenics, as an evolutionary doctrine, offered, as Dubow explains. In a wholly different vein, in the pre-Stalinist era of the Soviet Union, the geneticist Nikolai Kol'tsov (1872–1940) dreamed of a eugenic religion that would provide meaningful shape to people's lives (see the chapter by Kremmentsov).

National eugenic cultures were not infrequently defined and compared historically along a voluntary-compulsory continuum, most often with regard to sterilization. After 1933, when a compulsory sterilization law was passed in Germany, proponents of the legalization of voluntary sterilization put considerable effort into distinguishing their ideals from the German model, as Tydén argues of many Scandinavian states. British eugenicists also sought the legalization of sterilization, but voluntary sterilization was always their aim.<sup>44</sup> Australian, New Zealand, and South African jurisdictions were cautious about compulsory laws, influenced by a strong English liberal tradition against state interventions into homes and bodies. Those Canadian provinces that passed sterilization laws were strongly influenced by the United States, which, while always quick to rhetoricize its commitment to the liberty of the subject, initiated the early-twentieth-century wave of compulsory sterilization law, beginning with Indiana's 1907 Act.

Yet the difference between “voluntary” and “coerced” was oftentimes difficult to discern.<sup>45</sup> As Natalia Gerodetti has argued, “the absence or existence of a legislative basis for sterilization is in itself not much of an indicator for its practice...The absence of regulation, furthermore, potentially leaves practices in the hands of gate keepers or institutional policies.”<sup>46</sup> Historians know that sterilizations took place in institutions irrespective of legal indications at least until the late twentieth century.<sup>47</sup> Yolanda Eraso, for example, has demonstrated the extent to which biological sterilizations took place in Catholic Argentina for eugenic reasons in the 1930s, despite its clear illegality according to the Penal Code, and despite Catholic opposition.<sup>48</sup> Nonetheless, the question of consent was central for eugenicists, as they developed and argued their cases, and for clinicians who sought to avoid regulation.

## Critics of Eugenics

The successful implementation of actual eugenic practice was sometimes quite limited, or at least not as extensive as the promoters of eugenics hoped. In practice, eugenics was hobbled almost everywhere it emerged, sometimes by outspoken and organized religious opposition, sometimes by skeptical scientists, sometimes by individuals who refused to

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live the implications of modern dreams of national fitness and efficiency, and perhaps most often by politicians and jurists. Most of these protagonists questioned, either directly or indirectly, the implications of eugenics for relations between the individual and the state in the modern world. Though we tend to think that eugenics became an object of criticism only in the 1970s, it had attracted opponents and critics from the moment of its emergence. The history of eugenics is by no means a linear shift from unqualified support to unqualified resistance. Rather, it is one of simultaneous enthusiasm and disquiet.

Some of the strongest critics of eugenics were scientists, especially geneticists from the 1930s.<sup>49</sup> As Roll-Hansen's chapter demonstrates, the fast-paced development of genetics in the twentieth century threw doubt on the efficacy of eugenic plans to shape future generations by limiting reproduction. Increasing knowledge of dominant and recessive genes suggested that sterilization of ever larger numbers of people with a supposedly inheritable mental or physical condition would have a limited effect. The U.S. geneticist Herbert Jennings (1868–1947) pointed out in the early 1930s that for many problem populations, the defect was not dominant but recessive, and a large group of asymptomatic “carriers” would always continue to pass on the gene to the next generation, no matter what interventions were made to those with the dominant defect. Jennings did signal, however, the as-yet theoretical possibilities of diagnostics: “negative eugenic measures would be made more effective by the discovery of a method of detecting normal carriers of defective genes: but this cannot now be done.”<sup>50</sup> Here Jennings anticipated the enormous change that took place after prenatal diagnosis and pre-implantation genetic diagnosis of embryos became possible, developments that Bashford discusses in the epilogue.

