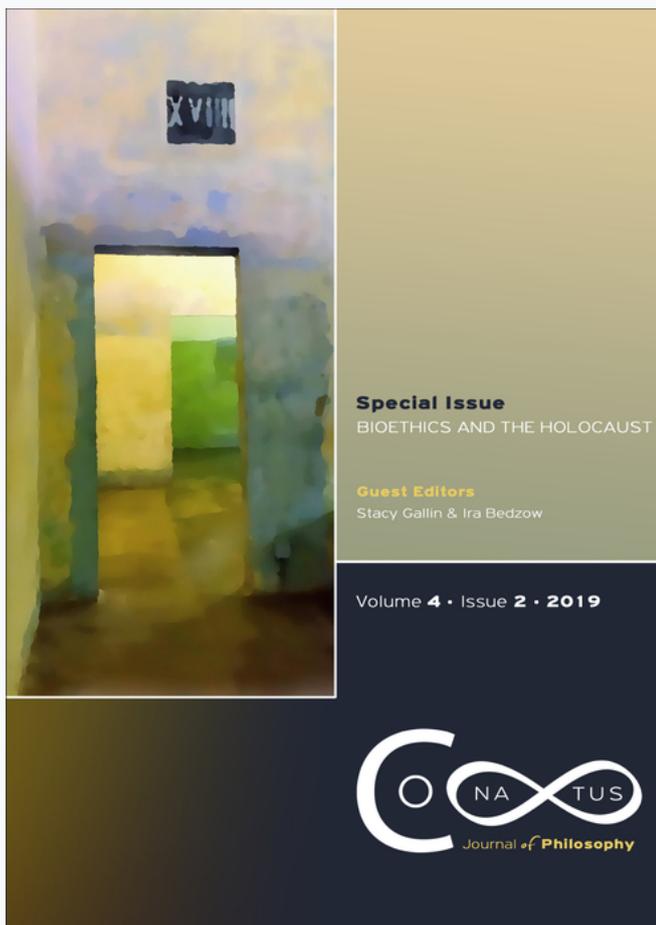


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Eugenics between Darwin's Era and the Holocaust

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Abstract

Heredity and reproduction have always been matters of concern. Eugenics is a story that began well before the Holocaust, but the Holocaust completely changed the way eugenics was perceived at that time. What began with Galton (1883) as a scientific movement aimed at the improvement of the human race based on the theories and principles of heredity and statistics became by the beginning of the 20th century an international movement that sought to engineer human supremacy. Eugenic ideas, however, trace back to ancient Greek aristocratic ideas exemplified in Plato's Republic, which played an important role in shaping modern eugenic social practices and government policies. Both positive (encouragement of the propagation of the fit, namely without hereditary afflictions, i.e. socially acceptable) and negative (institutionalization, sterilization, euthanasia) eugenics focused on the encouragement of healthy and discouragement of unhealthy reproduction. All these practices were often based on existing prejudices about race and disability. In this article, we will focus on the rise of eugenics, starting with the publication of Origin of Species to the Holocaust. This examination will be multidisciplinary, utilizing genetics, legal history and bioethical aspects. Through this examination, we will discuss how provisional understandings of genetics influenced eugenics-based legislation. We will also discuss the rise of biopolitics, the change of medical ethos and stance towards negative eugenics policies, and the possible power of bioethical principles to prevent such phenomena.

Key-words: *Eugenics; Darwin's era; Holocaust; race; heredity; Mendel's laws; forced sterilization; euthanasia; interracial marriage; immigration laws; biopolitics; medical ethics*

I. Introduction

The eugenics movement was an international movement that rose to prominence in an era of economic and social recession between 1900-1940, established socio-political beliefs and shaped government policies.¹ Social and political prejudices, nationalism, nativism, race and racial differences were often reflected in the “scientifically” based eugenic beliefs. Purity of the race and race inferiority ideas considered today unacceptable were common during this period.² It should be mentioned that in Europe during the early years of the 20th century the word race was often conceived as a synonym to “nation” in a context of nationalistic morale. Prominent medical schools, universities, and even high schools, developed curricula and established chairs for scientific fields, such as racial anthropology, and courses with elements of racial eugenics.

The nature of the majority of eugenic theories was deterministic. Eugenists believed that almost all diseases, conditions and addictions were inherited and therefore eugenic practices, if applied, would eliminate disease and inherited conditions from the population, including communicable diseases such as tuberculosis or syphilis, as well as lifestyle habits that result to addiction such as alcoholism. As far as cancer is concerned it has long been recognized that an inherited predisposition to neoplasms exists, presenting as a higher-than-normal risk of certain patterns of cancer within families for many generations. An example is retinoblastoma, a rare malignant neoplasm that develops in the eyes of young children. The inheritance of retinoblastoma has been documented in the scientific literature since the first half of the 20th century and has led to “practical eugenics” guidelines, such as prohibition of future childbearing in parents of a child with retinoblastoma, sterilization of children survivors of retinoblastoma and procreation discouragement.³

Before and in the early 20th century, it was not known that Mendel’s laws of inheritance could not be applied to complex functions, characteristics and behavioral traits, such as intelligence, mental illness or criminality. Often the characterization “defective and degenerate” was given both to criminals and people with mental disabilities.⁴ This simplistic approach to the nature or nurture debate ignored the multigenic and multifactorial nature of complex characteristics and dysfunctions as well as epigenetic inheritance and the im-

¹ Philippa Levin, *Eugenics: A Very Short Introduction* (Oxford: Oxford University Press, 2017), 1.

² *Ibid.*, 42

³ Carl V. Weller, “The Inheritance of Retinoblastoma and Its Relationship to Practical Eugenics,” *Cancer Research* 1, no. 7 (1941): 517-535.

⁴ Daniel J. Kevles, *In the Name of Eugenics: Genetics and the Uses of Human Heredity* (Cambridge, MA: Harvard University Press, 2004), 33.

fact of environmental factors on human development, health and disease. In the 1930s, the eugenic movement in Britain was criticized both from a genetic and social point of view (class prejudices and racism) and rejected often by earlier supporters.^{5,6}

Inheritance and transmission of physical and social human characteristics is an old question which is often reformulated in accordance with the scientific and social beliefs of the time. The modern eugenics movement was originally inspired by Darwin's theories and the emerging science of Mendelian genetic principles, applied to human populations, although the manipulation of human reproduction may be traced back to ancient Greek aristocratic ideas exemplified in Plato's *Republic*.⁷

II. Social origins

In Britain, unchecked human reproduction, especially of the poor, was a matter of concern since the 18th century when Thomas Malthus predicted that human population growth would surpass the earth's capability to produce food, resulting in environmental decline and social chaos.⁸ Malthus' ideas brought controversy at that time between conservative Europeans, who propagated the godsent and inevitable nature of the widespread poverty and social misery, and liberal Americans such as U.S. presidents Thomas Jefferson and James Madison who thought that equal opportunities combined with migration in new fertile lands in a republic could solve the social problems of the Old World.⁹

The conservative idea that social chaos will result if there is mixture of the aristoi (wealthy aristocrats, literally "the best ones") and the kakoi (poor people of humble origin, literally "the bad ones") originated at least as early as the 6th century BC when there was social turmoil in Greek cities, as the aristocrat poet Theognis of Megara attests.¹⁰ In a passage of Theognis, there is clearly mentioning of "blackening of citizens' generation"¹¹ if there is no

⁵ See John Burdon Sanderson Haldane, *The Causes of Evolution* (London, New York: Longmans, Green and Co., 1932), especially chapter "Natural Selection," 83-110.

⁶ Pauline M. H. Mazumdar, "Reform Eugenics and the Decline of Mendelism," *Trends in Genetics* 18, no. 1 (2002):48-52,

⁷ David J. Galton, "Greek Theories on Eugenics," *Journal of Medical Ethics* 24, no. 4 (1998): 263-267.

⁸ Levin, *Eugenics*, 3.

⁹ David R. McCoy, "Jefferson and Madison on Malthus: Population Growth in Jeffersonian Political Economy," *The Virginia Magazine of History and Biography* 88, no. 3 (1980): 259-276.

¹⁰ Mark A. Holowchak, "Jefferson's Platonic Republicanism," *Polis* 31, no. 2 (2014): 369-386.

¹¹ Theognis, "Elegiae," in J. M. Edmonds, *Elegy and Iambus, Volume I* (Cambridge, MA. Harvard

selection of mating in humans like in livestock, an idea that the idealist philosopher Plato incorporated in the *Republic*.¹² Plato proposed selection of couples for childbearing to produce offspring with “good” characteristics and called it εὐγονία (eugonia, Republic 8.546a), as well as sterilization of individuals with “bad” characteristics (5.460b7-5.460c8) and euthanasia of individuals with corporal and psychic disorders (3.410a1-5).^{13,14} Aristotle also starkly advocated exposing deformed infants despite the fact that they have already developed ‘sensation and life,’ but he had a different stance towards abortion distinguishing between ‘lawful and unlawful abortion’ depending on whether the fetus is a sensible, living being, i.e. ‘able to move on its own’ and therefore ‘ensouled’.¹⁵ It is true that Plato discusses abortion – and probably also infanticide – only in his ideal state, with regard to the class of the guardians and not in real life; only in such an ideal state there has to be control over breeding – at least for the guardians. Measures like abortion and, maybe, infanticide could be used if control failed.¹⁶ In early 19th century, Thomas Jefferson heavily criticized Plato’s eugenic ideas in several letters to his friends, favoring instead a democratic educational system of equal opportunity for all citizens so that the most intelligent and moral citizens may be justly selected for the most important levels of governance.¹⁷ Jefferson was a Republican, an Enlightenment scientific empiricist, and a self-professed Epicurean.¹⁸

After a century of political and nationalistic turmoil, as well as the reshaping of societies by industrial revolution, in the beginning of the 20th century certain social circles were ready to accept eugenics based on their concern about biological degeneration due to the propagation among people with undesirable characteristics (birth rate declining in upper/middle class, low among the cultured and civilized and high among mental defectives and immigrants). Immorality (criminality, pauperism, alcoholism, and prostitu-

University Press, London, William Heinemann Ltd, 1931), 191-192.

