Medical Science Under Dictatorship

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Science under dictatorship becomes subordinated to the guiding philosophy of the dictatorship. Irrespective of other ideologic trappings, the guiding philosophic principle of recent dictatorships, including that of the Nazis, has been Hegelian in that what has been considered "rational utility" and corresponding doctrine and planning has replaced moral, ethical and religious values. Nazi propaganda was highly effective in perverting public opinion and public conscience, in a remarkably short time. In the medical profession this expressed itself in a rapid decline in standards of professional ethics. Medical science in Nazi Germany collaborated with this Hegelian trend particularly in the following enterprises: the mass extermination of the chronically sick in the interest of saving "useless" expenses to the community as a whole; the mass extermination of those considered socially disturbing or racially and ideologically unwanted; the individual, inconspicuous extermination of those considered disloyal within the ruling group; and the ruthless use of "human experimental material" for medico – military research.

This paper discusses the origins of these activities, as well as their consequences upon the body social, and the motivation of those participating in them.

Preparatory Propaganda

Even before the Nazis took open charge in Germany, a propaganda barrage was directed against the traditional compassionate nineteenth – century attitudes toward the chronically ill, and for the adoption of a utilitarian, Hegelian point of view. Sterilization and euthanasia of persons with chronic mental illnesses was discussed at a meeting of Bavarian psychiatrists in 1931. [1] By 1936 extermination of the physically or socially unfit was so openly accepted that its practice was mentioned incidentally in an article published in an official German medical journal. [2]

Lay opinion was not neglected in this campaign. Adults were propagandized by motion pictures, one of which, entitled "IAccuse," deals entirely with euthanasia. This film depicts the life history of a woman suffering from multiple sclerosis; in it her husband, a doctor, finally kills her to the accompaniment of soft piano music rendered by a sympathetic colleague in an adjoining room. Acceptance of this ideology was implanted even in the children. A widely used high—school mathematics text, "Mathematics in the Service of National Political Education,"[3] includes problems stated in distorted terms of the cost of caring for and rehabilitating the chronically sick and crippled, the criminal and the insane."

Euthanasia

The first direct order for euthanasia was issued by Hitler on September 1, 1939, and an organization was set up to execute the program. Dr. Karl Brandt headed the medical section, and Phillip Bouhler the administrative section. All state institutions were required to report on patients who had been ill five years or more and who were unable to work, by filling out questionnaires giving name, race, marital status, nationality, next of kin, whether regularly visited and by whom, who bore financial responsibility and so forth. The decision regarding which patients should be killed was made entirely on the basis of this brief information by expert consultants, most of whom were professors of psychiatry in the key universities. These consultants never saw the patients themselves. The thoroughness of their scrutiny can be appraised by the work of on expert, who between November 14 and December 1, 1940, evaluated 2109 questionnaires.

These questionnaires were collected by a "Realm's Work Committee of Institutions for Cure and Care." [4] A

parallel organization devoted exclusively to the killing of children was known by the similarly euphemistic name of "Realm's Committee for Scientific Approach to Severe Illness Due to Heredity and Constitution." The "Charitable Transport Company for the Sick" transported patients to the killing centers, and the "Charitable Foundation for Institutional Care" was in charge of collecting the cost of the killings from the relatives, without, however, informing them what the charges were for; in the death certificates the cause of death was falsified.

What these activities meant to the population at large was well expressed by a few hardy souls who dared to protest. A member of the court of appeals at Frankfurt-am-Mainwrote in December, 1939:

There is constant discussion of the question of the destruction of socially unfit life—in the places where there are mental institutions, in neighboring towns, sometimes over a large area, throughout the Rhineland, for example. The people have come to recognize the vehicles inwhich the patients are taken from their original institution to the intermediate institution and from there to the liquidation institution. I am told that when they see these buses even the children call out: "They're taking some more people to be gassed." From Limburg it is reported that every day from one to three buses which shades drawn pass through on the way from Weilmunster to Hadmar, delivering inmates to the liquidation institution there. According to the stories the arrivals are immediately stripped to the skin, dressed in paper shirts, and forthwith taken to a gas chamber, where they are liquidated with hydro-cyanic acid gas and an added an esthetic. The bodies are reported to be moved to a combustion chamber by means of a conveyor belt, six bodies to a furnace. The resulting ashes are then distributed into six urns which are shipped to the families. The heavy smoke from the crematory building is said to be visible over Hadamar every day. There is talk, furthermore, that in some cases heads and other portions of the body are removed for anatomical examination. The people working at this liquidation job in the institutions are said to be assigned from other areas and are shunned completely by the populace. This personnel is described as frequenting the bars at night and drinking heavily. Quite apart from these overtincidents that exercise the imagination of the people, the are disquieted by the question of whether old folk who have worked hard all their lives and may merely have come into their dotage are also being liquidated. There is talk that the homes for the aged are to be cleaned out too. The people are said to be waiting for legislative regulation providing some orderly method that will insure especially that the aged feeble-minded are not included in the program.