Geneticists, then, were particularly critical of the sterilization programs that by the 1920s and 1930s were favored in many countries. But eugenics was also frequently opposed by scientists on political as well as scientific grounds. Having put forward his critique of the efficacy of sterilization, Herbert Jennings pointed out the non-scientific character of much eugenics: “National and racial prejudices have entered largely into eugenic propaganda. One of the commonest objectives has been the maintenance of the purity or the dominance of a certain racial or national group—the group selected for preferences being that to which the selectors belong.”<sup>51</sup> While Nazi Germany is always foremost in modern critiques of eugenics, earlier German expressions prompted considerable opposition as well. The British writer G. K. Chesterton (1874–1936) published his scathing *Eugenics and Other Evils* in 1922 in the light of “Prussianism.” Chesterton's position on eugenics was, in his words, “a more general critique of a modern craze for scientific officialdom and strict social organization.”<sup>52</sup> Critics of eugenics included key geneticists such as William Bateson (1861–1926), Lancelot Hogben (1895–1975), and Raymond Pearl (1879–

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1940), as well as social scientists like Franz Boas (1858–1942). Sun Benwen (1892–1979) in China, thought the application of animal breeding techniques to humans a dubious science, and he was openly critical of Chinese eugenics (see the chapter by Chung).

Criticism of eugenics sharpened in and over the postwar assessment and trials of Nazi officials. The so-called Doctors' Trials focused attention on the “euthanasia” program, the sterilization experiments, and genetic-oriented twin experiments.<sup>53</sup> As Bashford discusses in the epilogue, the connection between eugenics, sterilization, (p. 20) and Nazi genocidal policies and practices were drawn especially strongly from the 1970s, when disability, feminist, and anti-racist activists and scholars questioned ongoing discriminatory practice in health and reproductive domains, including sterilization. Details of the Tuskegee syphilis experiment begun in the United States in the 1930s, in which treatment was withheld from African American men in the Alabama county of Macon, were widely disseminated from 1972 and crystallized public conversation about race and medical ethics. This was a period of strongly left-oriented intellectual critique of science, the apogee of postwar anti-science, and anti-psychiatry in particular, leading to a generation of individuals who began to seek compensation for past state practices—for eugenic sterilization, for compulsory confinement, for experimental medical practice. This all coincided with and was driven by a wave of new scholarship on the history of eugenics, and by literature on eugenics in almost every genre, from memoir to novel to psychiatrist Peter R. Breggin's piece, “The Psychiatric Holocaust,” in a 1979 issue of *Penthouse*.<sup>54</sup>

## Conclusion

Mark Adams laid the groundwork for our study two decades ago, in his important comparative collection on Germany, France, Brazil, and Russia.<sup>55</sup> This new collection extends and deepens his important insistence on a comparative approach to the history of eugenics. The chapters that follow survey the global contours of this history, as both a transnational phenomenon of the modern period where particular themes are recognizable in otherwise vastly different locations, and as place-bound histories of colonies, nations, and regions.

The popularity and persistence of what detractors have often called a pseudoscience across such a remarkable variety of political, cultural, and scientific boundaries is itself a phenomenon that demands attention. What made eugenics so attractive, so powerful a pull for policy-makers in the early decades of the twentieth century, and in such different locations? Wherever we look, and whatever other differences marked its emergence,

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eugenics was always centrally about life—and death—in the new scientific frame of evolution, in new kinds of states, and in a newly globalized world.

## Notes:

(1.) Alexander Carr-Saunders, “Eugenics in the Light of Population Trends,” *Eugenics Review* 60 (1968): 46.

(2.) Important early research in this area includes Daniel Kevles, *In the Name of Eugenics: Genetics and the Uses of Human Heredity* (New York: Knopf, 1985); Mark B. Adams, ed. *The Wellborn Science: Eugenics in Germany, France, Brazil, and Russia* (New York and Oxford: Oxford University Press, 1990); Nancy Leys Stepan, “*The Hour of Eugenics*”: *Race, Gender, and Nation in Latin America* (Ithaca, NY: Cornell University Press, 1991).

(3.) Nikolas Rose, *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century* (Princeton, NJ: Princeton University Press, 2008), 58.

