

THE BIRTH OF SOCIAL MEDICINE*

In my first lecture, I tried to demonstrate that the basic problem did not lie in the opposition of antimedicine to medicine but, rather, in the development of the medical system and the model followed for the "take-off" in medicine and sanitation that occurred in the West from the eighteenth century onward. I emphasized three points that I consider important.

First: Biohistory—that is, the effect of medical intervention at the biological level, the imprint left on human history, one may assume, by the strong medical intervention that began in the eighteenth century. It is clear that humanity did not remain immune to medicalization. This points to a first field of study that has not really been cultivated yet, though it is well marked out.

We know that various infectious diseases disappeared from the West even before the introduction of the twentieth century's great chemical therapy. The plague—or the set of diseases given that name by chroniclers, historians, and doctors—faded away in the course of the eighteenth and nineteenth centuries, without our really knowing either the reasons for, or the mechanisms of, that phenomenon, which deserves to be studied.

Another notorious case, that of tuberculosis: compared with 700 patients who died of tuberculosis in 1812, only 350 suffered the same fate in 1882, when Koch discovered the bacillus that was to make him famous; and when chemical therapy was introduced in 1945, the number had shrunk to 50. How and for what reason did

this retreat of the disease come about? What were the mechanisms that intervened at the level of biohistory? There is no doubt that the change of socio-economic conditions, the organism's phenomena of adaptation and resistance, the weakening of the bacillus itself, as well as the measures of hygiene and isolation played an important role. Knowledge concerning this subject is far from complete, but it would be interesting to study the evolution of relations between humanity, the bacillary or viral field, and the interventions of hygiene, medicine, and the different therapeutic techniques.

In France a group of historians—including Emmanuel Le Roy Ladurie and Jean-Pierre Peter—has begun to analyze these phenomena. Using conscription statistics from the nineteenth century, they have examined certain somatic developments of the human species.

Second: Medicalization—that is, the fact that starting in the eighteenth-century human existence, human behavior, and the human body were brought into an increasingly dense and important network of medicalization that allowed fewer and fewer things to escape.

Medical research, more and more penetrating and meticulous, and the development of health institutions would also merit being studied. That is what we are trying to do at the Collège de France. Some of us are studying the growth of hospitalization and its mechanisms from the eighteenth century to the beginning of the nineteenth century, while others are focusing on hospitals and are planning to carry out a study of the habitat and all that surrounds it: the roads system, transport routes, and mass infrastructure [*équipements collectifs*] that ensure the functioning of everyday life, especially in urban environments.

Third: The economy of health—that is, the integration and improvement of health, health services, and health consumption in the economic development of privileged societies. This a difficult and complex problem whose antecedents are not very well known. In France, there exists a group devoting itself to this task, the Centre d'Études et de Recherches du Bien-être (CEREBRE), which includes Alain Letourmy, Serge Karenty, and Charles Dupuy. It is mainly studying the problems of health consumption over the last thirty years.

THE HISTORY OF MEDICALIZATION

Given that I am mainly concerned with retracing the history of medicalization, I will proceed by analyzing some of the aspects of the medicalization of societies and the population starting in the nineteenth century, taking the French example as my reference since I am more familiar with it. Concretely, I will refer to the birth of social medicine.

It is often remarked that certain criticisms of current medical practice hold that ancient—Greek and Egyptian—medicine or the forms of medicine of primitive societies are social, collective medicines that are not centered on the individual. My ignorance in ethnology and Egyptology prevents me from having an opinion about the issue; but from what I know of Greek history, the idea leaves me puzzled and I don't see how Greek medicine can be characterized as collective or social.

But these are not important problems. The question is whether the modern—that is, scientific—medicine born at the end of the eighteenth century between Giambattista Morgagni and Xavier Bichat, with the introduction of pathological anatomy, is or is not individual. Can we affirm, as some people do, that modern medicine is individual because it has worked its way into market relations? That modern medicine, being linked to a capitalist economy, is an individual or individualistic medicine amenable only to the market relation joining the doctor to the patient, and that it is impervious to the global, collective dimension of society?

One could show that this is not the case. Modern medicine is a social medicine whose basis is a certain technology of the social body; medicine is a social practice, and only one of its aspects is individualistic and valorizes the relations between the doctor and the patient.

In this connection, I would like to refer you to the work of Varn L. Bullough, *The Development of Medicine as a Profession: The Contribution of the Medieval University to Modern Medicine*,² in which the individualistic character of medieval medicine becomes evident while the collective dimension of medical activity is shown to be extremely inconspicuous and limited.

What I maintain is that, with capitalism, we did not go from a collective medicine to a private medicine. Exactly the opposite oc-

curred: capitalism, which developed from the end of the eighteenth century to the beginning of the nineteenth century, started by socializing a first object, the body, as a factor of productive force, of labor power. Society's control over individuals was accomplished not only through consciousness or ideology but also in the body and with the body. For capitalist society, it was biopolitics, the biological, the somatic, the corporal, that mattered more than anything else. The body is a biopolitical reality; medicine is a biopolitical strategy.

