



HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

Opiskelijakirjaston verkkojulkaisu 2006

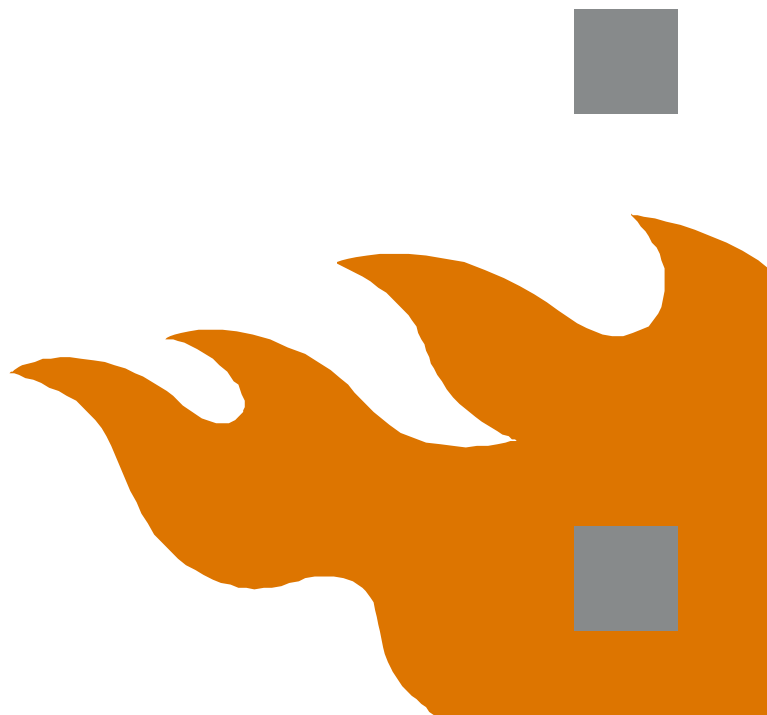
Something Rotten in the State of Denmark: Eugenics and the Ascent of the Welfare State

Bent Sigurd Hansen

Julkaisu: Eugenics and the Welfare State: Sterilization Policy in Denmark, Sweden, Norway and Finland
Eds. Gunnar Broberg and Nils Roll-Hansen
East Lansing 1996
pp. 9-76

Tämä aineisto on julkaistu verkossa oikeudenhaltijoiden luvalla. Aineistoa ei saa kopioida, levittää tai saattaa muuten yleisön saataviin ilman oikeudenhaltijoiden lupaa. Aineiston verkko-osoitteeseen saa viitata vapaasti. Aineistoa saa opiskelua, opettamista ja tutkimusta varten tulostaa omaan käyttöön muutamia kappaleita.

www.opiskelijakirjasto.lib.helsinki.fi
opiskelijakirjasto-info@helsinki.fi



SOMETHING ROTTEN IN THE STATE OF DENMARK: EUGENICS AND THE ASCENT OF THE WELFARE STATE

BENT SIGURD HANSEN

How important it is to trace the development of eugenics in each Scandinavian country can be debated. Still, a reasonably good case can be made for examining Denmark, which in many ways offers useful contrasts to the other countries that so far have been studied in detail: the United States, Great Britain, and also, in recent years, Germany¹—all countries that were great powers at the beginning of the century, and where eugenics had a considerable following.

The fact that a country considered itself a great power, or a power sliding from first to second rank, was in itself a factor that affected the development of eugenics. Certainly, the defeat of Germany in World War I strongly affected the German attitude toward eugenic measures; another example is the striving for "national efficiency" in Great Britain in the years before this war.² In contrast, Denmark was not, and did not aspire to be, a great power. Its last pretensions in this direction were lost, together with the fleet—and Norway—in the Napoleonic Wars, a conflict that literally bankrupted the country. And the area of Denmark was further depleted when Holstein and Schleswig were, in effect, ceded to Prussia after the Second Schleswig War (1864-66).

At the beginning of the twentieth century, Denmark was a country with a small homogeneous population, without the antagonism between different ethnic groups that influenced the eugenics movement in other countries. Denmark was the only Scandinavian country with colonies. But her West Indian colonies were transferred to the United States during World War I, and her remaining colony, Greenland, was so remote, so sparsely populated, and of such little economic importance, that its effect on Danish attitudes toward other races and peoples was negligible.³

After the first World War, during which Denmark remained neutral, the Social Democrats slowly gained ascendancy without violent political confrontations. Labor relations were also peaceful during the lean years immediately after the war, at least when compared to those in other European

countries. A kind of truce developed between the Social Democrats and the traditional parties of the center and right and, as a consequence, a large number of reform laws could be carried out during the 1920s and 1930s, not unanimously, but without violent confrontations. Chief among these laws was the great social reform law complex that marks the beginning of the Danish welfare state.

The preconditions that have been postulated for the development of the eugenics movement— ethnic antagonism, social unrest, conservative opposition to social relief— seem to have been absent, or only weakly represented in Denmark. Yet Denmark was the first European state to introduce national legislation concerning eugenic sterilization in 1929.

BIOLOGICAL DETERMINISM IN DENMARK: THE NINETEENTH CENTURY

Most of the powerful biological myths prevalent in the Western world in the nineteenth century can be found represented in Denmark. There was a general belief in the strong influence of heredity, coupled with an almost complete ignorance of actual genetic mechanisms. A picture of the confusion in this area can be gained from the prize-winning essay *Arvelighed og Moral* (Heredity and Morals), which appeared in 1881. The author, Karl Gjellerup, was not a scientist but a poet and novelist, who was later awarded a Nobel Prize in literature. Today, he is almost completely forgotten, even in Denmark. The essay was entirely derivative, with Prosper Lucas, Augustine Morel, Herbert Spencer, and Charles Darwin as main sources, and strongly influenced by a contemporary book by Theodule Ribot.⁴ Much of the essay was anecdotal material, concerning alleged examples of what Ernst Mayr has called "soft inheritance,"⁵ cases where heredity was supposed to have been directly influenced by the environment, the so-called Lamarckian heredity. Though not a professional scientist, on this point Gjellerup reflected the general consensus of contemporary medical and biological expertise.

A particular version of hereditary determinism, the belief in degeneration, was widely shared in Denmark. It was given scientific legitimacy by the French psychiatrist Augustine Morel, but the concept itself is much older. The psychiatrist Frederik Lange, who himself belonged to a well-known liberal, patrician family, introduced the ideas of Morel in his doctoral thesis of 1881.⁶ His last book, published two decades later, reminisces about his experience as the leader of Middelfart Psychiatric Hospital, and is a strange and haunting description of the last representatives of the declining great families he observed.⁷ More a work of art than a scientific treatise, it has been overshadowed

owed by a work of fiction that conveyed the same melancholic impression, Herman Bang's *Håbløse Slægter* (Descendants Without Hope) published in 1882, a poignant, partly autobiographical, account of a young man who regards himself as the last degenerate member of such a declining family.⁸ This theme was popular in nineteenth-century fiction, and other examples from Danish literature can be cited. Belief in degeneration, of course, presupposed belief in hereditary determinism, and, at the same time, belief in the—mostly negative—effects of bad behavior, drinking, sexual excesses and so on.

References to Darwin and Darwinism were widespread, but mostly in association with evolution in general and what Darwin himself called "descent with modification." Phrases such as "struggle for existence" and "survival of the fittest" were bandied about in the contemporary literature and applied, rather vaguely, to humans and human society. But no complete account of social Darwinism—selectionist ideas applied to social relations and social stratification—can be found before J. B. Haycraft's *Darwinism and Social Improvement* appeared in translation in 1894.⁹ The main thesis of this work was that the most valuable parts of the population reproduced at the lowest rate, while the part of the population that was "inferior," mentally and physically, reproduced at the highest rate—the concept of differential reproduction. Furthermore, this tendency was characteristic of civilized, as opposed to "natural," society and was reinforced in particular by the progress in medicine and various types of social relief. References to Herbert Spencer, regarded by many as the original inventor of social Darwinism, can of course be found much earlier. But it is characteristic that a work from 1881, where he was one of the primary sources, used his ideas of a general organic evolution and connected these ideas with the German theories of the cell-state.¹⁰ What has often simply been called Darwinism was, in Denmark, as in other countries, a confusing web of partly overlapping and partly conflicting biological ideas and myths.

Virtually all of the authors that used or referred to these ideas were regarded, and regarded themselves, as liberals or progressives. Many were radical followers of Georg Brandes, the great European literary critic, who was the leader of what has been called "the Modern Breakthrough" in Denmark—both a literary and a political movement directed against romanticism and reaction. A surprising number of the intellectuals attracted to biological determinism were also attracted to the ideas of Henry George. Gustav Bang, the major intellectual ideologue of the Danish Social Democrats, who at that time represented the extreme left in the political spectrum, wrote a doctoral thesis on the decline and degeneration of the old Danish nobility. Another young socialist intellectual arranged lectures for the workers of Copenhagen during the great lockout in

1899. And what were the lectures about? Darwin, Spencer, and Weismann, of course.¹¹ Denmark had its share of cultural pessimists, and they could find plenty to be pessimistic about, from the defeat in the Schleswig Wars and the subsequent loss of territory to the general decline in taste, literacy, and morals. But there were no examples of the blend of cultural pessimism, conservatism, chauvinism, and biological and racial determinism that could be found further south, nor of the exaltation of "Nordic" ideals combined with political reaction.

PHYSICAL ANTHROPOLOGY

A certain legitimating of this worship of the "Nordic" physical and mental type can be found in the discipline of physical anthropology, which had been established as a legitimate science in the last half of the nineteenth century with the Swede, Anders Retzius, as one of the founding fathers. A review of the development of this discipline in Scandinavia noted that Denmark was poorly represented compared to other Scandinavian countries, and attributed this to the generally mixed character of the Danish population that made studies of racial characteristics so unrewarding.¹² Most of the work that was done was statistical in nature, and several papers were very critical toward some of the accepted methods, in particular the use of the cranial index established by Retzius.¹³

Physical anthropology was never established as an independent scientific discipline at the university. A Danish anthropological committee was established in 1905 with the physician Søren Hansen, first as secretary, then as chairman of the committee. Søren Hansen was the closest Denmark came to a full-time physical anthropologist. He obtained grants to study physical anthropology, visited several of the famous European anthropologists, and published numerous works on physical anthropology. But the point is that he never actually had the opportunity to be a full-time anthropologist. He never achieved an academic position; he was forced to do his doctoral work in a completely different field and to support himself as a police doctor. In Denmark, physical anthropology never achieved the prestige it had in other countries.¹⁴

Physical anthropology could be regarded as the biological science about man, correlating physical and mental characteristics of the different races and types of man. Eugenics was defined by many as human biology, applied with special regard for future generations. So it was not surprising that there was a great overlap between physical anthropologists and eugenicists. Søren Hansen was only one of the many physical anthropologists who attended the First International Eugenics Conference, an experience that converted him to a

prolific advocate of eugenics. But, as he was the only physical anthropologist in Denmark, he was almost the only eugenicist. One of the reasons for the absence of a more broadly based eugenics movement in Denmark might be the weak standing of physical anthropology.

EUGENICS AND THE INSTITUTIONS

Unfortunately, only a very small part of the literature on eugenics deals explicitly with institutions for the mentally retarded and the mentally ill—the hospitals, prisons, and schools—where an increasing number of these people were segregated from normal society. But institutional leaders were among the first to use eugenic arguments. Not only were the "inferior" kept in an isolated and protected environment where they could do no harm and could be put to some use, but they were also prevented from transmitting their "inferiority" to any progeny. Surgery for eugenic or partly eugenic purposes was first performed in the institutions, and it was the institutionalized groups who remained the primary target of eugenics legislation in most countries. Institutional staff occupied a unique position where they could provide the observations and the scientific data that justified eugenic measures, put the eugenic proposals into practice, and even evaluate the benefits of the eugenic measures they performed.¹⁵

In several cases the medical experts at the institutions challenged the existing legislation. In some cases they simply carried out sterilizing operations without the sanction of the law, as Edwin Hedman, the head of an institution for the mentally retarded in Finland, did in 1911. In Denmark, it was the leader of the institution for the mentally retarded in Thisted that, more cautiously, forwarded the first formal application for eugenic sterilization.¹⁶

Of course, the institutional leaders were also in a position where they could effectively block eugenic measures, if they disapproved of them for religious or humanitarian reasons. Certainly, the early sterilization data for the United States, as depicted in the surveys of Harry F. Laughlin and J. H. Landman, shows that institutions in the same state differed widely in the zeal with which they carried out sterilizations. This trend proceeded well into the 1950s, as the example of Sonoma State Home in California demonstrates.¹⁷

It is generally accepted that the first to carry out eugenic sterilization (vasectomy) was Harry Sharp, who performed these operations at the Jeffersonville State Prison in Indiana. But these first operations were performed primarily for non-eugenic purposes, namely, to suppress excessive masturbation. According to Sharp, the operation seemed to repress not only masturbation but also other

kinds of sexual activity. He emphasized that the operation, as an additional benefit, would prevent reproduction.

Sharp carried out a large number of such operations even before 1907, when his experiences became the basis of a sterilization law in Indiana, the first modern eugenic sterilization law. It is interesting to note that virtually all experts since 1920 have claimed that the effects of vasectomy on sexuality are minor and mainly psychological. It could have been this psychological effect on the prisoners that Sharp observed; alternatively, he himself might have been deluded by his expectations.¹⁸

Even before Sharp's first operation in 1899, however, straightforward castrations had been performed at several institutions for the mentally retarded: at Elwyn in Pennsylvania under Isaac Kerlin and later under Martin W. Barr; in Winfield, Kansas, under F. Hoyt Pilcher, and in other American institutions.¹⁹ Of Sharp, Barr wrote:

Much distressed by the debasing habits rife among the children of this institution, and having exhausted every means of reformation through discipline, he, after consultation, castrated fifty-eight boys, with a resulting gain in almost every case of marked improvement both mental and physical.²⁰

But, in all cases the immediate reason for the operation was masturbation. Revulsion toward the various kinds of emerging sexuality that were possible under the conditions imposed by the institutions made the radical intervention of the surgeon's knife acceptable. And, later, other benefits, among them the eugenic effects of asexualization, added to the rationale for the operation. No doubt the institutions for the mentally retarded, like many other organizations, were easier to run without the further complications of sexuality, but ironically, the problem that was solved by the operation was created by the very nature of the institution.²¹

Barr and his coworkers from Elwyn also submitted a law proposal dealing with the castration of the mentally retarded. They stressed the double advantage of the operation: both that the individual operated on became "more docile, more tractable . . . a gelding or an ox loses nothing but becomes in every respect more docile, more useful and better fitted for service" and that reproduction was prevented: "It must be remembered that these idiots always must be dependents . . . the state therefore has a right to act in place of a parent and also to take measures to prevent their propagation."²² The eugenic benefits expected from this law can also be seen from the fact that Barr called it a proposal "for the prevention of idiocy." It was passed by both the legislative chambers of

Pennsylvania, but was then vetoed by the governor in 1904, to the great dismay of Barr.

In the same period, the psychiatrist and sexual reformer August Forel also experimented with castration at the psychiatric hospital of Burghölzli in Switzerland. The targets were violent patients, whose behavior he hoped to modify and control with the operation. It was also in the 1890s that the new operation ovariectomy, female castration, was used as a cure against hysteria by the inventor of the operation, the professor of obstetrics at Freiburg, Alfred Hegar.²³ Another example of this conjunction between mentally ill patients and radical interventionist surgery was the craniectomy operations that enjoyed a brief popularity. For some time, several eminent neurologists had maintained that mental retardations could be caused by a too early closing of the cranial sutures. Craniectomy, the reopening of these sutures, was suggested as a method to restore normalcy. The operation was widely promoted in the popular press, and in 1890 about fifty operations were undertaken in Europe and the United States. The operations were a dismal failure; about 15-25 percent of the patients did not survive the operations, and no significant improvement could be detected in the surviving group.²⁴

During the last years of the nineteenth century, the Utopian hopes of educating and essentially curing the mentally retarded had largely been abandoned. More and more, the institutions became places where the inmates were kept isolated from the rest of society, where they could be trained in certain skills according to the way they had been classified, and where a reasonable amount of work could be extracted from them, under humane conditions and for the benefit of society. The teacher and the amateur philanthropist became subordinate to the physician, the expert who could classify the mentally retarded and determine the extent of mental retardation, and subsequently the amount of instruction required.

The social niches where the mentally disabled could maintain an existence were slowly disappearing, and more and more people were being flushed out into a strange world where accelerating industrialization and urbanization made them helpless. The mentally retarded were no longer figures of fun; the old crude ways were disappearing, succeeded by the modern, "humanitarian" attitude—that they should be kept out of the way. The result was that pressure on the institutions increased; and to most observers, it appeared that the number of the mentally retarded was increasing.²⁵ Craniectomy meant that the last hope of curing the mentally retarded had to be abandoned; but other, less dangerous types of surgical intervention still held out the hope that the feared increase in their number could be checked.

THE INSTITUTIONS IN DENMARK—CHRISTIAN KELLER

At the turn of the century, the Danish institutions for the mentally retarded formed a small, close-knit community. They had all started out as privately funded philanthropic organizations, but now an increasing part of their budget was being provided by the state. They formed a loose organization, *Abnormvæsenet* (care of the abnormal), with the schools and institutions for the deaf and blind, but there was very little cooperation with the psychiatric institutions, which had much closer ties to the regular hospitals—and much higher prestige within the medical community.

The institutions for the mentally retarded were slowly being secularized and professionalized; physicians were gaining ascendancy as experts, while the philanthropic clergymen and the far-too-optimistic educators were being relegated to minor roles. Nevertheless, for a long time these institutions retained an old-fashioned, nonprofessional air compared to the regular medical world. Leadership of the institutions tended to run in families in a rather feudal way. The Keller family is a good example of this: the father and founder, Johan Keller, a philanthropic clergyman, had established institutions for the mentally retarded, the "Keller-institutions," which later were moved to Jutland, where the large modern institution Bregninge was founded. When he died, the institutions, at that time still officially private property, were divided up among his family, with the main responsibility resting with his son, Professor Christian Keller, who was to become the acknowledged leader in the field in Denmark. Other sons and relatives were put in charge of minor institutions. With these strong family ties in mind, it was perhaps not surprising that Christian Keller remained a convinced hereditarian all his life.²⁶

Though these institutions remained isolated from the regular hospital world and the centers of medical research in Denmark, close links to similar institutions in other countries were maintained. There was widespread cooperation between the different Scandinavian institutions but also much contact with institutions in other countries. In many places, Bregninge was regarded as a model institution, and international visitors were frequent.