(4.) Charles E. Rosenberg, “The Bitter Fruit: Heredity, Disease, and Social Thought,” in *No Other Gods: On Science and American Social Thought*, ed. Charles E. Rosenberg, (Baltimore, MD: Johns Hopkins University Press, 1997), 24–53; Carlos Lopez Beltran, “Heredity Old and New,” in *A Cultural History of Heredity II* (Berlin: Max Planck Institute for the History of Science, 2003), 10; Roger J. Wood and Vítězslav Orel, *Genetic Prehistory in Selective Breeding: A Prelude to Mendel* (Oxford: Oxford University Press, 2001); Staffan Müller-Wille and Hans-Jörg Rheinberger, eds., *Heredity Produced: At the Crossroads of Biology, Politics, and Culture, 1500–1870* (Cambridge, MA: MIT Press, 2007).

(5.) Francis Galton, *Memories of My Life* (London: Methuen, 1908), 323.

(6.) Galton cited in Diane B. Paul, *Controlling Human Heredity: 1865 to the Present* (Atlantic Highlands: Humanities Press, 1995), 3–9.

(7.) John C. Waller, “Ideas of Heredity, Reproduction and Eugenics in Britain, 1800–1875,” *Studies in History and Philosophy of Biological and Biomedical Sciences* 32, no. 3 (2001): 473–475.

(8.) Hilda Herrick Noyes and George Wallingford Noyes, “The Oneida Community Experiment in Stirpiculture,” in *Eugenics, Genetics, and the Family*, eds. Charles Davenport et al. (Baltimore, MD: Williams & Wilkins, 1923), 374–386.

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- (9.) Leta S. Hollingsworth, "Social Devices for Impelling Women to Bear and Rear Children," *American Journal of Sociology* 22, no. 1 (1916): 29.
- (10.) For one analysis of eugenics and peasant populations, see Gary Sigley, "Peasants into Chinamen: Population, Reproduction and Eugenics in Contemporary China," *Asian Studies Review* 22, no. 3 (1998): 309-38.
- (11.) Pauline Mazumdar, "The Eugenists and the Residuum: The Problem of the Urban Poor," *Bulletin of the History of Medicine* 54 (1980): 204-215. See also Angelique Richardson, *Love and Eugenics in the Late Nineteenth Century: Rational Reproduction and the New Woman* (Oxford and New York: Oxford University Press, 2003).
- (12.) Dan Stone, *Breeding Superman: Nietzsche, Race and Eugenics in Edwardian and Interwar Britain* (Liverpool: Liverpool University Press, 2002), 102, 95; See also, Lucy Bland, "British Eugenics and 'Race Crossing': A Study of an Interwar Investigation," *New Formations* 60 (2006-2007): 66-78.
- (13.) A considerable feminist literature has examined colonial attitudes to miscegenation. See Persis Charles, "The Name of the Father: Women, Paternity, and British Rule in Nineteenth-Century Jamaica," *International Labor and Working-Class History* 41 (1992): 4-22; Amirah Inglis, *The White Woman's Protection Ordinance: Sexual Anxiety and Politics in Papua* (New York: St. Martin's Press, 1975); Philippa Levine, *Prostitution, Race and Politics: Policing Venereal Disease in the British Empire* (New York and London: Routledge, 2003); Ann Laura Stoler, "'Mixed-bloods' and the Cultural Politics of European Identity in Colonial Southeast Asia," in *The Decolonization of Imagination. Culture, Knowledge and Power*, eds. Jan Nederveen Pieterse and Bhikhu Parekh (London and New Jersey: Zed Books, 1995), 128-148.
- (14.) For eugenic child-removal in the U.S. context, see, for example, Angela Gonzales, Judy Kertész, and Gabrielle Tayag, "Eugenics as Indian Removal: Sociohistorical Processes and the De(con)struction of American Indians in the Southeast," *The Public Historian* 29, no. 3 (2007): 53-67.
- (15.) William H. Schneider, *Quality and Quantity: The Quest for Biological Regeneration in Twentieth-Century France*, (Cambridge: Cambridge University Press, 1990).
- (16.) See, for example, Kevin Repp, "'More Corporeal, More Concrete:' Liberal Humanism, Eugenics, and German Progressives at the Last Fin de Siècle," *Journal of Modern History* 72, no. 3 (2000): 683-730.

