"The Hour of Eugenics"

RACE, GENDER, AND NATION IN LATIN AMERICA

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Introduction: Science and Social Knowledge

This book addresses the scientific and social movement known as eugenics, a word invented in 1883 (from the Greek *eugenēs*, meaning "wellborn") by the British scientist Francis Galton to encompass the social uses to which knowledge of heredity could be put in order to achieve the goal of "better breeding."[1] Others defined eugenics as a movement to "improve" the human race or, indeed, to preserve the "purity" of particular groups. As a science, eugenics was based on supposedly new understanding of the laws of human heredity. As a social movement, it involved proposals that society ensure the constant improvement of its hereditary makeup by encouraging "fit" individuals and groups to reproduce themselves and, perhaps more

1. It was the U.S. eugenist Charles B. Davenport who gave this succinct definition in his book *Heredity in Relation to Eugenics* (New York: Henry Holt, 1911), p. 1. *Please note*: Throughout this book I have chosen to refer to the people pursuing eugenics as "eugenists." This usage is contrary to current fashion (in which "eugenicists" is preferred) but historically one of the possible appellations, and the one normally used in British eugenics before World War II. That eugenics originated as an idea in Britain is one reason for prefering the term.

Portuguese spelling: Portuguese spelling and accenting have undergone several changes in the course of the twentieth century. I have used modern spellings and diacritical marks for people's names in the text but have retained the original orthography in the citations, in the belief that this practice would aid other historians. Unless otherwise indicated, translations are my own.

important, by discouraging or preventing the "unfit" from contributing their unfitness to future generations.

Practically speaking, eugenics encouraged the scientific and "rational" management of the hereditary makeup of the human species. It also introduced new social ideas and innovative policies of potentially explosive social force—such as the deliberate social selection against supposedly "unfit" individuals, including involuntary surgical sterilization and genetic racism.

The historical significance of eugenics, as well as the possible relevance of eugenics to current developments in human genetics and reproduction, has stimulated a surge of interest in the eugenics of the interwar years. This said, however, it is still surprising how restricted the study of eugenics is, especially when we consider the quasi-international currency of eugenics between the two world wars and its connections to many of the large themes of modern history, such as nationalism, racism, sexuality and gender, social hygiene, and the development of modern genetics itself. Eugenics societies, organizations, pressure groups, and legislation appeared in countries as different from one another as England, Italy, France, Japan, the Soviet Union, Sweden, Peru, and Australia, yet new studies of eugenics hardly reflect this fact. Recent work focuses largely on Britain and the United States, with even Germany, where eugenics reached its apogee of extremity and nastiness in National Socialism, coming a distant third.

"Latin" areas (the term used by the Latin International Federation of Eugenics Societies, founded in 1935, to refer to Italy, France, and Belgium as well as Latin American countries) are usually ignored, especially Latin America. Yet not only was Latin America oriented to Western science and medicine, and very receptive to European values and ideas; it was the only "third world" and yet postcolonial region where eugenics was taken up in a more or less systematic way. I argue in this book that Latin America is significant precisely because it challenges the more common understanding based on what Daniel Kevles has characterized as the "mainline" eugenics movements of Europe and the United States.[2] The inclusion of Latin American cases—and, more generally, the European Latin countries

2. See Daniel J. Kevles, *In the Name of Eugenics: Genetics and the Uses of Human Heredity* (New York: Knopf, 1985), chap. 6. This is one of the fullest and best accounts of eugenics in Britain and the United States.

with which the region associated itself in eugenics—gives us an expanded sense of the parameters of eugenics and goes a long way, I believe, to explain the extraordinary appeal of a scientific reform movement that after World War II was found to be morally and scientifically unacceptable.

The historical neglect of eugenics in Latin America is, of course, part of the larger neglect of the history of intellectual and cultural life in an area generally presented as being either out of the mainstream or only dimly reflecting European thought. The European bias of the history of ideas is well known, but it is especially strong in science. Latin America is often ignored altogether or it is treated as a consumer and not as a contributor of ideas, and a fairly passive one at that. The implicit assumption is that intellectual historians of Latin America are studying only an attempt to imitate or reproduce a European activity in an alien or unscientific setting. The intellectual gaze always moves from a center outward, toward a problematic periphery.

What historians often fail to appreciate is the contribution a region such as Latin America can make to our knowledge of how ideas become part of the complex fabric of social and political life; historians give too little weight to the construction of intellectual and scientific traditions within the region or to the way these traditions shape the meaning given to ideas, as subjects of interest in their own right. The varied processes of selection and reassemblage of ideas and practices, of their creative elaboration and modification, undertaken by specific groups of people in specific institutional, political, and cultural locations, are left out of consideration. Rarely is the case made that studying an aspect of modern culture in such an area as Latin America may actually change how we understand the meaning of ideas in general; or that Latin American intellectual history may make a difference in how we define a major set of ideas such as Darwinism or what is to count *as* Darwinism—or more generally, as Thomas F. Glick has said, what is to count as normative in intellectual or scientific history.[3]

