Abstract
This paper seeks to explore and analyze the different manifestations of eugenics in modern societies. First, the modern tools of eugenics will be outlined. Next, an analysis of the different levels of eugenic activities, i.e., the global, national, and individual level, will be presented. Finally, the basic errors of eugenic thinking and alternatives to eugenic thinking will be discussed.

Keywords: abortion, eugenics, epigenetics, overpopulation, prenatal diagnostics
Introduction

Eugenics can be defined as the “science of human improvement by breeding.” The general idea is to eliminate the disabled (negative eugenics) or to strengthen the abled (positive eugenics), thereby improving the human gene pool. The eugenic ideology is the most extreme form of exclusion of the disabled, and particularly of people with intellectual and developmental disabilities.

Eugenic thinking started as an attractive ideology in the beginning of the last century primarily based on utilitarian ethics. Social Darwinism with its quest to create a society of the fittest through genetic selection was essential to eugenic thinking. The basic idea was that white members of the societies of the Western civilization constitute the ideal, “able” humankind. Breeding in light of this ideal would solve problems like health care related spending for disabled and, in the end, generate a healthy society without any suffering. It is commonly assumed that eugenic exclusion of disabled people is an ideology of the past, which has been disqualified by the atrocities executed by Nazi Germany and is unacceptable for modern societies. Contrary to all expectations and hopes, however, the cruelties executed in Nazi Germany did not extinguish the attractiveness of eugenic thinking. The protagonists of eugenics somehow managed to modify their ideology such that it has become acceptable to most societies in the second half of the twentieth century and into the twenty-first century. These reconfigured eugenic ideas are again believed to offer solutions to pressing problems in modern societies such as health spending, demographic changes, overpopulation, and climate change. The original coercive characteristics were exchanged for a more liberal, even “voluntary” eugenic activity with the individual allegedly being in control. Indeed, the highest degree of success is currently gained by presenting essentially eugenic practices as a form of self-determination and the promotion of so called “reproductive rights.” This paper explores and analyzes different manifestations of eugenics in modern societies. First, it will discuss current tools of eugenics. It will then analyze these practices from three perspectives: the global, national, and individual perspective. Finally, the basic errors of eugenic thinking and alternatives to eugenic thinking will be discussed.

Tools of Modern Eugenics

Sterilization

Sterilization has always been the major eugenic tool. In fact, Margret Sanger, the founder of Planned Parenthood and one of the most prominent eugenic protagonists in the beginning of the last century, was the first to organize a sterilization clinic in Harlem. Ever since, sterilization methods are promoted as a major tool for negative eugenics: “... the most urgent problem today is how to limit and discourage the over-fertility of the mentally and physically defective” (Sanger).

A perverse perfection of coercive sterilization campaigns was reached in Nazi Germany. With the aim of generating Volksgesundheit, the healthy society, disabled people were identified by the Gesundheitsämter and public health agencies put in place in the 1930s (and actually still very active in public health in Germany today) (Bachrach). In a first step, forced sterilization was conducted on disabled citizens who supposedly lived “a life unworthy of
life.” Then, in a brutal euthanasia campaign, known as the T4 program, disabled children were killed in great numbers under the pretext of relieving unacceptable suffering.

Legislation supporting forced sterilization of the disabled was still active in the 1970s in Scandinavian welfare states (Broberg and Roll-Hansen) and in some states of the U.S., mainly California and North Carolina (Reilly). The pretext was always to prevent unbearable suffering; the actual purpose, however, was to relieve the welfare state from the economic burden induced by disabled persons.

Active and generally coercive sterilization programs are currently executed in a number of Third World countries, most prominently in China and India (Parker; Guancheng). Almost all international organizations, especially the United Nations’ World Health Organization (WHO) and Family Planning Agency (UNFPA), as well as most philanthropic funds actively promote sterilization on a voluntary basis (Hartmann). Indeed, sterilization is believed to be the decisive tool to control the postulated global overpopulation (Osterfeld).

**Prenatal Genetic Diagnostics**

Arguably, prenatal genetic diagnostics constitutes the highest perfection of eugenic activity in modern societies. Its widespread use in modern times meets little criticism in public opinion. And yet, the use of the term “diagnostics” is, of course, at best euphemistic and probably intentionally misleading. Contrary to the general conception of diagnosis, prenatal genetic diagnosis provides no benefit to the patient. Instead of eliminating the disease, it generally leads to the elimination of the patient, i.e., the child, by abortion.

Complete genetic screening and consequent eugenic activity in pregnancy was, until very recently, limited to instances in which the pregnant woman was undergoing amniocentesis and chorionic biopsy. With the recent development of genetic screening for Down Syndrome from a simple blood draw, this last threshold has been lost. Further development of these kinds of tests will exert a eugenic power that far exceeds any eugenic program of the past. Thus, the prognosis of the sociologist Troy Duster will soon be reality: “We are on the edge of a mass genetic screening for all pregnant women.”