Here one sees what "euthanasia" means in actual practice. According to the records, 275,000 people were put to death in these killing centers. Ghastly as this seems, it should be realized that this program was merely the entering wedge for exterminations for far greater scope in the political program for genocide of conquered nations and the racially unwanted. The methods used and personnel trained in the killing centers for the chronically sick became the nucleus of the much larger centers on the East, where the plan was to kill all Jews and Poles and to cut down the Russian population by 30,000,000.

The original program developed by Nazi hot – heads included also the genocide of the English, with the provision that the English males were to be used as laborers in the vacated territories in the East, there to be worked to death, whereas the English females were to be brought into Germany to improve the qualities of the German race. (This was indeed a peculiar admission of the part of the German eugenists.)

In Germany the exterminations included the mentally defective, psychotics (particularly schizophrenics), epileptics and patients suffering from infirmities of old age and from various organic neurologic disorders such as infantile paralysis, Parkinsonism, multiple sclerosis and brain tumors. The technical arrangements, methods and training of the killer personnel were under the direction of a committee of physicians and other experts headed by Dr. Karl Brandt. The mass killings were first carried out with carbon monoxide gas, but later cyanide gas ("cyclon B") was found to be more effective. The idea of camouflaging the gas chambers as shower baths was developed by Brack, who testified before Judge Sebring that the patients walked in calmly, deposited their towels and stood with their little pieces of soap under the shower outlets, waiting for the water to start running. This statement was ample rebuttal of his claim that only the most severely regressed patients among the mentally sick and only the moribund ones among the physically sick were exterminated. In truth, all those unable to work and considered nonrehabilitable were killed.

All but their squeal was utilized. However, the program grew so big that even scientists who hoped to benefit from the treasure of material supplied by this totalitarian method were disappointed. A neuropathologist, Dr. Hallervorden, who had obtained 500 brains from the killing centers for the insane, gave meavivid first-

hand account.[5] The Charitable Transport Company for the Sick brought the brains in batches of 150 to 250 at a time. Hallervorden stated:

There was wonderful material among those brains, beautiful mental defectives, malformations and early infantile diseases. I accepted those brains of course. Where they came from and how they came to me was really none of my business.

In addition to the material he wanted, all kinds of other cases were mixed in, such as patients suffering from various types of Parkinsonism, simple depressions, involutional depressions and brain tumors, and all kinds of other illnesses, including psychopathy that had been difficult to handle:

These were selected from the various wards of the institutions according to an excessively simple and quick method. Most institutions did not have enough physicians, and what physicians there were either too busy or did not care, and they delegated the selection to the nurses and attendants. Whoever looked sick or was otherwise a problem was put on a list and was transported to the killing center. The worst thing about this business was that it produced a certain brutalization of the nursing personnel. They got to simply picking out those whom they did not like, and the doctors had so many patients that they did not even know them, and put their names on the list.

Of the patients thus killed, only the brains were sent to Dr. Hallervorden; they were killed in such large numbers that autopsies of the bodies were not feasible. That, in Dr. Hallervorden's opinion, greatly reduced the scientific value of the material. The brains, however, were always well fixed and suspended in formalin, exactly according to his instructions. He thinks that the cause of psychiatry was permanently injured by these activities, and that psychiatrists have lost the respect of the German people forever. Dr. Hallervorden concluded: "Still, there were interesting cases in this material."

Ingeneral only previously hospitalized patients were exterminated for reasons of illness. An exception is a program carried out in a northwestern district of Poland, the "Warthegau," where a health survey of the entire population was made by an "S.S. X-Ray Battalion" headed by Professor Hohlfelder, radiologist of the University of Frankfurt-am-main. Persons found to be infected with tuberculosis were carted off to special extermination centers.

It is rather significant that the German people were considered by their Nazi leaders more ready to accept the exterminations of the sick than those for political reasons. It was for that reason that the first exterminations of the latter group were carried out under the guise of sickness. So-called "psychiatric experts" were dispatched to survey the inmates of camps with the specific order to pick out members of racial minorities and political offenders from occupied territories and to dispatch them to killing centers with specially made diagnoses such as that of "inveterate German hater" applied to a number of prisoners who had been active in the Czech underground.