How was this socialization brought about? I would like to explain my position in terms of certain generally accepted hypotheses. There is no doubt that the human body was politically and socially recognized as a labor force. Yet it seems to be characteristic of the development of social medicine, or of Western medicine itself, that medical power did not concern itself at the start with the human body as labor power. Medicine was not interested in the proletarian's body, the human body, as an instrument of labor. That was not the case before the second half of the nineteenth century, when the problem of the body, health, and the level of productive force of individuals was raised.

The three stages of the formation of social medicine could be reconstructed in this way: first, state medicine, then urban medicine, and, finally, labor force medicine.

STATE MEDICINE

"State medicine" developed primarily in Germany, at the beginning of the eighteenth century. Thinking of this specific problem, one is reminded of Marx's statement that economics was English, politics French, and philosophy German. But, as a matter of fact, it was in Germany in the seventeenth century—long before France and England—that what can be called the science of the state was formed. The concept of *Staatswissenschaft* is a product of Germany. Under the term "science of the state," we can group together two aspects that appeared in that country during that era. First, a field of study [*un savoir*] whose object was the state—not only the natural resources of a society or the living conditions of its population but also the general operation of the political machine. Research concerning the resources and the functioning of states constituted an

eighteenth-century German discipline. And second, the expression also denotes the methods by which the state produces and accumulates the knowledge that enable it to guarantee its operation.

The state, as an object of study, as an instrument and locus of acquisition of a specific body of knowledge, developed more rapidly in Germany than in France and England. It isn't easy to determine the reasons for this phenomenon, and historians have not yet given much attention to this question nor to the problem of the birth of a science of the state or of a state-oriented science in Germany. In my opinion, this is explained by the fact that Germany was converted to a unitary state only in the nineteenth century, after having been a mere juxtaposition of quasi-states, pseudo-states, small entities that fell short of "statehood." But it so happened that, as states were forming, state-centered technologies [*savoirs étatiques*] and interest in the very functioning of the state were developing. The small size of the states, their close proximity, their perpetual conflicts and confrontations, the always-unbalanced and changeable relation of force, obliged them to weigh and compare themselves against the others, to imitate their methods and try to replace force with other types of relations.

Large states like France or England, on the other hand, managed to function relatively well, equipped with powerful machines such as the army or the police. In Germany the smallness of the states made this discursive consciousness of the state-directed functioning of society necessary and possible.

There is another explanation for this evolution of the science of the state: the slow development or stagnation of the German economy in the eighteenth century, after the Thirty Years' War and the great treaties of France and Austria.

After the first burst of development in Germany during the Renaissance, a limited form of bourgeoisie appeared, a bourgeoisie whose economic advance was blocked in the seventeenth century, preventing it from finding an occupation and making a living in commerce and the nascent manufacture and industry. So it sought refuge in service to the sovereigns, forming a corps of functionaries available for the state machine the princes wanted to construct in order to alter the force relations with their neighbors.

This economically inactive bourgeoisie lined up beside sovereigns confronted with a situation of continuous struggle, and of-

fered them its men, its competence, its wealth, and so on, for the organization of states. In this way, the modern concept of the state, with its apparatus, its civil servants, its knowledge, was to develop in Germany long before in other, politically more powerful countries such as France, or economically more developed ones such as England.

The modern state appeared where there was neither political power nor economic development. It was precisely for these negative reasons that Prussia, economically less developed and politically more unstable, was that first modern state, born in the heart of Europe. While France and England clung to the old structures, Prussia became the first modern state.

The only purpose of these historical remarks on the birth, in the eighteenth century, of a science of the state and of reflection concerning the state, is to try to explain why and how state medicine was able to appear first in Germany.

At the end of the sixteenth century and the beginning of the seventeenth century, in a political, economic, and scientific climate characteristic of the epoch dominated by mercantilism, all the nations of Europe began to take an interest in the health of their populations. Mercantilism was not simply an economic theory, then, but also a political practice that aimed at regulating international monetary currents, the corresponding flows of goods, and the productive activity of the population. Mercantilist policy was based essentially on the growth of production and of the active population—the overall object being to establish commercial exchanges that would enable Europe to achieve the greatest possible monetary influence and, thereby, to finance the maintenance of armies and of the whole apparatus that endows a state with real strength in its relations with others.

With this in view, France, England, and Austria began to evaluate the active strength of their populations. Thus, birth and death rate statistics appeared in France and, in England, the great census surveys that began in the seventeenth century. But at the time, in both France and England, the only health interest shown by the state had to do with drawing up of tables of birthrate and mortality, which were true indications of the population's health and growth, without any organized intervention to raise the level of health.

In Germany, on the other hand, a medical practice developed

that was actually devoted to the improvement of public health. Frank and Daniel, for example, proposed, between 1750 and 1770, a program aimed in that direction; it was what was called for the first time a state "medical police." The concept of *Medizinischepolizei*, medical police, which appeared in 1764, implied much more than a simple mortality and birth census.

