

To S.R.  
with J.C. paintings

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## THE GERMAN INSTITUTE OF PSYCHIATRIC RESEARCH

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The havoc the world wide war has wrought among the best and sturdiest of our fellow citizens admonishes us to do everything possible to avert the harm which threatens the future of our nation through the reduction in the ranks of its noblest sons. Among the many enemies with whom we have to contend *diseases of the brain* stand almost in the forefront, for they always involve very grave troubles which in countless cases lead to pronounced invalidism, and often even to a fatal outcome. In far-reaching measure these diseases destroy the very substance of human personality, make it impossible for the sufferers to act rationally, make them helpless and quite often dangerous to themselves or to their environment. As a result at least half the patients must have special care in asylums for years or even for the rest of their lives. This makes them a hardly supportable economic burden for their families and for the communities on whose support they depend. Besides they very often have a tendency to transmit their affliction to their children, so that their baneful influence affects coming generations in a way that is at times most pernicious.

It is not easy to gauge the injury done the public weal by mental diseases. We may assume that *in Germany of every five hundred inhabitants, one requires treatment in an asylum and that the total number of insane persons is at least twice as large*. Thus we certainly have to deal with more than a quarter of a million persons who are more or less spiritually crippled or wrecked. In



addition to these there is an uncontrollable number of persons who have no pronounced disease, but who are either degenerate, nervous, unbalanced or depraved; they either engage the attention of the police and the courts as criminals, tramps or prostitutes, or else their inability to cope with the demands of life makes them a source of unhappiness to their families. It is doubtful whether the figure cited above actually covers the case, especially when we recall that the number of mentally disturbed persons who require asylum treatment increases very rapidly in all countries which provide for the systematic care of the insane, and that statistics gathered in smaller communities where great accuracy was possible have in part shown frightfully high results—results that are twice, nay, four to five times as high as the figures we have estimated.

With regret we must admit that we are very inadequately equipped for the fight against the dangers which menace our nation's health.<sup>1</sup> In the course of the last century, it is true, our care for the insane has made great progress and has now reached a point where we may say that what we are striving for has at least in principle been reached. But we must not close our eyes to the fact that our splendidly organized asylums can, in the great majority of cases only preserve the spiritual wrecks that survive the effects of insidious disease. In other cases the physician can at least create conditions favoring a complete recovery, but our science is only quite exceptionally able to intervene directly and thus actually to cure a disease. Our function as physicians is in large measure rendered ineffective by our *ignorance of the origin and nature of mental diseases*. We know the causes that lead to certain diseases without however being able to eliminate them. Moreover the task of combating some of the most important forms of insanity involves activities quite beyond the sphere of the physician. In these cases we could only hope to be successful if it were possible by means of extensive propaganda to secure an assured basis for the coöperation of wide circles and especially of the law making bodies (legislature).

An examination of the conditions which at present surround psychiatric research will promptly show that they preclude a satisfactory solution of the problems which confront it. It is quite natural that insane asylums are primarily arranged to meet the requirements of medical care. For purely scientific work, they do not, save in most exceptional cases, dispose of investigators who are free to devote themselves to research, nor of the assistants, laboratories and other resources needed for exhaustive research work.

<sup>1</sup> See Kraepelin, 100 Jahre Psychiatrie, etc.

In addition to all this the increasing number of huge asylums and their unfavorable provisions for advancement have rendered a career in such institutions much less attractive to men of independent scientific attainments. In clinical institutions conditions are no doubt more favorable owing to the influx of eager students and to their being in closer touch with general medical science. But here too teaching, examinations, administrative work and the treatment of the patients are oftentimes such a burden for the directors that their research work must perforce be much hampered even when they do not, from the outset, prefer to use their position as a stepping stone to an extensive private practice. Considerations as to the prospect of making a successful career almost always prevent the younger assistants from so consistently devoting all their energies to a specific field of research as the great scientific problems imperatively demand that they should. Besides these younger assistants generally receive wretched pay, hardly have leisure for their own work, leave their positions after a few years and have at their disposal only the meager means and material which a penurious government can grant for the luxuries of science and which are left over for their use after the needs of their chief have been met.