The Danish institutions were confronted directly with the problem of asexualization in 1897, when a group of doctors from Elwyn, headed by Dr. Barr, circulated a questionnaire on asexualization,²⁷ addressed to sixty-one institutions in the United States and Europe, including the Scandinavian countries:

1. In what proportion of the inmates of your institution do you consider procreation advisable?
2. In what proportion of the inmates of your institution do you consider procreation possible?
3. What would be the probable effect of asexualization upon their mental and moral condition?
4. What effect upon their physical condition?
5. What operation would you advise upon a male—removal of the testes, ligation of the cord, or ligation of the vas deferens?
6. What operation would you advise upon females?
7. At what age would the operation be most effective?
8. Have you had practical clinical experience in this matter?
9. Should a state law be enacted to legalize this operation? If so, what would you suggest in regard to such a law?²⁸

Unfortunately, only twelve institutions responded, three European and no Scandinavian. When Christian Keller chose to comment on this reaction some years later in a short review of Barr's book *Mental Illness and Social Policy*, he suggested that one of the reasons for the poor response was that Europe did not have experience with operative asexualizations on a larger scale, but he also considered the possibility that Europeans were much more reticent toward asexualization and sexuality in general than the Americans:

The American reasoning—that the already existing mentally retarded cannot be cured, and that all effort therefore should be directed towards inhibiting the production of a new generation of the mentally retarded—can probably obtain general approval in Europe. But the chosen road leaves the Europeans wondering and doubting, as long as one does not realize, that the American institutions to a large degree are dominated by "moral imbeciles" either with or without a defect in intelligence. With regard to the mentally retarded according to European usage, confinement—eventually for life—should be enough. Their role in the procreation of the race is not so important that it justifies the radical American therapy. We can get through with less.²⁹

This negative reaction from the leading representative of the Danish institutions apparently caused some consternation on the other side of the Atlantic Ocean. Keller was answered by Dr. S. D. Risley in the *Journal of Psycho-Asthenics*, and in an editorial by Barr in the same issue.³⁰ Barr described his experience with eighty-eight cases of emasculation of the mentally disabled patients: violent and dangerous individuals became mild and docile; for the epileptics, seizures were considerably reduced; sexual "perversions"—not specified—disappeared, and

sexuality as such was much reduced—obviously a good thing. Again, without using the word eugenics, Risley accurately summed up the eugenic point of view: the mentally retarded and the habitual criminal should not be allowed to perish according to the law of natural selection, but modern altruistic treatment of these unhappy persons should not include a free license to procreate. Society must be allowed to hinder their unlimited propagation which would lead to even more degenerate progeny. To this, Risley added that masturbation, widespread among the mentally retarded, was generally recognized as an ethiological factor in epilepsy, neurasthenia, and other nervous disorders. He also commented darkly on other aspects of the lack of sexual restraint among the mentally retarded. Asexualization, which in the case of Elwyn meant castration, could remove the troublesome sexuality and, at the same time solve the problem of the increasing number of the mentally retarded.

Risley and Barr were quoted extensively by Keller. He himself added only a brief comment on the pessimism and fatalism that characterized the American position, but he was not impressed and certainly not convinced by the American arguments.

Neither Keller nor anybody else from *Abnormvæsenet* chose to argue directly against asexualization. Perhaps it was self-evident to him and to others why internment was preferable to more radical measures; or perhaps he and others were simply reluctant to write about a subject so closely connected with human reproduction. Some years later, however, one of Keller's colleagues from Bregninge, Hother Scharling, brought up the subject again. Scharling accepted both the eugenic indication for asexualization and the other reason, the violent and unrepressed sexuality of some of the mentally retarded. He did not completely agree with Keller's abrupt rejection of the American practices, but he could not accept surgical castrations—the operation was far from harmless, particularly with regard to women (this was before antibiotics and contemporary statistics bore him out on this point). Furthermore, the operation might interfere with functions of the sexual glands other than the maintenance of reproductive capacity. Finally, he admitted to a certain revulsion toward the removal of a healthy functioning organ.³¹

Scharling touched on an important point. Castration, and particularly male castration, was a subject that was difficult to approach with a rational, enlightened spirit. Many people would regard it as mutilation, a barbaric penalty rather than a mere medical intervention; in principle, it was equivalent to the cutting off of an ear or a finger, only more cruel. Later critics of sterilization and castration used the same arguments repeatedly, and always it was male castration that seemed most objectionable.

Instead, Scharling advocated x-ray treatment for women and vasectomy for men. He found this operation "rather attractive" and no doubt less frightening than complete castration. He maintained that the operation did not interfere with sexuality, but he did not submit any references as proof. However, it is unlikely that his main source was Sharp, since Sharp's argument for the operation was exactly the reverse: that it did suppress sexuality.

In 1910 a young female physician working at Bregninge, Bodil Hjort, obtained a grant that allowed her to visit several of the more famous American institutions for the mentally retarded. Elwyn was among them, but probably her most important visit was to Vineland, Massachusetts, where Henry H. Goddard resided.

Several articles by and about Goddard subsequently appeared in *Nyt Tidsskrift for Abnormvæsenet*. The subject of eugenics was not mentioned directly, but heredity was emphasized as the most important factor in the etiology of mental retardation. Though the usual family trees made their appearance, Mendelian factors were not yet mentioned. In general, the influence of Goddard strengthened the scientific approach toward the mentally retarded, as could be seen in the use of advanced texts (for example, the Binet-Simon intelligence tests), strong emphasis on family research, and the introduction of advanced pedagogical methods. The important thing was to accurately determine the type and extent of mental retardation; then the amount of education could be adjusted accordingly.³²

Goddard became one of the authorities most frequently quoted by the Danish eugenicists during the following decades, with the Kallikak family featured prominently. Although his work was seriously criticized during this period, and he himself admitted to misgivings about the strong hereditarian views in his earlier works, no Danish source has been found that reflects this criticism.³³

The subject of eugenics was brought up again before a much broader audience at the 6th. Nordic Conference on the Welfare of the Handicapped in 1912 in Helsinki. Edwin Hedman, leader of the Bertula institution for the mentally retarded near Helsinki, underlined the importance of eugenics in his speech. The Finnish psychiatrist Björkman argued strongly for sterilization as the only effective prophylactic against the threatening increase in the number of the mentally retarded. At the very end of the meeting, a third Finnish speaker, Professor Georg von Wendt, was scheduled to speak on "A theoretical view of defective-support, seen in the light of eugenics." According to Hedman, hardly an unbiased observer, the subject seemed incomprehensible to most of the audience, in particular to the numerous clergymen and those in the audience

mainly concerned with the blind and the deaf. Not many registered that von Wendt, at the end of his speech, put forward a resolution calling for eugenics legislation, support of eugenic research, and commitment to the eugenic cause.³⁴

Hedman later did his best to obtain support for this resolution in the pages of *Nyt Tidsskrift for Abnormvæsenet*. He received a negative reaction from Sweden. The leader of the Swedish delegation did not reject eugenics outright; instead he opposed the resolution for more formal reasons: this was outside the scope of the meeting, the participants had not been chosen for such a purpose, etc. Hedman did receive an enthusiastic reply from Bodil Hjort, but not the much more important endorsement of Professor Keller, who for the moment remained silent on the subject.³⁵

There is no explanation for the strong interest in eugenics in Finland, which at that time enjoyed semi-autonomous status as a Russian principate. It is perhaps important that all the advocates of eugenics belonged to the Swedish-speaking minority.³⁶ In 1915 Hedman described eugenic operations that had been carried out at Bertula since 1912. The operations were vasectomies, performed on male inmates; the purpose of the operation was sterilization as well as a reduction of sexuality, just as originally recommended by Dr. Sharp.³⁷

The period 1911-12 can be regarded as the first breakthrough for the eugenic ideas in Denmark. Apart from the meeting in Helsinki and the fresh impulses that Bodil Hjort brought to the institutions for the mentally retarded, the first Danish book on the subject appeared in 1912. This was *De Velbårne og de Belastede*, a slim tract by the dentist Alfred Bramsen, whose earlier production included similar works on correct diet and on the correct method of chewing. In 1913 August Forel's *The Sexual Question*, which also introduced the concept of eugenics, was translated.³⁸

What was most important was probably that the anthropologist Søren Hansen, at that time promoted to chairman of the Danish anthropological committee, participated in the First International Eugenics Conference and returned a convinced eugenicist. From then on, he became almost a one-man eugenics movement. He gave interviews, lectured, and wrote, both to the specialist periodicals and the daily newspapers.³⁹ His writings touched on all aspects of human heredity, population science, and eugenics. He consistently campaigned for more scientific research into human heredity; among the projects he wanted support for was, naturally enough, his own anthropological laboratory, a collection of anthropological and genetic data that he had been accumulating and that he imagined would one day grow into a permanent general registration of all hereditary afflictions. (This goal was finally achieved

when the Institute of Human Genetics was founded in 1938 under the leadership of Tage Kemp.⁴⁰)

When considering the eugenic methods that should be applied, Søren Hansen was much less consistent. In some of his earliest writings on the subject he seemed to favor sterilization—but in other contributions he pulled back and found it was still premature to consider this remedy. In the same way, he sometimes seemed to favor eugenically based restrictions on marriage, then later argued that marriage laws of this kind so easily could be circumvented that the eugenic effect was negligible. (The subject turned up in 1911 when the Interscandinavian Marriage Commission actually introduced the official use of the concept of eugenics in its very cautious recommendations.⁴¹)

A persistent motive in Søren Hansen's writing was the declining birthrate. Since this decline took place among the best-educated and most intelligent groups, even a small decrease in the population might constitute a large decrease in its quality. For this reason, he also opposed any kind of birth control and even argued that the use and dissemination of contraceptive devices and methods should be legally restricted.⁴²

In 1915, a supporter of eugenics, the educator Vilhelm Rasmussen, entered the Danish Parliament. He was a member of the Social Democrats, but in temper and conviction seemed closer to the radicals who had gathered around Georg Brandes at the end of the nineteenth century. He espoused a number of slightly outdated ideas like Darwinism and atheism and must have been something of an embarrassment to the former radicals who, at this moment, were leading the government (Brandes's brother was secretary of finance). Vilhelm Rasmussen was bright and had very advanced ideas, but unfortunately not very much common sense. He repeatedly annoyed his parliamentary colleagues, lecturing, pontificating, and digressing during the yearly budgetary debates. In him, eugenics had gained a spokesman, but perhaps not a very effective lobbyist.⁴³

Nineteen-fifteen was also the year when Hedman again brought up the subject of eugenics in the pages of *Nyt Tidsskrift for Abnormvæsenet* by announcing that he had performed several vasectomies since 1912. He proceeded to prod and pressure his Danish colleagues, particularly Keller, to declare themselves for eugenics. There is evidence that, during this period, Keller was becoming convinced of the benefits of eugenics, but in public he remained silent.⁴⁴

Two groups of patients particularly interested Keller. One was the dangerous and violent, sexually aggressive male, the other the female counterpart, the sexually irresponsible, promiscuous female. These two groups corresponded very well to the two types of surgical therapy that later were included in the Danish

law of 1929. Males became the main target of castration, while females predominated in the group that was sterilized. For the latter group, one often gets the impression that this behavior in itself became one of the indications of mental deficiency; that poor and ignorant females ran a greater risk of being committed if they gave birth to too many illegitimate children or in other ways proved sexually active.

These two groups often ranged in the upper intellectual scale of mental deficiency. They were too active and too normal to be kept under strict supervision in a closed section of an institution, and if they were placed in open wards, they very often ran away and caused trouble, each in their fashion. Keller found the solution to the problem: an island, not too big and not too small, would accommodate each of these groups of troublemakers. Here they could walk freely among the surroundings, yet it was impossible to get away. He succeeded in securing such an island for the males in 1910 but was not able to obtain a similar island for the females until 1920, and, by that time, he had abandoned the idea that this or any other kind of isolation could be regarded as an alternative to castration and sterilization.⁴⁵

Apart from these special categories of inmates, the biggest problems for the institutions were overcrowding and lack of space. So, beside the more distant idealistic goals of eugenics—reduction of the number of the mentally retarded and general improvement of the population—the surgical solution offered some immediate advantages to the institutions, including the possibility of releasing some of the inmates or at least relaxing the strict and expensive controls.

In 1917 Keller chose to translate a lecture by the famous Walter Fernald, superintendent of the Massachusetts School for the Feeble-Minded. He painted a dismal picture of the number of paupers, prostitutes, and criminals that could be characterized as the mentally retarded. To him, it was indisputable that the majority of the mentally retarded had inherited their defects—and they would go on multiplying, pampered and protected in our civilized society, if they were not segregated and ultimately sterilized.

This was, of course, the standard type of eugenic argument, not very different from the arguments of Barr and Risley in 1906. But this time Keller did not dismiss it with a few adverse remarks; he just let it stand. One of the consequences—perhaps not quite unintended—was that several people, including K. K. Steincke, took it to be Keller's own opinion.⁴⁶

Then, in 1918, the leader of one of the smaller provincial institutions asked whether he was allowed to sterilize one of the inmates for eugenic reasons. The application was rejected. According to the authorities, this kind of operation could not be regarded as a normal therapeutic procedure, and it could not be

allowed without special legislation. With this decision, Denmark joined the majority of the countries that had considered the question of eugenic sterilization. Only in some of the Swiss cantons was it accepted that eugenic sterilizations and castrations could be regarded as a part of the doctor's individual responsibility. It was with this background that in 1920 Christian Keller forwarded his application: on behalf of all the institutions for the mentally retarded, he asked that an expert commission be assembled to consider the question of their sterilization.⁴⁷

WILHELM JOHANNSEN

Wilhelm Johannsen was not only the leading Danish expert in genetics, he was one of the principal architects of the new Mendelian genetics that arose after the rediscovery of Mendel's works at the turn of the century. Famous all over the world for his work on the pure lines of the brown bean, he also coined the expressions gene, genotype, and phenotype.

In his book, *Arvelighed i Historisk og Eksperimentel Belysning* (Heredity in historical and experimental light), published in 1917, Johannsen devoted a full chapter, forty pages, to the subject of eugenics. In the historical introduction, he mentioned Plato and his Utopian eugenics, and he did not hide his distaste for the idea of "human stockbreeding plans with systematic control, fraudulently organized marriage lottery, abortion and exposure as eugenic measures—dreamers and fanatics from the prohibition and eugenics movements of our own period can see themselves as in a mirror."⁴⁸

This negative attitude also pervaded the chapter that dealt directly with eugenics. Johannsen emphasized the fact that eugenic ideas had developed before the advent of modern genetics. For that reason the eugenic literature was full of outdated concepts such as stigmata, atavism, telegony, Lamarckian inheritance, and, not the least, the expressions degeneration and degenerate. He showed that the use of these terms could be traced back to Morel's theories and similar sources. Their use was extremely subjective and often implied a doubtful value judgment, and the application of these terms was particularly inappropriate when humans were compared to domesticated animals and plants. In that type of comparison—a favorite with many eugenicists—the term degenerate was used both to designate the supposedly weak and inferior human and organism (animal or plant) that had reverted from domesticated to the natural form—that is, in most respects, the superior organism.⁴⁹

Johannsen made a distinction between Mendelian eugenics and what he called Galton eugenics, the eugenics of Pearson and his biometrical school.

When Johannsen published his work on beans, demonstrating that a stable genotype can correspond to a continuous variation in phenotype, Pearson regarded it as a personal insult and published a violent rejection of the work. Furthermore, when Johannsen visited England and asked to see Pearson, he received an arrogant reply. So Johannsen had no particular reason to be gentle in his criticism of Pearson and his colleagues when he provided several examples of how flawed arguments had led them to false conclusions. According to Johannsen, their use of sophisticated statistical techniques was meaningless as long as the data were collected on the basis of faulty and outdated ideas of inheritance. He also found Pearson's eugenic arguments callous in the extreme: "The whole idea of heredity is wrong . . . there is no reason to assume that the weak and the sickly would represent the genetically inferior stock—they might be individuals possessing the same value as children from higher social classes, who are better cared for."⁵⁰

But Johannsen also expressed skepticism toward the attitude of the Mendelian eugenicists. He especially criticized Charles Davenport for trying to fit all the different kinds of pathological symptoms into simple patterns of dominant or recessive inheritance. Since these symptoms, in most cases, could be regarded as an interaction between the genotype and the surrounding conditions, they should not automatically be treated as hereditary units or unit-characters. The distinction between genotype and phenotype provided his main arguments against eugenics. The genotype could not always be derived from the phenotype, not even in cases where one looked at only a single set of characters with a simple pattern of inheritance. How much more difficult then to make estimates of the genotype, when so little was known of human genetics in general and of the inheritance of mental illness in particular.⁵¹

And then there might be cases of false inheritance: transfer of some pathological trait in a manner that mimicked true heredity but in reality represented a completely different mechanism. This was one of Johannsen's favorite subjects, and for several pages he tried to demonstrate that the familiar examples of the transfer of alcoholism in families and the degeneration of family lines due to alcoholism represented instances of false inheritance.⁵²

Johannsen's arguments were only partly technical. In many cases he applied common sense arguments, appealing to the reader's own experiences from daily life. And he tried to make even the more technical arguments easy to understand by illustrative examples, often from plant physiology, his original specialty:

various hereditary malformations in some poppies can be avoided if the earth is changed for the young plants . . . we are here contemplating a sensitive period during the development where the surrounding conditions have a decisive influence on the phenotype acquired by the individual. A closer investigation of these matters does not exist for humans, but we are approaching the problem of education.⁵³

Johannsen was very much against all attempts to favor the propagation of the "better, healthier, nobler—in short, ideal members of humanity. But what is the ideal? Who shall be responsible for the decision? The complexity of society makes it impossible that one single human type should be the best. We need all different types of humanity."⁵⁴

This was what he called positive eugenics. He was more inclined to accept negative eugenics, where the procreation of individuals with strongly flawed genotypes was inhibited. But he emphasized that it would be very difficult and complicated to carry this out in a responsible fashion. He certainly did not approve of "the haphazard surgical sterilization methods" applied in the United States:

There can be no doubt that negative eugenics has a future. That will come when first the medical profession accepts the responsibility and tries to cover all the different aspects. But a general legislation will easily be premature and might cause much unhappiness and injustice. Legitimate individual rights are here irrevocably opposed to the interests of society as a whole.⁵⁵

It is tempting to cast Johannsen as the chief adversary of eugenics in Denmark because of his polemics against the eugenicists. Yet, as we have seen, he was not opposed to eugenics as a whole but to the part of eugenics that was founded on wrong or outdated ideas. Thus, when he joined the Permanent International Commission on Eugenics in 1923, his membership was not inconsistent with his views. One of the most active members of the commission, the Norwegian Jon Alfred Mjösen, celebrated it as a great triumph. According to a review of Scandinavian eugenics written by Mjösen in *Nationalsozialistische Monatshefte* in 1930, Johannsen experienced a complete conversion, and from then on defended eugenics with the same zeal as he had attacked it.⁵⁶ Mjösen is not a particularly truthful or reliable witness, and the written sources certainly give no indication of this sudden conversion.

What we do know is that in these years Johannsen became more involved with eugenics and human genetics. In 1922 he assumed responsibility for a special government grant that would cover the preliminary investigation of

the possibility of establishing Danish research in "human genetics and eugenics."⁵⁷ The first example of Danish eugenics legislation, the marriage law, was carried through in 1922, and other forms of eugenics legislation were being considered. In 1924 Johannsen actually was asked to join the commission on castration and sterilization, and accepted. With this development in mind, it was a clear advantage to have a Danish member of the International Commission on Eugenics, and Johannsen was the obvious choice.

In Johannsen's writings on eugenics in the 1920s he hardly appears as a zealot for the cause. He toned down his criticism of the biometrical school but devoted some effort to demonstrating how little effect even very strict selection would have on recessive genetic diseases. He still rejected what he called positive eugenics but found negative eugenics acceptable, when it was applied with caution.⁵⁸ The same attitude is apparent in his contributions to the negotiations of the commission on castration and sterilization.⁵⁹

DANISH GENETICISTS AND EUGENICS

Several other Danish scientists were interested in genetics and eugenics. The pathologist Oluf Thomsen introduced human genetics into the medical curriculum and also did research into the inheritance of blood types. After Johannsen's death, Thomsen took over the responsibility for the university grant set up to establish research in genetics and eugenics in Denmark. He became deeply involved in the negotiations with the Rockefeller Foundation that eventually led to the establishment of the University Institute of Human Genetics in 1938. It was also Thomsen who, earlier, had handpicked Tage Kemp as the prospective leader of Danish research into human genetics. The psychiatrist August Wimmer was among the first to introduce the concept of eugenics in Denmark, but not without a certain skepticism; and he attempted Mendelian analysis of mental illnesses as early as 1920.⁶⁰ In 1918 and 1922 he represented Denmark in the Permanent International Commission on Eugenics. Both Thomsen and Wimmer were convinced hereditarians. Thomsen was much impressed by the works of the German criminologist Johannes Lange, but both were initially skeptical about eugenics. On the sterilization commission, Wimmer—like Johannsen—seems to have been a moderating influence; but later he came out strongly in favor of eugenic measures, and Thomsen also argued in favor of eugenics at the beginning of the 1930s. Wimmer played an important role as a member of the medico-legal council, where he was able to influence the revision of the sterilization legislation in 1935 as well as participate in the decisions on individual sterilization cases.

