

Report on the Typhus¹ Epidemic in Upper Silesia

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At the beginning of this year reports on the outbreak of a disastrous disease in Upper Silesia, which up to that time had appeared in the newspapers only sporadically, increased in frequency and urgency. The Prussian Minister for Religious, Educational and Medical Affairs, nevertheless, not only did not receive from the local medical authorities any reports on the nature of the malady but not even notification of its presence. Thus, when the press published increasingly horrible details on this so-called hunger-typhus, when the whole of Germany was resounding with a cry for help for the inhabitants of the Rybnik and Pless districts stricken by starvation and pestilence, and when finally even the Ministry of the Interior was forced to emerge from the apathy with which it had so far met the demands of the civil authorities, the Minister of Education finally ordered the chief medical privy councilor Dr. Barez "to travel to Upper Silesia so as to obtain detailed information regarding the outbreak of the typhus epidemic, and the measures taken against it, and to assist the authorities concerned in word and deed whenever necessary." The Minister of the Interior, however, refused to empower Mr. Barez with authority for any

effective intervention. On the 18th of February the writer of this report was also commissioned by the Minister of Education to visit the area ravaged by typhus. Mr. Barez "would be too heavily engaged to have the leisure to carry out a close investigation of the epidemic in the interest of science. Yet it was important for those medical authorities who were under the jurisdiction of the Minister that the epidemic occurring with such violence be investigated in a manner as thorough and promising of success as possible." I was charged with this investigation. Consequently Mr. Barez and myself started out together on the 20th of February; we arrived at Ratibor on the 22nd and continued to Rybnik on the 23rd; from there we visited Radlin and Loslau on the 24th, Geikowitz and Smollna on the 25th, went to Pless by way of Sohrau on the 26th, and visited Lonkau on the 28th. Mr. Barez then returned to Berlin on the 29th by way of Nicolai and Gleiwitz, while I returned to Sohrau and remained there up to the 7th of March. On that day I returned to Rybnik, reached Gleiwitz on the 8th and arrived in Berlin on the 10th.

The information I was able to gather during this journey was necessarily incomplete in many respects, and the following report does not claim to be a complete or even adequate description of the epidemic. However, the extraordinary uniformity of the Upper Silesian conditions, the great conformity in the symptomatology of the disease, the large number of persons affected simultaneously in the same place, and lastly the exceedingly friendly reception by the local physicians and the willing support of the local

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authorities, to both of whom I wish to express my heartfelt thanks, made it possible to grasp quite clearly the most essential points despite the short duration of my stay. I would have wished to provide decisive answers to some of the particularly important questions, but the political uprisings that had in the meanwhile broken out made it mandatory for me to participate in the manifestations in the capital. I also knew that in order truly to resolve these questions, I would have to wait for another suitable opportunity, which I did not know would ever arise. With the large number of physicians who have since been sent to Upper Silesia, there certainly will be some who will complete the data I assembled wherever they show lacunae and who will rectify them whenever they are erroneous. To await the return of these physicians did not seem advisable, because the interest of the medical profession in this question requires prompt satisfaction. I have already in part discharged my duty in this respect in the form of a lecture, which I read on the 15th of March before the Society for Scientific Medicine, the outline of which I follow here also.

CHAPTER 1: THE LAND AND ITS INHABITANTS

Upper Silesia (administrative region of Oppeln) comprises that part of Silesia south of the rivers Neisse and Stober. The districts of Rybnik and Pless constitute its southernmost portion, which lies directly at the borders of Galicia and Austrian Silesia between 36° and 37° eastern longitude and 49°9' and 50°3' northern latitude, between the upper courses of the rivers Oder and Vistula, covering an area of about 35 square miles. The country is a torn and deeply-cut high tableland, with an elevation above the Baltic of about 900-1000'.² The watershed between the Oder and the Vistula, which runs midway through it, is in general not conspicuous. In the area of Sohrau, where it consists of alluvial soil, it reaches a height of only 948'. It is gently inclined towards both sides, especially eastwards, to the valley of the Vistula (Pless district), while to the west it is formed by a range of hills, which rises until Pschow (1008') and continues south to Great

Gorzitz in a slight depression (853'). On the right bank of the Oder, whose water level lies at an elevation of 673' at the confluence of the Olsa, the high plateau falls away rather steeply to the wide and fertile valley of the Oder.

The irregularities of the surface are due in part to the rise of mountain chains and partly to subsequent erosion. To the north between Kosel and Great Strehlitz we meet the mighty and isolated basalt elevation of the Anna mountains; to the south at the boundary between Galicia and Hungary, towards the Bukowina, there run, in an east-west direction, the younger ridges of the Carpathians, whose lovely blue summits (for instance the Lissahora) are seen in both districts from almost every point in unlimited succession. Continuing an account of geological relationships, we encounter the Sudeten Mountains in the west, and the Sandomir Mountains in the east. The whole of the tableland of Upper Silesia is understood to be a huge alluvial basin. It is, therefore, only natural that we see older mountain formations emerge to the surface in many places, or find them buried at a small depth. Graywacke, bituminous coal, red sandstone and shell limestone, Jurassic formations, particularly clay-iron stone, upon which follow the peculiar tertiary formation of the gypsum and marl mountains (to which also belongs the rock salt of Wieliczka) almost always form the bottom of alluvial land whose mean thickness has been calculated to be 11-13 [Prussian mining] "fathoms" [=22-26 m]. In its superficial layer this alluvium consists alternately of clay and a coarse, frequently ferrous gravel, which was apparently formed by washing out of the clay.³ The former is widespread especially in the southwestern parts, around Sohrau and towards the Austrian border, the latter prevails in the eastern and northern parts. Both are usually easy to recognize from the nature of the woodland trees, which here are nearly always conifers, whereas toward Radlin, Loslau, etc. there grow beautiful deciduous trees (even oaks). But almost nowhere is the formation at the surface wholly suitable for agriculture, as the clayey or loamy soil is generally impermeable to

atmospheric water.⁴

Most of the valleys, especially in the district of Rybnik, are erosion valleys, often quite deep, so that they not only cut through the sedimentary deposits, but also sometimes expose on their edges layers of the tertiary gypsum formation. As a rule the slopes of the valleys are rather steep, the valleys relatively wide, with a stream flowing through them, and the remaining part of the ground is covered with wet greensward. Occasionally we find extensive marshes. Lakes, even large ones, are not rare; their beaches are mostly flat, so that they appear to the eye of the North German used to higher hilly slopes rather like ephemeral water collections in shallow depressions of the ground. The gradient of the small streams, especially toward the Vistula, is not great and since the Vistula itself has a very low inclination in its upper part and since this river, as well as the Oder, very rapidly receives enormous amounts of water in the proximity of the Carpathians, water is being dammed up in these valleys quite frequently with extensive flooding of the adjoining meadows.