In this book I argue precisely this point, namely that when we

3. See Glick's discussion in "Reception Studies since 1974," in *The Comparative Reception of Darwinism*, ed. Thomas F. Glick (Chicago: University of Chicago Press, 1988), pp. xi–xxviii; and his observations in "Cultural Issues in the Reception of Relativity," in *The Comparative Reception of Relativity*, ed. Thomas F. Glick (Boston: D. Reidel, 1987), pp. 381–400.

study the history of eugenics in Latin America, as a special kind of social knowledge produced out of, and shaped by, the political, historical, and cultural variables peculiar to the area, our understanding of the meaning of eugenics in general is altered.[4] The terminology of "center" and "periphery" loses much of its analytical force. The book, then, turns what is an implicit convention of intellectual and cultural history on its head by proposing that careful consideration of at least one aspect of the history of ideas and its associated social practices in Latin America will suggest new ways of conceptualizing the meaning of eugenics in the modern era. Eugenics was not unitary and could not be appropriated wholesale. The study of eugenics in Latin America reveals some of the contradictory impulses within the movement and the diverse ways it could be taken up.

The "Normality" of Eugenics

Many people have only a very vague recollection of the word "eugenics" and are often hard put to say what exactly it means. An idea and a movement that once had considerable resonance in the world have almost disappeared from public view. There are good historical and moral reasons for this disappearance, the main one being the link between eugenics and the ghastly acts of the Nazis, who forcibly sterilized hundreds of thousands of people (1 percent of Germany's population) "in the name of eugenics."[5] Another feature of Nazi eugenics is what Robert Jay Lifton, in his powerful and disturbing account of the Nazi doctors, refers to as the "malignant blending of biomedical and politico-racial ideologies."[6] After World War II Nazi eugenics was rightly condemned as a gross perversion of science and morality; the word itself was purged from the vocabulary of science and public debate.

Yet equating eugenics with fascist Germany is problematic on two counts. First, it conceals crucial continuities in eugenics be-

4. Everett Mendelsohn, in "The Social Construction of Scientific Knowledge," remarks that "scientific knowledge is [therefore] fundamentally social knowledge"; see *The Social Production of Scientific Knowledge*, ed. E. Mendelsohn, P. Weingart, and R. Whitley (Boston: D. Reidel, 1977), p. 4.

5. The phrase comes from the title of Kevles's *In the Name of Eugenics* [note 2].

6. Robert Jay Lifton, *The Nazi Doctors: Medical Killing and the Psychology of Genocide* (New York: Basic Books, 1986), p. 274.

tween the fascist and prefascist periods.[7] Second, it tempts historians to avoid discussing the involvement of many other nations in the eugenic experiment. Intellectual practice further aids such avoidance. Historians of science, especially, have a strong tendency to dismiss ideas that later seem obviously biased or hopelessly out of date as "pseudoscientific." Calling eugenics pseudoscientific is a convenient way to set aside the involvement of many prominent scientists in its making and to ignore difficult questions about the political nature of much of the biological and human sciences.

In fact, one of the puzzles about eugenics is that, far from viewing it as a bizarre notion of extremists at the fringes of respectable science and social reform, many well-placed scientists, medical doctors, and social activists endorsed it as an appropriate outcome of developments in the science of human heredity. The success of the First International Eugenics Congress, held in London in 1912, suggested the potentially wide appeal of eugenics, with some 750 participants from several European countries as well as the United States. Two further international eugenics congresses followed in 1921 and 1932 (both in New York). An International Federation of Eugenic Societies was founded in 1921 to coordinate the activities of the numerous national organizations and the various legal initiatives developed since 1912. Eugenics had become so much a part of health reform by the 1920s that a whole discursive field had been, in effect, "eugenicized." Eugenics had its critics, and many of its more extreme social goals and legislative ambitions failed to be met; yet the notion that human individuals and groups varied in their hereditary value and that one day, if not immediately, social policies should be based on these differences was widely accepted in many countries as fundamentally correct.

In recent years, an appreciation of the ubiquity and even the "normality" of eugenic themes and practices between the two world

7. Recent works on German eugenics, before and during the Nazi period, include Paul Weindling, *Health, Race, and German Politics between National Unification and Nazism, 1870–1945* (Cambridge: Cambridge University Press, 1989); Robert N. Proctor, *Racial Hygiene: Medicine under the Nazis* (Cambridge: Harvard University Press, 1988); Sheila Faith Weiss, "The Race Hygiene Movement in Germany," *Osiris* 2d ser. 3 (1987): 193–236, and *Race Hygiene and National Efficiency: The Eugenics of Wilhelm Schallmayer* (Berkeley: University of California Press, 1987); and Peter Weingart, "The Rationalization of Sexual Behavior: The Institutionalization of Eugenics in Germany," *Journal of the History of Biology* 20 (1987): 159–93, and his "German Eugenics between Science and Politics," *Osiris* 2d ser. 5 (1989): 260–82.

