

# Report on the Typhus Epidemic in Upper Silesia

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## CHAPTER 4: MEANS USED AGAINST THE DISEASE

### A. TREATMENT OF INDIVIDUAL CASES

Medical treatment, as far as I am aware, has always been expectative. Since the course of the disease was in general benign, it was mainly attempted to alleviate the more severe conditions (intensification of the catarrhal affections, dazedness, etc.). In addition, the usual drugs (i.e. chlorine water, mineral acids, etc.) were administered whenever possible. As far as I know the abortive method has never been applied. I would have liked to see the application of cold water packs followed by baths but had to desist because external conditions were too unfavorable to permit such trials to be made with the necessary care. Mr. Kunze, district physician, had most successfully used cold water compresses in a few instances, though with abortive intent, but in the later stages of the disease when the brain manifestations were intensified by severe *calor mordax*. But he too did not press for general use under prevailing conditions. The abortive calomel treatment was generally feared, as every purgative very easily caused severe and exhausting diarrheas.

I am not inclined to discuss the medical treatment in any detail, as, on the whole, I could only repeat common and customary detail. I

only want to make a few remarks. When, in the declining stage of the disease, the bronchial catarrh became more severe and the symptoms of incipient pneumonia began to appear, Dr. Sobeczko used gold sulfide [i.e. antimony pentasulfide] in large doses with very rapid and evident success. The district physician, Mr. Kuntze, administered camphor with good success towards the end of the second stage, when the pulse had become faint very early in weak and ill-nourished persons and at times had decreased in frequency. The continued administration of mineral acids appeared to promote the formation of petechiae in some patients, or at least to delay their healing. This was especially conspicuous in the case of Mr. von Frantzius. He had been taking hydrochloric acid in moderate doses for about 10 days; the disease subsided day by day, but the petechiae became larger and more numerous. As I could find no other cause for this than the acid, I immediately excluded it from the medication and on the next day the petechiae began to pale at the margins. Certain proof that this view is correct is most difficult to adduce. But from occasional reports that too prolonged use of acids produces scurvy or at least a scorbutic condition, I am inclined to take this coincidence for more than mere chance.

As regards the general hygienic treatment of the various patients, it can definitely be stated that any improvement whatsoever in their surroundings, especially the provision of fresh air, of a cooler temperature, a cleaner bed, caused significant improvement. When the authorities began to assemble the patients in hospitals, many feared that these would form new foci of infection from which disease would

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propagate with renewed power and would spread the contagion in a concentrated form. But not only did such foci of infection not arise, it also became very clear that the mere residence of patients under favorable hygienic conditions markedly improved their condition.

As I have already mentioned, a certain moderation in eating was very important, especially during convalescence. True enough, the majority of people were not in a position to err significantly in quantity, but the nature of the meals contributed to provoke relapses, sometimes dangerous ones.

#### **B. MANAGEMENT OF THE EPIDEMIC**

Month after month passed after the outbreak of the epidemic, without the higher governmental authorities taking the least notice of its occurrence. Autumn had gone, winter was approaching and with it the spectres of hunger and cold--nothing was done. Finally, small sums of money were granted for direct distribution to the needy, but the red tape of the bureaucracy was such, even in this, that they requested detailed receipts on the distribution of the money which was supposed to be given out in the smallest of amounts, so as to be able to submit them to the general auditing chamber. Finally, the press began to broadcast, throughout Prussia and the whole of Germany, the inconceivable and incredible happenings in Upper Silesia. The government then rested content with the distribution of flour, which I have fully described previously. To send physicians into the area, medical councilor Lorinser declared, was not necessary, and, as for provision of money, chief president von Wedell preferred to join the committee that had been formed in Breslau and to add his voice to the appeal made to the charity and compassion of the public. Mother Church, the powerful Silesian hierarchy, made good use of the inaction and neglect of duty by the officials; the hospitaller monks appeared on this scene of woe with gifts partly collected from charitable hands directly, and partly obtained through the mediation of the Breslau Committee. However, their activity,

devoted as it was, was nevertheless, as I have previously shown, limited, and their success only transient, care always being taken of individual patients only, and not of the epidemic as a whole.

The scene suddenly changed when the delegates of the Breslau Committee, Prince Biron of Courland and Prof. Kuh turned up in the districts, inspected everything themselves and organized relief down to the smallest detail. Local committees were now established, physicians were transferred, even provisionally hired, orphanages and hospitals were established, medicaments were obtained, rice, peas, etc., were distributed, blankets were provided; in short, the delegates did everything that should have been done by the authorities. All these arrangements were so well managed and executed at such great personal sacrifice and with such devotion, that the names of these two men, of whom one sacrificed his life and the other his health, should be honorably remembered always. As a model and an example and, at the same time, in contrast to the narrow-mindedness of the authorities, I here shall quote the general directions issued to the physicians with respect to the administration and use of the committee's funds, and of supplies for nursing.

#### **INSTRUCTIONS TO PHYSICIANS CONCERNING THE ADMINISTRATION OF THE COMMITTEE FUNDS AND MATERIALS DESTINED FOR CARE OF THE ILL**

The proper use of the resources which public charity has provided for the nursing of patients and convalescents is only possible through the good offices of the medical men who, on account of the pertinent information gained in visiting the patients, are alone capable of assessing the requirements of each patient.

Therefore, the committee entrusts to the district physicians in the villages and to the municipal physicians in the towns the assets for this purpose which consist of money as well as of natural products.

The committee refrains from giving too precise instructions as to the manner of their use,

because locality and variable circumstances will dictate the measures to be taken, and fully trusts the circumspection of the physicians. It limits itself to establishing a few general principles.

In general, the committee does not wish for hospitalization. In view of the great number of patients and the lack of suitable premises it cannot be successfully practiced on a large scale, and it also does not conform to the customs of our compatriots. Moreover, it is known that the mortality rate in large typhus hospitals, no matter how well one may attempt to ventilate them, is always worse than it is even in poor private quarters. The committee nevertheless recognizes the necessity of establishing such institutions in towns and in larger villages for those patients who lack any sort of care in the home, and it authorises the physicians either to establish such, or to modify institutions already existing whenever an urgent need for this should be felt.