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- (17.) See also Pamela Block, "Institutional Utopias, Eugenics, and Intellectual Disability in Brazil," *History and Anthropology* 18, no. 2 (2007): 177-196.
- (18.) Martin S. Pernick, *The Black Stork: Eugenics and the Death of "Defective" Babies in American Medicine and Motion Pictures since 1915* (New York and Oxford: Oxford University Press, 1996), 23.
- (19.) Michael Burleigh, *Death and Deliverance: "Euthanasia" in Germany, 1900-1945* (Cambridge: Cambridge University Press, 1994).
- (20.) Pauline M. H. Mazumdar, *Eugenics, Human Genetics and Human Failings: The Eugenics Society, Its Sources, and Its Critics in Britain* (London and New York: Routledge, 1992), 58-95.
- (21.) Richard L. Dugdale, *The Jukes: A Study in Crime, Pauperism, Disease, and Heredity* (New York and London: G.P. Putnam's, 1877); Nicole Hahn Rafter, *White Trash: The Eugenics Family Studies, 1877-1919* (Boston, MA: Northeastern University Press, 1988); Alice Wexler, *Mapping Fate: A Memoir of Family, Risk, and Genetic Research* (New York: Random House, 1995); Alice Wexler, *The Woman Who Walked into the Sea: Huntington's and the Making of a Genetic Disease* (New Haven, CT: Yale University Press, 2008).
- (22.) Theodore M. Porter, *Karl Pearson: The Scientific Life in a Statistical Age* (Princeton, NJ: Princeton University Press, 2004).
- (23.) Judith R. Walkowitz, "Science, Feminism and Romance: The Men and Women's Club 1885-1889," *History Workshop Journal* 21, no. 1 (1986): 39.
- (24.) Allen G. Roper, *Ancient Eugenics* (Oxford: Blackwell, 1913).
- (25.) Frank Dikötter, "Race Culture: Recent Perspectives on the History of Eugenics," *American Historical Review* 103, no. 2 (1998): 467-478.
- (26.) Marius Turda and Paul J. Weindling, *"Blood and Homeland": Eugenics and Racial Nationalism in Central and Southeast Europe, 1900-1940* (Budapest: Central European University Press, 2007); Alexandra Minna Stern, *Eugenic Nation: Faults and Frontiers of Better Breeding in Modern America* (Berkeley, CA: University of California Press, 2005).
- (27.) See also Tessa Morris-Suzuki, "Debating Racial Science in Wartime Japan," *Osiris* 13 (1998): 354-375.

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- (28.) Jawaharlal Nehru to the Indian Science Congress, 1938, cited in Benjamin Zachariah, "The Uses of Scientific Argument," *Economic and Political Weekly* 36, no. 39 (2001): 3693.
- (29.) See, for example, William Schneider, "Hérédité, sang, et opposition à l'immigration dans la France des années trente," *Ethnologie Française* 24 (1994): 104-117.
- (30.) Diane Paul, "Eugenics and the Left," *Journal of the History of Ideas* 45 (1984): 567-590; Kevles, *In the Name of Eugenics*; G.R. Searle, "Eugenics and Politics in Britain in the 1930s," *Annals of Science* 36 (1979): 159-169; Richard Cleminson, "A Century of Civilization under the Influence of Eugenics: Dr. Enrique Diego Madrazo, Socialism, and Scientific Progress," *Dynamis* 26 (2006): 221-251.
- (31.) Amir Weiner, "Introduction: Landscaping the Human Garden," in *Landscaping the Human Garden: Twentieth-Century Population Management in a Comparative Framework*, ed. Amir Weiner (Stanford, CA: Stanford University Press, 2003), 2.
- (32.) Ayça Alemdaroğlu, "Politics of the Body and Eugenic Discourse in Early Republican Turkey," *Body and Society* 11, no. 3 (2005): 63.
- (33.) "The language of rights...has become an integral part of the discussion of reproductive practices [because of] the practice of some states in interfering with the freedom of certain groups of individuals to make choices." Sheila McLean, "The Right to Reproduce," in *Human Rights: From Rhetoric to Reality*, eds. Tom Campbell et al, (Oxford: Basil Blackwell, 1986), 114-115.
- (34.) Paul Weindling, "The Origins of Informed Consent: The International Scientific Commission on Medical War Crimes, and the Nuremberg Code," *Bulletin of the History of Medicine* 75, no. 1 (2001): 37-71.
- (35.) Marius Turda and Paul J. Weindling, "Eugenics, Race and Nation in Central and Southeast Europe, 1900-1940: An Historiographical Overview," in Turda and Weindling, *Blood and Homeland*, 7.
- (36.) Christina Cogdell, *Eugenic Design: Streamlining America in the 1930s* (Philadelphia, PA: University of Pennsylvania Press, 2004); Pernick, *The Black Stork*; Daylanne K. English, *Unnatural Selections: Eugenics in American Modernism and the Harlem Renaissance* (Chapel Hill, NC: University of North Carolina Press, 2004); Richardson, *Love and Eugenics in the Late Nineteenth Century*. For one analysis of present-day cultural reception of eugenics, see Ralph Brave and Kathryn Sylva, "Exhibiting Eugenics:

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Response and Resistance to a Hidden History," *The Public Historian* 29, no. 3 (2007): 33–51.

(37.) Zygmunt Bauman, *Modernity and the Holocaust* (Cambridge: Polity Press, 1989); see also Véronique Mottier and Natalia Gerodetti, "Eugenics and Social Democracy: or, How the European Left Tried to Eliminate the 'Weeds' from its National Gardens," *New Formations* 60 (2006–2007): 35–49.

(38.) Michel Foucault, *The History of Sexuality: An Introduction* (Harmondsworth: Penguin, 1987), 149. For studies of Foucault, eugenics, and modernity, see C. Hanson, "Biopolitics, Biological Racism and Eugenics," in *Foucault in an Age of Terror: Essays on Biopolitics and the Defence of Society*, eds. Stephen Morton and Stephen Bygrave (Basingstoke: Palgrave, 2008), 106–117; Alan Milchman and Alan Rosenberg, "Michel Foucault, Auschwitz and Modernity," *Philosophy & Social Criticism* 22 (1996): 101–113.

(39.) For example, Marius Turda, "The Nation as Object: Race, Blood, and Biopolitics in Interwar Romania," *Slavic Review* 66, no. 3 (2007): 413–441; see also, Alison Bashford, *Imperial Hygiene: A Critical History of Colonialism, Nationalism, and Public Health* (Basingstoke: Palgrave, 2004) chap. 7.

(40.) Benoy Kumar Sarkar, *The Sociology of Population with Special Reference to Optimum, Standard of Living and Progress* (Calcutta: N.M. Ray-Chowdhury, 1936), 18.

(41.) William Schneider, "Puériculture and the Style of French Eugenics," *History and Philosophy of the Life Sciences* 8 (1986): 265–277.

(42.) Francis Galton, *Inquiries into Human Faculty and its Development* (London: Macmillan, 1883).

(43.) John Humphrey Noyes, *First Annual Report of the Oneida Association* (Oneida Reserve: Leonard, 1849), 34; Anita Newcomb McGee, "An Experiment in Human Stirpiculture," *American Anthropologist* 4, no. 4 (1891): 319–326.

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(45.) Ian Dowbiggin, *The Sterilization Movement and Global Fertility in the Twentieth Century* (Oxford and New York: Oxford University Press, 2008), 34.

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(47.) See, for example, Elena Gutierrez, *Fertile Matters: The Politics of Mexican-Origin Women's Reproduction* (Austin, TX: University of Texas Press, 2008); Alexandra M. Stern, "Sterilized in the Name of Public Health: Race, Immigration and Reproductive Control in Modern California," *American Journal of Public Health* 95, no. 7 (2005): 1128–1138.

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(50.) Herbert Jennings, "Eugenics," in *Encyclopedia of the Social Sciences*, eds. Edwin Seligman and Alvin Johnson, vol. 5 (New York: Macmillan, 1931), 619.

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