wars has led historians to reevaluate eugenics as a social and scientific movement. We are beginning to write the history of eugenics prospectively rather than retrospectively, from the beginning forward, rather than from the end backward. In some respects it may be more important to study eugenics in its non-Nazi forms, because Nazi eugenics was so brutal, so excessive, and so terrifying that it is tempting to view it as a historical aberration. We need to recapture "ordinary" eugenics and its social meanings. What made scientists give their support to ideas and practices that later would seem not only scientifically unsupportable but immoral? Why were over seventy thousand individuals in the United States sterilized involuntarily for eugenic purposes? How did the ordinary eugenics of the 1920s and early 1930s become the extraordinary eugenics of Nazi Germany?[8]

As a topic of study, eugenics offers the historian an opportunity to examine the relationships between science and social life—how social life structures or influences actual developments in hereditarian science, and the uses to which hereditarian science may be put. Eugenics has the further advantage of being contemporary and yet historical: contemporary in that the problems of erecting social policies on the basis of new knowledge in the field of human genetics and reproductive technology are especially pressing today, yet historical in the sense that the eugenics of the pre-1945 period can be viewed as a relatively closed phenomenon of the past on which we can gain some perspective.[9]

Here the study of Latin American eugenics acquires its significance. As I have already stated, even our best studies make no mention of Latin America.[10] This omission would matter little if we

8. Recent works on American and/or British eugenics include Kevles, *In the Name of Eugenics* [note 2]; G. R. Searle, *Eugenics and Politics in Britain* (Leyden: Woordhoff, 1976); Donald A. McKenzie, *Statistics in Britain, 1865–1930: The Social Construction of Scientific Knowledge* (Edinburgh: Edinburgh University Press, 1981); Greta Jones, *Social Hygiene in Twentieth-Century Britain* (London: Croom Helm, 1986).

9. Some people argue that current reproductive technologies and knowledge about genetics involve implicit eugenic issues and decisions that link the present to the past; others maintain that social and policy issues are difficult but not related to eugenics—that is, they do not involve differential breeding of human populations to improve overall genetic fitness.

10. Other Latin countries whose eugenics movements show a family likeness to the Latin American are France, Spain, and Italy. French eugenics, which has an important bearing on Latin American eugenics, has been analyzed recently by William H. Schneider in *Quality and Quantity: The Quest for Biological Regeneration in*

were assured that eugenics always had the same meaning wherever it was found. But meaning, in science as in any other facet of intellectual and cultural life, is never stable. Instead of using prior definitions to exclude novel examples from eugenics, we should extend our historical accounts and, in so doing, probe more deeply the significance of eugenics to modern history. As a region, Latin America is especially rewarding for the analysis of the kinds of themes I have outlined. It was Western in outlook and orientation, yet not merely an imitation of Europe; American, but not North American; "third world" in its poverty, inequality, and dependency but not uniformly poor and similarly dependent across the spectrum of Latin American countries; ethnically and culturally complex, and the site of troubling racist ideologies; culturally Catholic and deeply shaped by traditional gender ideologies, yet not immune to the pull of secularism and modernity. Then, too, the region was involved in nationalist self-making, in which the setting of boundaries between self and other and the creation of identities were increasingly carried out by and through scientific and medical discourses.[11]

Twentieth-Century France (New York: Cambridge University Press, 1990); see also his chapter in *The Wellborn Science: Eugenics in Germany, France, Brazil, and Russia*, ed. Mark B. Adams (New York: Oxford University Press, 1990), pp. 69–109. The French historian Jacques Léonard has contributed some useful articles: see "Le Premier Congrès International d'Eugénique (Londres, 1912) et ses conséquences françaises," *Histoire de Sciences Médicales* 17 (1983): 141–46, and "Eugénisme et Darwinisme: Espoirs et perplexités chez des médecins français du XIXe siècle et du début du XXe siècle," in *De Darwin au Darwinisme: Science et idéologie*, ed. Y. Conry (Paris: Vrin, 1983), pp. 187–207. On Spanish eugenics, see Raquel Alverez Paláez, "Introducción al estudio de la eugenesia española (1900–1936)," *Quipu: Revista Latinoamericana de Historia de las Ciencias y la Tecnología* 2 (1985): 95–122; "El Instituto de Medicina Social: Primeros intentos de institucionalizar la eugenesia," *Asclepio: Revista de Historia de la Medicina y de la Ciencia*, xl, 1 (1988): 343–58; and "Eugenesia y control social," *Asclèpio*, xl, 2 (1988): 29–69. See also Mary Nash, "Ordenamiento jurídico y realidad social del aborto en España: Una aproximación histórica," in *Ordenamiento jurídico y realidad social de las mujeres: Siglos XVI a XX* (Madrid: Seminario de Estudios de la Mujer, Universidad Autónoma de Madrid, 1986), pp. 223–39. One of the few accounts of Italian eugenics I have come across is Claudio Pogliano, "Scienza e stirpe: Eugenica in Italia (1912–1939)," *Passato e Presente* 5 (1984): 61–97.