When, under such conditions, we have to face the enormous task that science sets us, it is not surprising if a feeling of helplessness overcomes us. What we need is a practical division of labor and subsidies that are at least somewhat commensurate to the demands made upon us. The domain of psychiatry is already so large that it is quite impossible for a single individual to master the auxiliary sciences whose range is often so wide apart. Hence it is most important to secure eminent investigators for all the branches of science upon which the solution of psychiatric problems depends. And these investigators must be so situated that unimpeded and free from material cares, they can devote their entire energy to their special life's work. The conditions under which they are to work must be as favorable—ample and suitably equipped laboratories, every kind of scientific material, capable assistants and funds sufficient for the purchase of the numerous and manifold kinds of apparatus without which work in the natural sciences is impossible nowadays. All these conditions can only be realized in special research institutes which serve no other interests and are so endowed that sums vastly in excess of what we have been accustomed to spend for scientific work in our special field are available.

The foremost task for such a research institute would be to *make clear the nature and the sources of mental disturbances*, and

then to discover ways of preventing them, healing them or making them easier to bear. How intimately these two fields of research are related is best shown by the example of *syphilis*. We had long known that all kinds of serious nerve and brain troubles may follow in the wake of this disease, but it is only within the last few decades that we have recognized with increasing certainty that the most dreaded form of insanity, known as softening of the brain, occurs *only* as a consequence of *syphilis*, though as a rule there is an interval of eight to fifteen years between the two diseases. The recognition of this fact and the final confirmation afforded by Wassermann's reaction suddenly gave our methods of treatment a definitive turn. It must, however, be admitted that treatment which is effective in other forms of syphilitic disease has failed when applied to softening of the brain. Still we have gained a quite definitive viewpoint for further effort in this direction and we may hope that, sooner or later and by more or less circuitous routes, it will bring us nearer our goal. But above all we know that softening of the brain can be forestalled by the avoidance of syphilitic infection, and perhaps also by very prompt and thorough treatment.

Now that Wassermann's reaction has made it possible to trace the devious paths of the germ which causes syphilis, we find its range much wider than we could formerly have suspected. Not only affections of the heart and of the larger vessels, but also quite a number of diseases of the brain which it was customary to ascribe to overexertion and to strenuous life, are, as a matter of fact, due to syphilis. But it is steadily becoming clearer that many forms of infantile imbecility, of physical and mental incapacity, as well as of deficient moral strength may be due to injury and disease of the embryo brought on by syphilitic infection of the parents. Careful and thorough study of these influences opens a promising prospect for proper treatment and above all for prophylactic measures.

The causes that lead to those mental diseases which are super-induced by the consumption of poisons like alcohol are much clearer than those which lead to syphilis. But here also many an important problem awaits its solution. It was long before we had gained reliable information about the influence of alcohol on the mental faculties, an influence which is partially obscured by curious forms of self-delusion. Our knowledge of the changes in the mentality that are brought about by the consumption of other poisons is very meager. In several forms of mental disturbances due to alcoholism the causal connection with the poison needs explanation, for it seems as though hitherto unknown factors play a part here. Possibly

psychological experiments and examination of biochemical changes may throw some light upon this question. In its battle with alcohol and other poisons, as well as against syphilis, science has a further duty, namely, to use the results of its researches for the greatest possible enlightenment of the masses. It is only in this wise that we can secure the legislation that will help us in our effort to counteract two of the most widespread outward causes of insanity.

Unfortunately we have as yet not been able to take the first step toward an effective cure of several of the most prevalent and severe forms of insanity, because their nature and the causes from which they arise are wholly unknown. This is especially true of *dementia præcox*, which is responsible for the majority of cases of progressive dementia and of epilepsy. In a certain sense the same may be said of the very frequent cases of maniacal-depressive psychosis which have as their concomitants states of violent excitement and particularly of melancholic depression. To cast light into the darkness which still enshrouds these forms of disease must be the chief aim of psychiatric research. In addition to the anatomical determination of the more delicate changes in the brain and the gathering of data about heredity and prenatal infection, we shall probably have biochemical research as an aid in this work. With the aid of serology, a science that grew out of the investigations regarding immunity and which is beginning to throw light upon the complicated vital processes of the blood and of the vascular system, we may possibly be able to penetrate into these fields as well. Much attention has been bestowed upon disturbances of the inner secretion caused by cessation of secretion of the inner glands or by the occurrence of morbid changes in these secretions. The discovery that cretinism is caused by interruption of the functions of the thyroid gland and the surprisingly successful cures growing out of this discovery constituted the alluring example which led scientific thought into this channel. But it is hardly probable that we can hope to trace an equally simple connection between cause and effect in other diseases. Still it is indisputable that certain gland-like formations have a most decisive influence on our mental development and that we have every reason to study such questions, particularly with the help of vivisection.