After Johannsen's death, the mycologist Øivind Winge was regarded as the leading Danish geneticist. He came out in favor of eugenics in the 1930s, when the Danish sterilization law was revised, but his textbook and other publications contained very little about human genetics and eugenics.⁶¹

The psychiatrist Jens Christian Smith should also be mentioned. He cooperated with Johannsen in a short paper on the connection between alcohol and heredity, a paper that argued against the widespread belief in hereditary degeneration caused by alcohol. The paper did not directly attack eugenics, but it attacked people like August Forel and Agnes Blum, who were well-known eugenicists. Considering the well-established connection between the propaganda for teetotalism, prohibition, and eugenics, this review could be regarded as another, more oblique attack against the exaggerated propaganda for eugenics, but not against the eugenic principle itself. Smith was also responsible for the first genetic investigation of twins in Denmark and published several papers on the inheritance of mental illnesses. Later he became the genetic expert on a special board that ruled on sterilization of the mentally retarded, a powerful position where he became responsible for the major portion of eugenic sterilizations in Denmark in the years prior to World War II. From his surveys of these sterilizations it was clear that eugenic considerations played a major role, and he also argued for the introduction of a more undisguised eugenic indication in connection with the sterilization of the mentally retarded. Though Smith never seems to have been involved in the political side of the eugenics issue, it was he, together with the institutional leaders, who shaped the eugenics policy that would be carried out within the framework of the law of 1934 concerning the mentally retarded.⁶²

K. K. STEINCKE, THE POLITICIAN

The professionalization of the institutions was only one example of a general trend in the social sector, where the philanthropist, the amateur busybody, and do-gooder—often with ecclesiastical affiliations—gave way to the professionals: the physicians, of course, but also the professional reformer, planner, and administrator. As noted, it was a change that took place at a different pace in different parts of the social system; and there were great differences between the Scandinavian countries, with Denmark as the most secularized, and—for obvious geographical reasons—the most centralized.

K. K. Steincke was one of the new breed of administrators. As a young man, he had joined the Social Democrats when they were still regarded as a party of uncouth trade unionists. He was one of the few intellectuals in the party at that

time, but unlike most of them, he always identified with the reformist wing of the party. When he obtained his law degree, he started out by administering municipal poor relief and made a spectacular career at a time when membership in the Social Democrats still constituted a handicap for a civil servant. The Byzantine system of poor relief, with its numerous different boards and its jungle of paragraphs, made a strong impression on him, and in 1920 he single-handedly produced a blueprint for a general streamlining and rationalization of the social sector, *Fremtidens Forsørgelsesvæsen* (Social relief of the future), in reality, a general outline of the coming welfare state.⁶³

Of the 200 pages that constituted the book, twenty-eight pages were devoted to eugenics. And Steincke was not a recent convert to the cause. He was a hereditarian from the beginning, pontificating about population theory, Malthusianism, and the dangers of differential reproduction, in *Socialisten*, the monthly review for socialist intellectuals. He believed that the duty of the more intelligent part of the population—a group in which he definitely included himself—was to produce as much progeny as reasonably possible, at least more than the average two children which he believed to be a bane to civilized society.

Practicing what he preached, he consulted a specialist, the psychiatrist August Wimmer, before his own marriage in 1907. He was worried about a neurasthenic strain running in his own family; but Wimmer, sensibly enough, advised him to go on with the marriage. The sound peasant stock of his fiancé would more than compensate for his own nervous frailties. So Steincke married and subsequently went on to father five children, doing his part against the dangers of differential reproduction.⁶⁴

The most important foreign source for Steincke's book was Geza von Hoffman's *Die Rassenhygiene in den Vereinigten Staaten von Nordamerika*, a glowing recommendation of American eugenic practices. He also quoted Søren Hansen's *Retten og Racehygiejnen* (Eugenics and law) from Denmark; and he quoted extensively from *Biologiske Causerier* (Biological essays) by the Swedish author Robert Larsson, an entertaining little book, translated into Danish in 1918, that popularized most of the recent advances in genetics but also came down firmly on the side of eugenics.⁶⁵

But Steincke was also strongly influenced by Wilhelm Johannsen. A large part of the chapter on eugenics is simply a paraphrase of Johannsen's negative views on Darwinian selection, his rejection of Lamarckian inheritance, his criticism of the prevailing myths regarding the connection between alcoholism and heredity, and his account of Mendelian genetics and the fundamental difference between genotype and phenotype. No wonder this chapter met with Johannsen's approval.

Steincke also paraphrased many of Johannsen's critical remarks against eugenics. Still he made no attempt to reconcile the violently conflicting views of Johannsen and Geza von Hoffman and the other eugenicists he quoted. He started by introducing the concept of eugenics and the American experience, echoing the views of von Hoffman. He followed with a remark to the effect that there is some truth in this, but it might be exaggerated, and then switched to the views of Johannsen. The effect is that Steincke, after the first reading, appears moderate and cautious, critical toward the extreme eugenicists, but nevertheless convinced that eugenic measures will be important and necessary. Undoubtedly, this was how Steincke saw himself, but the overall result was an impressive piece of eugenic propaganda. Only a close reading reveals that Steincke in fact accepted the eugenic premises completely, a position very far from Johannsen's skepticism.

Steincke and most of the Danish followers of eugenics can be regarded as moderate or "reform" eugenicists, since they openly stated that they disapproved of the more violent eugenics propaganda and of the early American practice of sterilization, particularly as it was done in California. But when we take a closer look at their views—the belief in horror stories about the "Jukes" and the "Kallikaks," the acceptance of the dangers of differential reproduction, and their uncritical hereditarianism—they do not appear particularly moderate.

However, Steincke differed from the more extreme eugenicists in one way. He did not regard eugenics as an alternative to social relief and social legislation. Rather, he regarded the two concepts as complementary. Just to abandon the unfit and helpless would be callous; allowing them to breed unhindered would be folly—but eugenics solved the problem. You could afford to be humane and generous toward them, feed them and clothe them, as long as eugenic measures ensured that they did not increase in number. Steincke was a self-proclaimed anti-Darwinist, more or less because he identified Darwinism with social Darwinism; but though he did not accept the social Darwinist conclusion that selection should be allowed to proceed unhindered by social legislation, it appears that he accepted the premise that social relief in itself was dysgenic, harmful for future populations.

Steincke also differed from the extremists in his view on the value of eugenic propaganda:

Now when some people regret that the great part of the population is too ignorant to be interested in eugenics, then I am tempted to regard it as a big advantage. For could anything be more fatal to both a responsible effectuation of the sensible part of these ideas (the practice steps toward future race improvement) and to maintaining a

healthy outlook among the population, with conservation of the ethical values—than if large segments of the population became infatuated with eugenics.

If we shall advance in a responsible way, it has to be on an irreproachable scientific basis, free from emotions, agitation and stockbreeding arguments; whereas these ideas, freely disseminated and discussed in newspapers and at public meetings, doubtless would have a brutalizing effect, when the prevailing intellectual level of the population is taken into consideration.⁶⁶

These sentiments were not uncommon at the time, yet it is surprising to find them expressed by a Social Democrat and politician. Though Steincke was a great seeker of publicity for himself, he maintained, through his long political career, that the majority of the population was stupid and ignorant, and that the mass media were sensational and corrupting. This attitude also contained a strong puritanical element. Interference with reproduction was still, in 1920, a delicate matter, not something to be bandied about in the press and on every street corner. This puritanism also influenced his attitude toward eugenics and sterilization. If he disapproved of sexual license, then he was revolted by "the bestial scenes that take place in the mental hospitals and the asylums" as well as the "horrible and saddening examples of the unlimited breeding that takes place among the inferior strata."

The revolting acts and their equally revolting consequences were fused together in an emotional argument for eugenics. This extreme revulsion at the thought of the sexual activity of the mentally retarded has already been mentioned in connection with the first American castrations. Sentiments similar to Steincke's can be found among his fellow eugenicists and in many other contemporary sources. In these cases, sterilization, the surgeon's knife, could not be regarded as inhumanity; true inhumanity would be to disregard "the unhappy descendants ... allowing all kinds of irresponsible and defective individuals to propagate freely...."⁶⁷

Eugenics was necessary, but had to be left to the experts. Therefore, Steincke's final suggestion was that a special commission should be set up consisting of representatives of the various institutions—the medical, legal, and genetic experts. This idea was not new; similar suggestions had been put forward since 1915 by Vilhelm Rasmussen. But Steincke carried more weight than Rasmussen, both within the Social Democratic Party and in general; and he had also chosen a more opportune moment. In 1920 Keller had forwarded an official proposal, similar to Steincke's, on behalf of the Danish institutions for the mentally retarded; in that same year, radical surgical solutions to social problems were put forward from another front.

THE WOMEN'S PETITION

In his application, Keller had not specified the exact character of the asexualization operation but left it to the medical experts. While this application was still pending, the parliament received a petition, signed by more than 100,000 people from the Women's National Council which was much concerned with the increase in the number of sexual offenses.

Whether, as these women claimed, there had been an actual increase in sexual offenses is still unclear; perhaps only the number of reported cases was increasing as society became more civilized and genteel. But the distinction between the dangerous, violent sexual offender and more harmless exhibitionist types was hopelessly confused in the subsequent discussion. The women regarded the offenders, in particular the recidivists, as a perpetual threat to women and children, and they wanted something done about it. They were not interested in draconian or spiteful solutions, for they were not out for revenge but wanted something that could neutralize the offenders permanently; here, castration was mentioned as an alternative to internment for life.⁶⁸

It was still a daring thing for a woman to give public support to a demand for asexualization, and those who signed the petition were not extremists and fanatics, but members of the solidly middle-class core of the Danish women's movement. Some physicians—such as the prison doctor Georg C. Schrøder—also supported them, but the public prosecutor August Goll had grave reservations, as did other legal experts. The whole problem was referred to the commission on criminal law reform (the third since 1905). This commission again asked for advice from the medico-legal council (which counted August Wimmer among its members); it was told that only castration would be of any use toward sexual offenders, and that the unpredictable side effects of this operation made the medical experts regard it in a very negative light.

Consequently, the commission gave a negative reply. It could not recommend castration as a penalty or as a substitute for a penalty. In his thoughtful review of the problem, August Goll left a door open. The commission had not ruled out castration in all cases; it had just rejected it as a part of criminal law. Use of this and other operations in a medical and social framework was not excluded by the decision.⁶⁹

This same year, 1923, actually saw the first Danish example of eugenics legislation. The mentally retarded and the seriously mentally ill would have to obtain permission from the minister of justice in order to marry. Though the law could be seen as an inducement to live together without a marriage license, still a very serious thing at that time, there were not many protests. If any party

could be regarded as the eugenics party, it was the Social Democrats, but the government accepted the recommendations of the experts.

"SOCIAL MEASURES" AND "DEGENERATIVELY DISPOSED INDIVIDUALS"

In 1924 the first Social Democratic government took office. The secretary of justice was K. K. Steincke, and he soon succeeded in putting together a commission in accordance with the principles he had outlined in 1920. The commission was to consider Christian Keller's request regarding sterilization of the mentally retarded, as well as the castration of certain groups of sexual offenders.

As Steincke had suggested in 1920, the commission included physicians, scientists, and legal experts. Wilhelm Johannsen represented the legal expertise together with the psychiatrist August Wimmer. Christian Keller became a member of the commission, and another member, the physician Estrid Hein, had close links to the Women's National Council, even though she officially represented expertise in social insurance. Therefore, both groups that had pressured for radical surgical procedures were represented on the commission. Denmark's greatest expert on reproductive endocrinology, the physician Knud Sand, was not originally a full member of the commission but functioned as its secretary. He joined the commission as a full member when he became a full professor in forensic science. Along with Keller, five members of the commission represented institutions concerned with various deviant groups. There were four physicians and four legal experts, including August Goll. The only politician, and the only member that could be regarded as a layman, was the mayor of Copenhagen, a peaceful, elderly Social Democrat who was not likely to disagree with this awesome collection of experts. As it turned out, he certainly had fewer misgivings about sterilization than Johannsen and Wimmer, the experts in genetics.

The report from the commission was finished and published in 1926. Today, the title of the report seems curiously euphemistic: *Betænkning Angående Sociale Foranstaltninger Overfor Degenerativt Bestemte Personer* (Social measures toward degeneratively predisposed individuals). After all, the subjects were castration and surgical sterilization, eminently biological forms of intervention—which of course could have various social effects. Deliberate dissimulation was probably not intended, but "social" was just a handy, vague phrase that could be used to cover a variety of purposes, including those intended by eugenics. On the other hand, it was probably intentional that the phrases sterilization and castration were not used in the title.⁷⁰

"Degeneratively" could not be considered a very happy choice. It had no precise meaning in human genetics. "Degenerate" was used popularly as a catch-all, covering everything from declining nobility to the mentally retarded, and very often used to designate unorthodox sexual behavior. In any case, it was confusing that the commission was considering two very different types of surgical operations, with very different effects, directed against different groups. The ambiguous title of the report only increased the confusion and reinforced the popular opinion that all sexual offenders were genetically afflicted or that all the mentally retarded were potential sexual offenders. It was Johannsen who argued against using the word "degenerate" and instead had suggested "degeneratively afflicted." Initially, this caused more confusion, since some members of the commission took it to mean that all carriers of afflicted genes should be considered targets of the legislation; and for the layman, "degeneratively" still carried the same connotations as "degenerate."

Most of the report consisted of factual information. A large section reviewed the law, proposals, and reports concerning eugenics in other countries. Characteristically, the Danish commission could draw not only on American or Swiss experience, but also on government reports from Norway, Finland, and Sweden, for Denmark was the last of the Scandinavian countries to consider the sterilization question in detail. In the United States, the survey of Harry F. Laughlin in 1922 demonstrated that the situation there was much more complicated than described by Geza von Hoffmann and other propagandists; several laws had been repealed, found unconstitutional, or been very difficult to administer.

In the two sections of the report written by the genetic specialists, Wilhelm Johannsen reviewed Mendelian genetics in general, and August Wimmer, the heredity of mental illness, including mental retardation.

Johannsen's contribution contained his usual mixture of moderation and common sense. Again he emphasized the distinction between genotype and phenotype, and the consequences for eugenics—that manifest abnormal individuals could be genetically healthy and, conversely, that seemingly normal and healthy people could be genetically afflicted. He briefly tried to illustrate the numerical relationship between the afflicted and the carriers of a recessive disease: if only one in ten thousand was afflicted, carrying two copies of the harmful gene, then one in one hundred would be carrying one copy of the gene and be normal and healthy. This was in fact a very brief summation of what is known today as the Hardy-Weinberg rule, and the consequences for human genetics had been realized by several Mendelians, notably by R. C. Punnett in 1917; but it was not discussed in most of the

contemporary eugenics literature, and it was also absent from the Danish writings on eugenics.⁷¹ Johannsen concluded: "Calculation of this type demonstrates in a disquieting fashion the extent of the genotypical deficiencies in the population; and it shows the enormous difficulties inherent in carrying out eugenic measures. It is one thing to attempt to change the race, but an entirely different thing to intern and sterilize people with a degenerative phenotype in order to keep them from doing any harm to society."⁷² So Johannsen did not rule out sterilization but emphasized that the purely eugenic benefits of the operation would be very small.

August Wimmer listed the different types of mental disorders and the type and pattern of inheritance that they followed. According to him and his sources—no references were given—the manic-depressive psychosis followed a well-defined pattern close to the dominant mode of inheritance. Schizophrenia exhibited a much more complex picture because no direct inheritance from parent to progeny could be detected, while uncles, aunts, and siblings often exhibited the disorder. Wimmer concluded that schizophrenia showed an "extremely recessive" mode of inheritance. Epileptics, the mentally retarded, and psychopaths did not as groups exhibit well-defined patterns, yet his conclusion was that at least in some cases these afflictions were inherited: the majority of the psychopaths had probably inherited their "defects," while perhaps only a small percentage of the epileptic cases observed were hereditary in character. For the mentally retarded he referred to a Danish survey—probably the observations of H. O. Wildenskov that were published in an extended version in 1931—where the conclusion had been that about 50 percent of the cases were inherited, but he also noted that recent German sources gave lower numbers. For these three groups he concluded that the total amount of mental illness in the family should be taken into account.

He finished his survey with a cryptic paragraph:

For mental defectives, habitual psychopaths, and epileptics, the limited possibilities of a general hereditary prognosis should be evident. But it must be emphasized for these, as for the well-defined disorders, that estimates over the more theoretical possibilities not in practice have to be decisive or relevant, for example, with regard to eugenic measures. It is the balanced judgment in the concrete cases that must be of importance. And with the necessary regard for all the individual facts, evaluated on the basis of our general knowledge of the laws of heredity, one should in many cases be able to reach a decision with such a degree of probability that it should be justified to use it as a basis for certain eugenic measures, including sterilization if necessary⁷³

It is not very clear what Wimmer was trying to say here, or what he meant by "theoretical," "in practice," and "balanced judgment." But what worried him was the lack of certainty in the genetic prognosis. Should a decision be reached based on probabilities and could this be explained to the public? The only thing that was clear was that Wimmer, after listing all the doubt and all the difficulties, reluctantly came down on the side of an active, negative eugenics, i.e., sterilization.

From all these deliberations the commission concluded that what it called "legislation directed towards a general racial improvement" was not feasible at the time. Sterilization and other types of eugenic measures directed against the procreation of certain classes of the phenotypically afflicted—it again used the expression "degeneratively" disposed—would not significantly decrease these afflictions. On the other hand, the commission held, it should be legitimate to sterilize certain groups, including mentally ill persons who were incapable of raising and educating their progeny under acceptable conditions, progeny that also had a great probability of being genetically harmed:

Such a progeny, badly equipped from birth and equally badly raised, would often be predestined to a dismal existence, a burden to themselves and to society, not contributing anything of value to the common good, on the contrary representing a heavy social load on society, and a reservoir of prostitution, crime and shiftlessness.⁷⁴

Clearly, in the commission's view, society was better off without these people. By suggesting this mixed social and eugenic indication for sterilization, the commission dodged a very important argument against eugenic sterilization: the fact that it was difficult to distinguish with any certainty the genetically sound from people with a flawed genotype, a fact that Johannsen had pointed out and one that had worried Wimmer. Given a purely eugenic indication for sterilization, it would have been necessary either to lie about the certainty of the genetic prognosis or to introduce the concept of probability into the legislation, a difficult thing to explain properly or perhaps even to justify. But now, instead of saying that a woman would have a 50 percent probability of giving birth to mentally retarded children, one could argue in this fashion, following the commission: this woman is slightly mentally retarded, shiftless, lazy, and sexually promiscuous; clearly, she will be unable to raise the children who may also become mentally retarded. In this way eugenic considerations were let in through the backdoor, though "legislation directed towards a general racial improvement" was rejected.