¹² Ibid.

¹³ Ibid.

¹⁴ Christos Yapijakis, “Genetics and Ancient Greek Philosophers: From Myth to Science,” in *Hybrid and Extraordinary Beings. Deviations from ‘Normality’ in Ancient Greek Mythology and Modern Medicine*, eds. Panayiotis N. Soukagos, Ariadne Gartzziou-Tatti, and Minas Paschopoulos, 269-280 (Athens: Konstantaras Medical Books, 2017).

¹⁵ Evangelos D. Protopapadakis, *From Dawn till Dusk: Bioethical Insights into the Beginning and the End of Life* (Berlin: Logos Verlag Berlin GmbH, 2019), 35.

¹⁶ Ibid., 34.

¹⁷ Holowchak, “Jefferson’s Platonic Republicanism.”

¹⁸ Christos Yapijakis, “Ancestral Concepts of Human Genetics and Molecular Medicine in Epicurean Philosophy,” in *History of Human Genetics*, eds. Heike L. Petermann, Peter S. Harper, and Suzanne Doetz, 41-57 (Dordrecht: Springer, 2017).

tion) and poverty were considered inherited biological characteristics. This was an amalgam of idealistic philosophical beliefs associating class, intelligence, inheritance, race beliefs, prejudices and fecundity. The British Eugenics Education Society focused on this. The common belief was that feeble-mindedness was common both to the lower classes and the pauper due to inbreeding habits (according to the British) or due to the fact that feeble mindedness and other social dysfunctions were inherited as Mendelian recessive characters (USA). Moreover, in the USA, immigrants from South and Eastern Europe were “paupers” meaning that they possessed defective genes. Prevention of procreation was proposed because “inherited” feeble-mindedness was believed to be the basis of criminality and pauperism.¹⁹ Countries with high immigration rates (USA, Canada, Britain) used eugenics to control immigrants (racially, mentally, intellectually).

The eugenic movement was well-accepted and became an international movement rooted in ideologically-influenced science aimed at influencing culture. Scientists collaborated and exchanged findings and opinions at symposia and conferences, while novels were written and science fiction films were produced, raising eugenic issues.²⁰

III. Emerging Eugenics

In the early 19th century Darwin’s *Origin of Species* brought the question of inheritance and natural selection as well as the scientific interest in heredity and transmission of characteristics again to the forefront. In Britain, Sir Francis Galton²¹ initiated this movement by coining the term eugenics²² in 1883²³ and introducing the term “nature-nurture.”²⁴ Although he had read Plato’s *Republic*,²⁵ and most probably the

¹⁹ Garland E. Allen, “The Eugenics Record Office at Cold Spring Harbor, 1910-1940: An Essay in Institutional History,” *Osiris* 2 (1986): 225-264.

²⁰ Films were produced by the Eugenics society of Britain (1924) and the American eugenic film company (Birth 1917), as well as by independent producers (e.g. *Married in Name Only*, 1917); see Levin, *Eugenics*.

²¹ Sir Francis Galton (1822-1911), British polymath, explorer, anthropologist, and eugenicist known for his pioneering studies of human intelligence.

²² The word ‘eugenics’ derives from the Greek ‘εὐγενής,’ consisting of ‘εὖ’ (good) and ‘γένος’ (breed).

²³ Nicholas W. Gillham, “Sir Francis Galton and the Birth of Eugenics,” *Annual Review of Genetics* 35 (2001): 83-101.

²⁴ According to this theory either nature (inherited ability) or nurture (upbringing) determines who we are. See Francis Galton, *English Men of Science: Their Nature and Nurture* (London: Macmillan & Co, 1874).

²⁵ Karl Pearson, *The Life, Letters, and Labours of Francis Galton* (Cambridge: Cambridge University Press, 1930), 312.

term eugenics was inspired by Plato's eugonia, Galton did not favor negative eugenics like the idealist philosopher, but rather promoted positive good breeding. As Richard Barnett notes, "Negative eugenics aimed to eliminate, through segregation or sterilization, those deemed physically, mentally, or morally undesirable," while "Positive eugenics encouraged the reproduction of the intelligent, the healthy, and the successful, and tended to be voluntaristic in tone."²⁶

Galton became the founder and first president of the Eugenics Education Society (1907), a small but influential society focused on education and popularization of eugenics. Intrigued by *The Origin of Species* and based on his studies (pedigrees and offspring of prominent men, twin studies, anthropometrics, psychometrics, race and population measurements and biometry),²⁷ Galton supported the idea that nature and not nurture is the critical factor, physical and behavior character traits, intelligence, talents and abilities (*talent and character*) are inherited, measurable and subject to natural selection, thus the human race could be improved, exactly as animal breeds, by "selective (good) breeding" and elimination of undesirable characteristics. According to his theory, if parents belong to a "better," "superior" breed the children will exhibit exceptional characteristics.²⁸ Darwin had previously discussed these matters in his book *Descent of Man*, that was published in 1871. Darwin concurred that, unlike other animals, humans alone impede their own evolution through intervening to keep the weak alive and propagating; however, he thought that the instinct of human sympathy was too noble to deny.²⁹

The initial confrontation of the popular mind against Galton's eugenics program as being an affront to God and nature became within a generation a wise scientific advancement to a significant percentage of the Anglo-American public, supported by Platonic, spiritual and idealistic theories.³⁰

The emerging science of Mendelian genetics after the rediscovery of Mendel's laws in 1900 was originally applied in a simplistic and mechanistic way to human populations but with a plethora of misconceptions according to current knowledge (the concept of the gene itself, recessive and dominant alleles, variation, genotype-phenotype correlation, genetic mechanisms, complex diseases, genetics with multiple genes and environmental contribution etc.). Some of the misconceptions

²⁶ Richard Barnett, "Keywords in the History of Medicine: Eugenics," *The Lancet* 363, no. 9422 (2004): 1742.

²⁷ Francis Galton, *Natural Inheritance* (London, Great Britain: Macmillan, 1889); in 1884 Galton set up Anthropometric Laboratory in London's International Health Exhibition that performed tests on volunteers (head size and reaction time, sight, hearing, and color sense).

²⁸ Francis Galton, *Hereditary Genius: An Inquiry into its Laws and Consequences* (London, Great Britain: Macmillan and Co, 1869).

²⁹ Charles Darwin, *The Descent of Man, and Selection in Relation to Sex* (New York: D. Appleton and Co, 1871), 162.

³⁰ Cathy Gutierrez, "Unnatural Selection: Eugenics and the Spirit World," *Studies in Religion* 47, no. 2 (2018): 263-279.

regarding human traits' inheritance derived from the fact that what was true for simple traits in plants and animals was not applicable to complex, multifactorial and heterogeneous human characteristics and disorders (intelligence, psychiatric disorders, cancer), thus beliefs about the universal applicability of Mendelian genetics to the inheritability of traits and dysfunctions such as tuberculosis, criminality, and feeble-mindedness did not pan out scientifically.

The United States also pioneered the eugenics movement and was very closely related to the British movement (1906 foundation of the Eugenics Committee, 1910 Eugenics Record Office in Cold Spring Harbor Laboratory). The American movement was centered on feeble-mindedness and social failure along with degeneration.³¹ The leading eugenicists were Charles Davenport, Harry L. Laughlin and Henry G. Goddard. Davenport³² was responsible for establishing Mendelism in the United States. He believed in eugenic intervention (eugenics is the science "of improvement of the human race by better breeding, by prevention of reproduction of the "unfit" and preponderance of the "fittest" marriages)³³ and that unrestricted immigration was a threat to the quality of the population.³⁴ What was considered to be an inherited trait such as "thalassophilia" (love of the sea) and "nomadism" (love of nomadic lifestyle) and other inconsistencies that seem absurd or even ridiculous today were in the context of the scientific knowledge of the time.³⁵

Leading figures of this era, amongst others were Harry H. Laughlin³⁶ known for his ideas on eugenic sterilization,^{37, 38} Henry H. Goddard³⁹ known for his study

³¹ Mazumdar, "Reform Eugenics."

³² C. Davenport (1866-1944) was a prominent Biologist, Director of the Station of the Study of Experimental Evolution in Cold Spring Harbor, N.Y., Professor of Zoology at Harvard, founder of the Eugenics Record Office in 1910 at Cold Spring Harbor, NY.

³³ Charles B. Davenport, "Report of Committee on Eugenics," *Journal of Heredity* 1, no. 2 (1910): 126-129; C. B. Davenport, "Research in Eugenics," *Science* 54, no. 1400 (1921): 391-397.

³⁴ Allen, "The Eugenics Record Office."

³⁵ Mark S. Lubinsky, "Scientific Aspects of Early Eugenics," *Journal of Genetic Counseling* 2, no. 2 (1993): 77-92.

³⁶ H. Laughlin (1880-1943) was an educator and sociologist.

³⁷ Philip K. Wilson, "Harry Laughlin's Eugenic Crusade to Control the 'Socially Inadequate' in Progressive Era America," *Patterns of Prejudice* 36, no.1 (2002): 49-67.

³⁸ Garland E. Allen, "The Social and Economic Origins of Genetic Determinism: A Case History of the American Eugenics Movement, 1900-1940 and its Lessons for Today," *Genetica* 99, nos. 2-3 (1997): 77-88. Use of pedigrees on "manic-depressive insanity" and mental ability demonstrating inherited scholarship or feeble-mindedness; see Allen, "The Eugenics Record Office."