Programmed in Germany in the middle of the seventeenth century and set up at the end of that century and the beginning of the next, the medical police consisted of:

- A system of observation of sickness, based on information gathered from the hospitals and doctors of different towns and regions, and, at the state level, recording of the different epidemic and endemic phenomena that were observed.
- Another very important aspect that should be noted: the standardization of medical practice and medical knowledge. Up to that point, authority in the matter of medical education and the awarding of diplomas had been left in the hands of the university and, more particularly, the medical guild. Then there emerged the idea of a standardization of medical instruction and, more specifically, of a public supervision of training programs and the granting of degrees. Medicine and doctors were thus the first object of standardization. This concept began by being applied to the doctor before being applied to the patient. The doctor was the first standardized individual in Germany. This movement, which spread to all of Europe, should be studied by anyone interested in the history of the sciences. In Germany, the phenomenon affected doctors, but in France, for example, standardization of activities at the state level concerned the military industry at the start: the production of cannons and rifles was standardized first, in the middle of the eighteenth century, to ensure that any type of rifle could be used by any soldier, any cannon could be repaired in any repair shop, and so on. After standardizing cannons, France went on to "normalize" its professors. The first *écoles normales* designed to offer all professors the same type of training and, consequently, the same level of competence, were created in about 1775 and were institutionalized in 1790-91. France standard-

ized its cannons and its professors; Germany standardized its doctors.

- An administrative organization for overseeing the activity of doctors. In Prussia and the other states of Germany, at the level of the ministry or the central administration, a special office was assigned the task of collecting the data the doctors conveyed; observing how medical investigations were carried out; verifying which treatments were administered; describing the reactions after the appearance of an epidemic disease, and so on; and, finally, issuing directives based on these centralized data. All of this presupposed, of course, a subordination of medical practice to a higher administrative authority.
- The creation of medical officers, appointed by the government, who would take responsibility for a region. They derived their power from the authority they possessed or from the exercise of the authority conferred on them by their knowledge.

Such was the plan adopted by Prussia at the beginning of the nineteenth century, a sort of pyramid going from the district doctor responsible for a population of 6,000 to 10,000 inhabitants, to officers in charge of a much larger region whose population comprised between 35,000 and 50,000 inhabitants. This was when the doctor appeared as a health administrator.

The organization of a state medical knowledge, the standardization of the medical profession, the subordination of doctors to a general administration, and, finally, the incorporation of the different doctors into a state-controlled medical organization produced a series of completely new phenomena that characterized what could be called a "state medicine."

This state medicine, which appeared somewhat precociously, since it existed before the creation of the great scientific medicine of Morgagni and Bichat, did not have the objective of forming a labor force adapted to the needs of the industries that were then developing. It was not the workers' bodies that interested this public health administration but the bodies of individuals insofar as they combined to constitute the state. It was a matter not of labor power but of the strength of the state in those conflicts that set it against its neighbors—economic conflicts, no doubt, but also polit-

ical ones. Thus, medicine was obliged to perfect and develop that state strength, and this concern on the part of state medicine implied a certain economico-political solidarity. It would be a mistake, therefore, to try to link it to an immediate interest in obtaining a vigorous and available reserve of labor power.

The example of Germany is also important because it shows how, paradoxically, modern medicine appeared at statism's zenith. After these projects were introduced—for the most part at the end of the eighteenth century and the beginning of the nineteenth, after state medicine was established in Germany—no state ventured to propose a medicine that was as clearly bureaucratized, collectivized, and "statized." Consequently, there was no gradual transformation of an increasingly state-administered and socialized medicine. In a very different way, the great clinical medicine of the nineteenth century was immediately preceded by an extremely statized medicine. The other systems of social medicine in the eighteenth and nineteenth centuries were scaled-down variations of this state-dominated administrative model introduced in Germany in those years.

That is a first series of phenomena to which I wish to refer. It has not drawn the attention of historians of medicine, but it was very closely analyzed by George Rosen in his studies on the relationships between cameralism, mercantilism, and the concept of medical police. In 1953 he published in the *Bulletin of the History of Medicine* an article devoted to this problem, titled "Cameralism and the Concept of Medical Police."³ He also studied it later in his book, *A History of Public Health*.⁴

URBAN MEDICINE

The second form of the development of social medicine is represented by the example of France, where at the end of the eighteenth century a social medicine appeared, seemingly not based on the state structure, as in Germany, but on an entirely different phenomenon—urbanization. Social medicine developed in France in conjunction with the expansion of urban structures.

To find out why and how such a phenomenon occurred, let us do a bit of history. We have to imagine a large French city between 1750 and 1780 as a jumbled multitude of heterogeneous territories

and rival powers. Paris, for example, did not form a territorial unit, a region where a single authority was exercised; rather, it was made up of a set of seignorial authorities held by the laity, the Church, the religious communities, and the guilds, authorities with their own autonomy and jurisdiction. And representatives of the state existed as well: the representatives of the crown, the chief of police, the representatives of the high judicial court.