The commission suggested further restrictions. Sterilization should be limited to people confined to institutions. This was not strictly logical, since this group already was subjected to a fair dose of control, enough to make procreation a difficult affair. And even if pregnancy occasionally occurred at these places, this was hardly the group that constituted "a reservoir of prostitution, crime, and shiftlessness." However, when sterilization was introduced at the institutions, supervision and control could be relaxed and the load on institutional resources reduced. Furthermore, sterilization of citizens leading a normal life would have been much more controversial than sterilization at these remote places.

The other half of the same law proposal covered castration. It was suggested that sexual offenders could be castrated if their sexual disposition was so strong or so abnormal that repeated offenses were to be expected, and if they or their guardians applied voluntarily. No distinction between violent sexual offenders and other types, such as homosexuals and exhibitionists, was made in the proposal (and this continued to be the case both in the final text of the law of 1929 and in the subsequent, revised law of 1935), and several individuals from this latter category were sterilized according to the law in the following years. The proposal distinguished between castration (for sexual offenders) and sterilization (for social and partly eugenic reasons), but the public continued to confuse the two concepts. This was not surprising given the preoccupation with the sexuality of the mentally retarded in the discussion of eugenics.

It was also proposed that the law was to be regarded as an experimental law, scheduled to be valid for at most five years before revision. Perhaps for this reason the applications for sterilization had to follow a rather complicated route before a decision could be reached. The secretary of justice had to give every case his approval, and, prior to that, two authorities, the medico-legal council and the department of health, had to give recommendations. The doctor in charge of the institution or the local medical officer had to forward the application; and in all cases where the persons to be sterilized could understand the effect of the operation, they had to give their consent. If they were unable to understand it, a special guardian acting on their behalf had to be appointed.

With respect to the indications for sterilization, that is, the types of mental illness and their severity, the text of the law provided no details. Of course the original report gave some advice, but there was much room for interpretation and only advice was offered, not specific guidelines. In effect, the doctors forwarding the application, those from the medico-legal council and the health department, were free to formulate their own rules, with the minister of justice as the only controlling party.

The voluntary character of the sterilization or castration operations was not questioned (neither in the proposal nor in the definitive law text). This aspect of the law was later regarded as one of the fundamental differences separating it from the German law "Zu Verhütung Erbkranken Nachwuchses" passed in 1933.⁷⁵ But what does it really mean that an act is voluntary? Completely free will is not present when one is in a school, a military camp, a prison, or a similar institution. A person may be asked to make his or her own decisions, but if those decisions are not made in accordance with the powers that be, that person will sooner or later have to face the consequences. And who, in this case were the people expected to reach such a complicated decision? They were not even average ignorant laymen, but people who were seriously mentally disturbed or who had marked difficulties of comprehension. Nevertheless, they were expected to stand up to the considerable authority invested in the medical profession as well as the very real pressures of their confinement.

PARLIAMENTARY DEBATES AND THE PASSING OF THE STERILIZATION LAW

Though the commission's report with the proposal for the law appeared in 1926, political complications, unconnected with the problems of eugenics and sterilization, delayed the final approval of the law to 1929. The Social Democrats stepped down in 1926 and were followed by a government of the Agrarian Party, Venstre. This was the last government in Denmark to represent the landed interests, and it has generally been regarded as the most reactionary government in the twentieth century. But when first the new government had been established, the progress of the sterilization and castration law was not impeded, demonstrating the bipartisan character of the issue. As far as the record shows, the only really convinced eugenicists in the Danish Parliament were K. K. Steincke and Vilhelm Rasmussen, now in opposition, and Steincke frequently complained about the lack of interest in eugenics among his fellow politicians. What in particular irritated him was the indifference of the members of the Agrarian Party; they especially should know the value of good stock and sensible breeding. Their indifference was not due, however, to any underlying aversion, and the great majority of the Danish Parliament accepted the arguments of the experts and eventually was convinced.

The debate in the Parliament in 1928 shows that the only real opposition came from a very small group within the Conservative Party—led by the young clergyman Alfred Bindslev. He was one of the young Conservatives who had gathered around the movement called *Det Unge Danmark* (The Young Denmark), and for a period he had been editor of the movement's periodical

den Ny Tid (The New Times). He was also a popular priest in Copenhagen and something of a society figure. In his attack on the law, Bindslev succeeded in touching on a number of sore spots:

I would recommend, on behalf of a minority within my own party, that Parliament not approve this legislation because of the instinctive aversion that one experiences towards this type of experiment, which interferes with the most secret riddles of life itself; and also because knowledge still has not advanced further than the experimental stage with respect to eugenics. We know too little about these things; we have not yet thoroughly explored the human world, nor the human psyche.⁷⁶

Bindslev also quoted the statement by Wimmer about the limited amount of knowledge concerning the different kinds of mental illness. And he reserved his strongest attack for the part of the law dealing with castration.

The minister of health and welfare answered that the law actually showed great restraint; it was formulated as an experimental law with a limited duration precisely because so little was known. He stated emphatically that it could not be regarded as a eugenics law, a law that used eugenic indications for sterilization. Several other speakers used the same argument. A similar interpretation was offered by August Goll, the director of public prosecutions who had been a member of the commission.⁷⁷

It was true that the commission had emphasized that "legislation directed toward a general racial improvement" was not feasible at the moment. Nor did the word "eugenic" appear in the text of the law. It was not directly stated in the law that people could be sterilized for eugenic reasons; instead, the following words were used: ". . . where suppression of reproduction must be regarded as being of great importance to society." Certainly, however, considerations about the heredity of various mental illnesses were very much part of the law, and when we look at the way it was carried out, it must be regarded as a eugenics law. This was definitely the impression of Knud Sand in 1935 when he reviewed the cases of sterilization performed according to the law of 1929. He stated explicitly that all decisions regarding sterilization had been based on three types of considerations: eugenic, social (the potential benefits for society), and individual (potential advantages for the person involved—for example, release from confinement). Tage Kemp arrived at similar conclusions when he discussed the law in 1933.⁷⁸ What was remarkable was that some of the people that had put together the text of the law disagreed among themselves about the interpretation. But the importance of this disagreement must not be exaggerated;

it was about the meaning of words, notably the word "eugenic," not about what actually could be done according to the law. The vagueness of the law's text may not have been deliberate, but it certainly assisted in making the law acceptable to the majority in 1929.

Bindslev voted against the law, as did five of his colleagues from the Conservative Party, but to no avail. The law was passed by both chambers of the Danish Parliament, with only minor and unimportant modification. Bindslev proceeded in the following years to fight the various eugenics laws that were presented to the Danish Parliament—but always in vain. The Danish version of eugenics seemed to command agreement among all political parties.

THE MENTALLY RETARDED: THE LAW OF 1934

While the experimental law was still valid, a complex law dealing with all aspects of the mentally retarded and their institutions—including sterilization—was put forward by K. K. Steincke, who was functioning as minister of health and welfare. So far, the confinement of the mentally retarded had been voluntary—it was the family or the guardian that decided whether the mentally retarded should be committed—but the new law listed a number of indications for commitment, and it now became the rule that all the mentally retarded covered by these rules should be committed. Furthermore, it became the duty of teachers, medical officers, and other social authorities to report suspected cases of mental disability.

Two conditions for sterilization were included in the new law. The mentally retarded could be sterilized if they were judged unable to raise and support children, or if the sterilization could facilitate their release from confinement or their transfer to a more relaxed kind of supervision.

This law differed from the law of 1929 on a number of points: minors could be sterilized according to the new law, sterilization of the mentally retarded was no longer limited to people confined to institutions, and consent from the mentally retarded was not needed. The decision to apply for sterilization was made by the doctor in charge and had to be approved by an appointed guardian. It was forwarded through the department for the mentally retarded and, if approved, put before a specially appointed board of three including one medical expert—a psychiatrist or a physician associated with institutions for the mentally retarded.

The law did not explicitly contain any eugenic indication, nor even a mixed indication such as the 1929 law. But one of the criteria for forcibly maintaining confinement was, "if there existed a clear danger that they [the mentally

retarded] might have children." This was a sweeping statement covering, in theory, all the mentally retarded of a fertile age. Taken together with the indications for sterilization, it meant that all the mentally retarded could be forcibly confined from the onset of puberty and then sterilized because sterilization might facilitate their release—and the sterilization could be performed without their consent.⁷⁹

The word eugenics had been purged from the law, but the idea remained. The danger not only of bearing children but of bearing mentally retarded children was included in the considerations when compulsory confinement was discussed. The hereditary disposition was taken into account when applications for sterilization were considered. Most of the physicians associated with the department of the mentally retarded were strong hereditarians and positive toward eugenics; certainly, this was true of H. O. Wildenskov, who had followed Christian Keller as the leader of the asylums in Jutland. Wildenskov had a strong influence on the formulation of the law; it was according to his recommendations that sterilization of the mentally retarded was dissociated from the general law on sterilization and castration (to be revised in 1935), and that the decision should be approved by an independent board, not by the medico-legal council. The first physician to sit on this board, Jens Christian Smith, was also favorably inclined toward eugenics. In his later evaluation of the law, he recommended the introduction of a direct eugenic indication.⁸⁰ Finally, the minister of health and welfare was one of the most dedicated eugenicists in the country.

There was some opposition to the passing of the law, but not very much. Bindslev cast the single vote against the law in the lower chamber; in the more conservative upper chamber there were three votes against. The representative of the Agrarian Party did not like the fact that people could be forcibly sterilized, but accepted it, characteristically, because the law concerned only the mentally retarded. The medico-legal council was dissatisfied because the mentally retarded were removed from its authority, but its protests were in vain.

It must be emphasized that the largest number of sterilizations occurred under this law and not the revised Sterilization Act of 1935. Until 1945 about 78 percent of those sterilized were the mentally retarded, and of these there were twice as many women as men.

But people were never entirely reconciled to the law. Teachers were worried when slow but otherwise normal pupils fell below the IQ minimum and were removed to an institution, and there were difficulties when parents refused to leave their children to the authorities—in one case, the forcible removal of two children caused a small riot because the local population felt the children were completely normal.⁸¹ In these cases, the reaction was against the forcible

internment, rather than against the eugenic aspect of the law; but awareness of the sterilizations that took place tended to reinforce the opposition. The authorities ascribed reactions such as these to ignorance, and the physicians who made the decisions insisted on their expertise in the face of all criticism.

THE REVISION OF THE STERILIZATION LAW IN 1935

Finally, in 1935 the scheduled revision of the law took place. The new law still covered castration as well as sterilization, but the distinction between the character and the effect of the two types of operations was emphasized more strongly in the new law. The new law made compulsory castration possible in certain cases. Apart from this, the greatest difference between the two laws was that the mentally retarded were covered by the Mentally Handicapped Act of 1934. More than 90 percent of the people sterilized from 1929 to 1934 belonged to this category. The indications for sterilization were described with the same vague phrases as in the former law; sterilization could be undertaken "with regard to the interests of society," but a distinction was made between the "normal" and the "abnormal" applicant. The mentally "normal" applicant could be sterilized if special reasons favored the operation, particularly if a danger existed that progeny could be genetically afflicted. For the mentally "abnormal" the criteria were even vaguer, but the operation could be undertaken only if it would benefit the applicant. This meant that the operation could not be undertaken with sole regard to the interests of society and against the interests of the individual.

The final decision concerning each application was still left in the hands of the minister of justice, but now he could act on advice from only one side, the medico-legal council. The applicant had to be advised of the consequences of the operation and give consent. In cases where persons were unable to comprehend the effects of sterilization, a guardian could be appointed to act on their behalf.

The purely eugenic criterion had been accepted at last, but only for people who were judged mentally "normal." Actually, the majority of the people to be sterilized were not members of this group, but they could be sterilized anyway, in accordance with the vaguer criteria applied to the mentally "abnormal," and the eugenic benefits could be achieved without use of the eugenic criterion. In fact, all applications for sterilization had to be accompanied by—among other relevant information—an estimate of the hereditary disposition. And later reviews of the law have agreed that eugenic considerations played an important part in decisions regarding the mentally "abnormal." But the

provocative concept of eugenics was not used more than necessary in the text of the law and, at the same time, the difficult question of the hereditary character of the different mental afflictions was circumvented. The law did not provide detailed guidelines for what constituted an existing danger, what kinds of hereditary afflictions were covered by the law, or what was meant by the general interests of society and the benefits to the individual.⁸²

This information was provided in a lengthy review undertaken by the medico-legal council and signed by the chairman of the council, Knud Sand. In addition to chairing this council, Sand was also a professor of forensic medicine and at that time generally regarded as Denmark's greatest expert on the endocrinology of the sexual glands, a subject that included the effects of sterilization and castration. Consequently, he could influence the cases of castration and sterilization in a double capacity, as chairman of the advisory board and as medical specialist. Other prominent members of the medico-legal council during this period were the psychiatrist August Wimmer and the leader of the institutions for the mentally retarded in the eastern part of Denmark, Johannes Nørvig.⁸³

The review covered both the experience of five years of castration and sterilization and recommendations for the future. During the five years, 108 persons had been sterilized, eighty-eight women and twenty men. Of these 108, 102 were mentally retarded patients from the institutions, the group that in the future would be taken care of by the special law for the mentally retarded passed in 1934. The rest, all six of them, represented the group that in the future would be covered by the revised sterilization law of 1935.

Because of the small sample, the sterilization experience from the experimental law of 1929-35 was not particularly relevant for the future application of the revised law. Nevertheless, the authors stated that the experience with sterilizations had been positive, and proceeded to make a number of sweeping recommendations in their review: schizophrenics and certain cases of epilepsy as well as a number of well-defined hereditary neurological diseases, including Huntington's chorea, should provide indications for sterilization. The authors would also have preferred to include hereditary blindness and hereditary deafness in this group, but realized that this might be too extreme to be acceptable to the general public. With respect to psychopaths, alcoholics, and even habitual criminals of normal intelligence, the authors found that sterilization in many cases would be preferable:

[the psychopaths] are often—to a larger extent than for example, the mentally retarded—asocial or antisocial (criminal); and their erotic activity and

inventiveness, considered together with their fertility—often extramarital—is considerable. . . . With respect to hereditary tainted progeny the psychopaths are comparable to the more well-defined mental diseases, even though the pattern of inheritance is still unknown.⁸⁴

The review maintained therefore that the law should allow for the sterilization of the most extreme of these cases, especially where hypersexuality was indicated "by the existence of several illegitimate children supported by society."⁸⁵

The same considerations applied to the habitual alcoholics. According to the authors, available documentation (not supplied) demonstrated that the marriages of such persons tended to be more fertile than average, and their sterilization, concurrent with their release from prison, work-house, or institution, would seem a reasonable measure. Criminals of normal intelligence, they stated, were often genetically afflicted and provided very bad conditions for their often numerous progeny. Sterilization of this group should under no conditions be used as a kind of supplementary penalty or a penalty substitute, but was preferable for both social and humanitarian reasons.⁸⁶ The authors also recommended that sterilization be performed as early as possible and the age limit imposed by the law of 1929 be removed.

Finally, they considered the consent demanded by the law. They found the inclusion of this condition understandable. They would have preferred to modify it, so consent could be dispensed with in special cases, but again they realized that this was more than the general public would accept.⁸⁷

The whole document is a curious mixture of a review of the Sterilization Act of 1929 with recommendations and guidelines for the revised law of 1935 and criticism of this law with suggestions for further revisions. And the authors were the very same people that constituted the final authority with respect to castration and sterilization. In effect, the medico-legal council used the opportunity to make their intentions clear with regard to the new law.

The document demonstrated that the leading medical experts in 1935 were ready to go very far in their pursuit of eugenic goals and social control of the marginal groups of society. When the review appeared in the periodical of the Danish Medical Association (*Ugeskrift for læger*), there were no adverse reactions. In 1929, when the first sterilization law was introduced, the editors received a few letters in protest, but this time the medical world seemed to agree with the conclusions.

EUGENICS AND SOCIAL CONTROL—DEVELOPMENTS IN THE 1930S

There was indeed evidence for a hardening attitude among the eugenicists as well as growing public support for eugenics in the period from 1929 to 1935. A number of books appeared at this time. August Wimmer's *Sindsygdømmenes Arvegang og Raceforbedrende Bestræbelser* (The heredity of mental diseases and racial improvement) and Knud Hansen's *Arvelighed hos Mennesket* (Human heredity) are two examples. Hansen's book strongly emphasized race biology, the superiority of the white race, and the threats against its dominant position; the considerable number of references in the book revealed a strong inspiration from German sources.⁸⁸

Axel Garboe, a clergyman with an enduring interest in social work, wrote *Arvelighed og Socialpolitik* (Hereditary and social policy) in 1931. During the same period, he wrote numerous reviews for *Socialt Tidsskrift* that demonstrated his extensive knowledge of the international eugenic literature, and he also wrote accounts of the development of eugenics in Germany, the fate of Boeters' eugenic proposals—the famous "Zwickauer Gesetze"—and the eugenics legislation of the National Socialist government.⁸⁹

Oluf Thomsen published a textbook of human genetics in 1932, which covered eugenics in considerable detail. And finally, as a crowning achievement, *Arv og Race* (Hereditary and race) appeared in 1934, followed one year later by Theodor Geiger's *Samfund og Arvelighed* (Society and heredity). In addition, there were numerous shorter articles and reviews by Wildenskov, Wimmer, Steincke, August Goll, Tage Kemp, and Søren Hansen, both in the specialist periodicals and in the more popular media. But there was not very much real debate, apart from a few conservative and Catholic dissenters.⁹⁰

The book *Arv og Race* was a celebration of this Danish consensus. Here, eminent authorities laid down the law on genetics, eugenics, and social policy, and on race and racial biology. Included were Øjvind Winge who was the expert in genetics, Oluf Thomsen the specialist in human genetics, August Goll the legal expert and criminologist, August Wimmer the psychiatrist (who was also regarded as an expert on the genetics of mental illness), Axel Garboe the clergyman and social worker, and finally, K. K. Steincke. It would demand more than a normal amount of courage to dissent from the combined weight of these authorities.

The National Socialists' concept of race and particularly their anti-Semitism was criticized in this book, but there was no comparable criticism of the German sterilization law. Authors such as Wimmer and Goll, who earlier had recommended extreme caution with regard to eugenics, came down in favor of

the German law and were ready in certain cases to accept compulsory sterilization also in Denmark. Everybody seemed to agree that a eugenics policy was an urgent necessity in a modern society but that eugenics should complement rather than replace the social security system, thereby concurring with Steincke's original argument.

Even though *Arv og Race* was a popular book, meant to be read by the layman, it is curious that almost no new scientific evidence was presented. The famous criminal families who had served the case of eugenics so well—the Jukes, the Kallikaks, and their companions—were discussed again, and a certain amount of anecdotal material was offered, along with loose estimates of the number of people that should be sterilized in different countries. Though a major reevaluation of eugenic premises was taking place in the English-speaking countries in these years, no trace of this debate can be found in *Arv og Race*.

Another strange omission was that not one of the authors considered that the eugenics legislation might be biased against the poor and the lower classes. On the surface the laws seemed indifferent to economic status but whether you were an alcoholic, a psychopath, or bordering on mental retardation, you were much more likely to become a client of the social apparatus—and subsequently to become eligible for sterilization—if you were poor. Only one author seemed to note this aspect of eugenics, the German sociologist Theodor Geiger, who had emigrated to Denmark in 1934. Geiger also questioned the widespread assumption that only the public social security system was a burden on society, and claimed that people maintained by their family or by private philanthropic organizations placed the same drain on national resources.