Certain classes of patients with mental diseases who were capable of performing labor, particularly members of the armed forces suffering from psychopathy or neurosis, were sent to concentration camps to be worked to death, or to be reassigned to punishment battalions and to be exterminated in the process of removal of mine fields. [6]

A large number of those marked for death for political or racial reasons were made available for "medical" experiments involving the use of involuntary human subjects. From 1942 on, such experiments carried out inconcentration camps were openly presented at medical meetings. This program included "terminal human experiments," a term introduced by Dr. Rascher to denote an experiment so designed that its successful conclusion depended upon the test person's being put to death.

The Science of Annihilation

A large part of this research was devoted to the science of destroying and preventing life, for which I have proposed the term "ktenology," the science of killing. [7-9] In the course of this ktenologic research, methods of mass killing and mass sterilization were investigated and developed for use against non–German peoples or Germans who were considered useless.

Sterilization methods were widely investigated, but proved impractical in experiments conducted in concentration camps. A rapid method developed for sterilization of females, which could be accomplished in the course of a regular health examination, was the intra-uterine injection of various chemicals. Numerous mixtures were tried, some with iodopine and others containing barium; another was most likely

silver nitrate with iodized oil, because the result could be ascertained by x-ray examination. The injections were extremely painful, and a number of women died in the course of the experiments. Professor Karl Clauberg reported that he had developed a method at the Auschwitz concentration camp by which he could sterilize 1000 women in one day.

Another method of sterilization, or rather castration, was proposed by Viktor Brack especially for conquered populations. His idea was that x-ray machinery could be built into desks at which the people would have to sit, ostensibly to fill out a questionnaire requiring five minutes; they would be sterilized without being aware of it. This method failed because experiments carried out on 100 male prisoners brought out the fact that severe x-ray burns were produced on all subjects. In the course of this research, which was carried out by Dr. Horst Schuman, the testicles of the victims were removed for histologic examination two weeks later. I myself examined 4 castrated survivors of this ghastly experiment. Three had extensive necrosis of the skin near the genitalia, and the other an extensive necrosis of the urethra. Other experiments in sterilization used an extract of the plant caladium seguinum, which had been shown in animal studies by Madaus and his coworkers [10,11] to cause selective necrosis of the germinal cells of the testicles as well as the ovary.

The development of methods for rapid and inconspicuous individual execution was the objective of another large part of the ktenologic research. These methods were to be applied to members of the ruling group, including the SS itself, who were suspected of disloyalty. This, of course, is an essential requirement in a dictatorship, in which "cut-throat competition" becomes a grim reality, and any hint of faintheartedness or lack of enthusiasm for the methods of totalitarian rule is considered a threat to the entire group.

Poisons were the subject of many of these experiments. A research team at the Buchenwald concentration camp, consisting of Drs. Joachim Mrugowsky, Erwin Ding – Schuler and Waldemar Hoven, developed the most widely used means of individual execution under the guise of medical treatment — namely, the intravenous injection of phenol or gasoline. Several alkaloids were also investigated, among them aconitine, which was used by Dr. Hoven to kill several imprisoned former fellow SS men who were potential witnesses against the camp commander, Koch, then under investigation by the SS. At the Dachau concentration camp Dr. Rascher developed the standard cyanide capsules, which could be easily bitten through, either deliberately or accidentally, if mixed with certain foods, and which, ironically enough, later became the means with which Himmler and Goering killed themselves. In connection with these poison experiments there is an interesting incident of characteristic sociologic significance. When Dr. Hoven was under trial by the SS the investigating SS judge, Dr. Morgen, proved Hoven's guilt by feeding the poison found in Dr. Hoven's possession to a number of Russian prisoners of war; these men died with the same symptoms as the SS men murdered by Dr. Hoven. This worthy judge was rather proud of this efficient method of proving Dr. Hoven's guilt and appeared entirely unaware of the fact that in the process he had committed murder himself.

Poisons, however, proved too obvious or detectable to be used for the elimination of high–ranking Nazi party personnel who had come into disfavor, or of prominent prisoners whose deaths should appear to stem from natural causes. Phenol or gasoline, for instance, left a telltale odor with the corpses. For this reason a number of more subtle methods were devised. One of these was artificial production of septicemia. An intramuscular injection of 1 cc. of pus, containing numerous chains of streptococci, was the first step. The site of injection was usually the inside of the thigh, close to the adductor canal. When an abscess formed it was tapped, and 3 cc. of the creamey pus removed was injected intravenously into the patient's opposite arm. If the patient then died from septicemia, the autopsy proved that deathwas caused by the same organism that had caused the abscess. These experiments were carried out in many concentration camps. At Dachau camp the subjects were almost exclusively Polish Catholic priests. However, since this method did not always cause death, sometimes resulting merely in a local abscess, it was considered inefficient, and research was continued with other means but along the same lines.