As a rule, however, the patients are to be nursed at home by their relatives and to be issued there the bedding, food and medicaments required.

The committee will also try in the measure of the possible to furnish the necessary blankets.

Suitable nourishment for the patients and especially for the convalescents can be provided by having meals prepared either in special institutions (soup kitchens) or, when this is not feasible, by the relatives, with the foodstuffs, sometimes to be supplemented by small gifts of cash, to be given to them together with the necessary instructions. The physicians will choose one mode or another according to circumstance.

The members of the local committees will always gladly assist the physicians in the execution of these measures.

The drugs, in the prescription of which physicians will surely observe the economy and the simplicity demanded by the circumstances, will be obtained in large lots at the nearest pharmacy. The pharmacies of the districts have been instructed by us to deliver these without further ado against the prescriptions issued by

the district and communal city physicians for the poor, to the account of the Relief Committee.

For the regular distribution of the small quantities of such medicines as have been prescribed for the patients, and for all those services which cannot, or would not be satisfactorily, rendered by the relatives, such as ventilating the rooms, cleaning the skin, etc., for instructing relatives how to prepare the patient's special diet, his tea or other such requirements, the physicians will need help. Therefore, one male nurse, or if necessary more, will be engaged in every village at daily wages. These nurses will be under the obligation of visiting the patients assigned to them regularly and of accompanying the physicians on their rounds. Experience has shown that, in spite of the general fear of disease, one can nevertheless always find men who are ready to take on such a duty either from human kindness, or attracted by the earnings, when encouraged by the exhortations and example of the physicians.

The members of the local committee will be best suited to propose persons suitable for nursing, as well as to gain particular merit with regard to the sick, by carefully supervising these nurses and by generally assisting the physicians in their difficult task. In particular, it is expected that the members of the local committee will be ready to take charge of the supplies of utensils, food and medicines, which the physicians will leave in the village and that they will issue to the nurses from time to time what is required according to the instructions of the physicians. But whenever the physicians should see fit to delegate these functions to others, they should see to it that the local committee be at least informed to whom nursing sponsored by the committee is being assigned and from when on, and also when it is stopped, so that this can be taken into consideration when issuing the food provided by the state.

In general, physicians and members of the local committees are reminded of the necessity of harmonious cooperation, without which our work cannot succeed.

Wherever hospitaller monks are stationed, it

will be up to the physicians to seek an understanding and their cooperation.

The members of the district committee and of the central committee will gather information on the requirements of the various districts on frequent inspection trips, in order to supply the physicians with what is lacking in their districts in the speediest way; and physicians, on the other hand, are requested to take heed of eventual oral instructions by the authorized representatives of the committee as regards the administration of committee materials and funds.

It will not be necessary to request physicians to use the gifts offered by public charity sparingly and to provide only for the utmost emergency.

As the committee is accountable to the public for the use of the funds entrusted to it, it must ask the physicians to present accounts at the end of their service on behalf of the committee, it being understood that bills need to be presented for expenses incurred whenever they can be obtained without inconvenience; the committee least of all demands vouchers for cash distributed to the patients.

The committee is able at any time to obtain information on the situation of the disease in general from the royal district authorities, and in the various districts from the reports of the physicians; there is therefore no need for special reporting in the subject. However, those physicians who maintain a hospital at the expense of the committee are requested to send a weekly report (on Saturdays) on the admissions and releases and other events that have taken place during the week.

Rybnik, 19 February 1848

THE DISTRICT RELIEF COMMITTEE

BARON VON DURANT

DR. KUNTZE

DR. KUH

POLEDNIK

FRITZE

WOLFF

PREUSS

TARNOGROCKI.

The only item in these instructions which was not confirmed by subsequent events was that relative to the establishment of hospitals. As I have already mentioned, the assumption that these hospitals would form new foci of infection and would bring about a rise in mortality turned out to be unfounded. The size of the villages, the great distances allotted to physicians made a certain concentration of patients most desirable in their own interest as well as in that of the physicians, whose strength was frequently overtaxed by their great efforts; in fact, the poor nature of the housing, together with the uncleanliness, laziness and awkwardness of the people made such a concentration mandatory. As buildings of a moderately good standard were easily found or at least established in most places, clinics were later set up to a much larger extent than was anticipated in the instructions. The establishment of soup kitchens, mentioned in the instructions, as well as of bread bakeries was urgently recommended to the authorities by Mr. Barez in particular, since the mere contemplation of the dishes prepared by the people, i.e. of the "żur" and the "placzek," showed the need for such institutions. But as far as I know, the authorities rejected this so natural request, as well as that for supplying a certain variation in and betterment of the food, by providing legumes, peeled barley grains, etc.

In Sohrau direct experience very soon showed the need for convalescent homes next to the clinics. The latter were relatively small and the number of patients seeking admission and help was so large that the convalescents had to be discharged from the hospital as early as possible. Weak as they were, without means of support, without earnings and accommodation, the only choice was whether to expose them to renewed wretchedness, whether to keep them in hospital despite the influx of more serious cases in greater need of help, or lastly whether to accommodate them in special institutions for convalescents. The latter solution evidently was the most appropriate and the municipal authorities provisionally headed by a very

energetic and circumspect man, Mr. von Woisky, immediately took action.