The considerable elevation of the land and the great proximity and the direction of so massive a mountain range as the Carpathians cancel out the influence, which the southern position of this district (Pless lies nearly at the latitude of Mainz) should exert on the temperature of the air. The rye harvest commonly coincides with the harvest in areas of Pomerania which lie 4° further north, i.e. at the end of July and beginning of August, and the difference in temperature is so great that in the Oder valley at Ratibor a difference of 8 days is noted in agricultural activities. The direction of the Carpathian foothills from west to east seems to be particularly unfavorable in this respect. While the warm equatorial winds are partly stopped by the mountains and partly cooled by the snow masses that usually remain on the ground up to May, the Arctic air currents, which blow at a lower atmospheric level, rebound from the mountains which rise directly from the plains and accumulate before them. I was informed that the rainsqualls that come with a northwestern wind almost

regularly turn into long and persistent rains, which in a short time bring down large amounts of precipitation. I myself had the opportunity to observe how rapid and important are the changes taking place in the air masses. In the first two weeks that I spent in the area the weather was very pleasant, the air being mostly clear and warm, quite spring-like. Suddenly at the end of the second week snow flurries occurred with increasing intensity, covering the ground with a layer of snow several feet deep in a few days. At the same time the frost was so intense that on roads, which had just been bottomless, i.e. on which traffic by carriage was almost impossible, sledges were circulating everywhere a few days later. On the 8th, I traveled to Gleiwitz by sledge during a strong snow flurry with a whistling NNW wind. On the following day, while on my way to Breslau by railway I saw the snow cover becoming thinner the further north I traveled. Beyond Breslau I found snow only in some depressions in the ground, and in the Mark [= the Prussian province of Brandenburg] none was to be seen.

From this description it would appear that all factors contributing to an increase in the humidity of the ground and air are present. While the impermeability of the soil and the slight damming up of the flowing waters constitute a recurrent, and then commonly long lasting, source of surface evaporation, the frequent and persisting atmospheric precipitations at relatively low air temperatures cause a constant renewal of the fluid lost by evaporation.

Let us now observe the inhabitants of this country. All Upper Silesia is Polish. As soon as one has crossed the Stober, communication with the rural population and the poorer townsmen will be impossible for persons not thoroughly conversant with the Polish language, and only interpreters can provide scanty help. This situation generally prevails on the right bank of the Oder. On the left bank numerous German elements are interspersed. This population represents the lamentable remnants of the old Silesian population, as it has been preserved in these peripheral regions of German influence. We

remind the reader that from the end of the sixth century onwards members of the Slavonic tribes, a heretofore unknown race, invaded the areas which had been vacated by the German tribes emigrating toward the west and south, and that, while to the left of the Oder and around the Elbe there spread Czechs, Wends, Luticians and Obotrits, Lechitic Slavs took possession of the vast plains comprising the riverain areas of the Vistula limited to the west by the Oder. The name Poland is not derived from the word *pole*, meaning plain, without cause, for what is more characteristic for their land than these unlimited plains, which extend from the Carpathians to the shores of the Baltic Sea, and over which are widely scattered erratic blocks that have been carried from the Scandinavian mountain ranges to the foot of the Carpathians? When, at the end of the first millennium of the Christian era, Boleslav I. Chrobri established the Polish empire, Silesia was an integral part of it, and only in 1163 did the 4th Boleslav leave the area to his nephew as a separate realm. By continuous subdivision it was split into 18 dukedoms by the XIVth century. But the Luxemburgian emperors were acquiring one portion after the other for the Bohemian crown, until in 1339 the entire land of Poland was formally ceded to Bohemia, together with which it later fell to the Austrian rulers. The last Silesian Duke (of Liegnitz, Brieg and Wolau) of the Piastian house only died in 1675. It is well known that from his succession there arose the Silesian wars which brought the greatest part of the country under Prussian rule, and there began the unfortunate conflict of sovereignty between the two great German powers which has again been taken up in our days, and which is taking on so complicated a form in German political life through the admixture of foreign nationalities.

About 700 years thus have passed since Silesia was separated from Poland; the greater part of the country has been completely Germanized by German colonization and by the power of German culture. For Upper Silesia, however, 700 years did not suffice to obliterate the Polish national character of its inhabitants, which their racial

brothers in Pomerania and Prussia have so completely lost. The span was long enough to destroy their national consciousness, to corrupt their language and to break their spirit, so that the main part of the population has conferred on them the disparaging name of Water-Polacks: but their appearance, which has been described to me as being completely similar to that of the Polish population on the lower Vistula, still clearly shows their descent. Nowhere do we meet the characteristic physiognomy of the Russians, which is so frequently called typically Slavonic, and which serves as a reminder that these representatives of Asiaticism are the neighbors of the Mongolians. Everywhere we see good-looking faces with a very light skin, blue eyes and blond hair⁵; these handsome features are certainly altered at an early age by cares and uncleanness, but are frequently exhibited in children of rare loveliness. Their way of life also reminds us of Poland proper: their dress, their houses, their social conditions, their uncleanness and indolence are nowhere so closely similar as in the lower strata of the Polish nation. In particular as regards the two last named characteristics it would be hard to find them surpassed anywhere. The Upper Silesian in general does not wash himself at all, but leaves it to celestial providence to free his body occasionally by a heavy shower of rain from the crusts of dirt accumulated on it. Vermin of all kinds, especially lice, are permanent guests on his body. As great as this squalor is the sloth of the people, their antipathy for mental and physical exertion, their overwhelming penchant for idleness or rather for lying around, which, coupled with a completely canine subservience, is so repulsive to any free man accustomed to work that he feels disgust rather than pity. A comparison of the Upper Silesian with the Neapolitan beggars holds true in some respects only as long as one remains on the surface, but loses all weight as soon as one considers them more closely.

The Lower Silesians attribute this aversion to work sometimes to the debilitation of the people resulting from bad nutrition, and sometimes to a national tendency for inaction. The former view is

correct in part, though not to an extent and with an exclusiveness that would explain the whole picture from that factor alone. As for the latter view, it would be outrageously unjust to place the true cause of these traits in the Polish nation, that great-hearted nation capable of every sacrifice. Even though German diligence may perhaps be rare among the Poles, it should nevertheless not be forgotten under what conditions, under how long and heavy a pressure, this unhappy people has groaned. Let us consider these conditions more closely for a moment, as they will be important later in our exposition.

The Polish language, which is exclusively used by the Upper Silesian, is certainly not the least of the causes for the depths to which he has sunk. For 700 years after their separation from the mother nation, this population has taken no part, however slight, in the development, which has taken place in that nation; nor have they gained anything from German culture, since they had no connecting link with it whatsoever. Only in later times was it attempted to Germanize them by way of the schools. But the methods, which the government applied to this end, contained in themselves the seed of their failure. German schoolmasters with as limited a knowledge as possible were sent into Polish country and it was up to the teacher and to his pupils mutually to teach each other their mother tongues. The usual result of this procedure was that the teacher finally learned Polish, but the student no German. Thus the German language did not spread; the Polish language maintained the upper hand, and in the midst of the country there are numerous families with German names and German physiognomy who do not understand a single word of German. Hardly a book was available to the people, apart from the prayer book, and so it came about that there are more than half a million people here who totally lack any consciousness of the inner development of the nation and any trace of cultural history, because, in a dreadful way, they possess no development and have no culture.