11. I have analyzed aspects of the Latin American medical tradition in several publications: *Beginnings of Brazilian Science: Oswaldo Cruz, Medical Research and Policy, 1890–1920* (New York: Science History Publications, 1976); "Initiation and Survival of Biomedical Research in a Developing Country: The Oswaldo Cruz Institute of Brazil, 1900–1920," *Journal of the History of Medicine and Allied Sciences* 30 (1975): 303–25; and "The Interplay between Socio-Economic Factors and Medical Science: Yellow Fever Research, Cuba, and the United States," *Social Studies of Science* 8 (1978): 397–423.

Latin American eugenics is of further comparative interest because Latin Americans were, to most eugenists situated outside the region, regarded as "tropical," "backward," and racially "degenerate." Not eugenic, in short. And yet Latin Americans had their own eugenic movements and activities. How then was eugenics defined? Who took it up and why? What social meanings got embedded in the science of heredity between the two world wars? What did "race" mean in a movement for racial improvement? All these questions are tied to the larger issue of how a sector of the intelligentsia in Latin America used the supposedly universal discourse of science to interpret modernity and progress.

I originally began my investigation with eugenics in Brazil. I found that there was much about eugenics, in its science and in its social style, that seemed unusual. First, the eugenists based their eugenics not on Mendelian conceptions of genetics, the dominant framework in Britain, the United States, and Germany, but on an alternative stream of Lamarckian hereditary notions. This style of eugenics reflected long-standing scientific connections with France as well as more local factors of political culture; it also helped structure debates about degeneration and determined how the new genetics and the sanitation sciences would interact in novel fashion in "eugenics." If Brazilian eugenics was distinctive in its scientific base, it was also distinctive in its application to the critical areas of reproduction and sexuality. In this first study I also began to explore how racial ideology in Brazil affected the way eugenics entered scientific discourse and social debate, and how eugenics became a source of interpretetive contention between various groups seeking to use eugenics for their different political projects. Since that first exploration of eugenics in Latin America, I have widened my net to include eugenics in several other parts of the region.[12]

In the last decades of the nineteenth century, eugenics emerged as an idea in many areas of Latin America as part of the debates about evolution, degeneration, progress, and civilization. But its more systematic development came after World War I, with the establishment of specific eugenics societies and organizations. Thereafter, eu-

12. Nancy Leys Stepan, "Eugenesia, genética y salud pública: El movimiento eugenésico brasileño y mundial," *Quipu: Revista Latinoamericana de Historia de las Ciencias y la Tecnología* 2 (1985): 351–84; and "Eugenics in Brazil, 1917–1940," in *Well-born Science* [note 10], pp. 110–52.

genics touched or influenced the history of medicine, the family, maternity, population, criminology, public health, and social welfare. Many legislative efforts concerning human reproduction, the control of disease, and the regulation of immigration in Latin America can be fully understood only by taking into account eugenic concepts, which at the very least gave them their rhetorical structure and their medical-moral rationale. Eugenics was significant because it occupied the cultural space in which social interpretation took place, and because it articulated new and compelling images of health as a matter of heredity and race.

To enter the world of Latin American eugenics is to enter an unexplored area of human activity and political pressure and to discover forgotten languages of science. Strange fields of knowledge, with such curious and now discarded names as "puericulture," "maternology," "euphrenics," and "nipology," are brought back into view and a semiological terrain is reconstructed and surveyed.[13] Eugenics was a discursive project that provided a framework for cultural prescription and medical-moral investigation. It is this project that my book seeks to elucidate.

Science, Race, and Gender

Before outlining the plan of the book, however, I need to introduce some major concepts and related theoretical orientations that inform my empirical research. The concepts concern science, race, and gender, and my orientation to them is, broadly speaking, "constructivist." By drawing attention to these concepts and approaches, I believe we can rethink the meaning of eugenics as a social-medical movement of modern times.

First, I assume, along with many historians of science today, that science is a highly social activity and is not sealed off from the values of the society in which it is practiced. From the more traditional concern with the reconstruction of the internal coherence of major

13. Two contemporary accounts in French were M. T. Nisot, *La question eugénique dans divers pays* (Brussels: Librairie Faile, 1927), and Henri-Jean Marchaud, *L'évolution de l'ideé eugénique* (Bordeaux: Imprimerie-Librairie de l'Université, 1933). A somewhat rare secondary (and late) account in Spanish by a Latin American is Roberto Mac-Lean y Estenos, *La eugenesia en América* (Mexico City: Instituto de Investigaciones Sociales, Cuadernos de Sociología, Imprenta Universitaria, 1952).

theories in science, historians have shifted their attention toward more sociological and/or naturalistic views of science as a product of culture and social life. Although interest in science as an internally consistent and internally driven kind of empirical knowledge has not disappeared, many historians have begun to explore science contextually and to examine the way elements of society conventionally considered external and only indirectly connected to science become constituent parts of scientific theories themselves, as well as of their associated scientific practices.[14] As a result, science reveals itself as much more contingent and culturally specific than it has been thought to be. This issue raises complex interpretive issues that cannot be gone into in detail here, but its application to an area of the human sciences like eugenics is clear.[15] Since eugenics was both a science and a social movement, it lends itself to a constructivist approach in which political and other factors surrounding the development and endorsement of particular genetic theories, and the social policies derived from them, can be explored. The study of eugenics allows historians to move from abstract notions about the possible social generation of scientific knowledge to more historically nuanced, locally specific studies of science in culture. This is the way I have examined eugenics in Latin America—first, as a science of heredity that was shaped by political, institutional, and cultural factors particular to the historical moment and place in which it appeared; and, second, as a social movement with an explicit set of policy proposals that appeared to their proponents to be suggested by, or be logically derived from, hereditarian science itself.