While all this was taking place, the authorities also had started to move. Two special commissioners with limited authority were nominated for the districts; counselor in law Mr. von Götz, as civilian commissioner, and Cavalry Captain Boddien as military commissioner. The latter was in command of a number of small military squads intended to support or to replace the usually unreliable mayors and to help the local authorities and the physicians in the execution of their tasks, which was most useful. In addition, several officials bearing instructions and making inspections of all sorts were sent from Oppeln, Breslau, and Berlin without, however, achieving any tangible results. Since these inspectors, as a rule, did not actually look around on their own, and feared the hospitals like pest-houses, all they did was damage the roads on their various extraordinary journeys. The activities of the special commissioner were also, generally, not very fruitful, even though he had full powers in respect of the treasury. This was due, in part, to his working too bureaucratically, in part to the fact that, as is the

went among Prussian civil servants, he feared the independence and the responsibility of his position, and in part to the fact that he was not directly in charge of the local authorities. It thus came about that the special commissioner as well as the local authorities (at the side of which the local committees were working in a more or less independent manner) remained in direct dependence on the Breslau government, reports and answers crossing each other in an unfruitful and time-consuming manner.

Mr. Barez finally pushed through measures for cleaning up the homes of the people, which were to be carried out under military supervision.

Incomplete as these measures all were, they helped substantially in alleviating both want and the epidemic, and it can be said definitely that had these measures been taken in this form in the autumn of last year mortality would have been much lower. More recent information, which I have obtained through the kindness of district physician Dr. Kuntze make it possible to furnish here more exact data on the course of the epidemic.

**Data on typhus patients in Rybnik district from the 4<sup>th</sup> of March to the 28<sup>th</sup> of May, 1848**

Month And Date	No of old patients	New admissions during the week	No. of persons		Died		
			Total	Among these in convalescence	during the week	Nos. Ill	Date
March 4	2,469	580	3,049	1,160	96	1,793	On March 11
March 11	1,793	564	2,357	855	95	1,407	On March 18
March 18	1,407	272	1,679	537	89	1053	On March 25
March 25	1,053	324	1,377	385	94	898	On April 1
April 1	898	260	1,158	371	67	720	On April 8
April 8	720	249	969	299	41	629	On April 15
April 15	629	170	799	133	42	624	On April 22
April 22	624	166	790	131	14	645	On April 30
April 30	645	213	858	216	30	612	On May 7
May 7	612	138	750	268	26	456	On May 14
May 14	456	88	544	170	15	359	On May 21
May 21	359	100	459	149	10	300	On May 28
<b>Total</b>	<b>2,469</b>	<b>3124</b>	<b>5,593</b>	<b>4,674</b>	<b>619</b>	<b>9,496</b>	

Thus, in the course of 12 weeks, 3,124 persons fell ill, which, added to the 2,469

patients already present on the 4th of March makes a total of 5,593 patients. Of these 4,674 recovered and 619 died. The mortality rate was thus 11%, which agrees with the above mentioned information given by Dr. Türk and Dr. Wachsmann, Mr. Kuntze estimated the number of patients since the late autumn of 1847, for the period from October to the end of December, to be at least 1,000; and that for the period covering January and the first half of February, which also was not counted, to amount to about 2,000 persons, so that the total number of patients in the Rybnik district would amount to about 8,600 = 14.3% of the population. According to the reports by the local clergy, 1,315 persons died of typhus in the period from the 1st of January to the end of March, so that, if we deduct the 374 deaths

having occurred from the 4th to the 31st of March from the above table, the deaths during January and February alone would amount to 933. As it can, moreover, be estimated that in the months of October, November and December 1847 at least 200 persons died of typhus, the total number of deaths will be about 1,760 =20.46% of the patients (compare w. indications by Dr. Chwistek= 2.9% of the population).

From these numbers it is easily seen how variable was the situation during the course of the epidemic and how little observations made during a certain period can be regarded as representative for the whole period. This will be even clearer if we calculate the figures for the last 12 weeks on a monthly basis:

Date	No. of Old Patients	Newly Admitted	Total	Recovered	Died	No. of patients Remaining	Date
March 4	2,469	1,740	4,209	2,937	374	898	April 1
April 1	898	845	1743	934	164	645	April 30
<b>April 30</b>	<b>645</b>	<b>539</b>	<b>1184</b>	<b>803</b>	<b>81</b>	<b>300</b>	<b>May 28</b>

If the mortality rate is calculated for every 4-week period, it will amount to 8.8% for the first period from the 4th of March to the 1st of April; to 9.4% for the second period from the 1st to the 30th of April, and to 6.9% for the third period from the 30th of April to the 28th of May. These are relatively small percentages, because in the columns listing the number of patients the same patients were calculated at least twice. Nevertheless, it is seen that the mortality rate was fluctuating and bore no regular relationship to the morbidity rate.

To the list of physicians stricken by the disease, quoted on page 65 the following should be added: 1) Mr. Sugg, in Rauden. 2) Dr. Reche from Kosel, in Loslau. 3) Dr. Marggraf, from Berlin. 4) Mr. Dehmel, company surgeon. 5) Mr. Willim, in Pilchowitz. 6) Mr. Sangkohl, company surgeon. 7) Dr. Ebstein from Berlin, in Pschow. 8) Dr. Hoogeweg. 9) Dr. Leicht. 10) Dr. Ifiland from Berlin.

I have no certain knowledge on further illnesses among physicians in the Pless district and surroundings, but we can see now already that at least 33 physicians contracted the disease in this epidemic, of whom 5 died. Out of the 36 physicians active in the Rybnik district only 14 remained unaffected. As a rule the disease occurred in the foreign physicians between the 13th and 17th day after their arrival in the district; only in 3 cases was it later than 6 weeks.

Finally, I must yet add that, as the typhus cases decreased, malaria and dysentery cases, which had preceded the epidemic, again increased, so much so that at the beginning of June Rybnik district again had 800 cases of malaria and 200 cases of dysentery.

### C. MEASURES FOR SAFEGUARDING THE FUTURE

The present report will have provided the reader with a fairly comprehensive though not altogether complete picture of conditions in

Upper Silesia. A devastating epidemic and a terrible famine simultaneously ravaged a poor, ignorant and apathetic population. In a single year 10% of the population died in the Pless district, 6.48% of starvation combined with the epidemic, and, according to official figures, 1.3% solely of starvation. In 8 months, in the district of Rybnik, 14.3% of the population were affected by typhus, of whom 20.46% died, and it was officially established that one third of the population would have to be fed for a period of 6 months. At the beginning of the year, 3% of the population of both districts were orphans. A total of 33 physicians, and many priests and hospitaliers, as well as other persons rendering assistance, fell ill, and not few of them lost their lives.