In the second half of the eighteenth century, the problem of the unification of urban authority was raised. At this time, the need was felt—at least in the large conglomerates—to unify the city, to organize the urban corporate body in a coherent and homogeneous way, to govern it by a single, well-regulated authority.

Different factors played a part in this. In the first place, there were undoubtedly economic considerations. As the city was transformed into an important market hub that centralized commercial activities—not only at the regional but also at the national and even international level—the multiplicity of jurisdictions and authorities became more intolerable for the budding industry. The fact that the city was not only a market center but also a place of production made it necessary to resort to homogeneous and coherent mechanisms of regulation.

The second reason was political. The development of cities, the appearance of a poor, laboring population that was transformed during the nineteenth century into a proletariat, was bound to increase the tensions inside the cities. The coexistence of different small groups—guilds, professions, associations, and so on—that were mutually opposed but balanced and neutralized one another, began to reduce down to a sort of confrontation between rich and poor, commoners and bourgeoisie; this resulted in more frequent urban disturbances and insurrections involving more and more people. Although the so-called subsistence revolts—that is, the fact that on the occasion of a price hike or wage cut, the poorest people, no longer able to feed themselves, would pillage the silos, markets, and granaries—were not an entirely new phenomenon in the eighteenth century, they became more and more violent and led to the great disturbances during the time of the French Revolution.

In summary, we may affirm that in Europe, up through the seventeenth century, the major social threat came from the countryside: Poor peasants, who paid more and more taxes, would grab

their sickles and set out to storm the castles and towns. The revolts of the seventeenth century were peasant revolts, subsequent to which the cities were unified. In contrast, at the end of the eighteenth century, peasant revolts started to disappear thanks to the raising of the peasants' standard of living—but urban conflicts became more frequent with the formation of an underclass [*plèbe*] undergoing proletarianization. Hence the need for a real political authority capable of dealing with the problem of this urban population.

It was during this period that a feeling of fear, of anxiety, about cities emerged and grew. For example, in reference to cities, the late eighteenth-century philosopher Pierre Jean George Cabanis said that whenever men came together their morals changed for the worse; whenever they came together in closed places their morals and their health deteriorated. So there arose what could be called an urban fear, a fear of the city, a very characteristic uneasiness: a fear of the workshops and factories being constructed, the crowding together of the population, the excessive height of the buildings, the urban epidemics, the rumors that invaded the city; a fear of the sinks and pits on which were constructed houses that threatened to collapse at any moment.

The life of the big eighteenth-century cities, especially Paris, provoked a series of panics. One might mention here the example of the Cemetery of the Innocents, in the center of Paris, into which the cadavers of those who lacked the resources or the social stature to buy or to merit an individual grave were thrown, one on top of the other. Urban panic was characteristic of the politico-sanitary anxiety, the uneasiness that appeared as the urban machine developed. Measures had to be taken to control these medical and political phenomena, which caused the population of the cities to experience such intense anxiety.

At this moment a new mechanism intervened, one that, though it could be predicted, does not enter into the usual scheme of historians of medicine. What was the reaction of the bourgeois class that, while not exercising power, held back by the traditional authorities, laid claim to it? A well-known but rarely employed model of intervention was appealed to—the model of the quarantine.

Since the end of the Middle Ages, there was, not just in France but in all European countries, what would now be called an "emer-

gency plan." It was to be applied when the plague or another serious epidemic disease appeared in a city.

1. All people must stay in their dwelling in order to be localized in a single place. Every family in its home and, if possible, every person in his or her own room. Everyone was to stay put.
2. The city was to be divided into four districts placed under the responsibility of a specially designated person. This district head supervised inspectors whose job it was to patrol all the streets by day or stand watch to verify that no one left his house. So this amounted to a generalized system of surveillance that compartmentalized and controlled the city.
3. These street or district monitors were supposed to present to the mayor a detailed daily report on everything they had observed. Thus, not only was a generalized system of surveillance employed but also a centralized system of information.
4. The inspectors were to check on all the cities' dwellings every day. In all the streets they walked through, they asked every inhabitant to show himself at the window in order to verify that he still lived there and to note this down in the register. The fact that a person did not appear at the window meant that he was sick, that he had contracted the plague and consequently needed to be transported to a special infirmary, outside the city. Thus, an exhaustive record of the number of living and dead would be compiled, with daily updating.
5. A house by house disinfection, with the help of perfumes and incense, would be carried out.

The quarantine plan represented the politico-medical ideal of a good sanitary organization of eighteenth-century cities. There were basically two great models of medical organization in Western history: one that was engendered by leprosy, the other by the plague.

In the Middle Ages, when a leprosy case was discovered he was immediately expelled from the common space, the city, exiled to a gloomy, ambiguous place where his illness would blend with that

of others. The mechanism of expulsion was that of purification of the urban environment. In that era, medicalizing an individual meant separating him and, in this way, purifying the others. It was a medicine of exclusion. At the beginning of the seventeenth century, even the internment of individuals who were demented, misshapen, and so on, was still mandated by this concept.