*Degeneration* presents another large field for research. Though we know in a general way, that the inheritance of undesirable qualities may result in a deterioration of the human race, we are as yet ignorant of the precise conditions under which mental shortcomings and morbid tendencies are transmitted. Hence we also lack reliable

guidance for our efforts to choke this source of degeneration. The general question of the origin of inheritable deficiency and of unfavorable tendencies seems even more important. In this connection we should above all study the baneful prenatal influence of poisons like alcohol, of disease germs, sickness and of unfavorable environment. That these factors may cause a general deterioration in future generations is certain, but we do not know whether or in how far they are responsible for certain hereditary predispositions to disease.

In the question of degeneracy the gathering of statistics is a most important aid, but it is an aid with which it is not easy to deal. The mental state of a nation is reflected in an endless series of phenomena, many of which can be registered with the help of statistics. In addition to the recording of the prevailing mental diseases and to a census of the persons afflicted with mental weakness and disease, of epileptics and deaf-mutes, we have of course further indices for judging the mental status of the nation, in the frequency of suicide and crime, in the prevalence of tramps and prostitutes, of alcoholism and syphilis, and in the proportion of children fit to go to school and of young men fit for military service. But it is also clear that close observation of every possible other form in which the will of the masses finds expression may help to complete the picture, *e.g.*, marriages, the number of children, migration to the cities, economic development, religious, political and artistic tendencies, literature, the effects of education and culture, and many other factors. We shall also have to consider every fact that throws light upon the physical capacity of the nation, upon infant mortality, upon the age at which mortality occurs and upon the frequency of epidemics.

It is, of course, a tremendously difficult task, but at the same time a splendid one carefully to sift the mass of data which such a census presents and to construct a general picture of the folk-soul out of those traits in which its manifestations are best discernible. Were it possible to perform this task in a really reliable manner and so to gain insight into the changes that are constantly taking place in the mentality of our nation, we could be able to answer the much debated question of our future development—the question whether degenerative or regenerative processes predominate in the body politic and whether we are advancing or retrograding. We would also be able at times to discover the gradual growth of menacing symptoms in certain phases of life, to take the necessary preventive measures and to observe their effectiveness. The solution of all

these problems is conditioned upon thoroughgoing study of the circumstances in which abnormal soul conditions originate.

It would be useless to enumerate how many possibilities a group of capable and amply endowed psychiatrists might find to work for the weal of our people. It is a peculiarity of science that each new discovery infallibly raises new questions which no one can foresee. Fifty or sixty years ago hardly any one thought of getting other information about insanity than could be gained by superficial observation of the afflicted. At all events, scientific laboratories for such a purpose did not exist. About forty years ago the first occasional attempts were made to examine with the aid of microscopical sections the changes occurring in diseased brains, but it took many years before the first practical results could be made known. Still later came the first attempts to use psychological experiments—as developed chiefly by Wundt—in connection with psychiatry. In the last two decades one has resorted to exact biochemical examination of mentally diseased persons. Recently, and especially since the discovery of Wassermann's reaction, serology has also been enlisted in the service of psychiatry. Efforts are also being made to bring the former inaccurate observations about heredity into harmony with the views of modern natural science. Thus in the course of half a century a large group of auxiliary sciences has come to the aid of simple observation and each of them proceeds on its own way and with its special resources toward a common goal. Scientific problems have multiplied and have grown vastly more complicated than one could have anticipated. Hence their solution now calls for a whole staff of independent investigators, men trained in quite divergent directions, whereas not more than fifty years ago our only source of knowledge consisted in the close observation of the changes occurring in the state of the patient or possible in the clumsy dissection of a diseased brain.