The final triumph of the part of ktenologic research aimed at finding a method of inconspicuous execution that would produce autopsy findings indicative of death from natural causes was the development of repeated intravenous injections of suspensions of live tubercle bacilli, which brought on acute miliary tuberculosis within a few weeks. This method was produced by Professor Dr. Heissmeyer, who was one of Dr. Gebhardt's associates at the SS hospital of Hohenlychen. As a means of further camouflage, so that the SS at large would not suspect the purpose of these experiments, the preliminary tests for the efficacy of this method were performed exclusively on children imprisoned in the Neuengamme concentration camp.

For use in "medical" executions of prisoners and of members of the SS and other branches of the German armed forces the use of simple lethal injections, particularly phenol injections, remained the instrument of choice. Whatever methods he used, the physician gradually became the unofficial executioner, for the sake

of convenience, informality and relative secrecy. Even on German submarines it was the physician's duty to execute the troublemakers among the crew by lethal injections.

Medical science has for some time been an instrument of military power in that it preserved the health and fighting efficiency of troops. This essentially defensive purpose is not inconsistent with the ethical principles of medicine. In World War I the German empire had enlisted medical science as an instrument of aggressive military power by putting it to use in the development of gas warfare. It was left to the Nazi dictatorship to make medical science into an instrument of political power—a formidable, essential tool in the complete and effective manipulation of totalitarian control. This should be a warning to all civilized nations, and particularly to individuals who are blinded by the "efficiency" of a totalitarian rule, under whatever name.

This entire body of research as reported so far served the master crime to which the Nazi dictatorship was committed—namely, the genocide of non–German peoples and the elimination by killing, in groups or singly, of Germans who were considered useless or disloyal. In effecting the two parts of this program, Himmler demanded and received the co-operation of physicians and of German medical science. The result was a significant advance in the science of killing, or ktenology.

Medico-military Research

Another chapter in Naziscientific research was that aimed to aid the military forces. Many of these ideas originated with Himmler, who fancied himself a scientist.

When Himmler learned that the cause of death of most SS men on the battlefield was hemorrhage, he instructed Dr. Sigmund Rascher to search for a blood coagulant that might be given before the men went into action. Rascher tested this coagulant when it was developed by clocking the number of drops emanating from freshly cut amputation stumps of living and conscious prisoners at the crematorium of Dachau concentration camp and by shooting Russian prisoners of warthrough the spleen.

Live dissections were a feature of another experimental study designed to show the effects of explosive decompression. [12–14] A mobile decompression chamber was used. It was found that when subjects were made to descend from altitudes of 40,000 to 60,000 feet without oxygen, severe symptoms of cerebral dysfunction occurred—at first convulsions, then unconsciousness in which the body was hanging limp and later, after wakening, temporary blindness, paralysis or severe confusional twilight states. Rascher, who wanted to find out whether these symptoms were due to anoxic changes or to other causes, did what appeared to him the most simple thing: he placed the subjects of the experiment under water and dissected them while the heart was still beating, demonstrating air embolism in the blood vessels of the heart, liver, chest wall and brain.

Another part of Dr. Rascher's research, carried out in collaboration with Holzlochner and Finke, concerned shock from exposure to cold. [15] It was known that military personnel generally did not survive immersion in the North Sea for more than sixty to a hundred minutes. Rascher therefore attempted to duplicate these conditions at Dachau concentration camp and used about 300 prisoners in experiments on shock from exposure to cold; of these 80 or 90 were killed. (The figures do not include persons killed during mass experiments on exposure to cold outdoors.) In one report on this work Rascher asked permission to shift these experiments from Dachau to Auschwitz, a larger camp where they might cause less disturbance because the subjects shrieked from pain when their extremities froze white. The results, like so many of those obtained in the Nazi research program, are not dependable. In his report Rascher stated that it took from fifty-three to a hundred minutes to kill a human being by immersion in ice water—a time closely in agreement with the known survival period in the North Sea. Inspection of his own experimental records and statements made to me by his close associates showed that it actually took from eighty minutes to five or six hours to kill an undressed person in such a manner, whereas a man in full aviator's dress took six or seven hours to kill. Obviously, Rascher dressed up his findings to forestall criticism, although any scientific man should have known that during actual exposure many other factors, including greater convection of heat due to the motion of water, would affect the time of survival.