Never during the 33 years of peace in Germany had even remotely similar conditions been seen. No one would have thought such a state of affairs possible in a state such as Prussia, which took so much pride in the excellence of its institutions. But since, after all, it had been possible, and since we now unquestionably see the endless rows of figures every single of which one denotes untold, wretched misery, these enormous compilations of misery cannot be disavowed and we must not hesitate to draw all those conclusions that can be drawn from such a horrible experience. I myself had drawn the consequences when I returned from Upper Silesia, and was determined, in view of the new French Republic, to help in the demolition of the old edifice of our state. I later had no qualms in making known these conclusions at the meeting of the candidates of the 6th Berlin constituency for the German National Assembly. They can be summarized briefly in three words: *Full and unlimited democracy*.

Prussia was proud of its laws and its civil servants. In fact, was there anything not regulated by law? According to law the proletarian was entitled to demand every means that would preserve him from death by starvation; the law guaranteed work, so that he should earn the wherewithal; the schools, those

so much glorified Prussian schools, had been created in order to secure for him the education necessary to his standing; the sanitary police, finally, had the worthy task of watching over his housing and his way of life. And what an army of well-trained civil servants was ready to enforce these regulations! To what extent did this army not intrude in private relationships, controlling the most secret connections of the state's 'subjects' in order to safeguard their mental and material well-being from too great progress! And how eagerly did they not keep under tutelage any precipitate or impetuous impulse of the so limited intelligence of these same subjects! The law existed, the civil servants were there--and the people died in their thousands from starvation and disease. The law did not help, as it was only paper with writing; the civil servants did no good, for the result of their activity again was only writing on paper. The whole country had gradually become a structure of paper, a huge house of cards, to be toppled in a confused heap when the people touched it.

And who else but the people themselves could help the people to obtain their written and unwritten rights? The civil servants, even when they really wanted to help, were impeded by their estrangement from the requirements of the people and by the inflexibility of their formalism of operation. They could only act where it was not really necessary to act, and, in the sense of the old police state, they were only allowed to interfere where the interest of the people required protection against interference. Their whole activity therefore, in so far as it was positive, was directed against the people; to the extent it should have been for the people it was negative. Had not the civil servants been nominated not by the population, in the people's interests, but by the police state in the interest of the state?

If the civil servants thus were either the oppressors of the people or mere writing machines, nothing remained for the people but to turn away. In the old feudal state the

immediate protectors and guardians of the people were the landed gentry, the hereditary aristocracy; but now that the bureaucratic state and the young money aristocracy had destroyed this patriarchal relationship, the great landowners had taken up an inimical position against the great class of the landless and the small landholders. On the other hand, the people, not yet completely free from the feudal yoke, often enough recognized in the aristocracy their born enemies. Whom should the people now turn to? The otherwise natural alliance of labor, having neither property nor rights, with intellectuals equally devoid of property could not develop, because men of intellect were absent in Upper Silesia, or at least had not attained a viable relationship with the population. Therefore, those enjoying the complete confidence of the people were the members of the clergy, the hierarchy with all its contemptible principles of selfishness and tyranny, who admit absolute subjugation of the spirit under the spell of the church, and mental bondage coupled with the voluntary renunciation of material wealth as a means for reaching their purpose. In return the poor were guaranteed excellent care in the heavenly constitutional state by solemn promises.

The bureaucracy would not, or could not, help the people. The feudal aristocracy used its money to indulge in the luxury and the follies of the court, the army and the cities. The plutocracy, which drew very large amounts from the Upper Silesian mines, did not recognize the Upper Silesians as human beings, but only as tools or, as the expression has it, "hands." The clerical hierarchy endorsed the wretched neediness of the people as a ticket to heaven.

Any nation that still possessed inner strength and an urge to liberty would have risen up and thrown from its temples all the rubbish of hierarchy, bureaucracy and aristocracy, so that only the sacred will of the people should reign there. In Upper Silesia it was not so. Accustomed for centuries to extreme mental and corporal deprivation, poor and ignorant to a

degree rarely found in any other nation of the world, more slavish and submissive than others, the Upper Silesian had lost all energy and all self-determination and exchanged for them indolence, even indifference to the point of death. In Ireland the people rose in arms, and even with the unarmed hand, once its misery had exceeded the limits of tolerance; the proletariat appeared on the battlefield, rebellious against law and property, threatening, in great masses. In Upper Silesia the people silently died of starvation. Under the influence of external force they had acquired the stoicism which the North American redskin achieves by internal and voluntary, though misguided, efforts.

Just as the English worker, in the depths to which he had sunk, in the extreme deprivation of the spirit, ultimately knew only two sources of enjoyment, drunkenness and cohabitation, the Upper Silesian population likewise, until a few years ago, had concentrated all its desires and all its striving on these same two things. The consumption of hard liquor and the satisfaction of the sexual impulse reigned supreme, and this explains why the population increased in numbers as rapidly as it lost its physical power and moral content. In them was repeated what was long known of the Irish industrial laborers immigrating to England. But now there occurred the unheard of phenomenon that one of these two sources of pleasure yet remaining open to them was blocked by the church when it forbade the consumption of spirits. The people suffered it and accepted this blow in silence also. Its consequence was as strange as it was psychologically important. While one might have thought that now the last source of material enjoyment, i.e. sexual gratification would be more artfully exploited, the opposite occurred; the number of births steadily decreased. In their own way the people had become transcendental, like the Christian ascetics of the first centuries; but they did not neglect the body because of spiritual elevation but due to spiritual depression. The bonds which link man, that bodily lump of matter, to the earth, were



loosened in the consciousness of the people; they had become listless to the point of death, by starvation.