In contrast, there was another great politico-medical system established, not against leprosy but against the plague. In this case, medicine did not exclude the afflicted person or remove him to a dismal and turbid region. Medicine's political power consisted in distributing individuals side by side, isolating them, individualizing them, observing them one by one, monitoring their state of health, checking to see whether they were still alive or had died, and, in this way, maintaining society in a compartmentalized space that was closely watched and controlled by means of a painstaking record of all the events that occurred.

So there was a medical schema of reaction against leprosy—that of a religious type of exclusion, and of purification of the city. There was also the one motivated by the plague, a strategy that did not practice internment and relocation outside the urban center; rather, it depended on a meticulous analysis of the city, on a continuous recording. The religious model was replaced, therefore, by the military model. It was military inspection, basically, that served as a model for this politico-medical organization.

Urban medicine, in the second half of the eighteenth century, with its methods of observation, hospitalization, and so on, was nothing but an improvement on the politico-medical schema of the quarantine that appeared at the end of the Middle Ages, that is, in the sixteenth and seventeenth centuries. Public hygiene was a refined variation of the quarantine, the beginnings of the great urban medicine that appeared in the second half of the eighteenth century and developed especially in France from that time on.

The main objectives of urban medicine were the following:

First: Study the accumulation and piling-up of refuse that might cause illnesses in the urban space, the places that generated and propagated epidemic or endemic phenomena. Graveyards were the main concern here. Thus, protests against cemeteries appeared between 1740 and 1750. The first great removals to the city's periphery began around 1750. It was during this period that the

individualized cemetery came into existence, that is, the individual coffin and the tomb reserved for the members of a family, where each of their names was inscribed.

It is often thought that, in modern society, the cult of the dead comes to us from Christianity. I don't share that opinion. There is nothing in Christian theology that urges respect for the corpse as such. The omnipotent Christian god can raise the dead even when they have been mixed together in the ossuary.

The individualization of the corpse, the coffin, and the grave appeared at the end of the eighteenth century not for the theological-religious reasons having to do with respect for dead bodies but, rather, for politico-sanitary reasons having to do with respect for living ones. To protect the living from the harmful influence of the dead, the latter must be just as well indexed as the former—even better, if possible.

Thus, in the outskirts of the cities, at the end of the eighteenth century, what appeared was a veritable army of dead people, as perfectly aligned as a regiment being passed in review. It was necessary therefore to monitor, analyze, and reduce this constant threat which the dead represented. So they were transported to the country and placed side by side in the great flatlands that surrounded the cities.

This was not a Christian idea but a medical and political one. The best proof of this is that when the notion of moving the Cemetery of the Innocents in Paris was conceived, Antoine-François de Fourcroy, one of the greatest chemists of the end of the eighteenth century, was consulted about combating its influence. It was he who asked that it be moved; it was he who, in studying the relations between the living organism and the ambient air, took charge of that first medical and urban policing sanctioned by the banishment of the cemeteries.

Another example is furnished by the case of the slaughterhouses, also located in the center of Paris. It was decided, after consultation with the Academy of Sciences, to install them on the city's western fringe, at La Villette.

Medicine's first objective consisted therefore in analyzing the zones of congestion, disorder, and danger within the urban precincts.

Second: Urban medicine had a new objective—controlling cir-

ulation. Not the circulation of individuals but of things and elements, mainly water and air.

It was an old eighteenth-century belief that air had a direct influence on the organism because it carried miasmas; or because its excess chilliness, hotness, dryness, or wetness would be transmitted to the organism; and, finally, because the air exerted a direct pressure on the body through mechanical action. The air was considered to be one of the great pathogenic factors.

But how to maintain air quality in a city? How to obtain healthy air when the latter was blocked and kept from circulating between the walls, houses, enclosures, and so on? Thus, the need arose to open up the avenues of the urban space in order to preserve the health of the population. The opinion of commissions from the Academy of Sciences, doctors, chemists, and so on, was also solicited in an effort to find the best methods for ventilating the city. One of the best-known cases was demolition. Due to overcrowding and the high price of land during the Middle Ages, some houses were built on the gradients. So it was thought that these houses were preventing air circulation above the streams and retaining the humid air on the slopes: they were systematically torn down. In addition, calculations were performed showing the number of deaths avoided thanks to the demolition of three houses built on the Pont-Neuf—four hundred persons per year, twenty thousand in fifty years, and so on.

In this way, aeration corridors and air currents were organized, the same as had been done with water. In Paris, in 1767, the architect Moreau had the precocious idea of organizing the banks and islands of the Seine so that the river current itself would cleanse the city of its miasmas.

Thus, the second objective of urban medicine was the establishment and control of a good circulation of water and air.

Third: Another major goal of urban medicine was the organization of what could be called distributions and sequences. Where to place the different elements necessary to the shared life of the city? The problem of the respective position of the fountains and sewers, the pumps and river washhouses was raised. How to prevent the infiltration of dirty water into the drinking water fountains? How to keep the population's clean water supply from being mixed with the waste water from the nearby washhouses?