**Preimplantation Genetic Selection (PIGS)**

Preimplantation Genetic Selection, which is often but erroneously called preimplantation genetic diagnostics, is the most recent tool in the arsenal of allegedly voluntary eugenics in modern societies. Justified, once more, as a way to prevent the presumably unbearable burden for the parents and the presumably unbearable suffering of their offspring, selection along eugenic lines is performed on embryos produced through in-vitro fertilization prior to their implantation into the mother. Paradoxically, the parents eliminate embryos believed to be unworthy of life only on the basis that these embryos carry a gene pattern that the parents themselves share.

As is true of Prenatal Genetic Diagnostics, Preimplantation Genetic Selection also demonstrates how modern societies elegantly delegate the responsibility for eugenic actions to individuals. Using the argument of self-determination and free choice, modern societies manage to persuade mothers to voluntary sacrifice their children for the betterment of society.
Abortion

Eugenics is one of the reasons for the high number of abortions executed in Western civilizations and developing countries. “Embryopathic indication” for abortion is inherently eugenic and was previously called “eugenic indication.” The killing of the unborn child is justified either by a physical defect, detected by prenatal ultrasound or by a defective gene diagnosed in the course of prenatal genetic testing. The scientific basis for genetic counseling in pregnancy is weak since relevance and penetrance (manifestation rate) of the genetic alterations are seldom known. Essentially, the prenatal diagnostic findings can only show that the DNA sequence of the unborn child differs from that of the majority of the society. In the eugenic logic, this suffices to stigmatize the child as unfit and disabled. The high numbers of embryopathic abortions in industrialized and developing countries clearly demonstrate the high level and high effectiveness of eugenics in modern societies.

Euthanasia

The modern practice of euthanasia, unlike the T4 program of the Nazis, is not directly aimed at preventing procreation and thus improving the gene pool. However, even contemporary euthanasia and eugenics remain closely linked. First and most important, they both classify people as able and disabled depending on their net benefit for society. Second, they pretend to solve the problems of disabled individuals by killing these individuals. Third, they presume that certain types of lives – that is, severely disabled lives – are not worth living. And fourth, the cost of care is an important driver of both of these practices. The eugenic paradox is that, contrary to the state-driven coercive euthanasia in totalitarian countries of the past, euthanasia in modern societies is demanded by the public. This, of course, fulfills the wildest dreams of the eugenists.

Different Levels of Eugenics in Modern Societies

In addition to the analysis of the tools of eugenics in modern societies, this phenomenon can also be approached by looking at eugenic activity on the global, national, and individual levels.

Global Eugenics

The threat experienced by alleged overpopulation was present in old Greece and Carthage. At a time when the world population was about 1% of today’s population, Tertullian of Carthage (160-220 CE) claimed that “Our teeming population is the strongest evidence our numbers are burdensome to the world, which can hardly support us from its natural elements. Our wants grow more and more keen and our complaints more bitter in all mouths, while nature fails in affording us our usual sustenance. In every deed, pestilence and famine and wars have to be regarded as a remedy for nations as the means of pruning the luxuriance of the human race” (30.4).

Today, similarly, a threat arising from the over population of the planet is regularly proclaimed and seldom disputed. Public acceptance of the concept of overpopulation offers an excellent justification of eugenic activities. The implicit idea is that civilized Western and predominately white societies are threatened by expanding developing countries. In this context negative eugenics are commonly applied with great emphasis and camouflaged
behind solidarity with developing countries. The currently most effective postulate is the need to provide free access for women to reproductive health. These health measures, which include sterilization and abortion, are propagated by all major global institutions such as the United Nations and the World Bank (Hartmann). Also, almost all philanthropic foundations like the Rockefeller Foundation and the Gates Foundation invest enormous amounts of resources in campaigns to strengthen the self-determination and reproductive health of women in developing countries. The publicly expressed goal of the eugenic movement is to fight poverty, suffering, and, for instance, unsafe abortion in developing countries. The economic interests of the industrialized countries are seldom articulated.

Along the line of eugenic ideology, China and India have implemented very active programs of forced sterilizations, abortions, and other forms of coercive family planning (Parker). These countries serve as role models for global eugenic propaganda and their actual economic success helps to increase the attractiveness of eugenic concepts and easily silences criticism. However, the detrimental effect of the one child policy in China and the abortion practice in India favoring male offspring can no longer be completely disguised (Bernman; Guangcheng).

Overpopulation is also a concern for the protagonists of climate change. They argue that population growth and industrial development in developing countries has to be reduced to prevent further human induced CO₂-pollution and consequent climate change (Cox). On the other hand, the unrestricted growth of developed countries should not be hampered. This line of reasoning perfectly matches the classic eugenic notion of the survival of the fittest.