³⁹ Henry H. Goddard (1866-1957) was a psychologist who pioneering the introduction of intelligence testing in the USA, and introduced this test to a School (New Jersey Home for the Education and Care of Feeble-minded Children in 1908).

*The Kallikak Family*⁴⁰ and the special importance he gave to the relation of mental deficiency with morality and criminality.⁴¹

Davenport and Laughlin were among the scientists who influenced most of the American eugenics policies and legislation⁴² (especially compulsory sterilization legislation and restrictions on immigration). They believed that feeble mindedness was a recessive Mendelian trait (inherited) and the result of “misfit” marriages (“backward” immigrants).⁴³ All three believed that sterilization could reduce criminality.⁴⁴

Germany was the third country to significantly contribute to the eugenics movement during the 19th and 20th centuries, focusing primarily on psychiatric disorders. Social transformation due to the fast industrialization of Germany at the end of 19th century was associated with social problems (rise in criminality, alcoholism, prostitution) and favored the rise of eugenics ideas especially ideas concerning race hygiene. The economic crisis of 1929 also favored the application of eugenics measures such as colonies for the feeble-minded and a law plan for sterilizations, which was ultimately not accepted. At that time a crucial distinction began to emerge between positive and negative eugenics, with both of them supporting the popular concept of social hygiene.⁴⁵

In East Asian countries like Japan negative eugenic programs were implemented under the influence of Plato's *Republic* as a good paradigm of the “ideal state,”⁴⁶ while in several Latin American countries including Brazil the positive version of eugenics was more popular.⁴⁷

⁴⁰ The study describes two branches of a family who's the progenitor fathered a child out of marriage with a “feeble-minded” woman and then married an upright Quaker woman and fathered other children. Both families lived “in practically the same region and in the same environment” preponderance of inheritance (nature). The descendants of the first relation (Kakos) were decadent whereas the legitimate children flourished (kalos). Henry H. Goddard, *The Kallikak Family: A Study in the Heredity of Feeble-mindedness* (New York: MacMillan Co, 1912).

⁴¹ T. Caulfield, and G. Robertson, “Eugenic Policies in Alberta: From the Systematic to the Systemic,” *Alberta Law Review* 35, no. 1 (1959): 59-79.

⁴² In 1922 a “model sterilization law” was drafted by Laughlin on order to solve the legal problem of involuntary sterilization, which contradicted the constitutional right to due process of law. Moreover, Laughlin supported the Johnson-Reed Immigration Act of 1924 providing to Congress statistical data and the results of intelligence tests for immigrants on Ellis Island; see John P. Jackson, Jr., and M. Nadine Weidman, “Race, Racism and Science: Social Impact and Interaction,” *History: Reviews of New Books* 34, no. 4 (2006): 133.

⁴³ Allen, “The Eugenics Record Office.”

⁴⁴ Caulfield and Robertson, “Eugenic Policies in Alberta.”

⁴⁵ Barnett, “Keywords in the History of Medicine.”

⁴⁶ T. Sasaki, “Plato and Politeia in Twentieth-Century Politics,” *Études Platoniciennes* 9 (2012): 147-160; Y. J. Chung, “Better Science and Better Race? Social Darwinism and Chinese Eugenics,” *Isis* 105, no. 4 (2014): 793-802.

⁴⁷ Lima Nisia Trindade, “Public Health and Social Ideas in Modern Brazil,” *American Journal of*

German and American Eugenic Societies collaborated closely.^{48,49} In Germany, the term *Rassenhygiene* (Race Hygiene), a politically enhanced version of the term of eugenics, was widely used. German Eugenics was rooted in social Darwinism, and, utilizing existing racial ideology, it was concerned about the fitness of German population.⁵⁰ The prominent German eugenicist Hans F. K. Günther was inspired by the Platonic myths about the origins of humans whose constitution included gold, silver, copper and iron, and on the divine prophecy that the state would perish when its rulers would be of copper and iron race (*Republic* 3.415a-c), therefore he concluded: “Only men of pure blood should philosophise! Plato must have acquired in some way the awareness of a reality which we, trained in racial research (eugenics), have to accept as true: the fact that through the Sophists men of a Levantine (Oriental) nature have usurped the power of the Hellenic spirit, while the Nordic (Aryan) soul of Greekness died.”⁵¹ Similarly, for the Nazi theoretician, Alfred Rosenberg the concept of race was not based on scientific knowledge or observation but in the apprehension of its idea by intuition in a Platonic way (“the race is the soul of the people seen from the outside”). Rosenberg believed that “true politics is eugenics” and that the Platonic methodology of negative eugenics could serve as a guide to the “racial hygiene” of the German population and create a homogeneous “Aryan people of pure blood” by cleansing “sub-human beings.”⁵²

The German Society for Racial Hygiene was founded in 1905 (among the founders were Alfred Ploetz,⁵³ and Ernst Rudin⁵⁴ who in 1932 is elected Presi-

Public Health 97, no. 7 (2007): 1168-1177.

⁴⁸ Stefan Kühl, “The Cooperation of German Racial Hygienists and American Eugenicists before and after 1933,” in *The Holocaust and History. The Known, the Unknown, the Disputed and the Reexamined*, eds. Michael Berenbaum, and Abraham J. Peck, 134-151 (Bloomington and Indianapolis: Indiana, University Press, 1998).

⁴⁹ American eugenicists visited Germany after 1933 in order to examine eugenic sterilization processes and the advances of German sterilization Courts; see Garland E. Allen, “The Eugenics Record Office.”

⁵⁰ Paul J. Weindling, *Health, Race and German Politics between National Unification and Nazism, 1870-1945* (Cambridge: Cambridge University Press, 1989).

⁵¹ Simona Forti, “The Biopolitics of Souls: Racism, Nazism, and Plato,” *Political Theory* 34, no. 1 (2006): 9-32.

⁵² *Ibid.*

⁵³ Alfred Ploetz (1860-1940) German physician, biologist and eugenicist with strong interest in the improvement of the German population. He coined the term racial hygiene (*Rassenhygiene*); see Levin, *Eugenics*.

⁵⁴ Ernst Ruedin (1874-1952) German psychiatrist, eugenicist, expert on racial hygiene in Nazi Germany, considered by many, the founder of psychiatric genetics. Jay Joseph and Norbert A. Wetzel, “Ernst Rüdin: Hitler’s Racial Hygiene Mastermind,” *Journal of the History of Biology* 46, no. 1 (2013):1-30.

dent of the International Federation of Eugenic Organizations).⁵⁵ The Society advocated the principles of eugenics (the isolation of the feeble-minded, the restriction of “unfit” marriages, the control of “bad” immigration) of the time. Eugen Fischer was also a prominent eugenicist, especially concerned for “racial purity” and degeneration due to mixing with inferior races.⁵⁶ Among his projects and in collaboration with Charles Davenport, he conducted a study on “mixed children” which they studied at the International Federation of Eugenics Organizations (IFEEO). There was a strong collaboration with the American Eugenics Society. In 1929 Fischer was asked by Davenport to become chairman of the committee on racial crosses of IFEEO.⁵⁷

German eugenicists also believed that recessive factors were important for everyone’s inherited traits, both physical and behavioral. A German sterilization law passed in 1933, and, according to it, people with mental deficiency, schizophrenia, manic-depressive disorder, hereditary epilepsy, hereditary chorea (Huntington’s chorea), hereditary blindness, hereditary deafness, severe hereditary deformities, and severe alcoholism should be sterilized.⁵⁸ A related euthanasia program began in 1939.⁵⁹

Nazi eugenics measures were the implementation of the eugenic beliefs since the Third Reich followed the ideal of the Platonic state.⁶⁰ Almost one third of the Society members (prominent German physicians and geneticists such as Fritz Lenz, Alfred Ploetz, Gerard Wagner, Otmar von Verschuer, Ernst Rudin) later joined the Nazi party and participated in euthanasia and sterilization programs.⁶¹

⁵⁵ Benno Muller-Hill, *Murderous Science: Elimination by Scientific Selection of Jews, Gypsies, and Others in Germany, 1933-1945* (Oxford University Press, 1988), 9.

⁵⁶ Eugen Fischer (1874-1967) German professor of medicine, anthropology, ethnology and eugenics, director of the Kaiser Wilhelm Institute of Anthropology, Human Heredity, and Eugenics (1927-1942), and appointed by A. Hitler rector of the Frederick William University of Berlin (1933). In 1908, he started studying Rehoboth population. He analyzed in 1908 around three hundred children (called “Rehoboth bastards”) of mixed-race origin (Dutchmen and Khoikhoi African women in German Southwest Africa) and he concluded that these mixed-race unions produce “inferior” races; see Eugen Fischer, *Die Rehobother bastards und das Bastardierungsproblem beim menschen; anthropologische und ethnographische studien am Rehobother bastardvolk in Deutsch-Südwest-Afrika, ausgeführt mit unterstützung der Kgl. Preuss* (Jena: G. Fischer, 1913).

⁵⁷ Muller-Hill, *Murderous Science*, 8.

⁵⁸ Jacob M. Kolman, and Susan M. Miller, “Six Values Never to Silence: Jewish Perspectives on Nazi Medical Professionalism,” *Rambam Maimonides Medical Journal* 9, no. 1 (2018): e0007; William E. Seidelman, “Lessons from Eugenic History,” *Nature* 337, no. 6205 (1989): 300.

⁵⁹ Robert N. Proctor, *Racial Hygiene: Medicine under the Nazis* (Cambridge, MA, and London: Harvard University Press, 1988), 41.

⁶⁰ Forti, “The Biopolitics of Souls;” J. Bannes, *Hitlers Kampf und Platons Staat; eine Studie über den ideologischen Aufbau der nationalsozialistischen Freiheitsbewegung* (Berlin: W. de Gruyter, 1933); A. Gabler, *Platon und der Führer* (Berlin and Leipzig: W. de Gruyter, 1934).