Another series of experiments gave results that might have been an important medical contribution if an important lead had not been ignored. The efficacy of various vaccines and drugs against typhus was tested at the Buchenwald and Natzweiler concentration camps. Prevaccinated persons and nonvaccinated controls were injected with live typhus rickettsias, and the death rates of the two series compared. After a certain number of passages, the Matelska strain of typhus rickettsia proved to become avirulent for man. Instead of seizing upon this as a possibility to develop a live vaccine, the experimenters, including the chief consultant,

Professor Gerhard Rose, who should have known better, were merely annoyed at the fact that the controls did not die either, discarded this strain and continued testing their relatively ineffective dead vaccines against a new virulent strain. This incident shows that the basic unconscious motivation and attitude has a great influence in determining the scientist's awareness of the phenomena that pass through his vision.

Sometimes human subjects were used for tests that were totally unnecessary, or whose results could have been predicted by simple chemical experiments. For example, 90 gypsies were given unaltered sea water and sea water whose taste was camouflaged as their sole source of fluid, apparently to test the well known fact that such hypertonic saline solutions given as the only source of supply of fluid will cause severe physical disturbance or death within six to twelve days. These persons were subjected to the tortures of the damned, with death resulting in at least 2 cases.

Heteroplastic transplantation experiments were carried out by Professor Dr. Karl Gebhardt at Himmler's suggestion. Whole limbs—shoulder, arm or leg—were amputated from live prisoners at Ravensbrucck concentration camp, wrapped in sterile moist dressings and sent by automobile to the SS hospital at Hohenlychen, where Professor Gebhardt busied himself with a futile attempt at heteroplastic transplantation. In the meantime the prisoners deprived of limb were usually killed by lethal injection.

One would not be dealing with German science if one did not run into manifestations of the collector's spirit. By February, 1942, it was assumed in German scientific circles that the Jewish race was about to be completely exterminated, and alarmwas expressed over the fact that only very few specimens of skulls and skeletons of Jews were at the disposal of science. It was therefore proposed that a collection 150 body casts and skeletons of Jews be preserved for perusal by future students of anthropology. Dr. August Hirt, professor of anatomy at the University of Strassburg, declared himself interested in establishing such a collection at his anatomic institute. He suggested that captured Jewish officers of the Russian armed forces by included, as well as females from Auschwitz concentration camp; that they be brought alive to Natzweiler concentration camp near Strassburg; and that after "their subsequently induced death—care should be taken that the heads not be damaged [sic]" the bodies be turned over to him at the anatomic institute of the University of Strassburg. This was done. The entire collection of bodies and the correspondence pertaining to it fell into the hands of the United States Army.

One of the most revolting experiments was the testing of sulfonamides against gas gangrene by Professor Gebhardt and his collaborators, for which young women captured from the Polish Resistance Movement served as subjects. Necrosis was produced in a muscle of the leg by ligation and the wound was infected with various types of gas-gangrene bacilli; frequently, dirt, pieces of wood and glass splinters were added to the wound. Some of these victims died, and others sustained severe mutilating deformities of the leg.

Motivation

An important feature of the experiments performed in concentration camps is the fact that they not only represented a ruthless and callous pursuit of legitimate scientific goals but also were motivated by rather sinister practical ulterior political and personal purposes, arising out of the requirements and problems of the administration of totalitarian rule.

Why did men like Professor Gebhardt lend themselves to such experiments? The reasons are fairly simple and practical, no surprise to anyone familiar with the evidence of fear, hostility, suspicion, rivalry and intrigue, the fratricidal struggle euphemistically termed the "self-selection of leaders," that went on within the ranks of the ruling Nazi party and the SS. The answer was fairly simple and logical. Dr. Gebhardt performed these experiments to clear himself of the suspicion that he had been contributing to the death of SS General Reinhard ("The Hangman") Heydrich, either negligently or deliberately, by failing to treat his wound infection with sulfonamides. After Heydrich died from gas gangrene, Himmler himself told Dr. Gebhardt that the only way in which he could prove that Heydrich's death was "fate-determined" was by carrying out a "large-scale experiment" in prisoners, which would prove or disprove that people died from gas gangrene irrespective of whether they were treated sulfonamides or not.