Though Geiger was a convinced eugenicist, his book *Samfund og Arvelighed* criticized many of the eugenic assumptions. Of all that was written in Denmark in these years, it must be considered the most original contribution to the eugenic literature. But though Geiger was a sociologist of international stature, his opinions on eugenics did not have much impact on the Danish debate and the Danish legislation. In this area he remained an outsider.⁹¹

Changed attitudes toward eugenics can be registered both in the eugenic literature and in the parliamentary debates of the 1930s. Compulsory sterilization of the mentally retarded was now regarded as acceptable, together with compulsory castration of sexual offenders. And there were many, including the medico-legal council and several of the leading experts, that recommended compulsory sterilization for other groups. While everybody up to and during the passing of the 1929 law had recommended caution, they now spoke of eugenics legislation as something that was urgently needed.

This corresponded to a general hardening of attitudes toward the poor and the working class (two groups that were often confused), and the marginal members of society in general. Unemployment had risen dramatically following the world crisis in the early 1930s, the new carefully prepared social legislation came under attack, and there was a clamor for more draconian measures including the death penalty. There was much talk about Denmark is being a feeble and dying nation with a declining population. Unemployment relief was criticized; female emancipation was attacked, and it was also viewed as a direct cause of unemployment.

The cost of maintaining the unproductive segment of the population became a favorite topic. Supporters of the new social legislation, a group which included most of the eugenicists, did in many cases accept the argument that such people imposed a heavy burden on society, but argued that the social legislation actually represented a more rational management and control of the marginal members of society, and that eugenics was needed to ensure that the problem and the burden did not increase with time.

The same attitudes were present in the other Scandinavian countries at this time, and also in Germany. In the last years of the Weimar Republic, politicians from most parties, even from the Catholic Center Party, adopted a more positive attitude toward eugenics; a eugenic policy was officially accepted by the Protestant relief organization Innere Mission at the Treysa Conference in 1932. Here, too, the cost of maintaining the retarded was much discussed, and the participants endorsed the policy of the "social minimum," the concept that the retarded should not cost more than the lowest amount spent on the healthy and able-bodied. These beliefs were accepted in a very broad segment of the population. They were not only associated with national socialism, though the Nazis provided the most demagogic version of the argument.⁹²

The difference between Denmark and these other countries should not be exaggerated. In all cases, preparations for eugenics legislation were begun well before the onset of the world crisis, and everywhere the crisis made state intervention and resolute legal measures more acceptable. However, only in Denmark did the supporters of eugenics succeed in squeezing a eugenic sterilization law through the legislative apparatus before the crisis had made itself felt.

STRANGE BEDFELLOWS: EUGENICS AND BIRTH CONTROL

Most of the Danish eugenicists mentioned thus far were eminently respected people, occupying relatively high and influential positions in Danish

society. They were involved with eugenics in a professional capacity as psychiatrists, geneticists, social workers, institutional leaders, etc. Even though many had a medical education, there is not enough evidence to conclude that eugenics was particularly attractive to physicians as a professional group, only that many physicians in their work became directly or indirectly occupied with eugenic problems.

But other eugenicists were less respected. Thit Jensen was already well-known as an author and feminist lecturer when she became acquainted with Margaret Sanger and her work for birth control in 1923. Thit Jensen became probably the most effective propagandist for the cause in Denmark, for a period touring the Danish provincial towns almost continuously. She cooperated with the Danish League for Sexual Reform, and through it, with the parallel communist organization. Her agitation also led to a break with the Danish feminist organization (Dansk Kvindebevægelse), where the majority did not want to be too closely identified with sexual reform and birth control.

Eugenics was more of a side issue for Thit Jensen, but right from the start she used the eugenic argument for birth control and information about birth control: that it would reduce the number of births of afflicted children. This argument was used in conjunction with other arguments: that birth control liberated women from the perpetual fear of conception and from dependence on men, that it functioned as a check on the threatening overpopulation, and that it secured a well-planned and prosperous family with better opportunities for the children. She became quite notorious during this period, and to the anti-feminists she epitomized everything that was wrong with feminism. She was also, quite wrongly but not unexpectedly, accused of encouraging loose morals and promiscuity.

For Thit Jensen, the eugenic argument and the argument for the small, but prosperous, family occasionally merged; she seemed to believe that the better-fed, better-raised, and better-educated children would also be genetically superior—or, rather, she was not aware of any distinction between the physical and mental health of a person and his or her hereditary potential, between phenotype and genotype. In this way her arguments acquired a Lamarckian flavor which did not make them less convincing to the layman, but set her further apart from the official professional consensus.

Another radical eugenicist was held in even lower esteem. Jonathan Høgh Leunbach, a physician and cofounder of Magnus Hirschfeld's League for Sexual Reform, was also a fervent agitator for birth control and sexual education, so much so that for a period he formed his own Sexual Reform Party, loosely affiliated with the Communist Party. He himself ran twice on the Communist ticket.

He started courses in sexual physiology and birth control in the 1920s, and later, after he had received many requests for abortions, he founded a clinic where pregnancies could be terminated. This brought him into conflict both with his fellow physicians and with the law, and in 1930 the authorities, after several attempts, secured a conviction and three months of imprisonment.

Since that time many commentators have had difficulty understanding why two such progressive and courageous people were attracted to the "reactionary" idea of eugenics. But as we have seen, hereditary determinism and eugenics were supported by progressives, both moderate reformers and radicals. Indeed, there are numerous examples of radical supporters of birth control and sexual emancipation who were strong eugenicists: Victoria Woodhull, August Forel, the Drysdales, Havelock Ellis, Margaret Sanger, and Marie Stopes. They believed that women and men were rational beings that should be allowed to control reproduction—then why not the quality of the progeny?

Leunbach published a book in 1926 called simply *Racehygiejne*, a rather crude tract even when compared to most of the contemporary literature, advocating both positive and negative eugenics and with the usual arguments based on social Darwinism and the degeneration concept. Leunbach later denied that the word "race" in "racehygiejne" had anything to do with the superiority and inferiority of the different races and maintained that the word race denoted the human race. It is true that the expressions race and racial were used with this meaning—that racial quality in many cases simply meant biological quality, and had nothing to do with racism, and that "racehygiejne" as used by many eugenicists simply meant the (genotypical) health of the human race. But Leunbach left himself wide open for charges of racism when he spoke of the struggle between the races, the inferiority of the colored races, and the dangers of miscegenation.⁹³

To the more respected eugenicists, people such as Leunbach and Thit Jensen were an embarrassment: they brought eugenics into disrepute by associating it with abortion, free love, and communism: they were the types of people Steincke had in mind when he warned against irresponsible propaganda. But the disagreement was not only a question of style. Both Søren Hansen and Steincke were pronatalists; they firmly believed that the declining birthrate represented a grave danger, not only because the total number of people declined but even more because the decline of the "superior" part of the population was believed to be disproportionately high, since the "inferior" segment of the population was less likely to use birth control. Propaganda for birth control could only accelerate this process of differential reproduction. In a quite violent letter that appeared in the periodical

published by the association of Danish physicians, Søren Hansen attacked Leunbach: he did not know what he was saying and doing, and the best thing he could do was to close up shop as soon as possible.

Leunbach's reply was that all forms of eugenic policy had to be voluntary to be successful; as long as only the educated strata knew how to control reproduction, the effect would be dysgenic, but balance would be restored when everybody knew how to do it.

Given the premises that these opponents shared, premises that are not regarded as valid today, Søren Hansen probably got the better of the argument. But the interesting thing is that Leunbach, a Communist and presumably a dedicated collectivist, stressed the importance of individual free choice, while Søren Hansen, much more orthodox politically, was ready to resort to coercion, primarily indirect coercion based on maintaining ignorance, but in some cases even direct coercion, for instance, the suppression and prohibition of the use of contraceptives. Here, he put the interests of the collective, the state, higher than the right of the individual to free information. Søren Hansen's attitude cannot be said to be typical of the Danish eugenicists, who rarely discussed eugenics in these terms, but most of them did agree with the pronatalist argument, and most of them favored a strengthening of the state apparatus and the possibilities of state intervention for eugenic purposes.

One reason for these differing viewpoints could be the different pictures the opponents had formed of the woman that used contraception. To Søren Hansen—and Steincke—she was the modern pampered and spoiled woman who preferred enjoyment and luxuries to children; to Leunbach and other supporters of birth control, she was the poor and prematurely aged woman who lived in perpetual fear of yet another conception.

In defense of the respected eugenicists, it must be said that their lack of confidence in people such as Thit Jensen and Leunbach can appear reasonable in view of their other activities. Thit Jensen was notoriously eccentric and difficult to work with, and became increasingly preoccupied with spiritualism. Leunbach appeared sounder, and he did not become a follower of Wilhelm Reich, as did many from his circle. But he did introduce Hans Hörbiger's *Welteislehre* in Denmark—an eccentric cosmological theory that all respectable scientists regarded as a flagrant piece of pseudoscience.⁹⁴ It is not completely unjustified to say that Leunbach and Thit Jensen, together with the earlier Alfred Bramsen and perhaps Vilhelm Rasmussen, represented the eccentric and cranky side of eugenics in Denmark.

With the exception of the book by Knud Hansen in 1929, and perhaps Leunbach's *Racehygiejne* in 1926, the Danish literature on eugenics was remarkably free from racial considerations and racial nationalism. In Germany this was certainly not the case, but even compared with the other Scandinavian countries, the Danish eugenicists seemed fundamentally uninterested in race and seemed to consider it irrelevant to eugenics.

There is one prominent exception, which, when examined closely, actually confirms this impression. In 1919 the periodical *Det Nye Nord* was founded. Originally it represented a form of "modern" businesslike conservatism with a strong emphasis on Scandinavian cooperation. Beginning in 1920, a special section, "Den Nordiske Race," was added. This section was edited by the Norwegian Jon Alfred Mjøen and covered two of his favorite subjects, eugenics and race. The section was very well written, contained contributions from most of the world's leading geneticists, and demonstrated Mjøen's talent as a journalist and propagandist—after all, he had represented his own eugenic ideas as "The Norwegian Program" at the meetings of the International Federation of Eugenics, despite having been ostracized by the professional Norwegian geneticists.

Nevertheless, "Den Nordiske Race" fell flat in Denmark. There were very few Danish contributions and none from the prominent Danish eugenicists, while Harry Federley from Finland and Herman Lundborg from Sweden contributed several times. There were also remarkably few references to "Den Nordiske Race" in the contemporary Danish literature. After a while, more and more of the content was written by Mjøen himself, his family, and his coworkers at his own private research institute.⁹⁵

Later attempts to interest the Danes in their racial heritage did not meet with much success. The contributions to *Arv og Race* in 1934 that dealt with the concept of race were uniformly negative toward race-nationalistic ideas, and Søren Hansen even repudiated the National Socialist concept of race. The attempt by the National Socialists in Germany to stimulate Nordic ideals through the establishment of "Nordische Gesellschaft" was not successful in Denmark. In general, the Danes were not much interested in race, and the eugenicists were actively trying to dissociate the concept of eugenics from all association with race biology and race nationalism.⁹⁶

After "Casti Connubii," the papal bull of 1930, Catholics everywhere turned strongly against eugenics. Many Catholics had already expressed criticism of the eugenics movement; G. K. Chesterton's *Eugenics and Other Evils*, published in 1922, is one of the more entertaining examples.⁹⁷ In Denmark the Catholics, a very small minority, were virtually the only organized group that persistently criticized eugenics and the sterilization acts.

The attacks were led by the science historian Gustav Scherz, who had a background in biology and a good eye for the scientific shortcomings of eugenics. Scherz maintained that the knowledge of heredity, particularly human heredity, was still very incomplete. He also underlined the principal Catholic argument against sterilization, that it violated the body created by God. This must not be confused with the humanitarian argument. Catholics were quite ready to accept castration as a penalty, just as Alfred Bindselev, another consistent adversary of eugenics, defended capital punishment; but they were not ready to accept inactivation or removal of a healthy part of the body as a therapeutic measure. Another familiar argument, also used by Scherz and other Catholics, was that immorality and promiscuity would increase when the fear of pregnancy disappeared. Obviously, this argument applied mainly to women. It was also taken seriously by the eugenicists. Both Søren Hansen and Steincke warned against sterilization as being "abused" or used for frivolous reasons by people who did not want to marry or have children. The sexually irresponsible woman with a string of illegitimate children constituted a heavy economic burden but with her reproductive capability removed, the same woman might present an even graver moral danger, threatening the very foundations of society, marriage, and the family. Leunbach, of course, believed that the option of sterilization should be completely free.⁹⁸

Finally, Scherz and other Catholics argued that it was inconsistent to suppress reproduction in any way when the population already was declining at an alarming rate. Scherz used strong words such as "the white death" and "national suicide," and admitted he found the National Socialists' policy more consistent; although they introduced sterilization, at least they made an effort to encourage population growth.⁹⁹

It is striking that the Catholic critics in many ways shared the outlook of the more respected Danish eugenicists. They did not disagree with the hereditary determinism of the eugenicists, which was essentially conservative; and like Søren Hansen and Steincke, they were pronatalists. In fact, eugenics without sterilization could be quite acceptable to Catholics, and they had quite early

(1928) translated and printed a series of lectures on family and reproduction given by the Jesuit geneticist Father Muckermann, at that time leader of the eugenics department at the Kaiser Wilhelm Institut in Berlin. Several of these tracts espoused eugenic principles, but Muckermann passed over the controversial subject of sterilization and emphasized positive measures such as greater family allowances and the value of stable, fertile families.¹⁰⁰

It must also be noted that the attacks on eugenics legislation took place against a background of extreme conservatism, not only vehement anticommunism but also a general antisocialism that even included the very moderate Danish Social Democrats. The political heroes of the Catholic weekly *Nordisk Ugeblad for Katolske Kristne* were Antonio Salazar, Gil Robles, Ignatz Seipel, and Engelbert Dollfuss. Parliamentarism was frequently alluded to as "the dictatorship by numbers," and the organic corporative state recommended in its place. In many contributions, though not in the writings of Scherz, an unmistakable undercurrent of anti-Semitism is discernible.

One often has the impression from the arguments of Scherz that the real target was not so much the Danish eugenics legislation but all the phenomena that he associated with eugenics: female emancipation, free love, state socialism, general secularization, and the concepts of "modern" and "progressive." His attitude toward eugenics legislation was shared by a few conservative columnists who also seemed to aim their attacks against the eugenics of Leunbach rather than against the respected Danish eugenicists. But this conservative opposition never amounted to much, and it certainly never dominated the Conservative Party or the Agrarian Party, the two leading parties of the Right.

There was no trace of an organized opposition to the sterilization acts from the Lutheran Danish state church. Bindslev, who was against them, was, of course, a member of the clergy, but so was the pro-eugenic Axel Garboe. Neither could be regarded as typical or representative of the Danish religious community. Of greater importance was the attitude of the physician H. I. Schou. Schou was the leader of one of the few Danish institutions where religious attitudes still predominated. Schou himself was an unorthodox but devout believer, but he had argued in favor of the law of 1929 when he was consulted by the parliamentary politicians. According to several statements during the parliamentary debates, many people who initially had grave reservations were convinced because a man such as Schou could sanction eugenics.

Some opponents argued against the legislation from a humanitarian position. To them sterilization and particularly castration were mutilations and represented a return to an older, more barbarous legislative tradition, whether they were called therapy or not.¹⁰¹ The people who defended the sterilization

laws called this an emotional argument, as opposed to their own realistic, no-nonsense approach. From the parliamentary debates we know that many speakers admitted that they initially had shared this revulsion, but that they had been converted by the careful arguments of the experts.¹⁰² Castration evoked more revulsion than sterilization, and sterilization of disabled but "normal" blind and deaf people inspired more compassion than operations on the mentally disabled. Very few people seemed to be able to sympathize with this group. One who did raise her voice on their behalf, the pedagogue Sophie Ribbjerg, did not really try to argue against the sterilization of the mentally retarded. Though she had extensive experience with late developers, she considered it futile to argue in the prevailing climate of opinion, but she did emphasize that these people could have a full and happy life in spite of their disability.¹⁰³

THE GERMAN STERILIZATION LAW IN DANISH PERSPECTIVE

In 1933 the new National Socialist government in Germany issued a barrage of new laws. One of them, *Gesetz zur Verhütung Erbkranken Nachwuchses* (Law concerning the prevention of hereditarily afflicted progeny), concerned eugenic sterilization. Later, commentators such as Tage Kemp strongly emphasized the difference between the German law and its Danish counterpart.¹⁰⁴ The German sterilization law was founded on coercion which was exerted by a quasi-legal apparatus of local courts made up of experts in human genetics and legal advisers; people could be sterilized against their will, if the decision from the *Erbeberichtshof* (Hereditary Court) and the succeeding appeal to the *Erbeoberberichtshof* (Hereditary Upper Court) went against them. The indications for sterilization were also much more formalized than in Denmark. No fewer than nine different categories covering sterilization for eugenic reasons were outlined in the law.

Commentators after World War II have characterized the law as a typical Nazi law, and have seen it as the first step down the road to euthanasia and genocide, but most of the contemporary Danish eugenicists regarded the law favorably, an attitude that in no way could be interpreted as sympathy with the Nazi policy in general. In the month before the passing of the German law, the Danish newspaper *Politiken* published a series of features on eugenics by Tage Kemp, August Goll, and Søren Hansen.¹⁰⁵ All had taken pains to dissociate the concept of eugenics from the Nazi doctrines of race, and Søren Hansen had severely criticized the Nazi concepts of racial purity and anti-Semitic propaganda. His later reaction to the German sterilization law was quite different:

[it has been expected] . . . that Germany without doubt in the near future would acquire a sterilization law, which has been carefully prepared by prolonged and detailed deliberations—and this has come to pass. The law was accepted the 14 July and was as good as expected.... Already the title *Gesetz zur Verhütung Erbkranken Nachwuchses* demonstrates that this is a purely eugenic measure, and that is all it is. A number of hereditary diseases are listed as indications for sterilization, where medical expertise might decide that imminent danger exists of progeny with severe physical or mental "Erb Schaden." It is doubtful whether a substantial improvement of the racial quality of the German people can be expected from the application of the law, but it must be acknowledged that the law is carefully considered and clearly and distinctly phrased.¹⁰⁶

August Goll, who had lectured about the Danish law in Germany, admitted that "There is a connection between the law and the new national socialist idea of racial purity," and he did not approve of the compulsory sterilization of the deaf, the blind, and the physically invalid, that could be carried out according to the German law. But he did believe that following the German law and introducing the compulsory sterilization of chronic alcoholics and psychopaths would be preferable in certain cases. Finally, he claimed that "there can be no doubt that at least the younger generation among the German physicians are supporting the law, which thus can be regarded as evidence of the enormous progress of the movement for sterilization in the last five years."¹⁰⁷

This was also the impression of H. I. Schou, the pious director of Filadelfia, an institution for epileptics. He quoted the famous German psychiatrist Bumke as approving the law and another, anonymous German psychiatrist who had confirmed that the majority of his colleagues supported the law and that the law was carried out slowly and carefully.¹⁰⁸ Steincke commented on Schou's article, but merely to correct the impression that the Danish law—as opposed to the German—only allowed for voluntary sterilization. As Steincke correctly stated, the law of 1934 concerning the mentally retarded actually contained provisions for carrying out sterilizations against the will of the individual.¹⁰⁹

Tage Kemp thought the German organization with local courts preferable to the more cumbersome Danish decision process, but he did not comment on the German provisions for compulsory sterilization at that time.¹¹⁰ Even Leunbach, the revolutionary socialist, could not find anything to criticize in the German law except the fact that sterilization without the consent of the *Erbgerichtshof* was expressly forbidden.¹¹¹

August Wimmer, who a few years before and only with extreme reluctance had come out in favor of sterilization, now thought that Denmark should

adopt at least part of the German practice—the compulsory sterilization of psychopaths, alcoholics, and criminals. Without sterilization of this group, it would not be possible to effect the "purification of the social body of inferior elements" (an expression he had borrowed, with obvious approval, from the German psychiatrist Robert Gaupp).¹¹²

Axel Garboe was condescending, but also impressed by the German efforts:

That this contains correct ideas cannot be doubted. That difficulties are ignored and [that] the impact of genetical research for the present is overestimated are also easy to see. . . . But a grand experiment seems to be on the way. Time will tell what the results will be. When the high-sounding phrases and the naiveté that causes affront are removed, there will still be left something to learn and apply, with the necessary modifications, in our own country.¹¹³

The most critical reaction came from Professor H. O. Wildenskov, usually regarded as a hardliner in his attitude toward eugenics. In his commentary, written before the Danish Mentally Handicapped Act of 1934 had been approved by Parliament, he criticized the German law on two principal points. First, he protested that by insisting on the strict eugenic indication, the law demanded the impossible from the medical authorities. The hereditary character of the different afflictions listed in the German law could be proved with certainty only in very few instances. Second, he opposed the part of the German law allowing for compulsory sterilization. In a more practical commentary, he stipulated that, according to the text of the law, Germany would need around 2,600 physicians with expertise in human genetics, and he doubted that so many were available or could be available at short notice.¹¹⁴

Wildenskov's comments are interesting when seen in the light of the 1934 law on which he had been a major influence. In the Danish law there was no eugenic indication—the word eugenic was not mentioned once—though there definitely was a eugenic intention. And, of course, the same law actually did allow for compulsory sterilization, though in a more circumspect way than the German law.