⁶¹ R. D. Strous, “Hitler’s Psychiatrists: Healers and Researchers Turned Executioners and Its

IV. Legal eugenic framework before the Holocaust

i. Eugenic sterilization

Sterilization was accepted and practiced before the early 20th century in many countries [see Table I], in penitential and psychiatric asylum inmates.⁶² It was aimed at the feeble minded, people with cognitive disabilities, epilepsy, hereditary diseases or diseases considered to be hereditary at the time (deafness and muteness, schizophrenia, alcoholism, moral delinquency) but it was also sometimes racially or class oriented (North Carolina and California, Virginia, underprivileged and poorly educated whites e.g. *Buck v. Bell*).^{63,64}

Sterilization of mixed-race Germans was proposed in the 1920s by Fischer,⁶⁵ who was later one of the judges in Berlin's Hereditary Health Court, providing the Nazis with plenty of ideas on ensuring the purity of Aryan race.

Eugenic sterilization was accepted by the medical community, although some scientists were skeptical about its effectiveness to reduce hereditary defects. The Catholic Church was against sterilization.⁶⁶ In Britain, sterilization was never legalized because such a law was not supported by the British Medical Association, British Catholics, and the Labor movement.⁶⁷

Laws were proposed in many countries (Poland, Romania, Britain, the Netherlands, China, Australia, and France) but the first law for involuntary sterilization was enacted in 1907 in the United States⁶⁸ "to prevent procreation of confirmed criminals, idiots, imbeciles and rapists." In 1927, a second law was passed,⁶⁹ concerning those "afflicted with hereditary forms of

Relevance Today," *Harvard Review of Psychiatry* 14, no. 1 (2006): 30-37.

⁶² 1899 inmates at Jeffersonville Reformatory, Indiana; see Levin, *Eugenics*, 62.

⁶³ *Ibid.*, 66.

⁶⁴ Ann Harrington, *Mind Fixers* (New York, London: W. W. Norton & Company Independent Publishers, 2019), 61-63.

⁶⁵ Proctor, *Racial Hygiene*, 41.

⁶⁶ Levin, *Eugenics*, 69 (1930 papal decree, *Casti Connubii*).

⁶⁷ *Ibid.*, 69.

⁶⁸ In the US State of Indiana followed by California, Connecticut, and Washington (1909), Iowa, Nevada, and New Jersey (1911), New York (1912) although in some states the law was barely used. In some other countries it was not legalized but practiced. Moreover, sterilization was used discretely for the prevention from procreating of the feeble-minded and cognitive disabled (e.g. epilepsy, hereditary deafness or muteness, schizophrenia, alcoholism, psychopathy); see Laura Mondt, "An Act to Prevent Procreation of Confirmed Criminals: The Origins of Sterilization in Indiana," *Historia* 20 (2011): 56-70.

⁶⁹ An act providing for the sexual sterilization of inmates in state institutions in certain cases; Act of March 11, 1927 ch. 241 (see Mondt, "An Act to Prevent Procreation").

insanity that are recurrent, idiocy, imbecility, feeble-mindedness or epilepsy” committed to state mental health institutions. Both laws targeted inmates of state institutions and not the general population. In 1924, Virginia signed into law SB 281, the “Eugenical Sterilization Act,”⁷⁰ concerning institutionalized people. A catalyst for the implementation of the above legislation in Virginia, but also for the adoption of corresponding legislation around the world at the time, was the trial of *Buck v. Bell*, 274 U.S. 200 (1927) by the United States Supreme Court.⁷¹

In Germany in the 1930s, a variety of eugenics laws passed concerning racial purity. In 1933, the German Reich government enacted the “Law for the Prevention of Offspring with Hereditary Diseases” (Sterilization Law) for those with “serious physical or mental defects of a hereditary nature” (“genetic blindness, hereditary deafness, manic depression, schizophrenia, epilepsy, congenital feeble-mindedness, Huntington’s’ chorea and alcoholism”). In 1937 Adolf Hitler imposed the sterilization of the “*Rheinlandbasterde*,” a derogatory term used by Nazis to refer to children who had one parent of German heritage and one parent of African descent.⁷²

On the other hand, Greece, Netherlands, France⁷³ and Italy have never legislated for forced eugenic sterilization.

ii. Euthanasia

In the name of eugenics and science, a variety of laws were enacted throughout the world to euthanatize certain groups of people, such as the poor, criminals and those suffering from genetic and other health problems, in order to maintain a level of morality and a healthy society, as claimed by those who proposed this legislation.

⁷⁰ The purpose of the law was the lawful sterilization of people bearing undesirable hereditary features (“idiocy, imbecility, epilepsy and crime”). The law provided that no person involved in the sterilization process would be considered civil and criminally liable. The result of this legislation was the sterilization of 7325 people; see J. H. Landman, “The Human Sterilization Movement,” *Journal of Criminal Law and Criminology* 24, no. 2 (1933): 400-408.

⁷¹ Carrie Buck was a 17-year-old feeble minded woman in a state institution who was eventually sterilized. Characteristic is the judge’s Oliver Wendell Holmes Jr. speech “Three generations of imbeciles are enough” in the US Supreme-Court. The judge claimed that Carrie Buck had to be sterilized for the good of society and so that not to have degenerate offspring. It also claimed that neither the due process clause nor the Equal Protection Clause in the 14th Amendment was violated (“*Buck v. Bell*, 274 U.S. 200 (1927),” U.S. Supreme Court, accessed July 25, 2019, <https://supreme.justia.com/cases/federal/us/274/200/>).

⁷² Proctor, *Racial Hygiene*, 112-113.

⁷³ Although in France about 15,000 female inmates in psychiatric institutions have been sterilized without their permission; Lena Lennerhed, “Sterilisation on Eugenic Grounds in Europe in the 1930s: News in 1997 but Why?” *Reproductive Health Matters* 5, no. 10 (1997): 156-161.

In Germany, since the last decade of the 19th century the medical killing of people with an “unworthy life” was discussed very strongly. There were discussions about expanding euthanasia to other very diverse groups of people, criminals or those considered as criminals, and people with deformities, mental and genetic conditions, as well as based on racial origin and sexual orientation. On August 7, 1929, Adolf Hitler spoke about the killing of German families’ infants who had physical defects, such as mental retardation or genetic diseases. Subsequently the criteria for euthanasia were extended to adults and eventually led to elimination of “disabled and mentally ill adults and the terminally ill.”⁷⁴ The program of genetic euthanasia was named “Committee for the Scientific Treatment of Severe Genetically Determined Illness.”⁷⁵ The euthanasia project, T4, followed, in order to relieve Germany of “disabled people.” Fearing social outcry, the Nazis never officially proposed a law on euthanasia, however all its actions in this regard were carried out without legal formalities.⁷⁶

German doctors at the Nuremberg trial, in order to justify their actions, argued that their practices were referring to American examples of euthanasia to exempt from “inferior elements.” Also they emphasized that these actions were not initiated by Germany.

Moreover, in 1937, a poll in the United States showed that 45 percent of the population supported euthanasia for “defective infants.”⁷⁷

iii. Immigration law

Already in the 18th century, warfare, poverty, unemployment and the dream of a better life led waves of immigrants to foreign countries [see Table II]. The fear of the locals to the new immigrants, along with economic reasons, in combination with the eugenics movement, triggered the creation of a series of laws. Immigration restriction laws and nationality laws have existed since the 18th century in America, Europe and Australia. The above mentioned legislation mainly concerned migratory flow from Africa, Asia, Latin Ameri-

⁷⁴ Euthanasia is distinguished in voluntary and involuntary. In voluntary euthanasia the person has knowledge and consent to his killing. In contrast to involuntary euthanasia, the individual does not know (especially newborn children) or does not consent to his killing. Felipe E. Vizcarrondo, “Editorial Euthanasia and Assisted Suicide: The Physician’s Role,” *The Linacre Quarterly* 80, no. 2 (2013): 99-102.

⁷⁵ Proctor, *Racial Hygiene*, 186-187.

⁷⁶ Michael Berenbaum, and Abraham J. Peck (eds.), *The Holocaust and History: The Known, the Unknown, the Disputed, and the Reexamined* (Bloomington and Indianapolis: Indiana University Press, 1998), 59, 243, and 315.

⁷⁷ Lars Grue, “Eugenics and Euthanasia – Then and Now,” *Scandinavian Journal of Disability Research* 12, no.1 (2010): 33-45.

ca, Middle East (e.g. The Chinese Exclusion Act of 1882, which was a United States federal law), Southern and Eastern Europe (e.g. The Immigration Act of 1924, also known as The Johnson-Reed Act or National Origins Act, which was a United States federal law). Furthermore, the laws targeted specific groups of immigrants, like those who were considered to be poor and those who had been described as criminals and as “mentally or physically defective.”⁷⁸

iv. Interracial marriage

The idea of banning marriages for eugenic reasons has existed since ancient times. During the 17th century up to the 20th, there were laws that legitimized this very important and controversial issue of “miscegenation”— mixing of different racial groups. Many countries [see Table III], particularly the United States (e.g. Indiana Act of April 15, 1905 and the Cable Act, 1922) and in Europe (e.g. the Nuremberg Laws, September 15, 1935 and the Law for the Protection of the Hereditary Health of the German People, October 18, 1935), adopted so-called “eugenic marriage laws.”⁷⁹ These laws had linked marriage licenses with medical examinations and their purpose was to prevent people from misery and to save future generations from great sorrow. Most of these laws remained in force until after the middle of the 20th century when they were abolished.