Dr. Sigmund Rascher did not become the notorious vivisection ist of Dachau concentration camp and the willing tool of Himmler's research interests until he had been forbidden to use the facilities of the Pathological Institute of the University of Munich because he was suspected of having Communist sympathies. Then he was ready to go all out and to do anything merely to regain acceptance by the Nazi party and the SS.

These cases illustrate a method consciously and methodically used in the SS, an age-old method used by criminal gangs everywhere: that of making suspects of disloyalty clear themselves by participation in a crime

that would definitely and irrevocably tie them to the organization. In the SS this process of reinforcement of group cohesion was called "Blukitt" (blood-cement), a term that Hitler himself is said to have obtained from a book on Genghis Khan in which this technic was emphasized.

The important less on here is that this motivation, with which one is familiar in ordinary crimes, applies also towar crimes and to ideologically conditioned crimes against humanity—namely, that fear and cowardice, especially fear of punishment or of ostracism by the group, are often more important motives than simple ferocity or aggressiveness.

The Early Change in Medical Attitudes

Whatever proportions these crimes finally assumed, it became evident to all who investigated them that they had started from small beginnings. The beginnings at first were merely a subtle shift in emphasis in the basic attitude of the physicians. It started with the acceptance of the attitude, basic in the euthanasia movement, that there is such a thing as life not worthy to be lived. This attitude in its early stages concerned itself merely with the severely and chronically sick. Gradually the sphere of those to be included in this category was enlarged to encompass the socially unproductive, the ideologically unwanted, the racially unwanted and finally all non-Germans. But it is important to realize that the infinitely small wedged – in lever from which this entire trend of mind received its impetus was the attitude toward the nonrehabilitable sick.

It is, therefore, this subtle shift in emphasis of the physicians' attitude that one must thoroughly investigate. It is a recent significant trend in medicine, including psychiatry, to regard prevention as more important than cure. Observation and recognition of early signs and symptoms have become the basis for prevention of further advance of disease. [8]

Inlooking for these early signs one may well retrace the early steps of propaganda on the part of the Nazis in Germany as well as in the countries that they overran and in which they attempted to gain supporters by means of indoctrination, seduction and propaganda.

The Example of Successful Resistance by the Physicians of the Netherlands

There is no doubt that in Germany itself the first and most effective step of propaganda within the medical profession was the propaganda barrage against the useless, incurably sick described above. Similar, even more subtle efforts were made in some of the occupied countries. It is to the everlasting honor of the medical profession of Holland that they recognized the earliest and most subtle phases of this attempt and rejected it. When Sciss - Inquart, Reich Commissar for the Occupied Netherlands Territories, wanted to draw the Dutch physicians into the orbit of the activities of the German medical profession, he did not tell them" You must send your chronic patients to death factories" or "You must give lethal injections at Government request in your offices," but he couched his order in most careful and superficially acceptable terms. One of the paragraphs in the order of the Reich Commissar of the Netherlands Territories concerning the Netherlands doctors of 19 December 1941 reads as follows: "It is the duty of the doctor, through advice and effort, conscientiously and to his best ability, to assist as helper the person entrusted to his care in the maintenance, improvement and re-establishment of his vitality, physical efficiency and health. The accomplishment of this duty is a public task."[16] The physicians of Holland rejected this order unanimously because they sawwhat it actually meant—namely, the concentration of their efforts on mere rehabilitation of the sick for useful labor, and abolition of medical secrecy. Although on the surface the new order appeared not too grossly unacceptable, the Dutch physicians decided that it is the first, although slight, step away from principle that is the most important one. The Dutch physicians declared that they would not obey this order. When Sciss-Inquart threatened them with revocation of their licenses, they returned their licenses, removed their shingles and, while seeing their own patients secretly, no longer wrote death or birth certificates. Sciss-Inquart retraced his steps and tried to cajole them—still to no effect. Then he arrested 100 Dutch physicians and sent them to concentration camps. The medical profession remained adamant and quietly took care of their widows and orphans, but would not give in. Thus it came about that not a single euthanasia or non-therapeutic sterilization was recommended or participated in by any Dutch physician. They had the foresight to resist before the first step was taken, and they acted unanimously and won out in the end. It is obvious that if the medical profession of a small nation under the conqueror's heel could resist so effectively the German medical profession could likewise have resisted had they not taken the fatal first step. It is the first seemingly innocent step away from principle that frequently decides a career of crime. Corrosion begins in microscopic proportions.