This population had no idea that the mental and material impoverishment to which it had been allowed to sink, were largely the cause of its hunger and disease, and that the adverse climatic conditions which contributed to the failure of its crops and to the sickness of its bodies, would not have caused such terrible ravages, if it had been free, educated and well-to-do. For there can now no longer be any doubt that such an epidemic dissemination of typhus had only been possible under the wretched conditions of life that poverty and lack of culture had created in Upper Silesia. If these conditions were removed, I am sure that epidemic typhus would not recur. Whosoever wishes to learn from history will find many examples. Let us only look at Egypt with its plague (compare the reports of Prus to the *Acad. de Méd.*, in the *Gaz. méd.*, 1846, March, No. 11; Hecker, *Gesch. der neueren Heilkunde*, p. 103; Pruner, *Die Krankheiten des Orients*, p. 87,418). The plague, which at present has its focus proper in Egypt, was unknown in that country at the time of the last Pharaohs, during the 194 years of Persian occupation, the 301 years of Alexander and the Ptolemies, and during a long period of Roman occupation, i.e. as long as a good police and a certain degree of education were maintained. Now only a few plague-free years lie between the plague years and yet nothing has changed in Egypt except the people and the expression of their activity. The plague regularly begins in winter, when the flood of the Nile subsides and Western winds produce mist in the air; it disappears in June in Lower Egypt, already earlier in Upper Egypt when polar air currents blow into the country from the Mediterranean Sea. Hecker's description of these conditions is classical. "The regular sequence of the seasons," he writes, "has existed without change for as long as the Nile rushed down from the Abyssinian mountains into the plains. The cause of the plague, however, cannot lie in the

seasonal change alone, since it first appeared in epidemic form in the 6th century, and since earlier plague-like epidemic diseases recorded in history belong to an entirely different form of plague that became extinct in the 4th century. Thus, for plague to take root, there must exist other additional factors and these are to be found in the mode of life as well as in the political condition of the Egyptians, as they took form in the 13th century. Present-day Egypt is no longer the lovely country of the Pharaohs and Ptolemies, famous for its wholesomeness and for the health of its inhabitants. It is ruled by rapacious and cruel barbarians. Slavery and a brutish inertia subject to the elements have taken the place of discerning artistic skill and of the persevering industriousness which once knew how to control nature. In the midst of luxuriant fields and between the wonders of antiquity lie wretched cities and villages, inhabited by a debased population, whose despotic overlords hardly allow them to satisfy their most pressing needs. Hunger and nakedness are the inheritance of the Egyptian fellah, a brutish apathy is their relaxation after excessive compulsory service. The small hovels which they share with their animals, their comrades in misery, are pervaded by suffocating vapors, and close by decomposing carcasses spread a pestilential mephitic." I am adding some further information from Pruner so as to make clearer the analogy of the Egyptian fellah with the Upper Silesian rural population. "The basic element of their food is bread of unleavened wheat in the form of soft cakes, or bread made from dura (*Holcus sorghum*), and beans soaked in water and cooked with very little fat or oil. Onions, radishes, garlic, etc. add flavor to their food. A little sweet or salty cheese, sour or sweet milk are supplements from the animal kingdom. The usual drink in the Nile valley is the turbid water of the river as it flows by. In winter they sleep on the ovens for baking bread and other foods which are heated with camel dung. As regards filth, the inhabitants vie with one another."

The logical answer to the question as to how

conditions similar to those that have unfolded before our eyes in Upper Silesia can be prevented in the future is, therefore, very easy and simple: education, with its daughters, liberty and prosperity.<sup>19</sup> Less easy and simple, however, is the practical answer, the solution of this great social problem. For let us not conceal this from ourselves, we are now directly facing part of the great task which our century has initiated in human history and which carries within itself the development of the future. We have thus reached with logical argument the stand-point which we have quoted several times in our essay *Ueber die naturwissenschaftliche Methode*. Medicine has imperceptibly led us into the social field and placed us in a position of confronting directly the great problems of our time. Let it be well understood, it is no longer a question of treating one typhus patient or another by drugs or by the regulation of food, housing and clothing. Our task now consists in the culture of 1 millions of our fellow citizens who are at the lowest level of moral and physical degradation.<sup>20</sup> With 1 million people, palliatives will no longer do. If we wish to take remedial action, we must be radical. Palliatives in such cases are more costly than radical action: The state would exhaust its resources in redressing some districts, and could not even provide assurance that in case of renewed plight its powers would be adequate. Here we see repeated on a small scale what we have seen in times of general emergency on a larger scale. The preservation of states as well as of the individual citizens is only possible by the cooperative efforts of all. If we therefore wish to intervene in Upper Silesia, we must begin to promote the advancement of the entire population, and to stimulate a common general effort. A population will never achieve full education, freedom and prosperity in the form of a gift from the outside. The people must acquire what they need by their own efforts.

I see the possibility of providing so powerful a spiritual uplift that this apathetic, enervated and exhausted population would attempt its own regeneration in the national reorganization of