The Catholic hierarchy has been the second obstacle. Nowhere, except in Ireland and formerly

in Spain, has the Catholic clergy achieved a more absolute enslavement of the people than it did here: the priest is the absolute master of this people, which is at his order like a gang of serfs. The history of their conversion from brandy is an even more brilliant example of this spiritual bondage than that told by Father Matthew of the Irish. The Upper Silesian is addicted in the extreme to the use of spirits. In the evenings, when the people are returning from the town markets, the highways were literally strewn with drunks, men and women alike. Even the child at its mother's breast was given brandy. In the course of a single year Father Stephan (Brzozowski) succeeded in converting all these tipplers in one stroke. Of course all means were used, legal and illegal, spiritual and temporal; canonical penalties and corporal punishment were used with impunity; but the conversion succeeded in the end, and the vow was generally taken and kept (compare the essay of Prof. Kuh in the *Med. Vereinszeitung* of 1848, No.8). How great trust was placed in the clergy has also become evident in the present epidemic. Many trustworthy persons have assured me that the people had been facing death with a certain confidence, as death would relieve them of this miserable life and assure them of compensation by heavenly joys. When someone became ill he did not look to the physician but to the priest. For if the holy sacraments would not help, what could these miserable medicines achieve? This state of mind the administrative hierarchy well knew how to use at the beginning of the epidemic, and, according to general opinion in the districts, the government medical councilor in Oppeln, Mr. Lorinser, did everything calculated to encourage these tendencies. It is difficult to decide whether this was done intentionally, or because of a reprehensible ignorance of local conditions. But one of the two must have been the case. Or how could it otherwise be explained that at a time when every educated person in these districts publicly and urgently clamored for physicians, the official line was that they were not needed and that the people did not want them? (Compare the essay by Prof. Kuh in the

Wochenschrift für die ges. Heilkunde, 1848, No. 10.) Almost nothing was done on the part of the government. In its stead the monk-hospitallers of Breslau and Pilchowitz turned up under their spiritual leader Dr. Künzer. The press was full of praise, and wherever they went they brought help and gifts in the name of mother church. In spite of the admirable zeal of these men, their effect was quite limited. Two of them were surgeons; the others had entered spiritual orders from different professions, such as the military, etc., and were totally incapable of medical judgment. Since they moved from village to village, weeks often passed before they came back to the first village; often they never returned, and their appearance had then been that of an angel of salvation. Starting from the moment when the Breslau Committee, which had received gifts from all over Germany, began organized activity in the districts, when its delegates, Prince Biron of Courland and Prof. Kuh, themselves visited the districts, when physicians were commandeered from all parts of the country and local committees were established, all support had to be withdrawn from these religious institutions. In consequence the activity of the spiritual brothers gradually came to rest and the confidence of the people in the physicians grew. Only now did Mr. Lorinser also dispatch the physicians who had placed themselves at his disposal. True enough, he had himself previously visited the districts, though in a roundabout way which unfortunately prevented him from meeting the Minister, Count Stolberg, who had been sent by the King, privy councilor Barez, etc. But when he gave a talk about the measures to be taken against the epidemic at the meeting of physicians at Nicolai, Professor Kuh could reply that the Breslau Committee had already taken all these measures. When Mr. Lorinser then came to Sohrau, and the provisional director of the city council, Mr. von Woisky, urgently recommended the transfer of the churchyard which was almost located in the city and contained more than 600 in part only superficially buried cadavers in an area of some 40 square feet, he declared this to be quite unnecessary, in particular as the church, which

would be interested in keeping the churchyard in such a proximity, would certainly be against it. Be it clear that I do not wish to accuse individual members of the clergy of having made a cruel and inhuman use of their spiritual powers, but no one can deny that so powerful a hierarchy, which the people obeyed so blindly, could have fostered a certain mental development in the people, had it so wished. But it lies in the interest of mother church to keep the people bigoted, stupid and dependent. Upper Silesia is only a new example in the long series of old ones, among which Spain, Mexico and Ireland head the list. As for the local Catholic clergy, it differed greatly from the Evangelical clergy in its personal willingness and zeal to make great sacrifices, up to bodily immolation, in the interests of the hungry and the ill, while among the Protestants, Pastor Wolf in Rybnik for instance, refused to visit his parishioners abed with typhus in Sohrau to provide spiritual consolation. However, all this self-sacrifice, the personal merit of which I readily recognize and praise, cannot atone for the immense guilt of having allowed a great nation to sink so deeply into ignorance, superstition and sloth.

The drawbacks of bureaucracy, which Prussia had felt so deeply in other respects were relatively less prominent in Upper Silesia. Where it is to be blamed for this disaster, its faults were rather negative ones. It is the curse of humanity that it learns to tolerate even the most horrible situations by habituation, that it forgets the most shameful happenings in the daily shame of events, and that it can hardly understand when individuals aim to destroy this infamy. The educated people in those districts and with them the authorities, whose willingness and activity I moreover readily admit, became so dulled by the daily sight of this sunken nation, they became so indifferent in regard to their sufferings that, when at last help had been promised and tendered from all sides, there arose a general complaint that the people would be *spoiled*. When those who had nothing, absolutely nothing, to eat were allotted one pound of flour daily, it was feared that they would be spoiled! Can one imagine something more frightful than

the idea that somebody would be spoiled by a small handout of flour, mere flour alone, and that others would fear such a thing? This habituation to misery, this hardening of feeling toward the sufferings of others is so general in the districts, that I would be the last to attack the local authorities because they did not attend to the dispatch of their partly quite serious and urgent reports with greater urgency and determination. What Prussian civil servant would not be silenced when always getting negative replies and regular refusals from Oppeln, from Breslau, from Berlin? But the people have overthrown the Ministry of Bodelschwingh, chief president, von Wedell had to leave Breslau in cowardly and ignominious flight, and if the government at Oppeln still stands, this is due only to its unimportance and to Upper Silesian nonchalance. District president von Durant sent repeated direct requests from Rybnik to the Minister, which is strictly against protocol (!), urgently pointing out the imminent emergency in the autumn of 1847. With what results? The district offices, which were already burdened with debts a year ago, were told to look out for themselves. When two delegates of the Oppeln government happened to meet in Rybnik in the course of their official duties one of them had been charged with stimulating private charity for combating the famine, while the other was charged with raising the rates of taxation. For in the first meeting of the general provincial diet, it had been proposed for the purpose of a fairer distribution of taxes that the rates should be raised for the higher taxation groups and be reduced for the lower groups. I was told that the government thereupon was instructed to implement this policy, but with the limitation of maintaining the lower rates as they were. Thus, even though the authorities committed many blunders up to the last, the main reproach it must bear is that they did nothing at the proper time and that they initiated measures that were quite insufficient and only when it was much too late for many. I have occasionally heard stories of the executive levying of taxes that put to shame even the infamous scenes reported from Ireland. However, upon assiduous inquiry, I have become