The Danish reaction is not really surprising when we concentrate on the letter of the German law, without using hindsight. True, the German law did specify that the hereditary the mentally retarded, schizophrenics, manic-depressives, hereditary epileptics, hereditary deaf, hereditary blind, people suffering from Huntington's chorea, and alcoholics could be sterilized. The Danish laws of 1929, 1934, and 1935 did not specify anything as detailed. But if we look at the recommendations of the Danish medico-legal council from 1934, we find a similar list,

excluding only the manic-depressives. Together with the sterilization of habitual alcoholics, the Danish group also found sterilization of psychopaths, and even mentally "normal" habitual criminals, desirable.¹¹⁵

The German law did contain a provision for compulsory sterilization, but so did the Danish law of 1934 concerning the mentally retarded. If we reexamine the commentary of the medico-legal council on the 1935 legislation, we see it quite openly states that compulsory sterilization would be desirable for some categories of criminals and psychopaths. Individual comments from different experts show the same tendency; attitudes hardened considerably in the interval from 1929 to 1935, as even earlier skeptics such as August Goll and August Wimmer now seemed to approve of more draconian measures. We must conclude that the differences between the German law and the Danish legislation were smaller than we have since been led to believe. And the differences were even smaller between the German law and the wishful thinking of some of the Danish eugenicists.

It is difficult to envision a development analogous to the German practice in Denmark. Even if the effects of the world crisis had increased in severity and the political situation had been more polarized, mass sterilization of large groups in the population that were not institutionalized would not have been acceptable to the majority. However, if we consider the rhetoric of the leading experts, it is not quite as impossible to imagine a situation in which institutionalized groups, habitual criminals, psychopaths, and alcoholics could have been subjected to sterilization, compulsory or partly compulsory, on a large scale. The example of Hamburg is not encouraging. This part of Germany had been closest, in attitudes and administration, to the Scandinavian model. Even during the Nazi years, racial ideology played a minor role in Hamburg compared to the rest of Germany. Yet Hamburg was also the area that carried out the largest proportion of sterilizations and deportations of "antisocial individuals" to concentration camps.¹¹⁶

From their German colleagues the Danish eugenicists received the impression that the German law was applied cautiously, and that in reality it represented continuity with the Weimar administration which actually had set up a commission to consider proposals for a sterilization law in 1932. There is some truth in this view; the sterilization law that was enacted after the Nazi takeover owed much to work done in the last period of the Weimar Republic, even though the Weimar commission had considered only voluntary sterilization.¹¹⁷

The real difference between the German law and the various Danish sterilization laws lay in the way they were applied. In Denmark 1,380 people had been sterilized from 1935 to 1939, 1,200 of them mentally retarded. In

Germany about 200,000 people were sterilized from the beginning of 1934 to the middle of 1937, a staggering 7,000 per month. But neither these facts—which can have been no secret to the Danish medical community—nor the passing of the Nuremberg Laws of 1935 "To Safeguard German Blood and Honor," caused any of the Danish eugenicists to reevaluate or criticize the German sterilization program in public.

FURTHER EUGENICS LEGISLATION

One of the most controversial laws of the 1930s was the abortion law first put forward in 1937 and then, after extensive revision, passed in 1939. The law was an offshoot of the many recommendations of the Myrdal-inspired population commission. It did contain a provision for eugenic indication: the right to have an abortion performed when imminent danger existed that the child would be suffering from mental illness, mental deficiency, severe neurological illness, epilepsy, or severe somatic illness due to hereditary causes. In connection with an abortion, a woman could be sterilized if she was genetically afflicted. But the debate about this issue, which normally would have been quite controversial, was overshadowed by the violent public debate about abortion in general, and about the social indication for abortion in particular.¹¹⁸

Nineteen thirty-eight saw a revision of the marriage law. By this time, the law of 1922 was regarded as inefficient with respect to eugenics by some of the medical experts, and together with Steincke, still minister of health and welfare in 1938, they wanted to widen the indications for prohibition of marriage to include the hereditary blind and the hereditary deaf. At the same time, this group wanted to include a provision for compulsory divorce in cases in which married couples, who fulfilled the general requirements for sterilization according to the law of 1935, refused to be sterilized. This proved too much. There was an outcry in the press and among the more conservative politicians; and finally, Steincke had to settle for a clause specifying that marriage could be prohibited if people who fulfilled the sterilization requirements refused to be sterilized. Sterilization and castration could be accepted, but an established marriage was still sacrosanct.¹¹⁹

TAGE KEMP AND THE UNIVERSITY INSTITUTE OF HUMAN GENETICS

In the 1930s Tage Kemp gradually rose to become the acknowledged expert on human genetics in Denmark. As previously mentioned, he was handpicked for this position by his mentor, the pathologist Oluf Thomsen.

The government grant that was instituted in 1922 to prepare for the establishment of teaching and research in "racehygiejne" at Copenhagen University had passed into the custody of Thomsen in 1927 when Wilhelm Johannsen died. At that time part of the grant was set aside for the specific purpose of educating a prospective candidate for a chair in eugenics and human genetics. Thomsen chose the thirty-one-year-old medical researcher Tage Kemp, who had already done some work on chromosome cytology but not on anything related to eugenics. In 1932 Kemp started publishing work of this type beginning with the biosocial treatise, "A Study of the Causes of Prostitution, Especially Concerning the Hereditary Factors." Kemp presented this work at the Third International Congress of Eugenics in 1932 and later published it as a monograph.¹²⁰

In this period, Kemp's research career was funded largely by the Rockefeller Foundation. This foundation had more or less saved genetic research in Germany during the lean years after the war and was also supporting genetic research in other places in Europe, notably the Galton Laboratory and Penrose's Institute at Colchester.¹²¹ In 1932 Kemp received a grant that enabled him to study genetics in the United States and Europe, and in 1934 he received another grant that allowed him to visit various institutes of genetics in Europe. During these visits he also functioned as an observer for the Rockefeller Foundation which had voiced concern about the ideological commitment of some of the German researchers. Kemp visited, among others, Othmar von Verschuer, famous for his use of twin methods in human genetics, and stated that he was "a keen national socialist, completely honest, however, I feel, so one can rely upon his scientific research as being objective and real. He works especially with twin investigations, and is doing this research very thoroughly and systematically."¹²²

From 1933 on, Kemp wrote regularly on the subject of human heredity and eugenics. In accordance with Johannsen's ideas, he was skeptical of positive eugenics and thought more concrete results could be obtained by concentrating on negative eugenics, preventing the propagation of harmful genes. Like Søren Hansen, he regretted the declining birthrate and considered it part of eugenic policy to encourage childbirth, although he did not recommend state interference with the distribution and use of contraceptives and other drastic measures. He did not criticize the German laws openly at the time of their appearance, but he maintained a certain distance. He spoke of the sterilization law that "was applied very energetically" and stressed the difference between the dictatorship, where the interests of the state overruled the interests of the individual, and the democracies, where it was accepted that society owed all

individuals a tolerable existence. He was also very critical of the different American state laws and found that many of them had been carried out too hastily and without the proper genetic insight.¹²³ Kemp did not, as a rule, advocate coercion and perhaps did not realize that the law of 1934 in effect was compulsory. Instead he emphasized the need for more specific information about the nature of heredity and eugenics, advocating specific prognoses in individual cases so people could judge the risk of having children with hereditary disabilities. Once people had been given proper information, they could be expected to act in conformity with the general interests of society.¹²⁴

In 1938, after prolonged negotiations in which Oluf Thomsen and Tage Kemp were very involved, the Rockefeller Foundation founded the Institute of Human Genetics and immediately handed it over to Copenhagen University. Tage Kemp became the first director and, in accordance with his ideas, it became the center for the registration of genetic diseases and genetic investigations. Denmark had an honorable tradition in genetics but was not particularly strong in the area of human genetics. The Rockefeller Foundation chose Denmark for the establishment of the institute more for its social organization than for its research tradition. Denmark, along with the other Scandinavian countries, offered unique opportunities for research into human genetics. The civil records were almost complete, the population was stable and homogeneous, and the distances small; and together with the advanced state of the social health programs, these factors made family studies and larger surveys easy to complete. With the foundation of this institute, Denmark was chosen to be the major human genetics laboratory in the world.

Genetic registration became the central activity of the new institution. This was supported by the government, which in 1939 recommended that all people who were admitted to the institutions for mental disabilities and mental illnesses fill out questionnaires and forward them to the Institute for Human Genetics. In a way, this work represented a continuation of Søren Hansen's anthropological registration, and the archives of his anthropological laboratory were incorporated into the new institute. Indeed, the institute represented what he had fought for, for more than a quarter of a century.

Along with the genetic registration, the institute conducted family research and other types of research into human genetics; more traditional anthropological research was also carried out, to a limited extent. Finally, the institute also performed experimental research into pathological genetics, primarily on mice. Besides being a research institution, it functioned as a center for genetic counseling—probably the first in the world—dispensing advice on marriage, sterilization, abortion, and other problems of genetic interest.¹²⁵

While research into human genetics was firmly established, interest in the subject of eugenics faded after 1935. Kemp gave popular lectures on the subject, and Søren Hansen published occasional articles. There was some debate in the press about the eugenic changes in the marriage law in 1938, but the controversy was more about the violation of marriage than the subject of eugenics. The eugenic laws took their course, independent of the general interest in the subject: in the five-year period from 1929 to 1935, 108 people were sterilized; during the next five years the number was 1,380. As tables 1-3 show, more than twice as many women as men were sterilized, and far more the mentally retarded than all the other categories put together. And these numbers probably underestimate the true proportion of the mentally retarded. A later survey by Kemp, covering sterilization from 1945 to 1950, demonstrates that the more seriously retarded and those bordering on mental retardation constituted about 40 percent of the people sterilized according to the law of 1935, the law that primarily covered sterilizations not connected with the institutions for the mentally retarded.¹²⁶

Table 1. Total number of legal sterilizations in Denmark 1929-50.

| Period | Women | Men | Total |
|---------|-------|-----|-------|
| 1929-34 | 88 | 20 | 108 |
| 1935-39 | 975 | 405 | 1,380 |
| 1940-45 | 1,510 | 610 | 2,120 |
| 1946-50 | 1,771 | 561 | 2,332 |

Source: T. Kemp, *Arvehygiejne, Københavns Universitets Årsskrift* (Copenhagen: Københavns Universitet, 1951), 45.

Table 2. Legal sterilizations in Denmark (mentally retarded excepted).

| Period | Women | Men | Total |
|---------|-------|-----|-------|
| 1929-34 | 4 | 1 | 5 |
| 1935-39 | 150 | 30 | 180 |
| 1940-45 | 510 | 110 | 620 |
| 1946-50 | 902 | 96 | 998 |

Source: T. Kemp, *Arvehygiejne, Københavns Universitets Årsskrift* (Copenhagen: Københavns Universitet, 1951), 45.

Table 3. Legal sterilizations in Denmark of the mentally retarded.

| Period | Women | Men | Total |
|---------|-------|-----|-------|
| 1929-34 | 84 | 19 | 103 |
| 1935-39 | 825 | 375 | 1,200 |
| 1940-45 | 1,000 | 500 | 1,500 |
| 1946-50 | 869 | 465 | 1,334 |

Source: T. Kemp, *Arvehygiejne, Københavns Universitets Årsskrift* (Copenhagen: Københavns Universitet, 1951), 45.

LATER DEVELOPMENTS: EUGENICS AFTER WORLD WAR II

Denmark was occupied by Germany from 1940 to 1945, but the occupation did not lead to any change in the Danish eugenic policy. The German occupying power did not interfere in this area, and though the Danish government to a certain extent collaborated with Germany, it was ideologically very far from national socialism. There was no equivalent to the Norwegian Quisling government and its introduction of a more extreme eugenics legislation.

After World War II, the word "racehygiejne" had outlived its usefulness, and even the word eugenics was not used very often. But the horrible revelations of the genocidal racial policy of the Third Reich did not lead to any recriminations against the Danish eugenics legislation and the Danish eugenicists. Eugenics disappeared as a concept that was at least occasionally discussed in public, a gradual process that had already started before the war.

There was criticism against the Mentally Handicapped Act of 1934, but the criticism was not in any way connected to the condemnation of the German sterilization policy. There had always been a certain resentment against the administration of the law and its compulsory character, provoked mostly by the summary removal of children from their homes but also by the knowledge of sterilizations that took place in the institutions. There had also been unfortunate publicity about some cases of late developers who had been released and reclassified as normal—after sterilization had been performed. A claim for damages in such a case had been rejected by the courts, but it all contributed to the general dissatisfaction with the law.

This dissatisfaction had already led to an inquiry in 1941, and in 1954 it became possible to appeal decisions (mostly regarding compulsory institutionalization) to the regular court system, where previously this decision had rested with the minister of health and welfare. The same year another commission was founded to consider the problems of the mentally retarded; and in two

reports, from 1957 and 1958, the commission recommended that most of the compulsory elements in the Mentally Handicapped Act be eliminated.¹²⁷

According to the law of 1934, the mentally retarded could be interned against their will if there existed immediate danger that they would have children. The commission had this comment:

About this indication it should be noted that the text makes it very extensive, making compulsory confinement possible for every nonsterilized the mentally retarded person of fertile age. In practice, the clause has only been applied in very few cases, while it may have been of great importance indirectly. The possibility that a patient could be detained at the institution with a view to sterilization, or just the knowledge that such a detainment was legal, probably has facilitated many sterilization applications.¹²⁸

The commission recommended that this special indication be discarded, so the only condition for compulsory confinement was if nonconfinement implied a major disadvantage for the mentally retarded person. About the conditions for sterilization in the Mentally Handicapped Act of 1934 the commission commented:

The committee finally wants to emphasize that the rules concerning sterilization allow for compulsory sterilization, but that direct compulsion never has been used and never ought to be used in the future.¹²⁹

This was true enough, but even in Nazi Germany direct compulsion was used only in very few of the sterilization cases. A rule allowing for compulsion did not have to be used to be useful. The comments of the commission made it clear that it did not approve of involuntary sterilization and would have preferred to have the paragraph removed, but this revision of the law was postponed because another commission was set up in 1958 in order to consider the whole problem of sterilization and castration. With this exception, the revision of the law regarding the institutions for the mentally retarded was passed in 1959. Sterilization still remained, but the part of the law that had opened the way for eugenic sterilizations, namely the possibility of compulsory confinement for all mentally retarded individuals of fertile age, had been removed.

In 1956 the First International Congress of Human Genetics met in Copenhagen. Among the luminaries present were J. B. S. Haldane, L. S. Penrose, and H. J. Muller, the discoverer of the genetic effect of ionized

radiation. Tage Kemp was chairman of the organizing committee and gave the opening speech:

Within recent years very much attention has been drawn to the dangers which our load of mutations involves for the human race; the risk of reduced fitness and even the perils of genetic death have been strongly emphasized. Beyond a definite intensity, further increase in radiation presents a potential danger to the human race as well as to plant and animal life. The most serious and effective precautions to prevent and control this risk and this danger must be taken. On the other hand, the danger must not be overestimated and unnecessary anxiety ought to be avoided. This is why the study of hereditary lesions is of such great consequence. The knowledge of the conditions effected makes it possible to follow and control their development and fluctuation in the population, and to ascertain the behavior of hereditary diseases down through the ages.¹³⁰

There was no mention of eugenics, no mention of the dangers of differential reproduction, and the baby boom after the war had made all talk about the dangers of depopulation obsolete. "Load of mutations" was one of the expressions of the new age, and it indicated another way of looking at the genetics of human populations. It also expressed the new threat against humanity that had been conjured up in the last days of the war—the atomic bomb. Kemp still believed that moderate negative eugenics was possible and preferable,¹³¹ but he did not think that the survival of nations or the fate of the human race depended on it.

THE FINAL ACT: THE REVISION OF THE STERILIZATION LAW

The commission regarding sterilization and castration delivered its final report in 1964, and the law was revised in 1967. The most obvious change from the earlier laws was that all sterilizations were put under the same law, but what was regarded as the most important change was that compulsory sterilization (and compulsory castration) was removed from the law, on recommendations from the commission.¹³² The disappearance of direct coercion from the law was approved by all the political parties, though the smaller parties were more outspoken in their condemnation of the older law. The commission pointed out that it would still be possible after the revision of the law to exert a certain indirect pressure on the mentally retarded to make them apply for sterilization, since release from the institutions, according to the law, could still depend on previous sterilization. This was noted and approved by the minister of health

and welfare and by several of the other party representatives. Only representatives of the smaller parties worried about the possibilities of indirect coercion.¹³³

The revision of the law was an indication of a general change in the attitude toward the mentally retarded, and probably this change was more important than the actual change in the law. The number of mentally retarded sterilized declined rapidly, from 275 in 1949 to 80 in 1962. During the same period, the safeguards concerning sterilization of this group had been improved. Appeal to a judge had been instituted as well as legal guardians (who could not be associated with the institutions). The organization of friends of the mentally retarded, *Evnsvages Vel*, had been actively involved both in the revision of the sterilization law in 1967 and in the earlier revision of the laws concerning the mentally retarded in 1959. It was now becoming accepted that the mentally retarded should also be allowed the right to a full sexual life.¹³⁴

One thing that was not discussed in the parliamentary debates in 1967 was the topic of eugenics. The closest the discussion came to the subject was a remark from the representative of the Popular Socialist Party, a smaller party to the left of the Social Democrats:

You will see that the racial hygienic value of sterilization and the value of racial hygiene as such were debated with complete seriousness in 1928. The discussion proceeded in 1934 and 1935, even though the more sober-minded regarded all that race talk as a passing fad.¹³⁵

It is clear that the speaker associated racial hygiene with race biology and racism in general; one can assume from the debate that eugenics had been completely left behind, but this was not the case. The eugenic indication was maintained for mentally normal, and eugenic considerations still had to be included in the considerations for the sterilization of the mentally abnormal. The University Institute of Human Genetics also maintained a moderate negative eugenics as part of its objective, in so far as it was compatible with "democratic conditions with the high degree of personal freedom we prefer."¹³⁶ Eugenics therefore continued to be a part of the health policy in Denmark.