Upper Silesia, the sole means for lighting a great and enduring enthusiasm. The Upper Silesians, as I have shown, are Polish by their language, origin and habits, even though the other Poles despise their idiom and they themselves have forgotten their origin and their history. We now come to that point in the life of nations where the great family of Slav peoples is called upon and ready to make its appearance on the scene of history. Throughout the enormous range of their tribes resounds the call of panslavism. Unknown, almost nameless races rise from their geographically ill defined territories, and, stimulated by the new ideas of national politics, have set aflame the spirits of those whom artificial systems for the balance of states have left cold and untouched. The times of territorial politics and national proselytism are gone. Prussia has had opportunity enough during a whole century to demonstrate its incompetence in the Germanization of Upper Silesia; its attempts in the primary schools have failed utterly. A people does not easily abandon its national traits. Only the force of arms or decisive advantages of peace can convince it to accept new forms in a relatively short time. Such advantages, i.e., the participation in the cultural movement of another nation, can however, be offered only to a population that has already acquired the ability at least, within its national boundaries, of entering such a cultural movement. The first requirement for denationalization is a certain measure of national development. Prussia did not recognize this tenet. Now it is too late to consider converting millions of people to a language foreign to them, to the language of the "mute" (njemeczki) and should Prussia or Germany still wish to retain Upper Silesia as a territory belonging to it, all it could dare aspire to, at first, would be to attempt nurturing a German spirit and German habits through education given in the Polish language. It would then be their task to establish Polish schools and to staff them with reasonable teachers who would not further the interests of the Catholic hierarchy but who would know how

to advance and assert general human interests. It would furthermore be the duty of the government to promote a literature for adults in their own language which would throw light on their position and their requirements. In peaceful times it might perhaps have been possible to germanize Upper Silesia substantially in a few decades, since there was no national memory, no jealous national consciousness which had to be overcome. Now it appears to be too late. It would seem that Upper Silesia has already found a representative at the Slav congress in Prague in the person of Purkinje and if, despite all resistance, the Slav movement should finally break through the dams built up by historical right and the selfishness of possession, I doubt whether any power whatsoever would be able to preserve the country south of the Stober from the flood. Germany, though it would lose a territory of the greatest wealth, i.e., apart from excellent arable land, fine stands of forests and wonderful mines, would nevertheless thereby also rid itself of a great worry; and to insist on retaining the territory against the will of the inhabitants only because of its advantages would be very inconsequent for a nation that made war against Denmark for the sake of the German dukedoms. Moreover, reasonable external politics could in a large measure secure for Germany a share of these treasures. If the question were raised as to whether it would be to the advantage of this neglected and derelict population to dispense with the protecting and guiding hands of Germany and to become a member of a disorganized system of Slav states that must expect prolonged unrest, I should answer that for great ailments I know only great remedies. What cannot be cured by medicine, said Hippocrates, is cured by iron, and what is not cured by iron is cured by fire. I deeply deplore that fire and sword must rage over a population so as to raise them to a high ethical and human elevation, but humanity has not yet arrived at a point of cultural development, at which the laws of natural science alone determine its actions. An apathy as great as that

of the Upper Silesian needs hard stimulants and it might, thereafter, immediately turn into a glowing fanaticism. It would then be the duty of great men of state to gradually moderate this blaze to a mild but enduring and fecundating warmth. What new factors would then be introduced into the political life of Europe by the family of Slavic populations can only be surmised. Slav emigrants abroad have studied with eagerness the philosophic systems, the socialistic theories and the laws of the natural sciences and have added to it the peculiar religious mysticism of their glowing nature. Were these elements of fermentation introduced into the enormous inland nation of agricultural Slavs, the pages of world history would not fail to be covered with new and unheard of events.

May the cards fall as they will, may Upper Silesia fall to the Germans or to a Slav State system, it will always be the duty of a reasonable and popular government to educate the people and to make them not only externally free, but even more so internally. Liberty without education brings anarchy, education without liberty brings revolution. The people must be taught on the broadest basis, on the one hand by means of adequate primary trade and agricultural schools, by popular books and popular journals, and on the other hand there must be freedom to the greatest extent, especially complete liberty of communal life; these are the primary requirements which must be immediately granted to this population. No longer can patronizing and artificial formalism be of any help. True enough, what should be done with the present generation of adults is doubtful, but, for this very reason, one should not delay one moment to make the growing generation receptive to the blessings of culture as soon as possible. Death has raged terribly among the adults; there are many orphans now completely set free from the fetters which the influence of the family would have imposed on them. These should be dealt with; orphanages should be established, these children should be educated and later released among the general

population as apostles of a new time. I well know that the opposite was envisaged, i.e. that it was intended to abolish these institutions as soon as possible, so as to get rid of that great burden; but I would consider this the greatest disaster that could happen. We yet have a completely free hand. We can still form these children as we wish; such an opportunity will (it is hoped) not soon present itself again. Therefore, the orphanages should be maintained above all things, as seminaries of civilization and education. If we are willing and able to be radical let us educate these children to become teachers for new and better primary schools. Children of the nation, but released from the past of the nation by a tragic destiny, free and unhampered in their acts, they will become more suited than others to meet the demands of their new position. The absolute separation of the schools from the church, necessary as it is everywhere, nonetheless is nowhere more urgent than in Upper Silesia. Religious compulsion, crass bigotry and a tendency towards the transcendental are the natural enemies of liberty and independence, and in Upper Silesia they have borne fruits more bitter than anywhere else. If the schools are to prosper, they must be separated from the church completely and, without restraint and clerical tradition, be supplanted by liberal education, the base of which is formed by a positive view of nature. By the teaching of the great laws of nature and demonstration of their eternal validity in the past and present by means of the history of the development of the inanimate and animate worlds, in particular of the human race, those practical views will be created which, although material, are yet truly elevating and culture-forming, and which alone are capable of leading society to those solid and reasonable principles in its private civil and public relationships that make possible the welfare of all on the basis of the welfare of each individual. All will then learn to perceive that everyone has the same rights, though not necessarily the same obligations, and this insight gained from the

natural sciences will completely suffice to replace the dogmatic tinsel by which it was attempted to support the general principles of morals, humanity and philosophy proper among the uneducated sectors of the population.