convinced that such cases occurred only exceptionally. Want was greatest in the royal domains in the districts of Rybnik, and, as our legislation gives the functionaries of these domains the greatest direct authority, the conditions in them were therefore the worst for the people too. Admittedly, it would have been a very difficult enterprise to raise from its stagnation a people neglected and oppressed by the hierarchy for centuries. The means and efforts applied in such an undertaking would have had to be grandiose, but success would then have offered correspondingly great satisfaction. Men who know the Upper Silesians very well and are able to evaluate their capacity for development, such as Professors Göppert and Purkinje in Breslau, chief mining councilor von Carnall, etc., authoritatively attest their cultural potential. But as the schools, communications, agriculture, and industrial activities were in disarray, no development from within could be expected. This country's wealth in mining products, such as bituminous coal, clay iron stone, calamine and gypsum, is so great that the transport alone of these products, locally known under the name of "vecturance," supports a large part of the population. Of course, the individual carter, with his small and weak horses and small carts can move only limited freight, and his earnings are but a pittance. Nevertheless, many people thus make a living. Would it not have been the duty of the government to improve the roads? In spite of the urgency of such improvement nothing has been done, and when I was in Upper Silesia the roads formed nothing but a continuous morass. Formerly the industrial activities in the towns, in particular the fabrication of linen goods and cloth, used to be rather important; In Sohrau alone there existed 150 weavers looms for linen, supporting 600 persons. These products were exclusively sold in the free state of Cracow. With the incorporation of this territory into the Austrian empire, this industry abruptly stopped. Simultaneously another source of livelihood was cut off. The lakes and ponds in the Pless and Rybnik districts are extraordinarily rich in fish. Enormous quantities of these fish were transported

to Warsaw by way of the Vistula so that, some owners of fish ponds derived from them a yearly income of up to 3000 thalers. When Cracow became Austrian, the high customs duties assigned to the fish killed this trade. These short hints will suffice to show how the government has rendered impossible the mental and material development of these people through the most preposterous neglect of this country, and by its equally dilatory internal and external politics. Finally, we must consider the relationships existing between the rural population and the great landed proprietors, which mainly centers on the matter of robotage [villeinage]. I can deal with the subject briefly, as it has been discussed repeatedly and with candor in the press. In Upper Silesia, more than in any other part of the eastern provinces of Prussia, we have an aristocracy with enormous holdings of land, which more than in any other part of Prussia stays away from its properties, after the example of the Irish gentry. Many of them dissipate huge sums in the various capitals (Breslau, Vienna, Berlin, etc.) or outside of Germany, moneys that are constantly withdrawn from the country. But how can prosperity be developed in a land, which always gives up the yield of its activities to other regions abroad? A part of the rural population has been liberated from their most pressing burdens towards their landlords by past legislation, and their material position is somewhat improved. But until very recently the greater part of the common people, in particular the large number of so-called cottagers, still had to endure all the misfortunes of the robot. These unfortunate people had to render compulsory service to the landlord proprietors as house servants for 5-6 days a week, and there barely remained one day in which they could take care of their small field and their family (compare the Breslauer Zeitung, 1848, No. 59, supplement 1). What could they achieve in one day in the week, in 52 days a year? What they achieved per week, per year, was barely sufficient to satisfy the primary necessities of life in that week or that year. And what can one expect of people who have been fighting for their existence in such abject misery for centuries and have never seen a time

when the rewards of their labor were their own, who never knew the joys of possession, never had the satisfaction of deserved earnings, who had never received wages for the onerous work they did, but who always saw the fruit of their labors falling into the pockets of the landowners? It is quite natural that such an unhappy nation has relinquished the very idea of permanent property, and that they learned not to care for the morrow, but only for the day. After so many days of work spent only for the benefit of others, what was more natural than to spend the one day that was their own for resting in idleness and for slumbering on their beloved oven? What else was more natural than that the work for the landlords, which brought in nothing, was done carelessly, and that energetic activity could be inspired only by special incitements? Such a stimulation was furnished in particular by the brandy to which they were passionately devoted, and which was a source of oblivion and of momentary joyous elevation. All reports by local inhabitants agree that when, with the vow of abstinence, this consolation was lost, the indolence of the people increased and all joy disappeared. When finally, 2 years ago, new legislation brought about exemption from bond services by the cession of fields and the like to the landowners, when this nation, downtrodden and subjugated for centuries, or rather since the beginning of its emergence in history, at last saw the dawning of its personal liberty, could one expect such a people to greet this day as would a strong man who, being imprisoned by an inimical power, and in full consciousness of his liberty, sees the doors of his prison burst open? What else could a nation used to spending its free time in sluggishness do than to devote its days that now were all free to laziness, idleness and sloth? No one was there to act as their friend, their teacher, or their guardian and to support, instruct, and guide them in their first steps on the new road, no one to show them the significance of liberty and independence, no one to teach them that wealth and education are the daughters of work and the mother of well-being. Previously it had been in the interest of the landlords, who needed the hands

they exploited, to whom the strength of these hands represented the equivalent of capital, to prevent the total pauperization and starvation of the owners of these hands. But with the abolition of the bond service of manual labor, there was no further material incentive for taking measures against impoverishment and hunger. Now everyone was to look out for himself! For the fraternity of power presupposes common interests! Returning to our earlier question, i.e., whether the filth and sloth of the Upper Silesian are Polish national traits: in the light of the above information, which compares well with the testimony of Johannes Ronge, a man who has lived in Upper Silesia for a long time (*Deutscher Zuschauer*, 1848, No. 10), we can only reply in the negative. It might be possible that the burden of circumstances has produced similar sad results in other members of this unlucky nation; this I do not know and cannot judge. But my own observations have convinced me, and in my view justifiably so, that the Upper Silesians would not be found lacking in either industry or intelligence if the trouble were taken to awaken their dormant qualities. Corporally and spiritually weak, the people need guidance, a sort of tutelary control. Wealth, education and liberty depend on one another and thus, conversely, do hunger, ignorance and servitude, as Struve has very correctly pointed out (in the *Deutscher Zuschauer*). If these people were shown, by example and through their own experience, how wealth arises from work, if they were taught to develop needs by allowing them to enjoy earthly and spiritual goods, if one allowed them to take part in the culture, in the great movement of the nations, they would not fail to emerge from their condition of dependency, disinterest and indolence in a short time and thus to furnish a further example of the powers and elevation of the human intellect. The sudden conversion of so large a population from the worst kind of intemperance to the most complete abstinence from spirits, has shown, as Kuh has so well expressed it, "that the original nobility of the human nature is never completely obscured." This victory, now, was a deprivation, an abstention

from the last source of pleasure that had remained available to this afflicted people. How great a promise, then, does such a success hold when measured against the possibility of fighting for true values, for positive means of enjoyment, for the real treasures of mankind! Would it not be an impressive sight indeed if this abject population which has carried the heaviest of shackles for centuries, rose up for the first time like a young giant lifting up his head and stretching his powerful limbs! Surely it would be worth the while of a benevolent and clear-sighted politician to attempt the solution of such a problem. Medicine, as a social science, as the science of human beings, has the obligation to raise such problems and to attempt their theoretical solution; the politician, the practical anthropologist, must find the means for their actual solution. We shall return later to this point.