National Eugenics

Eugenic ideology is still very attractive to modern welfare states. As mentioned, eugenic thinking teaches that only the fittest and strongest merit being supported by the society. Frail elderly persons who no longer contribute economically to society are unfit and merely a burden to society. Against this backdrop, achievements of modern medicine that keep these elderly alive are often criticized with the argument that these achievements prevent the natural course of life. They are rejected as artificial prolongation of life. While emphasizing the alleged burden of such a prolonged life to the individual, society elegantly delegates its eugenic agenda to its individual citizens, convincing them to write advance directives so as to guarantee their timely demise through limitation of medical interventions or, better yet, assisted suicide and euthanasia before they pose too much of a burden to the community. Thus again, society defines quality of life and characterizes disability as the level at which life becomes supposedly unbearable. The prevailing arguments, which emphasize the importance of being able, active, and living a life of good quality and which depict a life with many disabilities, illness, and frailty as not worth living, are almost indistinguishable from the eugenic ideology of Nazi-Germany, which stigmatized the disabled as lebensunwürdig and which pursued the quest for a healthy society formerly called Volksgesundheit (Bachrach).

Individual Eugenics

The concept of disability plays an important role in twenty-first century eugenic ideology. When defined along utilitarian lines, ability is the potential to increase the common
 Disability is the lack of capacity to support society or, even worse, being a burden to society. In practical terms, therefore, a person who pays taxes is able, whereas anybody who needs to be supported by the society is unable. The otherwise very constructive ideology of a socially active citizenry which postulates that “we are what we do,” becomes detrimental and implies that “you are unworthy if you are unable to contribute to society.” This detrimental outcome is captured well in the Spanish language, which calls disabled persons minusválidos, literally, those less valued. To relieve disabled persons from their unworthy life is, in this tragic and supposedly voluntary eugenic mode of thinking, not only logical but an expression of compassion.

Thus, disability demands disabling action. Indeed, such a disabling action is called for as soon as the suspicion arises that a person becomes unable, that is, unable to perform properly along the demands of society. Killing is not performed in the old fashioned coercive way of totalitarian regimes, but is demanded by the individual in a presumably voluntary fashion. The tools that are offered by modern societies to exert such voluntary eugenic killing are, as outlined above, plentiful and include abortion, preimplantation genetic selection, euthanasia, and assisted suicide. Not only do people kill their unborn and living disabled children, but also their parents, and finally themselves.

**Basic Errors of Eugenic Thinking**

The eugenic fiction of a “good” genome lacks any scientific basis. Even those few dominantly inherited monogenetic diseases very seldom have a manifestation rate (penetrance) of 100%. And even then, the onset of disease is often much later in life (in the case of Huntington, for example, usually in the fourth decade of life). In addition, most genome alterations are recessive and, therefore, never manifest. The absurd idea of generating a “normal” gene pool would require a worldwide genome screening to detect all these latent recessive traits.

The strongest argument against the fiction of a good genome is, however, based on recent scientific advances in epigenetics (Armstrong). Eugenic thinking is based on Social Darwinism, which holds that the survival of the fittest is driven by sporadic mutational changes of the genome which generate fitness by an ideal adaption to environment. The counterpart to this very static genetic theory was a more dynamic concept of genetic changes induced by behavior and environment. The first protagonist of the latter view was Lamarck (1744-1829). His ideas have recently gained strong support as a result of the rapid growth in epigenetics research. Epigenetics can be defined as inheritance without DNA changes. This inheritance is not based on mutations but on individually differentiated activation or deactivation of genes, so called “gene switching,” which is induced by environmental factors. At a molecular level, these modifications of gene activity are known to be linked to changes in the methylation status of histones. Epigenetic changes are dynamic and can be modified over a life span, but can also be preserved over generations by inheritance. Thus, modern epigenetics provides a completely new insight into the complex pattern of inheritance and will surely replace the static idea of a good genome propagated by eugenics.

This makes clear that the qualification of a genome as “normal” or “good” merely reflects the characteristics and ultimately the interests of the stronger groups in a society.
which define normality. In totalitarian societies these stronger groups are the leading race or class; in democratic societies, it is the majority.

Conclusions

Eugenics shows the classic conflict between utilitarian and deontological ethics in modern societies. Contrary to utilitarian thinking, a deontological understanding of morality enables us to consider the value of human life to be independent of its abilities, that is, it is a value by itself. Furthermore, deontology also renders it possible to understand different genetic constellations of humans as merely exhibiting a much welcomed diversity of humankind. A classification of this diversity contradicts the idea of the unconditioned value of each human life. This is best expressed in the Christian belief that every human is created in the image of God. Moreover, instead of stigmatizing certain individuals as disabled, Jesus attributes an especially high status to such persons. This is expressed most prominently in the first of the eight blessings included in the Sermon on the Mount. Here, individuals that are stigmatized by eugenicists as disabled and feeble-minded are explicitly blessed by Jesus: “Blessed are the poor in spirit: for theirs is the kingdom of heaven” (Matthew 12:5).

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