V. Bioethical aspects

The bioethical implications of the aforementioned historical, legal and scientific facts concerning eugenics between Darwin’s era and the Holocaust concern mostly negative eugenics and especially its forms that could be considered criminal today as compulsive sterilization, abortion and institutionalization and euthanasia. Galton around 1890 promoted positive eugenics, mainly through the idea that society would be better if the gifted would be able to have larger families. There were several intellectuals who opposed even positive eugenics, like Gilbert Keith Chesterton,⁸⁰ but they were not able to with-

⁷⁸ United States, Congress, House. CHAP. 1134, *An Act to Regulate the immigration of Aliens into the United States*, loc.gov, accessed June 25, 2019 <https://www.loc.gov/law/help/statutes-at-large/59th-congress/session-2/c59s2ch1134.pdf>.

⁷⁹ Those who had been diagnosed as suffering from “venereal diseases” or some genetic disease were excluded from political marriage; see Paul A. Lombardo, “A Child’s Right to Be Well Born: Venereal Disease and the Eugenic Marriage Laws, 1913-1935,” *Perspectives in Biology and Medicine* 60, no.2 (2017): 211-232.

⁸⁰ “There exists to-day a scheme of action, a school of thought, as collective and unmistakable as any of those by whose grouping alone we can make any outline of history... It is a thing

hold the eugenics tide. However, “from the naive optimism that characterized Galton’s work to the hideous atrocities of the Third Reich” there is a great distance.⁸¹ Negative eugenics was condemned during the Nuremberg trials, while some positive eugenic practices, such as prenatal genetic diagnostic tests and the fast developing DNA manipulation techniques, are currently at the center of a heated bioethical debate. Today positive eugenics are strongly attacked by some critics, such as the disability movements’ supporters,⁸² for implicit or explicit discrimination against special human characteristics, or for offending rights like the right to an open future.⁸³

Bioethically we are interested in three issues concerning the eugenics era. One is the connection of science and politics, namely the politicalization of biology or the biologicalization of politics. The second explores the change of medical ethos during the eugenics era and the Holocaust. The third is the question of whether the existing bioethical principles, expressed in medical codes (international and national) which advocate strict laws concerning treatment and research, could prevent the massive abuse of persons in the name of genetic, ethnic or racist genocide ordered by political authorities.

The gradually tightening tie of medical sciences with politics from Darwin’s era forward is revealed at its peak by Hitler’s own words when he appealed to physicians: “You, you National Socialist doctors, I cannot do without you for a single day, not a single hour. If not for you, if you fail me, then all is lost.”⁸⁴ In the same vein Rudolf Hess declared that National Socialism

that can be pointed out; it is a thing that can be discussed; and it is a thing that can still be destroyed. It is called for convenience ‘Eugenics’ [...] it ought to be destroyed [...] I know that it means very different things to different people; but that is only because evil always takes advantage of ambiguity.” Gilbert Keith Chesterton, *Eugenics and Other Evils* (London, New York, Toronto and Melbourne: Cassell and Company, 1922).

⁸¹ Philip R. Reilly, “Eugenics and Involuntary Sterilization: 1907-2015,” *The Annual Review of Genomics and Human Genetics* 16 (2015): 351-368.

⁸² Ron Amundson, “Disability, Ideology, and Quality of Life: A Bias in Biomedical Ethics,” in *Quality of Life and Human Difference Genetic Testing, Health Care, and Disability*, eds. David Wasserman, Jerome Bickenbach, and Robert Wachbroit (Cambridge: Cambridge University Press, 2005).

⁸³ Jürgen Habermas in his book *The Future of Human Nature* attacks genetic mechanics: “advances of genetic engineering affect the very concept we have of ourselves, as cultural members of the species of ‘humanity’ [...] they consist a wound in ethical self-understanding of the species, which is shared by all moral persons;” see Jürgen Habermas, *The Future of Human Nature* (Cambridge: Polity Press 2003), 39-40. The notion of ‘open future’ was introduced by Joel Feinberg; see Joel Feinberg, “The Child’s Right to an Open Future,” in *Who’s Child? Children’s Rights, Parental Authority and State Power*, edited by William Aiken and Hugh LaFollete, 124-153 (Totowa, New Jersey: Littlefield, Adams and Co., 1980).

⁸⁴ Jeremiah A. Barondess, “Care of the Medical Ethos: Reflections on Social Darwinism, Racial Hygiene, and the Holocaust,” *Annals of Internal Medicine* 129, no. 11 (1998): 891-898.

was “nothing but applied biology,”⁸⁵ following so, according to Simona Forti, the eugenic methodology of Plato’s “ideal state.”⁸⁶ The discussion about biologicalization of politics leads us to the term *biopolitics*. Michel Foucault first, in the last years of his life, in his insistent effort to reveal the mechanics of power, defined *biopolitics* as “the growing inclusion of man’s natural life in the mechanisms and calculations of power.”⁸⁷ In *The History of Sexuality* he summarized the process by which life, at the beginning of the modern age, comes to be what is at stake in politics: “For millennia, man remained what he was for Aristotle: a living animal with the additional capacity for political existence; modern man is an animal whose politics calls his existence as a living being into question,” thus introducing biopolitics’ sovereignty.⁸⁸ Eugenics are a form of biopolitics where matters such as race and mental or physical health, the bare life of citizens, become the main interest of politics. Giorgio Agamben in *Homo Sacer* studies the connection of Sovereign Power and *bare life* or bodily human existence.⁸⁹ Agamben derives his concept of *homo sacer* or bare human life or biological life from Roman laws and social ethics, where it is defined as the life that “is included in the community in the form of being able to be killed.”⁹⁰ These lives are the object of biopolitics that Agamben believes existed as a transformation of sovereign power from ancient times until the eugenics era where they made their appearance and led to a murderous peak during the Holocaust. Agamben believes that because biological life and its needs had become the politically decisive fact, we are able to “understand the otherwise incomprehensible rapidity with which twentieth-century parliamentary democracies were able to turn into totalitarian states.”⁹¹ And in these states “the sovereign is entering into an ever more intimate symbiosis not only with the jurist but also with the doctor, the scientist, the expert, and the priest.”⁹² There is a line “marking the point at which the decision on life becomes a decision on death, and biopolitics can turn into *thanatopolitics*.”⁹³ This moving line between life or death decision circumscribes the

⁸⁵ Robert Jay Lifton, *The Nazi Doctors: Medical Killing and the Psychology of Genocide* (New York: Basic Books 2000), 129.

⁸⁶ Forti, “The Biopolitics of Souls.”

⁸⁷ Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life*, transl. Daniel Heller Roazen (Stanford, California: Stanford University Press, 1998), 119.

⁸⁸ *Ibid.*

⁸⁹ *Ibid.*

⁹⁰ *Ibid.*, 82.

⁹¹ *Ibid.*, 122.

⁹² *Ibid.*, 122.

⁹³ *Ibid.*, 122.

zone of *lives unworthy of being lived* (*Lebensunwerten Lebens*). The term was originally used in defense of the right to suicide, but according to Karl Binding it is essential, since it allows an answer to the juridical question: “Must the unpunishability of the killing of life remain limited to suicide [...] or must it be extended to the killing of third parties?”⁹⁴ For Agamben, it is obvious that “the concept of *life unworthy of being lived* is clearly not an ethical one [...]; It is, rather, a political concept.”⁹⁵ In 1988, Francois Dagogner declared that “organisms belong to the public power: the body is nationalized,” a statement that underlines the continuity of biopolitics in the post-Holocaust modern era and led Agamben to conclude that “in modern democracies it is possible to state in public what the Nazi biopoliticians did not dare to say.”⁹⁶

The second part of our bioethical investigation concerns the change of medical ethos through the wide acceptance of negative eugenics. For centuries from Hippocratic medicine on the leading principle of medicine was beneficence, a term covering the traditional medical values compassion, healing, relieving pain, and making lives of patients better. The mixture of healing with killing was unthinkable until negative eugenics appeared, marking a still existing change of paradigm in medical ethos that puts death (either as a political or personal decision as in the case of assisted suicide) in practitioner’s armor among caring, healing and relieving. The “survival of the fittest”⁹⁷ that Darwin introduced for the animal evolution was erroneously accepted for the formation of human societies. Darwin disagreed with Galton’s theory that “nature” is more important than “nurture.”⁹⁸ The populist eugenics rhetoric and the flawed genetic determinism as an ungrounded scientism influenced the medical stance towards negative eugenics. Thousands of surgeons actively participated in procedures such as involuntary abortions and sterilizations. There was, of course, a different degree of medical participation among different countries.⁹⁹ In the U.S. eugenic policies were adopted earlier and taken further than in Britain [table I], and sterilization laws were legislated by several states in the world’s most liberal immigration regime. Only Nazi

⁹⁴ Ibid., 137-138.

⁹⁵ Ibid., 142.

⁹⁶ Ibid., 165.

⁹⁷ Darwin borrowed the famous phrase in his *On the Origin of Species* from Herbert Spencer, a social thinker, who used it in his struggle against social welfare programs; see Reilly, “Eugenics and Involuntary Sterilization,” 352.

⁹⁸ Galton named his research ‘eugenics’ one year after his half cousin’s (Darwin’s) death.

⁹⁹ For instance, the British Medical Association never accepted eugenic laws (see table I for different legalization of eugenics around the world).