Before we now deal with the epidemic, there remain some observations about the housing and nutrition of the Upper Silesian.

As regards the houses, in the countryside as well as on the outskirts of the cities they correspond to the low cultural conditions of the people. Without exception they are blockhouses, the walls consisting of beams placed one upon the other and smeared with clay on the inside and sometimes also on the outside; the roofs are made of straw. Chimney stacks are found nearly everywhere; the windows are mostly small and are only rarely made to open. Only the wealthy have separate stables and barns. The house usually comprises living quarters, stable and store rooms. The living space is usually small, about 6 or 8-12 feet square, mostly 5-6 feet high; the floor is made of loam, the ceiling of boards, with the beams projecting underneath. The stove with its many accessories, takes up a great part of the place; among the accessories worthy of mention are: the so-called 'gipsy stove,' which serves for cooking, and a higher platform built of bricks, on which part of the occupants spend their leisure hours and sleep. The best part of the remaining space, if the family is prosperous enough, is taken up by a cow, or a cow with a calf. The remainder is occupied by

scanty furnishings, among which may be mentioned a hand-mill and bedsteads mostly furnished with feather cushions. There are almost never enough beds for the number of inhabitants, who in such houses commonly range between 6 and 14. The remainder of the family sleeps on top of the stove, on the benches by the stove, or on straw on the floor. The only ornaments in these rooms consist in hosts of pictures of the saints, which are well framed and usually hang in long rows above the windows. From this short description it will be easy to imagine the poverty and the shortcomings of these dwellings. The effluvia of so many people and of the cattle, the steam that rises in the atmosphere at the temperatures of 18-20°R (=22½-25°C), which are maintained during the winter months, produce a headache in those not accustomed to it within a very short time. The loam of which the floor

consists, and with which the walls are covered, is commonly so moist that fungi abundantly grow on it. I have even seen habitations into which the melting snow had penetrated, covering the floor with 1" of water, without the residents thinking of removing it; they had merely covered it with boards! Under the main bed there is, in many cases, a cellar-like pit for storing potatoes and the like, which contributes to corrupt the air.

It must be assumed that the greater parts of these conditions are of very long standing. But some of them, such as the great overcrowding of the dwellings, have greatly increased in the last few years. District magistrate Mr. Durant was kind enough to provide me with the official register for rural buildings and that for the inhabitants of the Rybnik district for the years 1834 and 1847, which clearly exposes the crowding as follows:

	Year 1834	Year 1847
1. Churches and Schools	30	76
2. State and municipal houses	100	22
3. Homesteads	5,544	6,396
4. Factories and warehouses	258	231
5. Stables, barns and sheds	3,454	4,260
Totals	9,386	10,985
Population incl. the towns	42,303	59,320

Taking only the houses serving as dwellings, there was an increase of 852 houses in a period of 13 years, while the population increased by 17,017 persons. In 1834 there were somewhat less than 7½ persons per house, in 1847 somewhat more than 9½, the increase of domiciles to that of the population showing the unfavorable ratio of 1:20. If the ratio of 1834 (1:7.5) is taken as normal, which, according to the facts mentioned, it is not, then so as to maintain this proportion the number of houses should have increased by 2,268 up to 1847, whereas it in fact only increased by 852. It is therefore clear that with every passing year hygienic conditions have become worse.

While the houses of the lower class everywhere conform to the primitive level of block houses, there are adjacent well-built stone

houses in the towns. The intermediate stage that characterizes the German towns, the combination of the beams with walls, the timber-frame buildings, are entirely absent, a sign that the population in general has never known this intermediate stage or culture, this gradual development of the requisites of social life, since the poorer part of the population has not yet reached and is still below that level, while the wealthier Germanized or immigrated part of the population has directly skipped it.

Lastly, we must discuss the location of these houses. Nearly everywhere the villages and towns are situated in valley lowlands, as in the plains of Northern Germany and elsewhere. The church occupies the highest and most favorable spot; then follow the houses of the wealthy, the city proper, or in the country, the farmsteads;

deepest down, sometimes in the middle of the pasture land, stand the hovels of the cottagers, and from the towns the suburbs extend far down into the valleys. At every flooding, whenever the waters rise, these houses in the lower locations are those most affected. As a rule, the spread of the villages and suburbs is relatively enormous. The individual houses are so far away from one another that a village of 1500 inhabitants is commonly half a mile to one mile long.

Another essential point is the food of the people. It is usually said of the Upper Silesian, and this is the common phrase of the educated classes of these districts, that they live solely on potatoes. But according to the information that I have collected, partly from the people and partly from experienced civil servants, among whom I shall mention only district magistrate Mr. von Hippel in Pless, this is not entirely accurate. Potatoes have indeed constituted the main staple since time immemorial, and the description of the quantity of potatoes that individuals are said to have consumed borders on the incredible. However two items must be mentioned besides: milk and sauerkraut. In many cases the milk and its products (butter, cheese) are marketed, but many people also drink milk; everyone has had buttermilk and the whey left after cheese making. Next to these, sauerkraut is a much sought after food. I myself have seen large barrels of it in the houses of the well-to-do. Cereals have always been cultivated in small amounts only, and bread proper has never been a staple food. When starchy materials were used it was only as an additive to other foods, or poor bread-like pastries were baked. Now and then I have found a baking oven in the houses and good, though coarse, bread, but this is in no way the rule. According to general consensus, the favorite food of the Upper Silesian consisted of a dish containing all the named ingredients, i.e., sauerkraut, buttermilk, potatoes and flour called *zur* (pronounced *jour*). Meat is eaten only very exceptionally.