Still, eugenics was not a very important part: the number of sterilizations with eugenic indication compared to social indication was declining long before the law revision in 1967. In 1973 free sterilization and abortion were legalized: everybody who wanted to be sterilized or have an abortion could do so, which meant that the possibilities for exerting a eugenics policy were reduced even further. The introduction of chemical alternatives to sterilization also reduced the importance of the sterilization legislation.

Eugenic sterilization was introduced in Danish legislation with the utmost caution in 1929; some would say it was done by stealth. It seems to have disappeared from the Danish consciousness in the same clandestine way. There was no general debate, no confrontation when the sterilization law was revised in 1967; not even the introduction of amniocentesis tests in Denmark in 1970 sparked any discussion. Later, in the wake of the general debate on biotechnology in the 1970s, Denmark joined in the discussion, but by that time everybody seemed to have forgotten that eugenics also had a history in Denmark.

NOTES

The classical review of the development of eugenics in Denmark is T. Kemp, *Arvehygiejne, Københavns Universitets Årsskrift* (Copenhagen: Københavns Universitet, 1951). This has been treated more briefly in G. Koudahl, *Om Vasectomi med Sterilisation for Øje*, dissertation (Copenhagen: Munksgaard, 1967). A more recent treatment of the subject is B. S. Hansen, "Eugenik i Danmark, den Bløde Mellemevej," *Niche* 4 (1984): 85-102. The subject has been treated in connection with the general attitude toward the mentally retarded in B. Kirkebaek's detailed *Abnormbegrebet i Danmark i 20.erne og 30.erne med Særlig Henblik på Eugeniske Bestræbelser og Særlig i Forhold til Åndssvage*, dissertation (Copenhagen: Danmarks Lærerhøjskole, 1985) and in her "Staten og den Åndssvage 1870-1935, fra Filantropi til Kontrol," *Handicaphistorie* 1 (1987): 45-56.

Another work that treats the concept in an institutional setting is F. E. Andersen's "Diskurs og Discrimination," *Agrippa* 3 (1982): 338-60. An extremely interesting discussion of the relationship between eugenics and the other social biological ideologies and the development of social hygiene in general is presented in L. H. Schmidt and J. E. Kristensen, *Lys, Luft og Renlighed: Den Moderne socialhygiejnes fødsel* (Copenhagen: Akademisk Forlag, 1986), esp. 89-114.

The related concept of castration has been treated by L. LeMaire in his dissertation *Legal Kastration i Strafferetslig Belysning* (Copenhagen: Munksgaard, 1946).

1. For an overview of the literature dealing with the United States and Great Britain, see D. J. Kevles, *In the Name of Eugenics: Genetics and the Uses of Human Heredity* (New York: Alfred E. Knopf, 1985); L. Farral, "The History of Eugenics: A Bibliographical Review," *Annals of Science* 36 (1970): 111-23; for literature on Germany, see P. Weindling, *Health, Race and German Politics between National Unification and Nazism, 1870-1945* (Cambridge: Cambridge University Press, 1989); P. Weingart, J. Kroll and K. Bayertz, *Rasse, Blut un Gene. Geschichte der Rassenhygiene in Deutschland* (Frankfurt: Suhrkamp Verlag, 1988); R. N. Proctor, *Racial Hygiene: Medicine under the Nazis* (Cambridge: Harvard University Press, 1988); G. Bock, *Zwangssterilisation und Nationalsozialismus. Studien zur Rassenpolitik und Frauenpolitik* (Opladen: Westdeutscher Verlag, 1986); J. Muller, *Sterilisation und Gesetzgebung bis 1933* (Husum: Matthiesen Verlag, 1985).

2. For examples, see G. Searle, *Eugenics and Politics in Britain* (Leyden: Noordhoff International, 1976); S. F. Weiss, *Race Hygiene and National Efficiency: The Eugenics of Wilhelm Schallmayer* (Berkeley: University of California, 1987).
3. The Danish administrators in Greenland often behaved in the high-handed and condescending way that Europeans used toward native populations, but the effects in Denmark of these attitudes were marginal and cannot be compared to the effects Belgian and Dutch colonies had on their mother countries. In some ways, Greenland and the Greenlanders can be compared to the northern parts of the other Scandinavian countries and their indigenous population, the Lapps. But while there are examples of eugenic literature in both Sweden and Norway, which are concerned about the effects of miscegenation with the Lappish population, I have not been able to find similar examples in the Danish literature with respect to the Greenlanders. Perhaps the generally positive attitude toward these people was partly a result of the immense popularity of the explorer and ethnographer Knud Rasmussen, who himself was partly descended from a Greenland family. Of course the Danish are not immune against racist prejudice. As a large number of young Greenlanders started moving to Denmark in the sixties and seventies, the accompanying social problems have caused a decidedly racist reaction.
4. K. Gjellerup, *Arvelighed og Moral* (Copenhagen: Andreas Schous Forlag, 1881); T. Ribot, *Sjælsevnernes Arvelighed* (Copenhagen: Gyldendal, 1899).
5. E. Mayr, *The Growth of Biological Thought* (Cambridge: The Belknap Press, 1982), 687-92.
6. F. R. Lange, *Om Arvelighedens indflydelse på Sindsygdømmene* (Copenhagen: Gyldendal, 1881).
7. F. R. Lange, *Slægter, Iagttagelser fra en Sindsygeanstalt* (Copenhagen: Gyldendal, 1904). This was translated as *Degeneration in Families: Observations in a Lunatic Asylum* (London: Kimpton, 1906).
8. H. Bang, *Håbløse Slægter* (Copenhagen: Gyldendal, 1882).
9. J. B. Haycraft, *Darwinism and Social Improvement* (London: S Sonnenschein and Co., 1894). This was translated the same year into Danish as *Darwinism og Raceforbedring* (Copenhagen: Jacob Lunds Forlag, 1894).
10. C. Wilkens, *Samfundslegemets Grundlove* (Copenhagen: Wroblewskys Forlag, 1881).
11. G. Bang, *Den Gamle Adels Forfald* (Copenhagen: Gyldendal, 1897); O. Hansen, *Udviklingslære* (Copenhagen: Gyldendal, 1900).
12. J. P. Steensby, "Foreløbige betragtninger over Danmarks Raceantropologi," *Meddelelser om Danmarks Antropologi* 1 (1907-1911): 83-172.
13. See, for example, W. Johannsen, "Über Dolichocephalic und Brachycephalie. Zur Kritik der Index-Angaben," *Archiv für Rassen und Gesellschafts-Biologie* 4 (1907): 171-88; C. Burrau, "Om Hovedets Form og Størrelse," *Meddelelser om Danmarks Antropologi* 1, no. 2 (1908): 241-74.
14. The fate and status of other Danish scientists who demonstrated an interest in physical anthropology exemplify this lack of prestige. The economist K. A. Wieth-Knudsen tried to merge economics, population science, and physical anthropology in his dissertation *Formerelse og Fremskridt. Økonomisk-Demografisk-biologisk Syntese* (Copenhagen: Julius Gjellerup, 1908), but the biological part of his argument was criticized strongly. Wieth-Knudsen felt that he was being excluded from scientific positions in Denmark and ended up as a professor at the business school in Trondheim, in what he himself considered an exile from Denmark. K. A. Wieth-Knudsen, *Mit Videnskabelige Livs Drama eller Universitetets Besættelsesregler og professor L. V. Birck* (Copenhagen: Reitzel, 1930). Fr. C. C. Hansen had a scientific position as professor of anatomy at Copenhagen University and he had cooperated with the famous Swedish anthropologist Carl Fürst, but he was also a notable eccentric and his later works of anthropology—attempts to reconstruct the physiognomy of Danish medieval notables based on the skeletal remains—did not enhance the prestige of the discipline. Fr. C. C. Hansen, *Identifikation og Rekonstruktion af historiske Personers Udseende på Grundlag af Skelettet* (Copenhagen: Københavns Universitet, 1921).
15. P. Reilly, "The Surgical Solution: The Writing of Activist Physicians in the Early Days of Eugenic Sterilization," *Perspectives in Biology and Medicine* 26 (1983): 637-56.
16. For Hedman's role, see E. L. Hedman, "Sterilisation, Nogen Erfarenhetsrön," *Nyt Tidsskrift for Abnormvæsenet* 17 (1915): 107-15; O. E. Hedman, "Några Ron ur den i Praktiken tillämpade Sterilisation," *Nyt Tidsskrift for Abnormvæsenet* 26 (1924): 127-28. For the Danish example, see C. Keller, "Kønsløsgørelsens Problem," *Nyt Tidsskrift for Abnormvæsenet* 23 (1921): 6-9.
17. H. Laughlin, *Eugenic Sterilization in the United States* (Chicago: Chicago Psychopathic Laboratory, 1922); E. S. Gosney and P. Popenoe, *Sterilization for Human Betterment: A Summary of 6,000 Operations in California* (New York: MacMillan, 1929); J. H. Landman, *Human Sterilization* (New York: MacMillan, 1932). An American example of a powerful institutional leader was F. A. Butler, the medical director and superintendent of Sonoma State Home in California, where 4,310 inmates were sterilized from 1919 to 1943; see F. A. Butler, "A Quarter of a Century of Experience in Sterilization of Mental Defectives in California," *American Journal of Mental Deficiencies* 50 (1945): 508-13; see also Reilly, "The Surgical Solution."
18. H. C. Sharp, "The Severing of the Vasa Differentia, and Its Relation to the Neuropsychiatric Constitution," *New York Medical Journal* (1902): 411-14.
19. F. E. Daniel, "Emasculatation of Masturbators—Is It Justifiable?" *Texas Medical Journal* 10 (1894): 239-44; see also M. W. Barr, *Mental Defectives* (Philadelphia: P. Blakiston's Son and Co., 1904), 196.
20. Barr, *Mental Defectives*, 196.
21. This criticism against surgical sterilization had already been raised by Prince Krapotkin at the First International Eugenics Congress. Krapotkin spoke with a certain authority, since he was without doubt the only participant who had extensive experience with penal institutions observed from the other side of the bars. See *Problems in Eugenics 2: Report of Proceedings of the First International Eugenics Congress* (London: Eugenics Education Society, 1912), 50-51.

22. Barr, *Mental Defectives*, 194.
23. A. Forel, *Det sexuelle spørgsmål* (Copenhagen: Gyldendal, 1913), 451-52; Weindling, *Health, Race and German Politics*, 84-87; Muller, *Sterilisation und Gesetzgebung bis 1933*, 37; P. Nücke, "Die Kastration bei Gewissen Klassen von Degenerierten als ein wirksamer sozialer Schutz," *Archiv für Kriminalanthropologie und Kriminalistik* 3 (1900): 58-84. A. Mayer, *Alfred Hegart und der Gestaltwandel der Gynäkologie seit Hegar* (Freiburg: Herder, 1961).
24. A. Rogers, "Futility of Surgical Treatment," *Journal of Psycho-Aesthetics* 3 (1898): 93-95. See also Barr, *Mental Defectives*, 182-88. I have not been able to find a recent historical treatment of this interesting episode.
25. For a characteristic expression of this sentiment, see H. M. Boies, *Prisoners and Paupers* (New York: Putnam, 1893). For a Danish example, see C. Keller, "Hvad Kan der Gøres for at Førringe de Åndssvages Tal," *Nyt Tidsskrift for Abnormvæsenet* 19 (1917): 19-24, 33-37.
26. The general development and character of the Danish institutions for the mentally retarded is described in B. Kirkebæk, "Staten og Den Åndssvage 1870-1935, fra Filantropi til Kontrol," *Handicaphistorie* 1 (1987): 45-56 and in B. Kirkebæk, *Da de Åndssvage blev Farlige* (Copenhagen: Socpol, 1993). The strong ties between the institutions and the Keller family have been detailed in the same manuscript (20-21, 103).
27. Barr, *Mental Defectives*, 192.
28. *Ibid.*, 196.
29. C. Keller, "Åndssvaghed," *Nyt Tidsskrift for Abnormvæsenet* 7 (1905): 104-7.
30. M. W. Barr, "Sterilization of the Unfit. Asexualization—Attitudes of the Europeans: Results of Asexualization," *Journal of Psycho-Aesthetics* 9 (1905): 127-29; S. D. Riskey, "Is Asexualization Ever Justifiable in the Case of Imbecile Children?" *Journal of Psycho-Aesthetics* 9 (1905): 92-98 (partly translated in C. Keller, "Den Åndssvages Kønsløsgørelse," *Nyt Tidsskrift for Abnormvæsenet* 8 [1906]: 161-71).
31. H. Scharling, "Bidrag til Diskussionen om Åndssvages Kønsløsgørelse," *Nyt Tidsskrift for Abnormvæsenet* 11 (1909): 188-92. For the development of the idea of x-ray sterilization, see Müller, *Sterilisation und Gesetzgebung bis 1933*, 22-25.
32. Examples of the articles dealing with or directly translating Goddard's work are C. Keller, "Studiet af Normale og Abnorme Børn," *Nyt Tidsskrift for Abnormvæsenet* 13 (1911): 1-12; H. H. Goddard, "Åndssvaghedens Arvelighed" (translated by B. Hjort), *Nyt Tidsskrift for Abnormvæsenet* 13 (1911): 257-70; B. Hjort, "Familien Kallikak," *Nyt Tidsskrift for Abnormvæsenet* 15 (1913): 1-7; and C. Keller, "Fra Vineland Laboratoriet," *Nyt Tidsskrift for Abnormvæsenet* 15 (1913): 125-26.
33. W. Fernald, "After-care Study of the Patients Discharged from Waverley for a Period of Twenty-five Years Upgraded," *American Journal of Mental Deficiency* 4 (1919): 62-81; H. H. Goddard, "Feeble-mindedness: A Question of Definition," *Journal of Psycho-Aesthetics* 33 (1928): 219-27. For examples of the kind of criticism directed against Goddard's results and against eugenic sterilizations in general, see R. Pearl, "The Biology of Superiority," *American Mercury* 47 (1926): 257-66; and A. Myerson, "Some Objections to Sterilization," *Birth Control Review* 12 (1928): 81-84.
34. A. Björkman, "Om Forekomsten af Svagsinneten i Finland og Några där av Foranledda Reflexioner," *Nyt Tidsskrift for Abnormvæsenet* 15 (1913): 72-73; E. L. Hedman, "Andesvagsvårdens Betydelse och Uppgift i Social och Rashedygienisk Avseende," *Nyt Tidsskrift for Abnormvæsenet* 15 (1913): 73-78; Från Helsingforsmodet, "Sammendrag af Forhandlingarna vid Andesvagesektionerne," *Nyt Tidsskrift for Abnormvæsenet* 15 (1913): 65-71.
35. See the exchange in *Nyt Tidsskrift for Abnormvæsenet* 14 (1912): 241-45 (Hedman), 284-285 (Bodil Hjort), 328-29 (Åstrand); and in *Nyt Tidsskrift for Abnormvæsenet* 15 (1913): 24-26 (Hedman), 83-84 (Åstrand).
36. For the development in Finland, see M. Hietala, "From Race Hygiene to Sterilization: The Eugenics Movement in Finland," in this volume.
37. Hedman, "Sterilisation, Nogen Erfarenhetsron". See also Hedman, "Några Ron ur den i Praktiken tillämpade Sterilisation." Hedman's vasectomy operations were first reported in Denmark in a brief notice in *Nyt Tidsskrift for Abnormvæsenet* 15 (1913): 29.
38. A. Bramsen, *De Velbaarne og de Belastede* (Copenhagen: Martins Forlag, 1912); Forel, *Det sexuelle spørgsmål*.
39. See, for example, S. Hansen, "Eugenicsbevægelsen," *Ugeskrift for Læger* 35 (1912): 3-7; S. Hansen, "Om Raceforbedring," *Nationaløkonomisk Tidsskrift* (1912-13): 11-30; S. Hansen, "En Undersøgelse af Døvtumhedens Arvelighed i Racehygiejnisk Øjemed," *Månedsskrift for Sundhedsvæsen* (1913): 97-106; S. Hansen, "Degenererer Overklasserne?" *Månedsskrift for Sundhedsvæsen* (1914): 97-99; S. Hansen, "Racehygiejne," *Månedsskrift for Sundhedsvæsen* (1915): 163-71.
40. S. Hansen, "Om en Registrering af Åndssvage," *Nyt Tidsskrift for Abnormvæsenet* 17 (1915): 82-85; S. Hansen, "Det Racebiologiske Laboratorium," *Naturens Verden* 4 (1920): 271-75; see also J. Mohr, "Human Arvebiologi og Eugenik," in *Københavns Universitet 1479-1979*, vol. 7, *Det Lægevidenskabelige Fakultet*, ed. J. C. Melchior et al. (Copenhagen: Copenhagen: Københavns Universitet, 1979), 241-52.
41. See S. Hansen, "Åndssvages Giftermål," *Ugeskrift for Retsvæsen* (1923), 153-56, and compare this with S. Hansen, "Retten og racehygiejnen," *Juridisk Tidsskrift* 1 (1915): 761-80, 2 (1916): 8-23, 66-81.
42. See Hansen, "Retten og racehygiejnen," 766-67.
43. V. Rasmussen, *Rigsdagstidende, Folketinget* (1915-16): 196-97.
44. Hedman, "Sterilisation, Nogen Erfarenhetsron." See also E. L. Hedman, "Öppet Brev til Herr Doktor Søren Hansen," *Nyt Tidsskrift for Abnormvæsenet* 17 (1915): 22-23. For Keller's attitude toward eugenics, see V. Rasmussen, *Rigsdagstidende, Folketinget* (1915-16): 196-97.
45. C. Keller, "Livø-Mænd," *Nyt Tidsskrift for Abnormvæsenet* 14 (1912): 1-13, 42-45, 79-91, 142-65; C. Keller, "Livø. Mændenes ø," *Nyt Tidsskrift for Abnormvæsenet* 22 (1920): 93-95; C. Keller, "'Sprogø' som Kvindernes ø," *Nyt Tidsskrift for Abnormvæsenet* 22 (1920): 95-98; C. Keller, "Sprogø," *Nyt Tidsskrift for Abnormvæsenet* 23 (1921): 43-47, 129-30.