14. A convenient way of dating the "new" history of science is from the appearance in 1962 of Thomas S. Kuhn's book *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 2d ed. 1972). Although Kuhn's work was primarily intellectualist in emphasis rather than sociological, it did raise new questions about the sociology of knowledge. For a review of the new sociology of science, with bibliography, see Michael Mulkay, "Sociology of Science in the West," *Current Sociology* 28(3) (1981): 1–184; for an account of the new social history of science see Steven Shapin, "History of Science and Its Sociological Reconstructions," *History of Science* 20 (1982): 157–211; realist, constructivist, and contextualist approaches to scientific knowledge are reviewed and analyzed by Karin D. Knorr-Cetina in her book *The Manufacture of Knowledge: An Essay on the Constructivist and Contextual Nature of Science* (London: Pergamon Press, 1981).

15. Some of the most interesting work in the sociology and social history of scientific theory, however, has been done in the physical sciences; an example is Andrew Pickering, *Constructing Quarks: A Sociological History of Particle Physics* (Chicago: University of Chicago Press, 1984).

A corollary of the new constructivist history of science is that historians no longer conceptualize science as depicting "reality" in any straightforward or transparent fashion but rather as constructing or creating the objects it studies and giving them their empirical weight and meaning. Genetics and eugenics, for example, created and gave scientific and social meaning to new objects of study, such as the supposed hereditarily unfit or "dysgenic" individuals or groups that constituted particular human populations. In this sense, science is seen as a productive force, generating knowledge and practices that shape the world in which we live. In this book, I explore how, through the science and social movement associated with the new field of genetics (a word coined in 1905), cultural meaning was encoded within and by science. Science carries immense social authority in the modern world—an authority based on its claim to facticity, neutrality, and universality. I hope to show how eugenics, perceived as a science, produced perceptions and techniques that shaped cultural interpretations and led to the development of social strategies.

Closely connected to these issues of scientific interpretation is the issue of race. As a science of "race improvement," some concept of race was of course built into eugenics from the start. At times "race improvement" meant merely the genetic improvement of "the human race" or "our people"; more often, however, eugenists were concerned with particular portions of the human population, which they perceived as being divided into distinct and unequal "races." Although no other eugenics movements went so far as the Nazis in exterminating races in the name of eugenics, most employed racist discourse as defined by Pierre-André Taguieff. Groups self-identified as dominant marked off other groups as inferior, through a language that asserted differences and created boundaries. These differences were presupposed to be fixed and natural (e.g., biological) and to limit each individual member to a fundamental "type." As a movement derived from ideas about biological heredity, eugenics provided a new set of conceptions and political principles with which to express and constitute differences within the social body.[16]

16. See Pierre-André Taguieff, "Racisme et antiracisme: Modèles et paradoxes," in *Racismes, antiracismes*, ed. André Béjin and Julien Freund (Paris: Librairie des Méridiens, 1986), pp. 253–302, and his book *La force du préjugé: Essai sur le racisme et ses doubles* (Paris: Editions la Découverte, 1988), esp. chaps. 8 and 9.

Eugenics was connected to another set of differences, those of sex and gender. Histories often mention that eugenics was related to women, but usually more in passing than as a central theme. This omission is surprising, since the novelty of eugenics as a scientific-social movement lay in its concentrated focus on human reproduction as the arena for the play of science and social policies. It aimed to identify the supposedly "dysgenic" features of the body or behavior caused by heredity in individuals and groups and to find social means to prevent bad heredity from continuing. Eugenists were especially concerned with women because they took reproduction to define women's social role far more than it did that of men; women were also more socially vulnerable and dependent than men, making management of their reproductive-hereditary lives seem more urgent and more possible. Eugenic prescriptions and proscriptions therefore fell differentially on men and women. In this book, I examine how eugenics defined biological and cultural distinctions of gender and how race and gender intertwined to construct new images and social practices of the "fit" nation.