In the second half of the eighteenth century, this organization was thought to be the cause of the main urban epidemic diseases. This led to the first hydrographic plan of Paris, in 1742. It was the first survey of the places where water that wasn't contaminated by the sewers could be drawn, and the first attempt at defining a policy for river life. When the French Revolution broke out in 1789, Paris had already been carefully studied by an urban medical police that had established directives for bringing about a veritable sanitary organization of the city.

And yet, up to the end of the eighteenth century, there had not been any conflict between medicine and the other forms of authority such as private property, for example. Official policy relating to private property, to the private dwelling, was not sketched out before the eighteenth century, except for one of its aspects—the subsurface. Underground spaces belonging to the house owner remained subject to certain rules concerning their use and the construction of tunnels.

This was the problem of subsurface ownership that was raised in the eighteenth century with the advent of mining technology. When the capability for digging deep mines developed, the problem of their ownership appeared. In the middle of the eighteenth century, a binding legislation relating to the subsoil was formulated: it provided that the state and the king were the sole owners of the subsoil, and not disposers of the ground. In this way, the Paris subsoil was controlled by the authorities, whereas the surface was not, at least as concerned private property. Public spaces, such as places of circulation, cemeteries, ossuaries, and slaughterhouses, were controlled starting in the eighteenth century, which was not the case with private property before the nineteenth century.

Medicalization of the city in the eighteenth century is important for several reasons:

First: Through urban social medicine, the medical profession came directly in contact with other related sciences, mainly chemistry. Since that period of confusion during which Paracelsus and Vahelmont tried to establish the relationships between medicine and chemistry, nothing more had been learned on the subject. It was precisely the analysis of water, of air currents, of the conditions of life and respiration which brought medicine and chemistry into contact. Fourcroy and Antoine-Laurent Lavoisier became interested

in the problem of the organism in connection with control of the urban air.

The entry of medical practice into a corpus of physico-chemical science was brought about through urbanization. Scientific medicine did not grow out of private, individualized medicine, nor was it inspired by greater interest in the individual. The introduction of medicine into the general functioning of scientific discourse and knowledge occurred through medicine's socialization, the establishment of a collective, social, urban medicine. It is by all this that the importance of urban medicine is measured.

Second: Urban medicine is not really a medicine of man, the body, and the organism but a medicine of things—air, water, decompositions, fermentations. It is a medicine of the living conditions of the existential milieu.

Although the term "environment" did not appear, this medicine of things already outlined the concept, and the naturalists of the end of the eighteenth century, such as Cuvier, would develop it. The relationship between the organism and the environment was established simultaneously in the field of natural sciences and of medicine via urban medicine. The progression was not from analysis of the organism to analysis of the environment. Medicine went from analysis of the environment to that of the effects of the environment on the organism and, finally, to analysis of the organism itself. The organization of urban medicine was important for the formation of scientific medicine.

Third: With urban medicine there appeared, shortly before the French Revolution, the notion of salubrity. One of the decisions made by the Constituent Assembly between 1790 and 1791 was, for example, the creation of salubrity committees in the departments and main cities.

It should be pointed out that salubrity did not mean the same thing as health; rather, it referred to the state of the environment and those factors of it which made the improvement of health possible. Salubrity was the material and social basis capable of ensuring the best possible health for individuals. In connection with this, the concept of public health [*hygiène publique*] appeared, as a technique for controlling and modifying those elements of the environment which might promote that health or, on the contrary, harm it.

Salubrity and insalubrity designated the state of things and of the environment insofar as they affected health: public health was the politico-scientific control of that environment.

Thus, the concept of salubrity appeared at the beginning of the French Revolution. The concept of public health was to be, in nineteenth-century France, the one that brought together the essential components of social medicine. One of the major journals of this period, the *Annales d'hygiène publique et de médecine légale*, which began to appear in 1829, would become the organ of French social medicine.

This medicine remained far removed from state medicine of the sort that could be found in Germany; it was much closer to small communities, such as towns and districts. At the same time, it could not count on any specific instrument of power. The problem of private property, a sacred principle, kept this medicine from being endowed with a strong authority. But while *Staatsmedizin* surpassed it in the authority at its disposal, there is no doubt that its keenness of observation and its scientific character were superior.

A large part of nineteenth-century scientific medicine originated in the experience of this urban medicine which developed at the end of the eighteenth century.

LABOR FORCE MEDICINE

The third direction of social medicine can be examined through the English example. Poor people's medicine, labor force or worker's medicine, was not the first but the last objective of social medicine. First the state, then the city, and finally poor people and workers were the object of medicalization.

What characterized French urban medicine was respect for the private sphere and the rule of not having to regard the poor, the underclass, or the people as an element that threatened public health. Consequently, the poor or the workers were not thought of in the same way as cemeteries, ossuaries, slaughterhouses, and so on.

Why didn't the problem of the poor as a source of medical danger arise in the course of the eighteenth century? There are several reasons for this. One is quantitative in nature: the number of poor people in the cities was not large enough for poverty to represent

a real danger. But there was a more important reason: urban activity depended on the poor. A city's poor people accomplished a certain number of tasks: they delivered the mail, collected the garbage, picked up old furniture, used clothing, redistributed or resold scrap materials, and so on. They thus formed part of urban life. In this era, the houses didn't have numbers and there was no postal service either. No one knew the city and all its nooks better than the poor; they carried out a series of basic functions such as water hauling or refuse disposal.