The Situation in the United States

The question that this fact prompts is whether there are any danger signs that American physicians have also

been infected with Hegelian, cold-blooded, utilitarian philosophy and whether early traces of it can be detected in their medical thinking that may make them vulnerable to departures of the type that occurred in Germany. Basic attitudes must be examined dispassionately. The original concept of medicine and nursing was not based on any rational or feasible likelihood that they could actually cure and restore but rather on an essentially maternal or religious idea. The Good Samaritan had no thought of nor did he actually care whether he could restore working capacity. He was merely motivated by the compassion in alleviating suffering. Bernal[17] states that prior to the advent of scientific medicine, the physician's main function was to give hope to the patient and to relieve his relatives of responsibility. Gradually, in all civilized countries, medicine has moved away from this position, strangely enough in direct proportion to man's actual ability to perform feats that would have been plain miracles in days of old. However, with this increased efficiency based on scientific development went a subtle change in attitude. Physicians have become dangerously close to being mere technicians of rehabilitation. This essentially Hegelian rational attitude has led them to make certain distinctions in the handling of acute and chronic diseases. The patient with the latter carries an obvious stigma as the one less likely to be fully rehabilitable for social usefulness. In an increasingly utilitarian society these patients are being looked down upon with increasing definiteness as unwanted ballast. A certain amount of rather open contempt for the people who cannot be rehabilitated with present knowledge has developed. This is probably due to a good deal of unconscious hostility, because these people for whom there seem to be no effective remedies have become a threat to newly acquired delusions of omnipotence.

Hospitals like to limit themselves to the care of patients who can be fully rehabilitated, and the patient whose full rehabilitation is unlikely finds himself, at least in the best and most advanced centers of healing, as a second-class patient faced with a reluctance on the part of both the visiting and the house staff to suggest and apply therapeutic procedures that are not likely to bring about immediately striking results in terms of recovery. I wish to emphasize that this point of view did not arise primarily within the medical profession, which has always been outstanding in a highly competitive economic society for giving freely and unstintingly of its time and efforts, but was imposed by the shortage of funds available, both private and public. From the attitude of easing patients with chronic diseases away from the doors of the best types of treatment facilities available to the actual dispatching of such patients to killing centers is a long but nevertheless logical step. Resources for the so-called incurable patient have recently become practically unavailable.

There has never in history been a shortage of money for the development and manufacture of weapons of war; there is and should be none now. The disproportion of monetary support forwar and that available for healing and care is an anachronism in an era that has been described as the "enlightened age of the common man" by some observers. The comparable cost of jet planes and hospital beds is too obvious for any excuse to be found for a shortage of the latter. It rust that these remarks will not be misunderstood. I believe that armament, including jet planes, is vital for the security of the republic, but adequate maintenance of standards of health and alleviation of suffering are equally vital, both from a practical point of view and form that of morale. All who took part in induction—board examinations during the war realize that the maintenance and development of national health is of as vital importance as the maintenance and development of armament.

The trend of development in the facilities available for the chronically ill outlined above will not necessarily be altered by public or state medicine. With provision of public funds in any setting of public activity the question is bound to come up, "Is it worth while to spend a certain amount of effort to restore a certain type of patient?" This rationalistic point of view has insidiously crept into the motivation of medical effort, supplanting the old Hippocratic point of view. In emergency situations, military or otherwise, such grading of effort may be pardonable. But doctors must beware lest such attitudes creep into the civilian public administration of medicine entirely outside emergency situations, because once such considerations are at all admitted, the more often and the more definitely the question is going to be asked, "Is it worth while to do this or that for this type of patient?" Evidence of the existence of such an attitude stared at me from a report on the activities of a leading public hospital unit, which stated rather proudly that certain treatments were given only when they appeared promising: "Our facilities are such that a case load of 20 patients is regularly carried . . . in selecting cases for treatment careful consideration is given to the prognostic criteria, and in no instance have we instituted treatment merely to satisfy relatives or our own consciences." If only those whose treatment is worth while in terms of prognosis are to be treated, what about the other ones? The doubtful patients are the ones whose recovery appears unlikely, but frequently if treated energetically, they surprise the best prognosticators. And what shall be done during that long time lag after the disease has been called incurable and the time of death and autopsy? It is that period during which it is most difficult to find hospitals and other therapeutic organizations for the welfare and alleviation of suffering of the patient.