In keeping with the social constructivist approach outlined earlier, I assume that racial and gender definitions are not "given" by nature but are historically constituted in different ways in different historical periods. In the case of gender, this assumption is based on the insight developed over the last several years by many scholars, notably feminist ones, that many of the things we think of as natural, "essential," or timeless facts of sexual difference are not the results of anatomy and physiology understood unproblematically and objectively by the inquiring mind of the neutral observer, but instead complicated and essentially social constructions connected to larger practices and institutions in society. Feminist scholars have introduced the word "gender" in English-language discussions precisely to indicate that our understanding of sexual differences, or the social and political roles taken to be appropriate to those differences, are not, as they have often been taken to be, obvious or based in simple ways on well-known differences of sexual physiology and anatomy. Sexual differences in reproduction are not enough to explain why women in the past have been denied the vote, excluded from certain kinds of work, and treated as legal minors. These aspects of women's lives are instead related to gender and are essentially political and normative, not biological and anatomical. Some feminists would go further to argue that even the seemingly most obvious

facts of biology differentiating the sexes (e.g., hormone differences) are also socially constituted, so that gender assumptions are always part of our understanding of biological sex and vice versa.[17] I have used gender in this book to indicate that sexual differences are constructed most powerfully around naturalized social categories and that in this process of naturalization science has played a crucially important role.

No equivalent word to "gender" exists to indicate the socially constituted character of the "races" represented in European science and politics. Yet the argument for their politically and historically constructed character is compelling. Scientists' many disputes over racial classifications, and the inability to find a classification that would satisfy once and for all the requirement for authoritative ways to divide the human species into fixed types, are powerful indicators that racial categories are not representations of preexisting biological groups transparently understood but distinctions based on complex political-scientific and other kinds of conventions and discriminatory practices. Racial distinctions are not timeless but have constantly been renegotiated and experienced in different ways in different historical periods. We should think, then, of the races that constituted the objects of the movement of race improvement as "artifactual" aspects of the human sciences. I take this term to refer to an object of knowledge that is constructed as a biological and social "fact" grounded in what is taken to be empirical nature. At the same time, the term indicates that we do not experience human variation or human difference "as it really is, out there in nature," but by and through a system of representations which in essence creates the objects of difference. This book asks what part eugenics played in the construction of race and gender differences, and how gender and

17. These insights are the work of many authors. For a succinct summary of the feminist understanding of gender, see Joan Wallach Scott, *Gender and the Politics of History* (New York: Columbia University Press, 1988), esp. chap. 2. For a telling critique of the biological "facts" of sex difference, see especially Evelyn Fox Keller, "Women Scientists and Feminist Critics of Science," *Daedalus* 4 (Fall 1987): 77–92, and her "The Gender/Science System; or, Is Sex to Gender as Nature Is to Science?" *Hypatia* 2 (Fall 1987): 37–49. Along rather different lines, there is Anne Fausto-Sterling, *Myths of Gender: Biological Theories about Women and Men* (New York: Basic Books, 1985). See also Nelly Oudshoon, "On Measuring Sex Hormones: The Role of Biological Assays in Sexualizing Chemical Substances," *Bulletin of the History of Medicine* 64 (1990): 243–61, and my own article "Race and Gender: The Role of Analogy in Science," *Isis* 77 (1986): 261–77.

race discursively intertwined in the debates about identity and fitness.[18]

The Scope and Plan of the Book

I have made two choices about the scope of this book. First, I have viewed eugenics primarily through the prism of the movement itself. This book is a history, therefore, of the individuals, publications, and institutions of eugenics, in their prescriptive and proscriptive aspects. This choice was dictated by practical considerations, especially the novelty of my topic in Latin American studies and the lack of secondary materials on even closely related themes. By and large, histories of Latin American intellectual life and institutions, the professions, public health, and women—all matters having a bearing on my theme—are tasks for the next generation of scholars. I am especially sorry to have to leave for another book, or another historian, the study of the reactions of the people, most of them poor and many of them illiterate, who were the targets of the eugenists' ill-considered plans and policies. But by concentrating on the individuals and groups who self-consciously promoted scientific eugenics, I have been able to emphasize the political significance of the knowledge-claims of the eugenists in the areas of human heredity and health. I have been able, that is, to keep at the center of my analysis the problem of eugenics as a movement based on science or claiming legitimacy because of its connections to science. Throughout the book, in fact, issues relating to science and social action are kept in the foreground, to a degree perhaps not common in other historical studies of eugenics.

My second choice has been to focus on three Latin American countries as exemplary of eugenics in the region. The three are Bra-

18. The historical literature on race and race difference is large. An excellent starting point is Stephen Jay Gould's book *The Mismeasure of Man* (New York: Norton, 1981), where he explores the variety of ways "race" was created through scientific theory and practice in the nineteenth and early twentieth centuries. I also discuss races as historical-social constructions within science in *The Idea of Race in Science: Great Britain, 1800–1960* (London: Macmillan, 1982). In the introduction to that book, I discuss how "lowland Scots," "Celts," and "Mediterraneans" (to take only a few examples) were counted as biological races at various times in the nineteenth century. See also the analysis in my article "Biological Degeneration: Races and Proper Places," in *Degeneration: The Dark Side of Progress*, ed. J. Edward Chamberlin and Sander L. Gilman (New York: Columbia University Press, 1985), pp. 97–120. I first heard the term "artifactual" from Donna Haraway.

zil, Argentina, and Mexico. This selection has allowed me to explore enough Latin American examples to see whether a Latin family likeness in eugenics existed and to sort out some of the factors that might be connected to such a family. The analysis, then, is explicitly and implicitly comparative—explicitly within Latin America itself, and implicitly with Europe and the United States. The three countries chosen were the most populous in Latin America. Each had an organized interest in eugenics and all were sufficiently involved in the world of science to be selective users of hereditarian ideas and to adapt them to local interests and necessities.[19] At the same time, these countries differed sufficiently—in social structure, racial makeup and ideology, economic development and politics—to provide interesting comparisons within the Latin American setting.