Germany took it further more with a more ambitious and aggressive program.¹⁰⁰ German doctors were not only obedient but enthusiastic supporters of eugenic criminal activities of the Third Reich. They ranked prisoners as experimentation subjects or workers and sent those who were weak or became ill to the gas chambers. They used methods like injections of cultures of live tubercle bacilli, and they made premarital examinations, searching for Jewish blood. They participated in racial courts that considered the presence or absence of non-Aryan blood. "German medicine was not merely deflected from its traditional ethos but was invested in a perverse ideology of death and suffering."¹⁰¹

This observation brings us to the third part of our research, the question of the possible power of contemporary bioethical principles to prevent such a phenomenon. In the present, biomedical sciences equipped with principled bioethics supported by strict laws, conventions and universal declarations, seem inviolable from a new change of paradigm of medical ethics. After the Nuremberg Code the autonomous and non-coercive concept of informed consent has become the cornerstone of bioethics. Respect for autonomy, beneficence, non-maleficence and justice,¹⁰² the famous four principles that are learned all over the world through bioethical education, are a strong instrument against a possible new abuse of patients or research subjects at least in the massive form that it took at the beginning of the 20th century. However, there remain coercive sterilization or abortion policies of curbing population growth sometimes of racist origin in several places on the planet.¹⁰³ Mixing of caring with killing in medical duties seems to be a legacy of the eugenics era. Pro-euthanasia legislation in several countries allow today the practitioners to exercise medical killing, introducing new trends in medical ethos. A heated debate about the right to conscientious objection of doctors is dividing the medical community as well as legislators. The advantage of current controversies over the ones we described here is that there exists today a stable and more or less universally accepted system of bioethical principles and the historic knowledge inherited by eugenics era and the Holocaust.

At last the horror of the Third Reich atrocities discredited eugenics and the word (although, not the concept) almost disappeared.¹⁰⁴ Eugenics, even

¹⁰⁰ Randall Hansen, and Desmond King, "Eugenic Ideas, Political Interests, and Policy Variance. Immigration and Sterilization Policy in Britain and the U.S.," *World Politics* 53, no. 2 (Jan., 2001): 241.

¹⁰¹ Barondess, "Care of the Medical Ethos," 895.

¹⁰² Tom Beauchamp, and James Childress, *Principles of Biomedical Ethics* (Oxford: Oxford University Press, 2009).

¹⁰³ Reilly, "Eugenics and Involuntary Sterilization."

¹⁰⁴ For example, the UK-based journal *Annals of Eugenics* in 1954 changed its title to *Annals of Human Genetics*; see Barnett, "Keywords in the history of medicine."

renamed, remains still of strong influence, in genetic engineering, enhancement, infanticide, euthanasia, etc. practices that are defended mainly by the utilitarian rationale in contemporary bioethics.

Our investigation revealed Holocaust's negative eugenics theory not as an exception in international eugenics of the previous period, i.e. not an exceptionalism in theory, but in the extreme form and intensity of practices exhibited by the Nazis. The huge difference was the special interest on extinction of the Jewish people and the vast legalization of massive euthanasia practices. This observation does not underestimate the Holocaust as an exemplary (if not unique) appearance of evil in human history, but intends to draw attention on the incubation of the serpent's egg¹⁰⁵ in democracies, through far-right conservative political ideas, flawed scientism and absence of deeper bioethical education of scientists based on historical facts of the eugenics era that led to the Holocaust.

¹⁰⁵ The *Serpent's Egg* is a 1977 drama film written and directed by Ingmar Bergman. The title is taken from a line spoken by Brutus in Shakespeare's *Julius Caesar*: "And therefore think him as a serpent's egg / Which hatch'd, would, as his kind grow mischievous; / And kill him in the shell." "The Serpent's Egg (film)," Wikipedia, accessed November 5, 2019, [https://en.wikipedia.org/wiki/The_Serpent%27s_Egg_\(film\)#cite_note-1](https://en.wikipedia.org/wiki/The_Serpent%27s_Egg_(film)#cite_note-1).%20%E2%80%9Cserpent%E2%80%9D%20in%20the%20title%20means%20fascism.

Tables

Table I: Sterilization Laws in North America, Europe and Australia before the Holocaust

Country/State	Legislation	Target group
US/Indiana ¹	1.An act to prevent procreation (1907). 2.An act to provide for the sexual sterilization of inmates in state institutions in certain cases (1927). 3.Act of March 3, 1931 (ch. 50). 4.Act of 1935 (ch. 12).	1. Confirmed criminals, idiots, imbeciles and rapists housed in state institutions. 2. Individuals afflicted with hereditary forms of insanity that are recurrent (e.g., idiocy, imbecility, feeble-mindedness or epilepsy) who were committed to a state mental health institution. 3. Persons whose admission to feeble-minded institutions. 4. Feeble-minded.
US/Virginia	The Eugenic Sterilization Act, 1924.	People limited to state institutions "afflicted with hereditary forms of insanity that are recurrent" such as "idiocy, imbecility, feeble-mindedness or epilepsy." ²
US/California	1. Sterilization Law, 1909. 2. Sterilization Law, 1913. 3. Sterilization Law, 1917.	1. People mentally ill and mentally deficient in state hospitals and institutions and prison inmates (especially sex offenders). 2. People from the general population "afflicted with hereditary insanity or incurable chronic mania or dementia to all those suffering from perversion or marked departures from normal mentality or from disease of a syphilitic nature." Also the State Lunacy Commission was set up and had the power to decide and order sterilization. ³
US/New York	New York Sterilization Law, 1912. The law was declared unconstitutional in 1918 and the sterilizations stopped.	"Inmates of State hospitals for the insane, State prisons, reformatories, and charitable institutions, and rapists, and confirmed criminals in penal institutions." ⁴
Canada/Alberta	The Legislative Assembly of Alberta, Canada, enacted the Sexual Sterilization Act, 1928. ⁵	The law stipulated that "mental defectives" would be sterilized without their consent. Moreover, the law created a Eugenic Board, which provided advice on who should be sterilized.
Sweden	Sterilization Law of 1934 passed by the Swedish Parliament.	"Sterilization without the consent of the patient was now permitted in cases of mental illness, feeble-mindedness, or other mental defects." ⁶

¹ "Eugenic Sterilization in Indiana," *Indiana Journal Law* 38, no. 2 (1963): 275-189.

² Jacob Henry Landman, *Human Sterilization: The History of the Sexual Sterilization Movement* (New York: Macmillan, 1932), 84.

³ About 20,000 people were sterilized until 1964 in the state of California, an act of violation of human rights. The laws did not include self-notification procedures for people who would be sterilized, neither the possibility of questioning the mandate nor the opportunity of being heard by a judicial body (Stern, Alexandra Minna, "Eugenics, Sterilization, and Historical Memory in the United States," *História, Ciências, Saúde-Manguinhos* 23, no. 1 (2016): 195-212.

⁴ Alexander R. Denis, and Ronald L. Numbers, *Biology and Ideology from Descartes to Dawkins* (Chicago - London: The University of Chicago Press, 2010), 182.

⁵ Dominique Clément, "Human Rights Milestones: Alberta's Rights Revolution," in *The Search for Equality and Justice: Alberta's Human Rights Story*, eds. Dominique Clément, and Renée Vaugeois, 17-57 (Edmonton: John Humphrey Centre for Peace and Human Rights, 2012).

⁶ Stephanie Hyatt, "A Shared History of Shame: Sweden's Four Decade Policy of Forced Sterilization and the Eugenics Movement in the United States," *Indiana International & Comparative Law Review* 11, no. 2 (1998): 475-503.

Norway	Parliament passed a law on voluntary sterilization, 1934.	The law passed for eugenic, social and economic reasons and targeted people with hereditary diseases. Sterilization for eugenic reasons took place in Norway ⁷ several years before its legalization in 1934.
Denmark	Law on Sterilization, 1929. ⁸	Mentally ill.
Germany	Law for the Prevention of Offspring with Hereditary Diseases, 1933/Law for the Protection of Hereditary Health, 1933 (Gesetz zur Verhütung erbkranken Nachwuchses).	Sterilization of those who “suffered” from a “hereditary disease” and more specifically: “1. Congenital mental deficiency, 2. Schizophrenia, 3. Manic-depression, 4. Hereditary epilepsy, 5. Hereditary St. Vitus’ Dance (Huntington’s Chorea), 6. Hereditary blindness, 7. Hereditary deafness, 8. Serious hereditary physical deformity.” ⁹
United Kingdom	There was no law on eugenic sterilization in UK. However, there was a type of policy in this direction: <ul style="list-style-type: none"> • The National Association for the Care and Control of the Feeble Minded,¹⁰ 1896. • The Eugenics Educational Society in 1907 was founded on the initiative of Francis Galton.¹¹ • UK birth control clinic,¹² 1921. 	Those groups were aiming to avoid births of “mentally defective” and “feeble-minded” children.
Australia ¹³	Mental Deficiency Bills, 1926, 1929, 1939.	<ul style="list-style-type: none"> • Sterilization¹⁴ of “inefficient” people such as “slum dwellers, homosexuals, prostitutes, alcoholics, as well as those with small heads and with low IQs.” • The Aboriginal population.

Table II: Immigration Laws in North America, Europe and Australia before the Holocaust

Continent	Law	Content
US	The original United States Naturalization Act of March 26, 1790.	Provided the conditions to grant United States national citizenship; For granting nationality the immigrant had to be a “free white person of good character.” ^{15, 16}

⁷ Alain Drouard, “Concerning Eugenics in Scandinavia: An Evaluation of Recent Research and Publications,” *Population: An English Selection* 11 (1999): 261-270.

⁸ Denmark was the first country in Northern Europe which passed a law on sterilization. See Drouard, 261-270.

⁹ Jacob M. Kolman, and Susan M. Miller, “Six Values Never to Silence: Jewish Perspectives on Nazi Medical Professionalism,” *Rambam Maimonides Medical Journal* 9, no. 1 (2018): e0007.

¹⁰ Nikolas Rose, *The Psychological Complex. Psychology, Politics and Society in England 1869–1939* (London: Routledge and Kegan Paul, 1985), 104.

¹¹ Graham J. Baker, “Christianity and Eugenics: The Place of Religion in the British Eugenics Education Society and the American Eugenics Society, c.1907-1940,” *Social History of Medicine: The Journal of the Society for the Social History of Medicine* 27, no. 2 (2014): 281-302.

¹² Caitriona Beaumont, “Moral Dilemmas and Women’s Rights: The Attitude of the Mothers’ Union and Catholic Women’s League to Divorce, Birth Control and Abortion in England, 1928–1939,” *Women’s History Review* 16, no. 4 (2007): 463-485.