To the extent that the famine spread and became more acute, nourishment grew more

scant. Potatoes were soon lacking in most households, and flour also; it did not take long before the poor were obliged to sell their cow; in short, cabbage alone remained for a while. As soon as stocks of green vegetables were exhausted, people were obliged to use surrogates such as green clover, couch-grass, diseased and rotten potatoes, etc. Many died of starvation directly; many others fell into a state of atrophy that was pitiable. Finally, the government intervened. Its help consisted in delivering flour and salt. The amount of flour provided in the Rybnik districts was one pound per day per person and in the Pless districts 1½ lbs., as the opinions of the authorities and of the local committee regarding quantity were divergent. What were these poor people to do with this flour? They had nothing else, and no money to buy any additional foodstuffs. Naturally, they fabricated dishes suited to their culinary art. Mainly they made a sort of *zur* by mixing together flour and water and adding to it some leaven or vinegar, put this on top of the stove and ate it during the following days. In the second place they prepared a sort of bread (*placzki*) by shaping the dough, after it had risen a little, into a flat form and letting it dry externally on the oven. As anybody can imagine, neither the one nor the other seemed at all edible to us. The number of those who were estimated to be in need of such help for about 6 months in the district of Rybnik alone was about 20,000, i.e., 1/3 of the total population! For it was unthinkable that this population could find within itself the means of its support. Apart from the relatively few who made a frugal living in mining and in transportation, it was not to be expected that agriculture and animal husbandry would provide adequate supplies for the population until the following autumn. Seed was lacking everywhere; the cows had mostly been sold. But even if this had not been the case, it would have made little difference, as these branches of cultivation too were in the most wretched state of neglect. Even animal husbandry furnished a special instigation to

idleness, as everyone took care of his own animal and there were therefore almost as many herdsmen as there were animals.

I felt that these observations had to precede the main report so as to make sure of full subsequent understanding. From the above, the reader will have convinced himself that the condition of the Upper Silesian population was so horribly wretched, that if comment had been restricted to a few words only, every outsider would be sure to consider such an account as exaggerated. Yet conditions must be known, if the present epidemic is to be correctly evaluated.

CHAPTER 2. THE ENDEMIC DISEASES AND THE DEVELOPMENT OF THE EPIDEMIC

From the unanimous reports of all local physicians, typhous affections, malaria and the dysenteries are the endemic diseases without which no year passes. As to malaria, it is so common that hardly anyone can be found who has not suffered from it. It occurs at all seasons of the year, being especially common after floods in villages of low location. The common forms are of the tertian, more rarely of the quartan type; the latter commonly ends with dropsy; both frequently occur in combination with various complications (gastric, nervous, etc.). The usual treatment applied by the people themselves consists in the excessive consumption of buttermilk, after which, as I have been universally assured, the fever soon disappears. But nearly all persons whom I could examine more thoroughly had retained an enlarged spleen and a pale cachectic appearance.

The dysenteries usually appear in late summer, occur in large numbers and are frequently of the so-called inflammatory character, so that they are often fatal.

Information on the typhous affections are divergent. The majority of local physicians assert decidedly that it is not the usual abdominal ileo-typhoid (*fièvre typhoïde*); the abdominal symptoms were hardly noticeable and those in the head also reached but feeble

intensity. Autopsies were never made in the districts, so that a diagnosis from the anatomical standpoint was not possible. Dr. Lemonius, formerly active in Königshütte, and now in Beuthen (the district of Beuthen adjoins that of Pless in the east) wrote to me: "In the few autopsies that I did perform, I saw the complete typhous process in a single case only, while in the others nothing more than a great flaccidity of the intestine, in particular great bloodlessness, as well as limpness of the abdominal organs in general." Dr. Polkow in Ratibor told me that in the past up to November 1847 he had seen the usual typhus with intestinal ulcerations; later autopsies, however, had shown the intestinal mucous membranes to be entirely free. Mr. Haber, a very skillful surgeon in Rybnik, claims to have seen the same form of typhus in Upper Silesian soldiers at Neisse, while in Rybnik autopsy had revealed ulcerations. Unfortunately all these reports are not sufficiently definite for generally valid conclusions. In the future, science will yet require from the Upper Silesian physicians further essential clarification and more exact observations.

I could not even determine a generally exact symptomatology for endemic typhus. Only Mr. Haber and Mr. Willim, both from Pilchowitz, and Dr. Raschkow from Loslau, claimed to have seen a measles-like exanthema, while all other physicians denied its presence. Violent fever with extreme muscular debility and frequent bronchial catarrh were said to be common symptoms; diarrheas and meteorism were present very rarely; exaltation of the nerves, especially of cerebral activity, only exceptionally. These typhuses occur during the whole year, but with special frequency in spring and autumn. According to Mr. Haber's experience, they almost fail to occur in humid years during which there was much rain, while they usually break out very rapidly in families that live in new houses in which the loam on the walls and floors is not yet dry. According to Mr. Kunze, the district physician, the typhuses sometimes intensify to epidemic form, as, for

example, in Rybnik 15 years ago. Among the exanthemic diseases, particularly measles is very frequent and widespread.

Of special interest among the truly endemic affections is trichoma (*plica polonica*) which frequently occurs in the Vistula lowlands, but also further up on the right bank of the Oder. I have myself seen the choicest cases of it in Lonkau and Sohrau.

Despite a diet based on potatoes, and poor housing, scrofula and tuberculosis are very rare. Although I have seen an unusually large number of patients from the poorer classes in cities and villages, in private homes, and in hospitals, I have never seen a single case of phthisis. The information given by physicians is in complete agreement with this. Exact statistical data for either incidence or mortality are not available. In children, much enlarged abdomens are not rare; however, they never are atrophic, nor are enlarged glands ever seen (I naturally do not speak of atrophic children with ascites, which I have also seen).

Reviewing these data, which, however incomplete they may be, can be considered such as they are as certain, I feel that some obvious reflections on the relation of the above mentioned diseases to one another and to local conditions might be added.

Apart from trichoma, the black history of which we must pass over, the endemic accessory diseases of this same soil are malaria, typhuses and dysentery, frequently side by side, mostly, however, occurring in such a manner that one or the other predominates at certain times; scrofulous and tuberculous diseases are equally rare. This simple listing will certainly remind everybody of the "law of exclusivity" between malaria and tuberculosis, mainly advanced by the natural history school, and recently also by the young Vienna school, which has such great practical importance. Without going into the details of the question, I think I must say this much, so as to preclude premature conclusions from my data. As is well known (although many appear not to know it) exact examinations on the

correctness of this law have so far not produced very convincing results. In Holland and Belgium (the Rhine Delta of the natural historians), in France and in Brazil, malaria and tuberculosis are not infrequently found side by side in families. In Amsterdam, through the kindness of my friend Dr. Schneevogt, in the Buiten-Gasthuys directed by him, I have had opportunity to see that persons with overt tuberculosis had also contracted malaria, which had no effect on the course of the former disease. On the other hand, it appeared that cases of tuberculosis did develop during a terrible epidemic outbreak of malaria (1846-47) in the very nests of fever infection. In Rochefort, in one of the most severe malarial foci, A Lefèvre (*Gaz. des hôp.* 1845, Sept., No. 103) found 105 cases of pulmonary tuberculosis and 27 cases of tuberculosis in other organs in 605 autopsies. Apart from Boudin and others, to whom I shall later return, only the Italian physicians confirmed the exclusion principle. Particularly at the congress of Italian scholars in 1846 the problem was frequently vented. Buffalini finally came to the conclusion that data to the contrary could only have come from countries where intermittent fever was very benign, while wherever malaria developed severely, had a long duration and easily became pernicious, antagonism was always observed. The Dutch example, however, contradicts this theory. But we must ask ourselves whether there is no intermediate solution to these conflicting data, which after all, were obtained from observation. It seems to me that this is indeed possible by exact and detailed observation of the relationships. When the army lists of hospitalized cases and deaths are taken as a starting point, as in Boudin's cases, or statistical data on large rural districts, as has been done in particular by the Italian doctors in regard to the Tuscan province Grosseto, it will not be difficult to confirm the exclusion principle. For easily understandable reasons, tuberculosis does not belong to the diseases affecting armies, and it never originates under the natural conditions