From the principle of equality in the eyes of the law there follows directly the demand for self-government in state and community. To those who hold the view that the people must first be educated before they are judged to be 'ripe' for a certain measure of liberty, I shall reply that history has always shown the contrary. Before an overthrow the population was always considered unripe: immediately thereafter they were always ripe. When an insurrection resulted in an artificial and distorted form of government as well as in dialectically difficult tenets of law, then the population all of a sudden was unripe again. But when the simple and natural laws which directly result from studies of human nature are applied, the sound mind of the population will understand them and will quickly learn to deal with them and only then will the people be able to help themselves. Of what use is that worn-out and artificial formalism of the constitutional states? Has the Belgian or the English constitution prevented the people of Flanders, Ireland and Scotland from dying in their thousands through famine and epidemic disease, just as the Upper Silesians? In a free democracy with general self-government such events are impossible. The earth brings forth much more food than the people consume. The interests of the human race are not served when, by an absurd concentration of capital and landed property in the hands of single individuals, production is directed into channels that always guide back the flow of the profits into the same hands. Constitutionalism will never wipe out these abuses, since it is itself a lie, either a concession to prejudice or a deal with (historical) injustice. It therefore can never truly draw the conclusions to be drawn from the principles of general equality before the law. Therefore, I abide by the doctrine which I have placed at the head of this discussion: *Free and*

*unlimited democracy.*

If we thus obtain an educated and free people, there is no doubt that it will also gradually become prosperous. It hardly needs to be mentioned that by a natural and national policy the people will very soon reach a level enabling them to shape international traffic in accordance with their interests and to prevent the executive powers from carrying out measures, either from ignorance or prejudice, such as exhibited only too often by the Prussian government, which suddenly destroyed whole branches of industry. I want to stress though that in such a population, by a just and direct system of taxation and by the abolition of all privileges and special (feudal, etc.) burdens, the poorer classes will be enabled to utilize their earnings themselves, and to enjoy the fruits of their labor. The resulting alleviation should in itself suffice to lay the basis for a certain prosperity. Was not the mere removal of the bane of forced labor on the left bank of the Oder sufficient to carry the population over the dangerous transition period from an unfree to a (qualifiedly) free condition within a decade and to bring them to moderate prosperity? How much more will this apply when the feudal scourge will be completely removed and replaced by fair and moderate income taxes.

However, I do not believe that in the long run these measures alone would meet the demands of a steadily increasing population. More permanent and more reliable means must be found to develop and maintain a greater activity in the work force. I do not suggest that the state should take into its hands as an employer the organization of labor and thereby establish a new factor in the subjugation and dependence of the individual. I believe, though, that legislation and government have the obligation to establish adequate organizations for facilitating traffic which, by increased circulation of money, will increase the income of the individual; they have the obligation of guaranteeing to the workingman not merely his subsistence but also the opportunity of creating

his livelihood by his own efforts. A reasonable political constitution must establish the unquestionable right of the individual to a healthy life; it will be left to the executive powers to find the means and ways of rendering effective this right by arrangement with the associations of the various classes of citizens who already enjoy such rights.

A very obvious requirement in the districts, which was therefore even recognized by the authorities of the old regime, is road building. In an area where on account of the carriage of the products of mining and agriculture very active traffic takes place, good roads are an essential aspect of life. Their construction was the more urgent as two railroads and two navigable streams, which would have secured considerable export, could at times hardly be reached in spite of their nearness. And not only highways in the main directions but also good local roads were promising a profitable return. The need for large capital investment for road building should not have been a deterrent as it could nowhere have been better invested. The mere employment of a large task force alone, while construction was under way, would in itself have constituted a tremendous help to the area; for although moneys were spent, the way would thereby be paved for that intensification of circulation without which a people cannot be prosperous.

The next task will be the improvement of agriculture, horticulture and animal husbandry. It is to be expected, though, that improvement in education and stimulation of traffic will by itself cause an improvement of these branches of culture. But it would be more suitable and more profitable for the public treasury if we were not to wait for such a slow and gradual spontaneous development. However, schools of agriculture will be useful only to the next generation, and the large number of small landholders would derive little help from their establishment. These men can only be assisted by popular instruction, by the introduction of better plant strains and better breeds of domestic animals, and also by premiums to encourage industriousness. The

people must be made to understand that, when exclusively cultivating potatoes, they will always be exposed to the threat of a similar crop failure and that only a certain variety of crops can protect them from a total failure. The more widespread cultivation of maize, legumes, pot-herbs and fruit could give them a better chance of yield. Cooperation between the communities for the purpose of regulating the flow of streams and rivers, for the drainage of pastures and swamps, for irrigation etc., could, apart from their hygienic advantages, furnish a basis for the maintenance of more livestock. The improvement of the races of domestic animals cannot be achieved without great costs. In normal times, the introduction of innovations such as the improvement of agricultural tools or instruction in the art of rational and empirically efficient crop rotation would have been associated with many difficulties in view of the tenacity with which country folk cling to tradition everywhere. I nevertheless believe that these difficulties could have been overcome by "separation" as was the case everywhere. Now that the population is smitten by impotence, its mind blank as a *tabula rasa*, we can envisage forming it and preparing it for a culture such as is commensurate with the requirements of our times. Such examples as are now available to them will not prove helpful as they emanate exclusively from the holders of large estates and as the small holders believe that only great resources would permit their successful realization. Only when they among themselves will begin to make successful use of new knowledge can we expect general imitation. Should there, in spite of a generally reasonable cultivation of the land, still exist a danger of generally poor harvests, it is self-evident that the government will be obligated to establish large stores, in which part of the surplus from the good years is to be stored or which are to be filled with timely imports from other countries. Switzerland, this small country which never produced as much as it consumed, can provide the best example of a reasonable political

economy in this respect.