46. C. Keller, "Hvad Kan der Gøres for at Førringe de Åndssvages Tal," *Nyt Tidsskrift for Abnormvæsenet* 19 (1917): 19-24, 33-37 (translated from W. Fernald, "The Burden of Feeble-mindedness," *Journal of Psycho-Asthenics* 17 [1912]: 89-111); K. K. Steincke, *Fremtidens Forsørgehesvæsen* (Copenhagen: J. H. Schultz, 1920), 241.
47. C. Keller, "Kønsløsgørelsen's Problem" (with a copy of Keller's petition), *Nyt Tidsskrift for Abnormvæsenet* 23 (1921): 6-9. For development in Switzerland, see Müller, *Sterilisation und Gesetzgebung bis 1933*, 37-40; B. Zurugzogl, "Die Probleme der Eugenik Under Besondere Berücksichtigung der Verhütung Erbkranken Nachwuchses," in *Verhütung Erbkranken Nachwuchses*, ed. S. Zurugzogl (Basel: Birkhäuser, 1938).
48. W. L. Johannsen, *Arvelighed i Historisk og Eksperimentel Belysning* (Copenhagen: Gyldendal, 1917), 4-5.
49. *Ibid.*, 259-68, esp. 264.
50. *Ibid.*, 269-74. For the controversy between Johannsen and Pearson, see N. Roll-Hansen, "The Death of Spontaneous Generation and the Birth of the Gene: Two Case Studies of Relativism," *Social Studies of Science* 13 (1983): 481-519.
51. Johannsen, *Arvelighed i Historisk og Eksperimentel Belysning*, 268, 275.
52. *Ibid.*, 278-87.
53. *Ibid.*, 277.
54. *Ibid.*, 287-88.
55. *Ibid.*, 289.
56. J. A. Mjøen, "Rassenhygiene in den Nordischen Landern," *Nationalsozialistische Monatshefte* (6 October 1935): 874-85, 875-76 (remarks about Johannsen).
57. Mohr, "Human Arvebiologi og Eugenik."
58. W. Johannsen, *Arvelighed i Historisk og Eksperimentel Belysning. 4. omarbejdede og forøgede udgave* (Copenhagen: Gyldendal, 1923); W. Johannsen, "Racehygiejniske Problemer," *Naturens Verden* 11 (1927): 214-35.
59. *Betænkning Angående Sociale Foranstaltninger Overfor Degenerativt Bestemte Personer* (Copenhagen, 1926), 20-23; material from "Kommissionen Angående Sociale Foranstaltninger overfor Degenerativt Bestemte Personer," Danish National Archive.
60. O. Thomsen, "Sterilisering med Racehygiejnisk Formål, Nordisk Tidsskrift for Videnskab," *Kunst og Kultur* 11 (1935): 115-23; O. Thomsen, "Forbrydelse som Skæbne," *Politiken*, 22 December 1928, 4; A. Wimmer, "Ægteskabslovgivning og Racehygiejne," *Gads Danske Magasin* (1911-12): 91-96; A. Wimmer, *Sindsygdommenes Arvegang og Raceforbedrende Bestræbelser* (Copenhagen: Levin og Munksgaard, 1929).
61. Ø. Winge, "Er der Fare for Samfundets Arvelige Degeneration," *Naturens Verden* 17(1933): 106-19.
62. J. C. Smith, "Dementia Præcox og Maniodepressive Psykosers Arvelighedsforhold," *Hospitalstidende* 64 (1921): 152-58; J. C. Smith, "Sterilisation af Åndssvage. Foreløbige Erfaringer på Grundlag af den danske lov af Maj 1934 om Foranstaltninger vedrørende Åndssvage," *Nordisk Tidsskrift for Sinnesslovård* 38 (1936): 97-107. See also A. Bruun and J. C. Smith, "Om Sterilisation af Åndssvage i henhold til lov nr. 117 af 16. maj 1934 om Foranstaltninger vedrørende Åndssvage," *Socialt Tidsskrift* (1939): 369-81.
63. Steincke, *Fremtidens Forsørgehesvæsen*. Steincke has left an extensive, five-volume biography which only makes the need for a critical biography more acute (K. K. Steincke, *Også en Tilværelse* [Copenhagen: Fremad, 1945-49]). For a bibliography of his considerable literary output, see T. Kjølner-Pedersen, *K. K. Steincke, En Bibliografi*, dissertation (Copenhagen: The Danish Library School, 1977).
64. K. K. Steincke, *Også en Tilværelse: Minder og Meninger* (Copenhagen: Fremad, 1945), 245-46.
65. G. von Hoffman, *Die Rassenhygiene in den Vereingigten Staaten von Nordamerika* (München: J. Lehmann, 1913); R. Larsson, *Biologiske Causerier* (Copenhagen: Gyldendal, 1918).
66. Steincke, *Fremtidens Forsørgehesvæsen*, 251-52.
67. K. K. Steincke, "Sociallovgivning og Racehygiejne," *Ugeskrift for Læger* 90 (1928): 1138-45.
68. J. Arenholt, "Sædelighedsforbrydelser mod Børn," *Kvinden og Samfundet* 37 (1921): 101-21. See also the debate in the same volume, 34-35, 42-43 (M. B. Westenholtz) and 44, 53-54, 60-61 (L. B. Wright).
69. A. Goll, "Sterilisation af Forbrydere," *Nordisk Tidsskrift for Strafferet* 11 (1923): 1-20; G. E. Schrøder, *Ufrugtbarførelse som Led i Moderne Forbryderbehandling*, *Tilskueren* 39 (1922): 88-112.
70. *Betænkning Angående Sociale Foranstaltninger Overfor Degenerativt Bestemte Personer*, 11-14, 20-23.
71. For the history of the Hardy-Weinberg law, see W. B. Provine, *The Origin of Theoretical Population Genetics* (Chicago: Chicago University Press, 1971). See also R. C. Punnett, "Eliminating Feeble-mindedness," *Journal of Heredity* 8 (1917): 464-65.
72. *Betænkning Angående Sociale Foranstaltninger Overfor Degenerativt Bestemte Personer*, 20-23.
73. *Ibid.*, 23-27; H. O. Wildenskov, *Investigation into the Causes of Mental Deficiency* (Copenhagen: Levin og Munksgaard, 1934).
74. *Betænkning Angående Sociale Foranstaltninger Overfor Degenerativt Bestemte Personer*, 28.
75. See Kemp, *Arvehygiejne, Københavns Universitets Årsskrift*, 27, 31-32. For a detailed treatment of the German law, see Bock, *Zwangssterilisation und Nationalsozialismus*; Müller, *Sterilisation und Gesetzgebung bis 1933*; Weindling, *Health, Race and German Politics*; and Weingart et al., *Rasse, Blut und Gene*.
76. V. Rasmussen, *Rigsdagstidende, Folketinget* (1928-29): 3069-76.
77. Rasmussen, *Rigsdagstidende, Folketinget* (1928-29): 3050-94, 4677-88, 4746-77, 5749-55; A. Goll, "Sterilisationsloven af 1. Juni 1929 og dens Resultater," *Politiken* (9-12 June 1933).
78. T. Kemp, "Sterilisation og Racehygiejne," *Politiken* (28 June 1933); K. Sand, "Sterilisation af Syge, Abnorme og Forbrydere," *Politiken* (23 January 1935).

79. Regarding the law of 1934, see *Betænkning om Åndssvageforsorgen, Betænkning nr. 204* (Copenhagen, 1958), 101-12; *Betænkning om Sterilisation og Kastration, Betænkning nr. 353* (Copenhagen, 1964), 19-20, 25, 29. For an unusually blunt statement regarding the application of the law, see R. Marthinsen, *Åndssvaghed og Åndssvageforsorg* (Ribe: Eget Forlag, 1957), 102.
80. A. Bruun and J. C. Smith, "Om Sterilisation af Åndssvage i Henhold til lov nr 117 af 16. maj 1934 om Foranstaltninger Vedrørende Åndssvage," *Socialt Tidsskrift* (1939): 369-81.
81. For a more detailed description of this episode, see Kirkebæk, *Abnormbegrebet i Danmark i 20.erne og 30.erne med Særlig Henblik på Eugeniske Bestræbelser og Særlig i Forhold til Åndssvage*, 144-47. The fact that workers attacked a law enacted by the Social Democratic government was noted, not without malice, by several conservative newspapers.
82. E. Schibbye, *Lov nr 176 af 11 maj 1935 om Adgang til Sterilisation og Kastration* (Copenhagen: J. H. Schultz, 1952); *Betænkning om Sterilisation og Kastration, Betænkning nr. 353*, 112-66.
83. K. Sand, "Den Danske Sterilisationslov af 1. Juni 1929 og dens Resultater, med Overvejelser om Lovens Revision," *Nordisk Tidsskrift for Strafferet* 23 (1935): 31-86. The review appeared with Sand listed as the only author, but it represented the opinion of the whole medico-legal council.
84. *Ibid.*, 78.
85. *Ibid.*
86. *Ibid.*, 78-79.
87. *Ibid.*, 81.
88. A. Wimmer, *Sindsygdømmenes Arvegang og Raceforbedrende Bestræbelser*, K. Hansen, *Arvelighed hos Mennesket* (Nykøbing F.: Eget Forlag, 1929).
89. A. Garbo, *Arvelighed og Socialpolitik* (Copenhagen: P. Haase og Søns Forlag, 1931). The "Zwickauer Gesetze" was a controversial eugenic proposal forwarded by Gerhard Boeters, the municipal physician of Zwickau, Sachsen, in 1923. See Müller, *Sterilisation und Gesetzgebung bis 1933*, 60-63; and Weindling, *Health, Race and German Politics*.
90. O. Thomsen, *Lærebog om Menneskets Arvelighedsforhold* (Copenhagen: Levin og Munksgaard, 1932); O. Thomsen, *Arvelighedsforhold hos Mennesket*, a series of lectures that were broadcast by Danish Radio (Copenhagen: Levin og Munksgaard, 1930); O. Winge et al, *Arv og Race* (Copenhagen: Martin's Forlag, 1934); T. Geiger, *Samfund og Arvelighed* (Copenhagen: Martin's Forlag, 1935).
91. Geiger, esp. 122-79 and 257-78. See also the anonymous review of Geiger's book in *Socialt Tidsskrift* 11 (1935): 121-24.
92. For the changing attitude in Germany under the impact of the world crisis, see Muller, *Sterilisation und Gesetzgebung bis 1933*; and Weindling, *Health, Race and German Politics*. A detailed description of the reaction in the religious communities is given by K. Nowak, *"Euthanasie" und Sterilisierung im "Dritten Reich"* (Göttingen: Vandenhoeck und Ruprecht, 1978).

93. For description of the birth control movement in Denmark, see B. Lau, *Børnebegrænsningsbevægelsen i Danmark i 1920erne og 1930erne*, dissertation (Aarhus: Aarhus University, 1972); B. Borgen, *Thit Jensen's Samfundengagement* (Copenhagen: Vinten, 1976); P. Hertoft, *Det er måske en Galskab* (Copenhagen: Gyldendal, 1985); and J. H. Leunbach, *Racehygiejne* (Copenhagen: Martin's Forlag, 1926). For the polemic between Søren Hansen and Leunbach, see *Ugeskrift for Læger* 87 (1925): 42-43, 64-65, 91-92, 114, 138. Thit Jensen stated her view on birth control and eugenics in T. Jensen, *Frivilligt Moderskab* (Copenhagen: Kria, 1923), a small tract containing a lecture first given in the small provincial town Kolding, 5 November 1923.
94. The history of this eccentric cosmology has been treated in B. Nagel, *Die Weltelehre. Ihre Geschichte und ihre Rolle im "Driften Reich"* (Stuttgart: Verlag für Geschichte der Naturwissenschaft und der Technik, 1991).
95. "Den Nordiske Race" was published as a feature in *Det Nye Nord* from 1920-25, but it appeared as an independent periodical in Norway. For a more detailed treatment of Mjøen, see N. Røll-Hansen, "Eugenics before World War II: The Case of Norway," *History and Philosophy of the Life Sciences* 2 (1980): 269-98.
96. See R. Spärck, "Racebegrebet Biologisk Set," in *Arv og Race*, O. Winge, et al. (Copenhagen: Martin's Forlag, 1934), 27-36; G. Hatt, "De Menneskelige Racer," in *Arv og Race*, O. Winge et al. (Copenhagen: Martin's Forlag, 1934), 37-61; A. Olsen, "Den Jødiske Race," in *Arv og Race*, Ø. Winge et al. (Copenhagen: Martin's Forlag, 1934), 129-43; S. Hansen, "Racerne," *Politiken* (19 June 1933). Paradoxically, Gudmund Hatt wrote in support of Germany during the occupation of Denmark. The fate of "Nordische Gesellschaft" is described in H. J. Lützhof, *Der Nordische Gedanke in Deutschland 1920-1940* (Stuttgart: Klett, 1971). Virtually the only prominent Dane who was active in this enterprise was Wieth-Knudsen, the economist and anthropologist who had been exiled to Norway (see note 14).
97. G. K. Chesterton, *Eugenics and other Evils* (London: Cassel and Co., 1922).
98. G. Scherz, "Sterilisation og Racehygiejne," *Nordisk Ugeblad for Katolske Kristne* 82 (1933): 38-42; G. Scherz, "Til hvad Gavn er Sterilisation," *Nordisk Ugeblad for Katolske Kristne* 82 (1933): 720-24; Hansen, "Retten og racehygiejnen," 762-71; Steincke, *Fremtidens Forsørgelsesvæsen*, 246-47
99. Scherz, "Til hvad Gavn er Sterilisation."
100. H. Muckermann, *Familien og Folket*, pamphlets 1-5 (Copenhagen: Katolsk Ungdom, 1931).
101. M. Pedersen, "Nogle Betragtninger, særlig Vedrørende Lægers Stilling til Sterilisationsloven," *Ugeskrift for Læger* 91 (1929): 194-95.
102. V. Rasmussen, *Rigsdagstidende, Folketinget* (1934-1935), 5127-31, 5141-43.
103. S. Rifbjerg, *Udviklingshæmmede Børn* (Copenhagen: Levin og Munksgaard, 1935), 194-95.
104. Kemp, *Arvehygiejne, Københavns Universitets Årsskrift*, 27, 31-32. For details of the German sterilization act, see Weindling, *Health, Race and German Politics* and Muller, *Sterilisation und Gesetzgebung bis 1933*.

105. Kemp, "Sterilisation og Racehygiejne"; Goll, "Sterilisationsloven af 1. Juni 1929 og dens Resultater"; Hansen, "Racerne."
106. S. Hansen, "De Tyske Sterilisationslove," *Ugeskrift for Læger* 95 (1933): 912-13.
107. A. Goll, "De Arvesyge og Samfundet," in *Arv og Race*, Ø. Winge et al. (Copenhagen: Martin's Forlag, 1934), 89.
108. H. I. Schou, "Sterilisation af Sindssyge og Abnorme i Tyskland," *Ugeskrift for Læger* 96 (1934): 1248-49.
109. K. K. Steincke, letter, *Ugeskrift for Læger* 96 (1934): 1248-49.
110. T. Kemp, letter, *Ugeskrift for Læger* 95 (1933): 965.
111. J. H. Leunbach, letter, *Ugeskrift for Læger* 95 (1933): 925. Leunbach's advocacy of free sterilization drew strong criticism from Søren Hansen (S. Hansen, letter, *Ugeskrift for Læger* 95 (1933): 964).
112. A. Wimmer, "Moderne Racehygiejne," in *Arv og Race*, Ø. Winge et al. (Copenhagen: Martin's Forlag, 1934), 108-17.
113. A. Garboe, "I Anledning af den Tyske Sterilisationslov," *Socialt Tidsskrifts* (1933): 396.
114. H. O. Wildenskov, "Sterilisationslovens Revision," *Socialt Tidsskrift* 10 (1934): 1-13, esp. 5-8.
115. Sand, "Den Danske Sterilisationslov af 1. Juni 1929 og dens Resultater, med Overvejelser om Lovens Revision."
116. See A. Ebbinghaus, H. Kaupen-Haas and K. H. Roth, *Heilen und Vernichten in Mustergau Hamburg. Bevölkerungs und Gesundheitspolitik im Driften Reich* (Hamburg: Konkret Literatur Verlag, 1984).
117. W. Kopp, "Arvelighed og Racehygiejne i Det Tredie Riges Lovgivning," *Juristen* 19 (1937): 249-60. Compare the views of Schou ("Sterilisation af Sindssyge og Abnorme i Tyskland") and Goll ("De Arvesyge og Samfundet"). This argument was reiterated after the war by several German geneticists. See, for example, H. Nachtsheim, "Das Gesetz zur Verhütung erbkranken Nachwuchses aus dem Jahre 1933 in heutiger Sicht, Artzliche Mitteilungen," *Deutschen Ärzteblatt* 33, no. 59 (1962): 1640-44; H. Harmsen, "The German Sterilization Act," *Eugenics Review* 45 (1954): 227-32.
118. The population commission had originally recommended a limited social indication for abortion but was overruled by the Minister of Health and Welfare, K. K. Steincke, who also overruled other recommendations, including the institution of sexual counseling. See Hertoft, *Det er måske en Galskab*; Steincke, *Også en Tilværelse*; and A. Myrdal and G. Myrdal, *Kris i Befolkningsfrågan* (Stockholm: Bonniers, 1934). The effect of this influential book in Denmark and other Scandinavian countries has been described by A. C. Carlson, *Kris i Befolkningsfrågan*, dissertation (Minneapolis: University of Minnesota, 1978).
119. V. Rasmussen, *Rigsdagstidende, Landstinget* (1937-1938), 172-74, 458-85, 786-802, 829-35.
120. T. Kemp, "A Study of the Causes of Prostitution, Especially Concerning Hereditary Factors," in *A Decade of Progressive Eugenics, Scientific Papers of The Third International Congress of Eugenics*, ed. N. Perkins et al., (Baltimore: The Williams and Wilkins Co., 1934), 255-63; T. Kemp, *Prostitution, An Investigation of Its Causes, Especially with Regard to Hereditary Factors* (Copenhagen: Levin og Munksgaard, 1936).
121. P. Weindling, "The Rockefeller Foundation and German Biomedical Science 1920-1940: From Educational Philanthropy to International Science Policy," in *Science, Politics and the Public Good: Essays in Honour of Margaret Gowing*, ed. N. Rupke (Basingstoke: MacMillan, 1988), 119-40. See also Kevles, *In the Name of Eugenics*, esp. 209-10.
122. "Report to the Rockefeller Foundation of visits to various Institutes, Laboratories, etc. for Human Genetics in Europe July-October 1934, by Tage Kemp," Rockefeller Archives, transfer file 713A.
123. T. Kemp, "Aktuelle Eugeniske Problemer," *Ledetråd ved Folkelig Universitetsforskning*, no. 41 (Copenhagen: Levin og Munksgaard, 1936). T. Kemp, "Den Moderne Arvelighedsforskning," *Nordisk Tidsskrift for Vetenskap, Konst och Industri* (1939): 394-409.
124. Kemp, *Arvehygiejne, Københavns Universitets Årsskrift*, T. Kemp, "The Frequency of Diseases Affected by Heredity in Denmark," *Cold Spring Harbor Symposium in Quantitative Biology* 15 (1952): 129-40.
125. The University Institute provided genetic counseling from 1939. The Heredity Clinic at the University of Michigan was established in 1940 and the Dight Institute in 1941 at the University of Minnesota (Kevles, *In the Name of Eugenics*, 251-54). Of course, Eheberatungsstellen and similar institutions had provided genetic advice even earlier.
126. Kemp, *Arvehygiejne, Københavns Universitets Årsskrift*, 50 table 9.
127. *Betænkning afgivet af det af Arbejds og Socialministeriet nedsatte Udvalg angående den mod Børne og Åndssvageforsorgen offentligt fremførte Kritik* (Copenhagen, 1941); *Betænkning om Åndssvageforsorgens Problemer, betænkning nr. 185* (Copenhagen, 1957); *Betænkning om Åndssvageforsorgen, betænkning nr. 204* (Copenhagen, 1958), 104-11.
128. *Betænkning om Åndssvageforsorgen, betænkning nr. 204*, 105.
129. *Ibid.*, 111.
130. T. Kemp, "Address at the Opening of the First International Congress of Human Genetics," *Acta Genetica at Statistica* 6 (1956-57): xii-xiii.
131. T. Kemp, "Genetic-Hygienic Experiences in Denmark in Recent Years," *The Eugenics Review* 49 (1957): 11-18.
132. *Betænkning om Sterilisation og Kastration, Betænkning nr. 353*, 24, 71-72; *Folketingets Forhandlinger* (1966-1967), 52-55, 925-43.
133. *Betænkning om Sterilisation og Kastration, Betænkning nr. 353*, 29-30; *Folketingets Forhandlinger* (1966-1967), 927 (Ib Thyregod, the Agrarian Party), 941-942 (the Minister of Justice, K. Axel Nielsen, the Social Democrats). For an example of the anxiety concerning the indirect coercion on the mentally retarded, see *Folketingets Forhandlinger* (1966-1967), 932 (Hanne Reintoft, The Socialist People's Party).
134. *Betænkning om Sterilisation og Kastration, Betænkning nr. 353*, 20-21 and table page 19.

135. *Folketingets Forhandlinger* (1966-1967), 932 (Hanne Reintoft, The Socialist People's Party).