Brazil was a leader in Latin America in the biomedical and sanitation sciences in the first two decades of the twentieth century, and the first to establish formally a eugenics society. Brazil's population was racially mixed, illiterate, and poor, and the country's small, largely European, intelligentsia had long been preoccupied with the racial identity and health of the nation when eugenics appeared on the scene. The notion that racial improvement could be achieved scientifically therefore had considerable appeal to medical doctors and social reformers. In these circumstances, the potential existed for an extreme race-hygiene movement; but so did political space for less extreme definitions of the meaning of eugenics for the nation.

Argentina, with Brazil, was the most advanced scientifically of the Latin American countries. It was also by far the wealthiest in the 1920s and 1930s. Racially, however, Argentina took its identity to be white, not mulatto or black; the Indian population of the country had been drastically reduced by violent campaigns of conquest and control; large-scale European immigration, mainly from Italy and Spain, had led to the idea that Argentina was a potential Europe in the Americas. In the circumstances, eugenic debate revolved mainly around which of the European "races" and which social classes best represented Argentine nationality and what could be done to make

19. The three are historically and currently the largest contributors to science from Latin America. See Patricia McLauchlan de Arregui, *Indiciadores comparativos de los resultados de la investigación científica y tecnológica en América Latina* (Lima, Peru: GRADE, 1988).

that nationality fit. Given the strong personal and institutional connections between Argentina and Mussolini's Italy in the 1930s, Argentina provides an important example of the ties between fascism and eugenics in Latin America.

Mexico stands out as the only country in Latin America to have undergone a profound social and political upheaval in the early twentieth century. The Mexican Revolution that began in 1910 shattered the old political arrangements, altered the ideological landscape, and transformed the national state. The revolutionary and secular setting of eugenics in Mexico was therefore very different from the setting in Brazil and Argentina. Yet if eugenics was associated with radicalism (and so revealed as not a monopoly of the right), Mexicans shared with other Latin Americans a deep concern with the health and racial makeup of their country. The country's semiofficial, revolutionary view of its population as biologically united in a superior, mestizo or "cosmic" race, in which merged all the different racial elements of the country, was undercut by the real political and social marginalization of the unacculturated Indians. Again a question is raised about what form eugenics would take in such circumstances.

The histories of eugenics in these three countries are organized thematically. Chapter 1 briefly introduces the scientific and political meaning of eugenics as it has normally been understood in Europe and North America and prepares the way for a different interpretation of eugenics in Latin America. In Chapter 2, I turn to Latin America as a setting for eugenics in the 1920s. With Brazil as my starting point, I analyze the political, social, and other factors that set the stage for eugenics ideologies and policies after World War I. I identify which individuals and groups embraced eugenics, where they were located professionally and socially, what kinds of institutions they established.

In Chapter 3, I explore in some detail how eugenics was first interpreted in the 1920s as a new kind of social hygiene. All three countries I examine were "postcolonial" and politically independent, yet they were bound up in the networks of the informal empires of Europe and the United States.[20] Long-standing cultural ties to France

20. The use of eugenics in colonial settings in the 1920s and 1930s is just beginning to be studied. A particularly interesting analysis is by Ann Laura Stoler, "Making the Empire Respectable: Race and Sexual Morality in Twentieth-Century Colonial Cultures," *American Ethnologist* 16 (1989): 634–60.

were especially important in suggesting a "soft" style of eugenics which was distinct from the "hard" Mendelian eugenics familiar to us from Britain and the United States. Genetics was not, in the period between 1900 and 1940, a monolithic or homogeneous body of knowledge; different approaches competed for scientific attention and political appropriation. Early on, eugenics in Latin America was associated theoretically with flexible neo-Lamarckian notions of heredity (in which no sharp boundaries between nature and nurture were drawn) and practically with public-health interventionism.

The outcome was a "preventive" eugenics directed to improving the nation by cleansing from the milieu those factors considered to be damaging to people's hereditary health. As a style, preventive eugenics extended the tradition of medical environmentalism into the new era of genetics and thereby did much to give eugenics its initial appeal to medical experts. Nonetheless, preventive eugenics did less to improve public health in Latin America (most of the eugenists' social-welfare recommendations were never implemented) than to promote new, biologically governed norms of social behavior which were justified in the name of hereditarian science—something new, modern, and in keeping with the scientific standards of Europe.