But the government must do yet more, without thereby impairing free self-determination. In a region so rich in labor (for the present weakened powers of the individual will soon wax strong again), where wages are so low and which, by the richness of the land in coal and metals, offers such an inexhaustible source of activity, factories should make particularly good profits. It is, however, natural that factories which have to compete with those already existing can only be established by either the government, the plutocracy, or by societies. To leave exploitation uncurtailed to the plutocracy would be foolish, as this would only enlarge the spot of decay which lies at the root of the social movements of our days. Societies formed by small proprietors would be quite appropriate, but there is no reason for supporting them by special legislation or political action, while the state as such should never be a permanent employer, since this would gradually lead to a new despotism, to a general enslavement by even more rigorous fetters than those of the past. What is necessary and desirable is above all the association of the unpropertied, so that through these associations they can join the ranks of those citizens who are enjoying the bounties of life and thereby at last cease being mere machines for others. All the world knows that the proletariat of our present time has been created mainly by the introduction and improvement of machinery and that to the degree that agriculture, manufacture, navigation and road traffic have attained an extent never before anticipated by the improvement of equipment, human power has lost all autonomy and has become but a link in mechanically run operations, a link which, though alive, is yet equated to an inanimate value. People only count as hands! Is this the purpose of machines in the cultural history of nations? Shall the triumphs of human genius serve no other aim than making the human race miserable? Certainly not. The social era begins with our century and the object of its activity can be none

other than to reduce to the least possible measure the mechanical aspects of human activity, those occupations which bond man most strongly to the clay, to that which is most roughly material and draws him away from the finer aspects of matter. Man should work only as much as is required to wrest from the soil, from that crude substance, as much as is needed for the comfortable existence of the whole race, but he should not squander his best powers to amass capital. Capital is the promissory note for gratification. But why should one inflate such prospects to a degree which exceeds all limits? Let us increase the pleasures of enjoyment but not the mere dead and cold possibility of gratification, which, moreover, has not even a constant, but an infinitely variable and uncertain relation to capital. The French republic has acknowledged this principle under the motto of brotherhood and it seems as though, despite the power of the old bourgeoisie, it is now preparing to realize this aim by means of the associations. In fact, an association of the unpropertied workers with the capital of the state or of the plutocracy or of the many small owners is the sole means of improving the social condition. Capital and labor must at least have equal rights and the living force must not be subservient to non-living capital. An association of these two is, however, possible in the threefold manner quoted above and can be beneficial in any of these ways. In every case the worker must have part in the yield of the whole, and as, moreover, with reduced taxation and with better education, his will be a happier lot, he will soon be able to achieve a satisfying measure of contentment by such participation in the great enterprises of industry, and on account of the weight which the association of power confers. Should the state be ready to enter into such an association with capital, this should only be done with the understanding that new ways or new localities are thereby opened up to industry. The state must never permanently participate in industrial enterprises as, at the present time, they are competitive and would thus bring it in

opposition to a part of its subjects, i.e. the whole in opposition to a part. When a business has been started and is progressing the state must withdraw from it, leaving it either to the associations of the workers alone, or to these in combination with financiers. In this way, the greater insight that good civil servants possess by virtue of their detailed knowledge of the country and its requirements, as well as the greater ease with which they can draw on the help of expert information, might serve to raise the national wealth and secure the welfare of the citizens individually; in this way we may envisage paving the way for conditions in which man will not only work to obtain food, clothes and shelter but in which the work he does will also serve as useful muscular exertion, and from which he will turn away only so as to use the other half of the day for the formation of his mind.

These are the radical methods I am suggesting as a remedy against the recurrence of famine and of great typhus epidemics in Upper Silesia. Let those who are unable to rise to the more elevated standpoint of cultural history smile; serious and clear-thinking persons capable of appraising the times in which they live will agree with me. Some, although realizing that a thorough and permanent recovery is possible only in this way, might object that it would take too long to establish such a state of affairs. To these I shall say that once the present epidemic has completely abated its recurrence is not to be expected within a short time. Davidson (*loc. cit.*, p. 93) has shown with great circumspection that, because typhus as a rule affects one and the same individual only once, all susceptible bodies must have suffered infection when an epidemic has lasted for a certain time and is then spontaneously extinguished. He thus explained the observation that in cities also, even a severe epidemic rarely lasts longer than two years, and that there never follows another before the lapse of several years. In the cities in which the population increases in sharp progression by the immigration of new

persons from the outside, a recurrence can take place relatively rapidly under adverse conditions, but in the country, where all increase in population is due to new births exclusively, and where in fact many of the adults leave for the cities, there will always be a relatively long interval between two epidemics. May therefore the next interval be used to preserve from the repetition of such scenes of horror by liberal institutions for the benefit of the people, a lovely and rich country, which to the shame of the government has so far been inhabited only by poor and neglected people.

#### Endnotes

19. As is well known, the same question was posed to the Egyptian Government by the Académie de Médecine in Paris in respect to the problem of plague.
20. I here cite with pleasure some lines by Renzi (Corrispond. scientif. di Roma, 1847, No.2): "Quando il medico vien chiamato alia custodia di un popolo, a studiare la natura de' luoghi e la influenza de' climi, ad appressare le abitudini e i costumi, l'indole e le passioni, le leggi e la religione; quando è chiamato a seguire le cause de generale distenzione, a porre un' argine alla irruzione de' contagi ed epidemie desolatrici; quando è chiamato a raddrizzare la bilancia della

giustizia, a dirigere la spade del magistrato, onde ferire il colpevole e proteggere l'innocente; a fornire cognizioni al legislatore, onde non formi della legge una forza bruta che diriga materialmente come una mandria d'animali gli uomini pel retto sentiero, ma una forza di ragione ed un mezzo di civiltà e di progresso; in questo caso la medicina acquista ancora una novella maestà, e deviene tale potenza ch' è impossibile metterla in materiali rapporti di convenzioni e di premio."

[“When the physician is called to the custody of a nation, to study the nature of the various localities and of the different climes, to appraise its habits and customs, its heedlessness or passions, its laws and religion; when he is called upon to follow the causes of general ruin, to put a brake on the eruption of desolating contagions and epidemics; when he is called upon to redress the balance sheet of justice, to direct the sword of the magistrate so as to smite the guilty and to protect the innocent, to furnish knowledge to the legislator, so that the law should not be brute force driving men on the right path like a herd of cattle, but a force of reason and a means of progress and civilization; when all this has come to pass, then medicine will have acquired a further majesty and will have become a power so mighty that it will be impossible to relate it to the usual conventions and rewards.”]