of the countryside. But going into the cities and particularly into the large cities, the true hotbeds of tuberculosis, the exclusion principle will very frequently be found to be false. I said false because natural laws, as I have previously pointed out, have no exceptions; if an apparent exception is found to a natural law, one is mistaken in every case, since in that case it is not the exception which is seemingly false but the law. In the spring and at the beginning of the summer of 1847 we had in Berlin, instead of the typhus epidemic which usually occurs at this season, an extremely extensive epidemic of malaria. The consumptives who were hospitalized in large numbers at the Charité were not spared, and I quite frequently had the opportunity to see, in autopsies, the characteristic splenic tumors of malaria beside fresh tuberculosis of the lung. All observations so far gathered do, in my opinion, justify the conclusion that there exist malaria generating regions and conditions which cause tuberculosis, and that sometimes such conditions occur in those regions and sometimes they do not.

Boudin (*Études de Géologie méd. sur la phthisie pulmonaire et la fièvre typhoïde, 1845*) has even gone beyond the above mentioned exclusion principle and, on the basis of statistical tables, has established the principle that phthisis and typhous afflictions are relatively rare in areas where the primary cause of endemic malaria deeply modifies the human organism, while in areas where these diseases occur frequently locally acquired malaria is rare and mild; after a long residence in definitely swampy countries people were immune to typhus (*compare Ann. d'hygiène publ. et de méd lég., 1845, Janv.*). Thus that which was imputed only to malaria was now extended to typhus also. However, the experience of the Upper Silesian physicians directly contradicts this view. Boudin, though he does mainly speak of ileo-typhoid (*fièvre typhoïde*), also includes the English 'typhus fever' in his argument, so that he cannot therefore exclude the Upper Silesian typhus. I would like to especially mention that

not only have I repeatedly heard from physicians in Holland about the transition of the intermittent fevers into the typhous fevers (*febris intermittens* into *continua remittens*), but it has also generally been observed in Upper Silesia that previous malaria predisposes to typhus, which would be exactly the opposite of Boudin's opinion. Lastly, I must point out that the observations of Mr. Haber, according to which typhuses are rare in humid years, also contradict an observation of Boudin's, i.e., that desiccation of swampy soil or its transformation to a pool will eradicate malaria and instead further phthisis or typhus.

Having referred the origin of the malarias, dysenteries and typhous fevers to the endemic conditions, we must raise the question of what special causes must be assumed for each of these diseases, of which causal relations these three diseases are thought to have with each other. There is a general consensus of opinion that endemic⁶ malaria is derived from a certain miasma, a marsh-miasma; the latter, more exactly, is thought to consist of certain products of decaying vegetation. In the dysenteries, spoiled, particularly vegetable, substances have also been incriminated as the source of the disease, but in such a manner that, whereas we must postulate for malaria a volatile miasma capable of penetrating through the respiratory mucous membranes, the dysenteric miasma would be a permanent one which would gain access to the body by beverages or food.⁷ As for the typhous affections, everyone knows how often it was attempted to explain their origin by the intake of substances derived from rotting animal products created by the crowding of many people in closed rooms, by the exhalations from animal excrements or by direct putrefaction of the meat of different animals. If we take these views, which I do not intend to discuss here in detail, and apply them to Upper Silesian conditions, i.e., see whether there do exist factors in the above mentioned conditions of the country and its inhabitants which would support the possibility of such decompositions

and the effect of their products on the human body, we find that this is in fact the case. According to recent views in chemistry, rotting requires the presence of an exciting and an excitable substance; its occurrence depends on the degree of humidity and temperature. Rotting of vegetable substances consequently takes place wherever dead plant debris is found in humid soil; decomposition of animal products develops the more easily and intensively the more animal substance is accumulated in a moist and warm room, and the more animal creatures remain together in such a room for a long time. It is easily seen that such conditions are those commonly present in Upper Silesia. The soil used for cultivation is almost exclusively very moist because of its impermeability, coupled with an abundance of rain. The valleys, consisting only of meadows and swamps, are frequently exposed to flooding. The houses are small and humid, and overcrowded with people and animals; the people stay indoors a great deal, the temperature in the rooms always being high (even in summer the air in these low rooms must be very hot because of the presence of the cooking stove and the impossibility of opening the windows properly); finally, the people are unclean and eat foods which undergo incomplete fermentation, e.g. *zur*. Accordingly, we would have to consider the great moisture of the soil as an essential factor for malaria; and, for the typhuses, the housing conditions and the food. As regards dysentery, we cannot deny that the ingestion of unripe and indigestible vegetable substances frequently causes sporadic cases in summer; we must, however, search for its general sources, as the enormous endemic incidence sometimes attained by dysentery cannot be satisfactorily explained thereby. In this connection I would like to point out in particular that the wells from which the people take their water are frequently superficial and situated in the highest layers of the swampy ground in the low grassy valleys, so that the admixture of decomposing vegetable products from the latter can take place very easily.

If these views on the endemic diseases of Upper Silesia are correct, they would support the opinion defended by Brachet, i.e. that the malarial miasma is formed by the decomposition of vegetable substances, whereas that of the typhous affections is of animal origin (compare Bouillaud, *Traité des fièvres dites essentielles*, 1826, p. 351). After observing the prevailing epidemic, we shall again discuss the degree of probability of the opinion presented. But I am saying here that a definitive opinion as to the questions raised will only be attained by long detailed studies of local conditions. I have not been able to conduct such studies, as this would have involved staying in Upper Silesia for years. But it will be one of the noblest tasks of our colleagues in Upper Silesia, and one worthy of the social significance of medicine, to develop the points which would permit the formulation of legislation by providing definite recommendations on how to deal with the factors endangering the health of the inhabitants, in so far as this is possible under the conditions of our society, and in view of the natural conditions of the country.