In Chapter 4, I turn to eugenics in the area of human reproduction. I explore what I call, borrowing from the Latin Americans themselves, "matrimonial eugenics." The germ plasm the eugenists believed to be altered for the worse by acquired heredity was transmitted to future generations in sexual reproduction. Some kind of control over the quality of that reproduction therefore became the goal of most eugenics movements. Here I am interested not just in the kinds of proposals the eugenists made but in the ways these proposals constructed gender, both female and male, in new terms. The issue of policies is additionally important because many of the radical and negative techniques suggested or legislated in eugenics in European countries and in the United States, notably human sterilization, were for religious and other reasons not publicly acceptable in the region. With some very significant and historically telling exceptions, they did not come to define the movement. At the same time, Latin American doctors and scientists wanted to develop new procedures, based on their understanding of heredity and health, for ensuring the hygiene of the reproductive cells of heredity and for creating fertile and fit populations to fill the empty spaces of their countries. Eugenics was a normalizing program concerned with ra-

tionalizing and purifying sexuality; how this program worked to shape the reproductive roles of men and women in the nation is the theme that concerns me here.

In Chapter 5, I examine the part eugenics played in Brazil, Argentina, and Mexico in structuring notions of inclusion and exclusion of various populations in the national body and in giving that body its ethnic identity. Gender helped articulate the notion of race and vice versa, since through reproduction the "racial types" supposedly making up the body politic were created. Although Europeans tended to lump the Latin American countries together as generally dysgenic and disagreeable places of biocultural degeneration, the countries actually varied considerably in the articulation of their racial ideologies and therefore in the racial inflections of their eugenics movements. Yet the movements were also united by a common concern, how to create out of their heterogeneous populations a new and purified homogeneity on which a true "nationhood" could be erected. Eugenics in Latin America developed coincidentally with the resurgence of various nationalisms, first in the aftermath of World War I, and again in the 1930s, in the wake of the worldwide depression and the ensuing severe dislocations and political mutations. In a time of worries about the racial foundations of their national identities, about the dangers to or possibilities for a perfected nationality provided by new immigrants, and about the negative effects caused by migrations of "inferior" types from the countryside into the cities, eugenists in Latin America found a role for scientific prescriptions and policy making.[21]

In Chapter 6, I consider Latin American eugenics in its international dimensions and connections. More specifically, I ask how eugenics became part of the political relations between nations, especially in debates about national identity and the flow of peoples across boundaries. I look closely at the Pan American experiment in eugenics, which brought eugenists from the United States into con-

21. Like many others, I have found Benedict Anderson's discussion of nationalism in his *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 1986) useful for my work. Anderson conceptualizes the nation as a relatively recent cultural artifact, which he associates with the appearance of modern nationalisms. Interestingly, however, Anderson denies that racism is connected to dreams of nationality (see chap. 8). I obviously disagree with him on this point. Jean Franco has also incorporated Anderson's ideas into her analysis of gender and women's writing in Mexico; see her *Plotting Women: Gender and Representation in Mexico* (New York: Columbia University Press, 1989).

tact with their Latin American counterparts and was intended to ensure Pan American cooperation in the field. The story of Pan American eugenics is a story of failure; rather than creating a powerful Code of Eugenics for the region, as some eugenists had hoped, only watered-down, compromise resolutions emerged from the two Pan American eugenics conferences held in the 1920s and 1930s. The story of this venture is interesting, however, because it made clear some of the differences separating U.S. and Latin American eugenists—in the definition of eugenics, its proper scope, and its political valuations. The story allows us to identify some of the special characteristics of the "family" of eugenics to which the Latin Americans believed they belonged. It also helps explain why the Latin International Federation of Eugenics Societies, founded in the 1930s, seemed to promise an attractive venue for Latin Americans because it was at once somewhat international—in that it established connections to Italy, France, and other European countries with whom the Latin Americans believed they shared a supposedly Latin culture—and yet not wholly international—in that it excluded the eugenics of "Anglo-Saxon" nations, which many Latin Americans opposed. The debate between supposed Anglo-Saxon practicality, materiality, and extremity and Latin humanity and sensibility was hardly new in Latin American history; but the story of Latin Americans' efforts to both participate in a modern scientific movement and resist particulars of its ideology unfavorable to themselves adds an interesting twist to the debate and to our understanding of eugenics. The fate of the Latin Federation—and indeed, the fate of eugenics generally in the late 1930s and 1940s as a movement with significant scientific and social weight—provides the coda to this chapter.

Chapter 7 reflects generally on eugenics as a powerful movement of biopolitics between the two world wars. I do not attempt to sort out the complicated history of human genetics after the war, when the field tried to reconstitute itself in a form uncontaminated by past eugenic ideas; this history is only now being taken up, and Latin American contributions to it are in any case marginal.[22] Nor do I try to compare the eugenics of the pre-1945 period with the social and ethical choices that face us today in the field of modern genetics.

22. The most detailed account of developments in human genetics after World War II, and of the emergence of the "new eugenics," is Kevles's in his *In the Name of Eugenics* [note 2], esp. chap. 17.

Rather, I pull together some of the conclusions that emerge from the history of eugenics in Latin America and use them as a springboard for some reflections on the relations between science and politics in different social and political settings. In particular, I examine the lessons of eugenics for what I call a "politics of scientific interpretation," a major theme of my book.