¹³ Victor H. Wallace, “The Eugenics Society of Victoria (1936-1961),” *The Eugenics Review* 53, no. 4 (1962): 215-218.

¹⁴ Ross L. Jones, “Eugenics in Australia: The Secret of Melbourne’s Elite,” *The Conversation*, 2011, <https://theconversation.com/eugenics-in-australia-the-secret-of-melbournes-elite-3350>

¹⁵ Rudolph J. Vecoli, “The Significance of Immigration in the Formation of an American Identity,” *The History Teacher* 30, no. 1 (1966): 9-27.

US	Page Act of March 3, 1875.	Ensured that the migration of people from China, Japan and any Asian country must be free and voluntary. The law also banned the immigration of women into the US for prostitution and the immigration of those who have been convicted "in their own country of felonious crimes other than political." ¹⁷
US	The Chinese Exclusion Act of 1882.	The first major federal immigration law aimed at a particular category of people banned the immigration of Chinese workers to the United States and anyone who is considered a "lunatic, idiot, or any person unable to take care of himself or herself without becoming a public charge" ¹⁸ Also, immigration from Africa, Asia, Latin America and the Middle East was restricted.
US	The Immigration Act of 1891.	This act forbade paupers, the insane, those with a contagious disease or those who have been convicted of a felony from immigrating to the US. Also, upon arrival of migrants to the US, there was strict control over their personal data. ¹⁹
US	The Immigration Act of 1903 also called the Anarchist Exclusion Act.	The law stated (Sec. 2) "that the following classes of aliens shall be excluded from admission into the United States: All idiots, insane persons, epileptics, paupers, professional beggars; persons afflicted with a loathsome or with a dangerous contagious disease; persons who have been convicted of a felony or other crime or misdemeanor involving moral turpitude; polygamists, anarchists, prostitutes, and persons who procure or attempt to bring in prostitutes or women for the purpose of prostitution and also any person whose ticket or passage is paid for with the money of another." ²⁰
US	The Immigration Act ²¹ of 1907.	The law stated (Sec. 2) "That the following classes of aliens shall be excluded from admission into the United States: All idiots, imbeciles, feeble-minded persons, epileptics, insane persons, and persons who have been insane within five years previous; paupers; persons likely to become a public charge; professional beggars; persons afflicted with tuberculosis or with a loathsome or dangerous contagious disease; persons not Defective persons. comprehended within any of the

¹⁶ Linda K. Kerber, "The Meanings of Citizenship," *The Journal of American History* 84, no. 3 (1997): 833-854.

¹⁷ Ronald H. Bayor, *The Columbia Documentary History of Race and Ethnicity in America* (New York: Columbia University Press, 2004), 275-276.

¹⁸ Patrick J. Hayes, *The Making of Modern Immigration: An Encyclopedia of People and Ideas*, Vol. 1 (Santa Barbara, CA: ABC-CLIO, 2012), 323.

¹⁹ "FIFTY-FIRST CONGRESS. SESS. II. CH. 550, 551. 1891," Library of Congress, accessed July 15, 2019, <https://www.loc.gov/law/help/statutes-at-large/51st-congress/session-2/c51s2ch551.pdf>.

²⁰ "FIFTY-SEVENTH CONGRESS. SESS. II. CHS. 1011, 1012. 1903," Library of Congress, accessed June 25, 2019, <https://www.loc.gov/law/help/statutes-at-large/57th-congress/session-2/c57s2ch1012.pdf>.

²¹ In 1907, the United States and Japan signed a Gentlemen Agreement according to which US would not forbid the entry of Japanese immigrants, and Japan would not issue passports for Japanese immigrants except for certain categories of businessmen ("FIFTY-NINTH CONGRESS. SESS. II. CH. 1134. 1907." Library of Congress, accessed June 25, 2019, <https://www.loc.gov/law/help/statutes-at-large/59th-congress/session-2/c59s2ch1134.pdf>).

		<p>foregoing excluded classes who are found to be and are certified by the examining surgeon as being mentally or physically defective, such mental or physical defect being of a nature which may affect the ability of such alien to earn a living; persons who have been convicted of or admit having committed a felony or other crime or misdemeanor involving moral turpitude; polygamists, or persons who admit their belief in the practice of polygamy, anarchists, or persons who believe in or advocate the overthrow by force or violence of the Government of the United States, or of all government, or of all forms of law, or the assassination of public officials; prostitutes, or women or girls coming into the United States for the purpose of prostitution or for any other immoral purpose; persons who procure or attempt to bring in prostitutes or women or girls for the purpose of prostitution or for any other immoral purpose.” Also, Article 39 of the law provided for the creation of the U.S. Immigration Commission, better known as the Dillingham Commission, to investigate the problems caused by immigration and its effects in the US. Moreover, it was forbidden for Asians to enter the US through the state of Hawaii and doubled the head tax to \$4 per person.</p>
US	The Immigration Act of 1917, also known Literacy Act and Asiatic Barred Zone Act. ²²	<p>This law prohibited immigration into the United States for those involved in prostitution, and those who were “idiots, imbeciles, epileptics, alcoholics, poor, criminals, beggars, any person suffering attacks of insanity, those with tuberculosis, and those who have any form of dangerous contagious disease, aliens who have a physical disability that will restrict them from earning a living in the United States..., polygamists and anarchists, those who were against the organized government or those who advocated the unlawful destruction of property and those who advocated the unlawful assault of killing of any officer” and those “born in the Asiatic Barred Zone,” with the exception of the Japanese and the Filipinos. Additionally, the entry head tax was raised to \$8 and a series of Literacy Tests had been introduced, but because of poverty, illiteracy and language ignorance, many failed. Moreover, immigrants were subjected to medical examinations to determine their physical and mental health.</p>
US	The Emergency Quota Act, also known	A system of percentages was defined, lim-

²² The Public Health Service (PHS), whose duties included the medical inspection and certification as it disembarked on the Ellis island, adopted and promoted eugenic practices “to help stem the flood of “inferior stock” represented by the new immigrants. “SIXTY FOURTH CONGRESS. SESS II. CHS. 27-29. 1917,” Campus Library, Serving University of Washington Bothell and Cascadia College, accessed June 25, 2019, <http://library.uwb.edu/Static/USimmigration/39%20stat%20874.pdf>.

	as the Emergency Immigration Act of 1921, the Immigration Restriction Act of 1921, the Per Centum Law and the Johnson Quota Act. ²³	iting the wave of immigrants mainly from southern and eastern Europe, as they thought they were not able to assimilate to US culture. The law restricted the number of new immigrants per year to 3 percent of the number of residents from that country already in the US in 1910.
US	The Immigration Act of 1924, also known as The Johnson-Reed Act or National Origins Act was a United States federal law. ²⁴	The law restricted the number of new immigrants per year to 2 percent of the number of residents from that country already in the US. The aim of the law was to limit the number of so-called "New Immigrants" coming from Southeast European countries, such as Italy, Greece, Hungary, Poland, and the exclusion of the Asian tribes. ²⁵ "Older immigrants" coming from countries in western or northern Europe such as Britain and Scandinavia were not impacted.
US	The Immigration Act of 1929.	This law fully established the percentages of the previous law of 1924 and limited the number of migrants to 150,000 people per year. According to the law "The annual quota of any nationality for the fiscal year beginning July 1, 1929, and for each fiscal year thereafter, shall be a number which bears the same ratio to 150,000 as the number of inhabitants in continental United States in 1920 having that national origin (ascertained as hereinafter provided in this section) bears to the number of inhabitants in continental United States in 1920, but the minimum quota of any nationality shall be 100." ²⁶
Europe (United Kingdom)	Aliens Act, ²⁷ 1905.	The law restricted immigration for: <ul style="list-style-type: none"> • someone who "does not have means to support himself and/or dependents." • "a lunatic or an idiot." • "a convicted criminal."
Europe (United Kingdom)	British Nationality and Status of Aliens Act (Aliens Restriction Act), ²⁸ 1914.	The target group included mainly the "enemy aliens", but there were several bans in the law for immigrants in general.
Europe	Aliens Act, ²⁹ 1919.	The target group included mainly the "en-

²³ Hayes, 331-332.

²⁴ The law was replaced in 1965 by the Immigration and Naturalization Act of 1965, also known as the Hart-Celler Act, which established a new immigration policy based on family reunification and the advent of skilled labor in the United States ("SIXTY – EIGHTH CONGRESS. SESS I. CHS. 185, 190. 1924," Campus Library, Serving University of Washington Bothell and Cascadia College, accessed June 25, 2019, <http://library.uwb.edu/Static/USimmigration/43%20stat%20153.pdf>).

²⁵ Racial discrimination was due to the fact that the nations of northern and western Europe were believed to have been overtaken by the nations of southern and eastern Europe at various points, such as education, traditions and physical characteristics. Migrants from Southeast Europe were characterized as biologically inferior, poor in IQ TESTS and characterized by poverty, alcoholism and inaction, which were considered to be of genetic origin ("SIXTY – EIGHTH CONGRESS. SESS I. CHS. 185, 190. 1924," Campus Library, Serving University of Washington Bothell and Cascadia College, accessed June 25, 2019, <http://library.uwb.edu/Static/USimmigration/43%20stat%20153.pdf>).

²⁶ "SEVENTIETH CONGRESS. SESS. II. CH 690. 1929," Library of Congress, accessed August 24, 2019, <https://www.loc.gov/law/help/statutes-at-large/70th-congress/session-2/c70s2ch690.pdf>.

²⁷ The law enacted in order to protect Britain from "undesirable immigration" while encouraging immigration which was beneficial to Britain ("Aliens Act, 1905 [5 EDW. 7. CH. 13]," Legislation.gov.uk, accessed August 24, 2019, https://www.legislation.gov.uk/ukpga/1905/13/pdfs/ukpga_19050013_en.pdf).