The year 1844, in which the apostle of temperance, Stephan Brzozowski, a Capuchin friar who had escaped from Russian Poland, exacted the vow of abstinence from spirits in the whole of Upper Silesia, was the last to yield a good harvest. In 1845 already there was a poor harvest, especially of potatoes, so that the population later proposed the hypothesis that God had wanted to punish them for despising his gift. Consequently, some have again begun to drink spirits; the Catholic clergy released others from the vow, so that they should not drift to German catholicism, whose cradle, as is well known, stood in this very area. In 1846, the year in which forced labor began to be abolished, the harvest failed to such an extent that public assistance had to be given to the poor and that the inhabitants of the district had to incur a debt of 30,000 thalers. At that time the hand-outs of flour first started. Month after month, as the stocks of food further decreased, want increased;

and in the summer of 1847 many of the surrogates of which I have already spoken were consumed (clover, grass, fungi, roots, etc.). Meanwhile, deprivation had also overtaken the poorer artisans in the cities, as the notorious cession of Cracow had taken place, and the rural population, which was growing more impoverished by the day, had less and less money to spend in the towns (compare the excellent description by Kuh in the *Med. Ztg.*, No.8). Everyone remembers the high temperatures of 1847. Such a temperature, however, as we have already seen, is good for Upper Silesia: dry years bring large harvests. The potatoes did indeed seem to develop extraordinarily well; they had produced luxuriant foliage. Expectations were high. But very soon the situation changed; heavy rains fell, with ensuing inundations; the potatoes became diseased and the harvest failed totally. Mr. von Elsner in Great-Strehlitz, in the northern part of Upper Silesia, has determined the mean yearly rainfall for his place of residence as 25 Paris inches, from 14 years of observations. This approximately corresponds to the average rainfall of Heidelberg. From the 10th of June to the 16th of September, 1848, he measured 19.75 Paris inches, i.e., somewhat more than the yearly average for Berlin (19.6").

During the first part of summer there occurred an epidemic outbreak of dysentery which, in distribution and violence, matched the severest of epidemics. Definite statistical information is not available, as the number of the patients cannot be even approximately estimated. But mortality can be assayed if we compare the absolute numbers of deaths in that year with past figures. The number of deaths in the district of Pless in 1847 exceeds that of normal years (about 2000) by about 5000, a figure representing nearly 10% of the whole population. The epidemic of dysentery also affected the wealthy classes. At the same time there was an epidemic outbreak of anthrax among ruminants.

After this the typhus epidemic gradually began to develop. According to various reports it would seem that typhus was present in the adjacent Austrian provinces (Galicia, Austrian Silesia, Moravia and Bohemia) before it appeared in the Prussian districts. But since the Austrian press was not able to report anything about it we altogether lack exact information. It seems, however, as if the epidemic had caused extraordinary devastation particularly in Galicia. In the province of Wadowicz, which borders on the district of Pless, the number of deaths is concurrently given as from 60,000 to 80,000 by various sources. The district prefect (the same, who placed a prize of 10 gold florins on the heads of Polish agents) is known to have stated that this was of no import! The epidemic first spread in the Pless district, where it already began in July; in the Rybnik and Ratibor districts it did not reach its greatest development before September-October; in Loslau and Rybnik itself it was not before December and January that the full intensity of the epidemic was felt. During January, February and March the epidemic gradually raised its head in 7 further districts (Gleiwitz, Beuthen, Lublinitz, Great Strehlitz, Rosenberg, Kosel, Leobschütz), so that it afflicted more than 2/3 of Upper Silesia.

The famine, naturally, had rapidly increased to enormous proportions after the complete failure of the harvest. District magistrate, Mr. von Durant, sent a report on the condition of the crop and the threatening famine to the Minister of the Interior, Mr. von Bodelschwingh, on August 3 (*Schles. Ztg.*, 1848, No. 44, Suppl. 2). Nothing was done, however, because these reports were taken as timorous souls, exaggerations. Did not this same minister, when accompanying the king two years ago on his journey to Upper Silesia, in which they never left the railway track and the palaces of the great landowners, shruggingly explain to the well-informed and well-meaning local dignitaries in Ratibor, Gleiwitz, and other cities, who described the prevailing state of distress, that

things were not as bad as they chose to portray them; he knew better, the government was well-informed! When he finally did recognize that the situation was desperate, help was so long delayed on account of the interruption of water traffic in winter and of the time-consuming bureaucratic correspondence that many people (how many no one knows) actually starved to death. The Breslau Committee which first had to beg for money from all over Germany was on the spot earlier than was the Government!⁸

Endnotes

1. The reader, perceiving a certain lack of precision in the use of the term "typhus" in the text should bear in mind that, in the middle of the 19th century, particularly in Germany, typhus included a variety of fevers thought to affect the nervous system. Virchow himself believed the "typhuses," now differentiated mainly into "typhoid fever" and "typhus fever," to be variants of essentially the same affection and frequently (though not always) attempted to distinguish between the "compound," abdominal form or ileotyphus (= typhoid fever) and the "simple," exanthematous or petechial (spotted) form (= typhus fever), to which the Upper Silesian epidemic pertained. Remittent (recurrent) fevers were also included. For further details on the history and evolution of the concept of typhus also compare with later chapters (XI, XII) (Ed.).
2. In my description I mainly follow the almanac for the Upper Silesian Miner for the fiscal year 1845 (second volume), edited by R. v. Carnall, where the alluvial mountains of Upper Silesia are discussed on p. 27.
3. The opinion of Carnall seems to be supported in particular by the circumstance that the surface of the soil at the higher points is commonly formed by clay and at the lower parts by fine gravel.
4. On the roads there readily form somewhat unsafe

spots, in that the toughly adhesive coat of clay is carried by an utterly softened substrate and markedly bends downward under the slightest of loads. These spots are aptly called "leather bridges."

5. An old (barbarian) writer tells us of the Slavs: "Sunt enim Slavi proceri omnes ac robustissimi; colorem nec summe candidum habet cutis nec flavum coma, neque is plane in nigram deficit, ac subrufus est. (Procop. de bello Gothico III. c. 4)"
6. I wish to expressly state that, in the following, I am limiting the discussion to endemic malaria, dysentery and typhous afflictions, and that I would not automatically concede that these considerations be directly transposed to the etiology of all sporadic cases.
7. I cannot refrain from quoting a case of Boudin's (Gaz. méd., 1845, Oct., No. 40): In a quarter of Versailles that receives its water by piping from the Trou-Salé, a severe endemic dysentery broke out, with periodical paroxysms that did not befall the inhabitant of other quarters, or those drinking wine and water from the river Seine. Examination revealed that fishermen in the Trou-Salé had agitated the mud of the pond with their nets. This was forbidden at once, Seine water was let into the pond and the dysentery stopped.
8. Just as I was about to send this manuscript to the printers I received a monograph written with great knowledge and in the finest spirits, entitled The Hunger Pest in upper Silesia, an Illustration of Upper Silesian and Prussian conditions, Mannheim, 1984. Much as I regret not to have been able to consider in my report many of the facts therein reported, I am on the other hand greatly pleased to find a confirmation of its accuracy in the agreement between that paper and my report. Comparing the two, I note that the most I could be reproached with would be to have been too mild in my judgments. In order to correct this fault I most heartily recommend this paper to the reader.