Under all forms of dictatorship the dictating bodies or individuals claim that all that is done is being done for the best of the people as a whole, and that for that reason they look at health merely in terms of utility, efficiency and productivity. It is natural in such a setting that eventually Hegel's principle that "what is useful is good" wins out completely. The killing center is the reductio ad absurdum of all health planning based only on rational principles and economy and not on humane compassion and divine law. To be sure, American physicians are still far from the point of thinking of killing centers, but they have arrived at a danger point in thinking, at which likelihood of full rehabilitation is considered a factor that should determine the amount of time, effort and cost to be devoted to a particular type of patient on the part of the social body upon which this decision rests. At this point Americans should remember that the enormity of a euthanasia movement is present in their own midst. To the psychiatrist it is obvious that this represents the eruption of unconscious aggression on the part of certain administrators alluded to above, as well as on the part of relatives who have been understandably frustrated by the tragedy of illness in its close interaction upon their own lives. The hostility of a father erupting against his feebleminded son is understandable and should be considered from the psychiatric point of view, but it certainly should not influence social thinking. The development of effective analgesics and pain-relieving operations has taken even the last rationalization away from the supporters of euthanasia.

The case, therefore, that I should like to make is that American medicine must realize where it stands in its fundamental premises. There can be no doubt that in a subtle way the Hegelian premise of "what is useful is right" has infected society, including the medical portion. Physicians must return to the older premises, which were the emotional foundation and driving force of an amazingly successful quest to increase powers of healing if they are not held down to earth by the pernicious attitudes of an overdone practical realism.

What occurred in Germany may have been the inexorable historic progression that the Greek historians have described as the law of the fall of civilizations and that Toynbee [18] has convincingly confirmed—namely, that there is a logical sequence from Koros to Hybris to Atc, which means from surfeit to disdainful arrogance to disaster, the surfeit being increased scientific and practical accomplishments, which, however, brought about an inclination to throw away the old motivations and values by disdainful arrogant pride in practical efficiency. Moral and physical disaster is the inevitable consequence.

Fortunately, there are developments in this democratic society that counteract these trends. Notable among them are the societies of patients afflicted with various chronic diseases that have sprung up and are dedicating themselves to guidance and information for their fellow sufferers and for the support and stimulation of medical research. Among the earliest was the mental – hygiene movement, founded by a former patient with mental disease. Then came the National Foundation for Infantile Paralysis, the tuberculosis societies, the American Epilepsy League, the National Association to Control Epilepsy, the American Cancer Society, The American Heart Association, "Alcoholics Anonymous" and, most recently the National Multiple Sclerosis Society. All these societies, which are coordinated with special medical societies and which received inspiration and guidance from outstanding physicians, are having an extremely wholesome effect in introducing fresh motivating power into the ivory towers of academic medicine. It is indeed interesting and an assertion of democratic vitality that these societies are activated by and for people suffering from illnesses who, under certain dictatorships, would have been slated for euthanasia.

It is thus that these new societies have taken over one of the ancient functions of medicine—namely, to give hope to the patient and to relieve his relatives. These societies need the whole – hearted support of the medical profession. Unfortunately, this support is by no means yet unanimous. A distinguished physician, investigator and teacher at an outstanding university recently told me that he was opposed to these special societies and clinics because they had nothing to offer to the patient. It would be better to wait until someone made a discovery accidentally and then start clinics. It is my opinion, however, that one cannot wait for that. The stimulus supplied by these societies is necessary to give stimulus both to public demand and to academic medicine, which at times grows stale and unproductive even in its most outstanding centers, and whose existence did nothing to prevent the executioner from having logic on his side in Germany.

Another element of this free democratic society and enterprise that has been a stimulus to new developments is the pharmaceutical industry, which, with great vision, has invested considerable effort in the sponsorship of new research.

Dictatorships can be indeed defined as systems in which there is a prevalence of thinking in destructive rather than in ameliorative terms in dealing with social problems. The ease with which destruction of life is advocated for those considered either socially useless or socially disturbing instead of educational or ameliorative measures may be the first danger sign of loss of creative liberty in thinking, which is the hallmark of democratic society. All destructiveness ultimately leads to self-destruction; the fate of the SS

and of Nazi Germany is an eloquent example. The destructive principle, once unleased, is bound to engulf the whole personality and to occupy all its relationships. Destructive urges and destructive concepts arising therefrom cannot remain limited or focused upon one subject or several subjects alone, but must inevitable spread and be directed against one's entire surrounding world, including one's own group and ultimately the self. The ameliorative point of view maintained in relation to all others is the only real means of self-preservation.

A most important need in this country is for the development of active and alert hospital centers for the treatment of chronicillnesses. They must have active staffs similar to those of the hospitals for acute illnesses, and these hospitals must be fundamentally different from the custodial repositories for derelicts, of which there are too many in existence today. Only thus can one give the right answer to divine scrutiny: Yes, we are our brothers' keepers. 433 Marlborough Street

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