Insofar as the poor formed part of the urban system, like the sewers or pipes, they performed an indisputable function and could not be considered as a danger. At the level where they were placed, they were useful. But starting in the second third of the nineteenth century, the problem of poverty was raised in terms of menace, of danger. The reasons are diverse:

1. Political reasons, first of all: during the French Revolution and in England during the great social unrest of the beginning of the nineteenth century, the destitute population transformed itself into a political force capable of revolting or at least of participating in revolts.
2. In the nineteenth century, means were found for partly replacing the services offered by the underclass, such as the setting up of a postal service and a transport system. These reforms were at the origin of a wave of popular disturbances launched against these systems, which deprived the most needy of bread and of the very possibility of living.
3. With the cholera epidemic of 1832, which began in Paris, then spread throughout Europe, a set of political and health fears occasioned by the proletarian or plebeian population crystallized.

It was in this period that the decision was first made to divide the urban space into rich areas and poor areas. The feeling was that cohabitation between rich and poor in an undifferentiated urban environment constituted a health and political hazard for the city. The establishment of rich districts and poor districts dates from this time. Political authority thus began to intervene in property and

private dwelling rights. This was the time of the great reshaping, under the Second Empire, of the urban zone of Paris.

These are the reasons for which, up until the nineteenth century, the urban population was not regarded as a medical danger.

In England—where industrial development was being experienced, and where, consequently, the formation of a proletariat was faster and more extensive—a new form of social medicine appeared. This doesn't mean that state medicine projects of the German type did not exist as well. For example, in about 1840, John Chadwick was largely inspired by German methods in formulating his plans. Moreover, in 1846 Rumsay wrote a work titled *Health and Sickness of Town Populations*⁵ which reflects the content of French urban medicine.

It was essentially the Poor Law⁶ that made English medicine a social medicine insofar as this law implied a medical control of the destitute. Since the poor benefited from the welfare system, it became obligatory to subject them to various medical controls.

With the Poor Law, an important factor in the history of social medicine made an ambiguous appearance: the idea of a tax-supported welfare, of a medical intervention that would constitute a means of helping the poorest individuals to meet their health needs, something that poverty placed beyond their hope. At the same time, it made it possible to maintain a control by which the wealthy classes, or their government representatives, would guarantee the health of the needy classes and, consequently, protect the privileged population. In this way, an officially sanctioned sanitary cordon between the rich and the poor was set in place within the cities. To that end, the latter were offered the possibility of receiving free or low-cost treatment. Thus, the wealthy freed themselves of the risk of being victims of epidemic phenomena issuing from the disadvantaged class.

The transposition of the major problem of that period's bourgeoisie is clearly visible in the medical legislation: At what cost? Under what conditions? How to guarantee its political security? The medical legislation contained in the Poor Law was consistent with that process. But that law—and the protection assistance, together with the control assistance it entailed—was only the first component of a complex system whose other components appeared later, around 1870, with the great founders of English social medicine.

Chief among them was John Simon, who completed the medical legislation with an official service organizing not medical treatment but medical control of the population. I am referring to the systems of the Health Service, the Health Offices, which appeared in England in 1875, and were estimated to number a thousand toward the end of the nineteenth century. Their functions were the following:

- Control of vaccination, obliging the different elements of the population to be immunized.
- Organizing the record of epidemics and diseases capable of turning into an epidemic, making the reporting of dangerous illnesses mandatory.
- Localization of unhealthy places and, if necessary, destruction of those seedbeds of insalubrity.

The Health Service developed out of the same thinking that produced the Poor Law. The Poor Law provided for a medical service expressly intended for the poor. The Health Service, on the other hand, was characterized by protection of the entire population without distinction, and by the fact that it was comprised of doctors offering nonindividualized care extending to the whole population, preventive measures to be taken, and, just like French urban medicine, objects, places, social environment, and so on.

However, analysis of the Health Service's operation shows that it was a means of completing at the collective level the same controls that were guaranteed by the Poor Law. Intervention in unhealthy places, verification of vaccinations, and disease records were really aimed at controlling the needy social classes.

It was precisely for these reasons that, in the second half of the nineteenth century, English medical control administered by the Health Offices provoked violent popular reactions and resistances, small-scale antimedical insurrections. R. M. Macleod drew attention to these cases of medical resistance in a series of articles published by the journal *Public Law* in 1967.⁷ I think it would be interesting to analyze how this medicine, organized in the form of a control of the needy population, incurred such reactions—not only in England but in various countries of the world. For example, it is curious to observe that the dissident religious groups, so nu-

merous in the English-speaking Protestant countries, had the primary goal during the seventeenth and eighteenth centuries of opposing state religion and interference by the state in religious affairs, whereas those groups which reappeared in the course of the nineteenth century were concerned with combating medicalization, with asserting the right to life, the right to get sick, to care for oneself and to die in the manner one wished. This desire to escape from compulsory medicalization was one of the characteristics of these numerous apparently religious groups that were intensely active at the end of the nineteenth century, as they still are today.