The account I have given shows that the lines on which our science has developed necessarily call for the establishment of a research institute and Munich seemed a favorable place for this venture. Aside from the fact that a considerable sum of money was forthcoming in this city, it was possible without special difficulty to find a temporary home for the institute in the Psychiatric Institute, equipped as it is with numerous scientific laboratories. Furthermore there exists the possibility of later on coming into close relations with a new admission hospital for the insane which the city of Munich proposes to build. And this opens the prospect that at a not too distant date the institute may have a new and well

equipped building of its own on a site that has already been granted by the city.

These are the auspices under which the institute began its work on April 1, 1917. It started with five departments, three devoted to the various branches of anatomical work and one each to serology and demographic-genealogical research. After the war is over it will probably be feasible to establish a department of chemistry and one of psychology. For the existing departments we have secured the services of distinguished scientists. They enjoy complete independence and have the same rights as other Bavarian officials. As the research institute is affiliated with the university, the heads of departments are all members of its teaching staff, but their university work is subsidiary. Scientific research and the gaining of collaborators to solve the problems it presents are their exclusive field of activity. With a view to inducing as many young and ambitious men as possible to work in the research institute, provision has been made for a number of laboratory places and more are projected. We have suggested to all such corporations in the various German states as have to provide for the care of the insane that they pay an annual rental of 2,000 Marks per laboratory table and appoint suitable candidates. It is pleasant to be able to report that notwithstanding the heavy burdens imposed by the war, twenty such corporations have already agreed to pay for tables, in whole or in part. This insures the healthy growth of the institute and brings it into most desirable relations with German insane asylums. The latter will in turn, as we hope, derive helpful suggestion and professional satisfaction from the scientific work done in the institute. The founders and the Kaiser-Wilhelmsgesellschaft which grants us an annual subsidy are also to have the right to appoint candidates.

Thus everything points toward a satisfactory development of the research institute, but it would be a mistake to think that we shall soon or without great toil garner the fruits of the work now initiated. Untiring and long collaboration on the part of all concerned will be necessary ere we can gradually penetrate the deep mystery which still enshrouds the greatest part of our branch of science. But if we are ever to accomplish this task it can only be done by pursuing the course upon which we have now started. We must enlist every conceivable scientific help and place it in the fullest measure at the service of the work of research. In addition to the installation and up-to-date equipment of the projected research departments and of such further ones as may be necessary we shall

require a library which ought to be as complete as possible and include all auxiliary sciences. The generous gift of the very valuable and precious library of the late Geheimrat Lähr-Zohlendorf supplies a good foundation upon which to go on building. Later on we shall also have to think of providing certain specially gifted younger scientists with more amply endowed opportunities for work, of gaining further suitable collaborators, of stipends and means for scientific journeys and investigations in foreign countries.

Of course much more money than we now dispose of would be needed to carry out such plans as these. But one thing is certain—that the cost for a most completely and amply equipped research institute would amount to a mere fraction of the 200 million which the care of the inmates of asylums, most of whom are incurable, annually consumes. If our work is not quite futile and if in the course of time it brings about an appreciable reduction of this financial burden, we shall be amply rewarded for the outlay incurred. We must not forget that even with niggardly financial resources and under most unfavorable outward conditions our science has made notable progress and has gained important viewpoints for the prevention and treatment of several forms of insanity.

Unfortunately we shall never be able to count upon the state, hampered as it is by tax considerations, to grant us funds for a research institute of a large scale. Private endowment must be secured, just as it was secured for other research institutes, some of which, notably in foreign countries, have vast sums at their disposal. Possibly this method of founding institutions is better for their healthy growth, as it gives them greater latitude. Our own experience has shown that even under the limitations imposed by the war, it was possible to found an institute for psychical research, however modest in its dimensions. The necessary funds were raised in less than two years. We may even hope that the experience gained during the war will popularize the thought that one ought generously to support all efforts to strengthen the mental and moral health of the nation. Those who have in their own environment had occasion to observe what mental disturbances and disease mean for the patient and his family will certainly do everything in their power to help check the flow of this too abundant source of human suffering. But even those who have not been personally affected by such misfortune, cannot fail to see that we have to deal with questions and aims that are of supreme importance for the future of the race.