²⁸ The law laid down very strict conditions for aliens wanted to immigrate to Britain. The monarch gained authority to restrict immigration to Britain in times of "national danger or great emergency" ("British Nationality and Status of Aliens Act 1914, CHAPTER 17," Legislation.gov.uk, accessed August 24, 2019, <http://www.legislation.gov.uk/ukpga/Geo5/4-5/17/enacted>).

(United Kingdom)		emy aliens” and those who did not have enough money and were at risk of charging the public funds, but there were several bans in the law for immigrants in general
Europe (Sweden)	Deportation Act, 1914.	Allowed deportation of: <ul style="list-style-type: none"> • Roma, • Criminals, • Workforce immigrants.³⁰
Europe (Sweden)	Aliens Act, 1927. ³¹	Severe restrictions on: <ul style="list-style-type: none"> • Gypsy immigrants, • Workforce immigrants, • Criminals, • Poor.
Europe (Germany)	The Nuremberg Laws September 15, 1935, The Reich Citizenship Law (Reichsbürgergesetz).	The law was both anti-Semitic and racist in nature and revoked the citizenship of German Jews. In accordance with Article 2 (1) of the Act: “A citizen of the Reich is that subject only who is of German or kindred blood and who, through his conduct, shows that he is both desirous and fit to serve the German people and Reich faithfully.” ³²
Australia	The Immigration Restriction Act 1901 of the Parliament of Australia.	The law was enacted by the Parliament of Australia to ban certain categories of migrants from entering Australia in order to maintain the large proportion of Europeans living in Australia. Specifically, in the law it is stated: ³³ “The immigration into the Commonwealth of the persons described in any of the following paragraphs of this section (hereinafter called “prohibited immigrants”) is prohibited, namely: (a) Any person who when asked to do so by an officer fails to write out at dictation and sign in the presence of the officer a passage of fifty words in length in a European language directed by the officer; (b) any person likely in the opinion of the Minister or of an officer to become a charge upon the public or upon any public or charitable institution; (c) any idiot or insane person; (d) any person suffering from an infectious

²⁹ The law included “stringent and wide” terms. There were specific ports for the expulsion of immigrants. Also, all immigrants over 16 had to register with the police. Aliens who already lived in Britain were deported if they were arrested for a criminal act. Deportation was allowed if the Home Secretary judged this was “conducive to the public good”. It was forbidden for foreigners to work in specific positions, such as “master, chief officer, or chief engineer of a British merchant ship” and public services. Ten (10) years of imprisonment was imposed for immigrants who participated in “any act calculated or likely to cause sedition or disaffection.” Also medical examinations were required. “Aliens Restriction (Amendment) Act 1919, CHAPTER 92 9 and 10 Geo 5,” Legislation.gov.uk, accessed August 24, 2019, <http://www.legislation.gov.uk/ukpga/Geo5/9-10/92>.

³⁰ Christer Gardes, and Eskil Wadensjö, “Post-enlargement Migration and Adjustment in a Receiving Country: The Case of Sweden,” in *Labor Migration, EU Enlargement, and the Great Recession*, eds. Martin Kahaneč, & Klaus F. Zimmermann, 123-138 (Berlin, Heidelberg: Springer, 2016), 123.

³¹ The law was aimed at the protection of “Nordic race” from immigrants for eugenic and economic reasons. Moreover, when the WWI ended, immigration policy became more stringent and the Swedes wanted to “control immigration of people who do not to our benefit allow themselves to meld with our population.” Pontus Rudberg, *The Swedish Jews and the Holocaust* (New York: Routledge, 2017).

³² Pheng Cheah, David Fraser, and Judith Gribich, *Thinking Through the Body of the Law* (New York: New York University Press, 1996), 66.

³³ “IMMIGRATION RESTRICTION, No. 17 of 1901,” Australian Government: Federal Register of Legislation, accessed July 11, 2019, <https://www.legislation.gov.au/Details/C1901A00017>.

		<p>or contagious disease of a loathsome or dangerous character;</p> <p>(e) any person who has within three years been convicted of an offence, not being a mere political offence, and has been sentenced to imprisonment for one year or longer therefor, and has not received a pardon;</p> <p>(f) any prostitute or person living on the prostitution of others;</p> <p>(g) any persons under a contract or agreement to perform manual labour within the Commonwealth: Provided that this paragraph shall not apply to workmen exempted by the Minister for special skill required in Australia or to persons under contract or agreement to serve as part of the crew of a vessel engaged in the coasting trade in Australian waters if the rates of wages specified therein are not lower than the rates ruling in the Commonwealth."</p>
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Table III: Interracial Marriage Laws in North American, Europe and Australia before the Holocaust

Continent	Law	Content
US	Virginia, ³⁴ 1691 and Virginia 1924 (SB 219) "The Racial Integrity Act." ³⁵	All interracial marriages were forbidden by punishing whites who were in exile.
US	Maryland, 1664 (The British colonial law) and Maryland 1692.	Maryland passed the first British colonial law, which banned the marriage between white people and slaves. According to this law, any woman who married a black man and any children who may emerge from this union would be considered slaves. However, the law did not include provisions for a white man marrying a black woman. ³⁶
US	Oregon Law passed in 1862 and an Act to Prohibit the Inter-marriage of Races, 1866 (Oregon).	Prohibited the marriage between white people and those with a quarter or more of "Negro blood." ³⁷
US	Connecticut, 1895, An Act Concerning Crimes and Punishments. ³⁸	The marriage of "epileptics, imbeciles, and the feebleminded" ³⁹ was prohibited. The law criminalized even relations and cohabi-

³⁴ Wolfe Brendan, "Racial Integrity Laws (1924–1930)," *Encyclopedia Virginia*, Virginia Humanities, (Feb. 2009), accessed July 10, 2019, https://www.encyclopediavirginia.org/racial_integrity_laws_of_the_1920s.

³⁵ The law banned the interracial marriage for eugenic purposes and defined the white person as the one "who has no trace whatsoever of any blood other than Caucasian." The law was abolished in 1967 following the case *Loving v. Virginia*. See Kevin R. Johnson, *Mixed Race America and the Law: A Reader* (New York: New York University Press, 2003), 53, 64, 238.

³⁶ Christopher Tomlins, *Freedom Bound: Law, Labor, and Civic Identity in Colonizing English America, 1580–1865* (New York: Cambridge University Press, 2010), 459.

³⁷ Allan K. McDougall, Lisa Philips, and Daniel L. Boxberger, *Before and After the State: Politics, Poetics, and People(s) in the Pacific Northwest* (Vancouver, Toronto: UBC Press, 2018), 112.

		tation of “affected couples.” ⁴⁰
US	Indiana Act of April 15, 1905.	Banned marriage to people with “mentally deficient”, “transmissible disease” and “habitual drunkards.” ⁴¹
US	Congress passes the Cable Act, 1922.	Weddings between white and African American people, as well as between Indians and Asians were prohibited. ⁴²
Canada	There was no law against interracial marriage.	There was a strong social outcry against interracial marriage despite the lack of interracial marriage laws.
Europe (Germany)	The Nuremberg Laws, September 15, 1935, Law for the Protection of German Blood and German Honour (Gesetz zum Schutze des deutschen Blutes und der deutschen Ehre).	The law was a result of Nazi and anti-Semitic theory and mentioned in Sections 1 and 2: <ol style="list-style-type: none"> 1. “Marriages between Jews and citizens of German or some related blood are forbidden. Such marriages [...] are invalid, even if they take place abroad in order to avoid the law. 2. Sexual relations outside marriage between Jews and citizens of German or related blood are forbidden.”⁴³
Europe (Germany)	Law for the Protection of the Hereditary Health of the German People, October 18, 1935.	New requirements for marriage were introduced under this law such as a certificate of fitness to marry. These certificates were not administered to “those suffering from hereditary illnesses and contagious diseases” ⁴⁴ and those attempting to marry against the Nuremberg Laws.
Australia	The Aboriginals Ordinance 1918.	Marriage restriction between Indigenous women and non-Indigenous men to avoid reproduction of “genetically inferior offspring” ⁴⁵

³⁸ Following the Connecticut law, some 30 states adopted similar laws, such as Minnesota and Kansas (1903), Ohio and New Jersey (1904), Indiana and Michigan (1905) and Arizona (1913). According to this law “mental or physical defects” of parents would be transferred to their offspring, who was undesirable and was considered as a burden on society. See Laura L. Lovett, “Mark A. Largent. Breeding Contempt: The History of Coerced Sterilization in the United States. New Brunswick: Rutgers University Press, 2008,” *The American Historical Review* 114, no. 3 (2009): 776-777.

³⁹ Lawrence B. Goodheart, “Rethinking Mental Retardation: Education and Eugenics in Connecticut, 1818–1917,” *Journal of the History of Medicine and Allied Sciences* 59, no. 1 (2004): 90-111.

⁴⁰ Philip R. Reilly, “The Surgical Solution: A History of Involuntary Sterilization in the United States,” *The American Historical Review* 97, no. 3 (1992): 944-945.

⁴¹ Samuel M. Dike, “State Laws Regulating Marriage of the Unfit,” *Journal of the American Institute of Criminal Law and Criminology* 4, no. 3 (2013): 423-425.

⁴² Michael C. LeMay, and Elliott Robert Barkan, *U.S. Immigration and Naturalization Laws and Issues: A Documentary History* (Westport: Greenwood Press, 1999), 135-136.

⁴³ Cheah, Fraser, and Crbich, 66.

⁴⁴ Wayne Morrison, *Criminology, Civilisation and the New World Order* (London: Routledge, 2006), 80.

⁴⁵ Nina N. Lemieux, *Australian Eugenics from 1900 to 1061* (PhD Diss, The University of Texas at Austin, 2017), 12.

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