In Catholic countries the situation was different. What meaning would the pilgrimage to Lourdes have, from the end of the nineteenth century to our time, for the millions of poor pilgrims who arrive there every year, if not that of being a sort of muddled resistance to the obligatory medicalization of their bodies and their illnesses?

Instead of seeing in these religious practices a present-day residue of archaic beliefs, shouldn't they be seen as the contemporary form of a political struggle against politically authoritarian medicine, the socialization of medicine, the medical control that presses mainly on the poor population? The strength of these continuing practices resides in the fact that they constitute a reaction against this poor people's medicine, in the service of a class, English social medicine being an example.

In a general way, we may affirm that, in contrast to German state medicine of the eighteenth century, there appeared in the nineteenth century—above all, in England—a medicine that consisted mainly in a control of the health and the bodies of the needy classes, to make them more fit for labor and less dangerous to the wealthy classes.

Unlike urban medicine and especially state medicine, this English approach to medicine was to have a future. The English system of Simon and his successors enabled three things to be established: medical assistance of the poor, control of the health of the labor force, and a general surveying of public health, whereby the wealthy classes would be protected from the greatest dangers. Further—and this is where its originality lies—it enabled the creation of three superimposed and coexisting medical systems: a wel-

fare medicine designed for the poorest people; an administrative medicine responsible for general problems such as vaccination, epidemics, and so on; and a private medicine benefiting those who could afford it.

The German system of state medicine was burdensome, and French urban medicine was a general plan of control without any specific instrument of authority; but the English system made possible the organization of a medicine with different features and forms of authority—depending on whether it was a question of welfare, administrative, or private medicine—and the establishment of well-defined sectors that allowed a fairly complete medical survey to be constituted in the last years of the nineteenth century. With the Beveridge Plan⁸ and the medical systems of today's richest and most industrialized countries, it is always a matter of bringing these three sectors of medicine into play, although they are linked together in different ways.

NOTES

- * This is the second of two lectures that Foucault delivered at the State University of Rio de Janeiro in October of 1974, both of them on the emergence of what is now known as "public health." The first lecture, titled "Crisis of Medicine or Crisis of Anti-medicine?," was published in a Portuguese translation in 1976. This essay appeared in Portuguese in 1977. [eds.]
- 1 Emmanuel Le Roy Ladurie, Jean-Pierre Peter, Paul Dumont, *Anthropologie du conscrit français d'après les comptes numériques et sommaires du recrutement de l'armée (1819-1826)*, (Paris: Mouton "Civilisations et Sociétés" no. 28, 1972).
- 2 Varn L. Bullough, *The Development of Medicine as a Profession: The Contribution of the Medieval University to Modern Medicine* (New York: Hafner, 1965).
- 3 George Rosen, "Cameralism and the Concept of Medical Police," *Bulletin of the History of Medicine* 27 (1953), pp. 21-42.
- 4 Rosen, *A History of Public Health* (New York: MD Publications, 1958).
- 5 TK Rumsay, *Health and Sickness of Town Populations* (London: William Ridgway, 1846).
- 6 A law instituted in the nineteenth century stipulating assistance for the poor at public expense. [eds.]
- 7 R. M. Macleod, "Law, Medicine and Public Opinion: The Resistance to Compulsory Health Legislation. 1870-1907," in *Public Law: The Constitutional and Administrative Law of the Commonwealth* (London) no. 2 (Summer 1967), pt. 1, pp. 107-128; no. 3 (Autumn 1967), pt. 2, pp. 189-211.
- 8 The Beveridge Plan was instituted in Great Britain in 1942. Its measures were designed to ensure that every British citizen would enjoy adequate health and medical care. [eds.]

LIVES OF INFAMOUS MEN*

This is not a book of history. The selection found here was guided by nothing more substantial than my taste, my pleasure, an emotion, laughter, surprise, a certain dread, or some other feeling whose intensity I might have trouble justifying, now that the first moment of discovery has passed.

It's an anthology of existences. Lives of a few lines or a few pages, nameless misfortunes and adventures gathered into a handful of words. Brief lives, encountered by chance in books and documents. *Exempla*, but unlike those collected by the sages in the course of their reading, they are examples that convey not so much lessons to ponder as brief effects whose force fades almost at once. The term "news" would fit them rather well, I think, because of the double reference it suggests: to the rapid pace of the narrative and to the reality of the events that are related. For the things said in these texts are so compressed that one isn't sure whether the intensity that sparks through them is due more to the vividness of the words or to the jostling violence of the facts they tell. Singular lives, transformed into strange poems through who knows what twists of fate—that is what I decided to gather into a kind of herbarium.

As I recall, the idea came to me one day when I was reading, at the Bibliothèque Nationale, a record of internment written at the very beginning of the eighteenth century. If I'm not mistaken, it occurred to me as I read these two notices: