

# the **doctor** and the **charlatan**

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## — CURING FOR THE WRONG REASONS

We all know, in fact we are sure, that our medical practices are very different from those in the times of Molière or of Louis XVI. In one way or another medicine has today become ‘modern’ in the same way as the whole set of knowledges and practices that call themselves rational. This is obvious, but I would like to interrogate this obviousness. Not to debunk it so as to show that beyond these appearances nothing has changed, but in order to focus in a slightly clearer way on ‘what’ has changed. To be even more precise, I would like to focus on ‘what’ has changed for the doctor, the one who practises medicine.

Today’s accumulated knowledges about living organisms, plus the biochemical and metabolic techniques of analysis and modes of visualisation and imaging, will all play a part in what I want to do, but will not be my prime concern, because they relegate the doctor to the role of communication relay between the individual patient and the body of general biological knowledge. Nor do I want to focus on the institutions, industries, administrative regulations and financing channels that also contribute to the shaping of medical practices. In short, I am not dealing with medicine in general, with its problems, its inertias, its ambitions, its more or less vicious circles or its occasional uncontrollable waywardness. Nor is there anything sociological about the question I am posing. I am not interested in knowing ‘who’ the doctor is, but rather ‘what’ it means, ever since medicine became modern, to be a doctor, to be involved with a ‘suffering body’ and to be involved with it in the context of a supposedly rational framework. In other words, what does it mean for the doctor to be carrying out a rational practice?

An initial problem is this: ever since what we call the modern sciences began, each knowledge and practice aspiring to rationality has had to be positioned in relation to them. Now, from the point of view of the rhetorical and/or practical strategies used for this rational purpose, the doctor presents a particular case, and for at least three reasons.

First, there is a practice that could be called immemorial: in all civilisations, among all human groups, in all cultures, there exists and has existed specially designated curers, as well as therapeutic knowledges transmitted from generation to generation.

Second, the desire to define medicine as a rational practice is, from a historical point of view, fairly independent from the production of a set of practices we deem rational, in the sense of improving in a systematic fashion the likelihood for the patient to be cured. In other words, there is no ‘Galileo’ of medicine who created simultaneously a discourse and a practice that made a distinct break from the past and was recognisable as the beginning of ‘the history of modern medicine’. One might be tempted to slot Louis Pasteur or Robert Koch into this role, but they emerged far too late, at a time when everyone thought that modern medicine was already well under way.

Third, as a profession authorised by a diploma, and the product of teaching organised by doctors themselves, medicine precedes the appearance of the modern sciences by a long way. In Europe, medicine was taught in the medieval university, and even at that time it was locked in a struggle, which continues to this day, pitting degree-bearing doctors against various traditional types of ‘healer’. This idea of regulating the right to care for patients is a continual feature of the history of Western medicine. So at what point does one move from a notion of corporate rights—designating medicine as a profession defending its monopoly—to a principle that can effectively embrace the logic of rationality? What principle could invoke the ‘real’ difference between the practices of modern doctors and those of charlatans? Each case can be examined on its merits, and even today the difference is not always very clear. Nevertheless, I would like to begin with the question of the ‘charlatan’ to develop my enquiry into so-called modern medicine. More precisely, I will start with the transformation of the mode of denunciation that creates the object ‘charlatan’, and with the transformation of the charlatan’s identity.

This approach first of all relates to the fact that in medicine the theme of rationality has a polemical accent that is not in evidence anywhere else. Of course, there is a polemical angle to the way chemistry is distinguished from alchemy, astronomy from astrology and Darwinian biology from the ‘static’ doctrine of the species. But in each of these cases the polemic is part of the foundation narrative, or part of the edifying pedagogy. Astrology is not stalking astronomy, and the latter does not feel in the slightest danger of being confused with this ‘other’, which in any case it has scarcely ever encountered. There is no procedure in the repertoire of the astronomer that is designed to establish a distinction with the knowledge of the



astrologer. In this case the polemic is symbolic but it creates no constraint or problem. In the case of medicine, however—and I am thinking here of so-called ‘soft’ medicines—the idea of charlatanism is quite central, as it is continually brought to public attention and debated over and over again in the press and in public institutions. So in an implicit way charlatanism organises, as we shall see, medical and pharmaceutical research.

Franz Anton Mesmer and his tub of magnetic fluid, 1784.  
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This choice of approach also gives us the entertaining option of identifying a ‘first act’, that is, both a particular moment and a multifaceted episode, where we can assemble a cast, and identify and make perform all the significant factors and dilemmas I am going to use for the purposes of recognising modern medicine.

The scene takes place in Paris in 1784. Two commissions have been appointed to investigate the practices of the Viennese doctor Franz Anton Mesmer. Their main task is to put the principles underlying his practices to the test. According to Mesmer’s practice, his patients gather around a tub that contains a magnetic fluid, which has the power to effect the cures on which his reputation is based. We know that Mesmerian fluid is not part of the present-day therapeutic arsenal, and that therefore it did not survive the enquiry. Nonetheless, we must acknowledge that at the time Mesmer’s ‘animal magnetism’ was a genuine candidate for the foundation of a medicine that would at last be scientific. Reference to some unknown fluid to which living beings would be susceptible did not induce any *a priori* disqualification. The fluid is invisible, certainly, but wasn’t that also the case for Newtonian attraction, whose existence was recognised because of its effects? In this sense, Mesmer’s tub could have been acknowledged as an apparatus both therapeutic and demonstrative, its healing power

constituting simultaneously the proof of the existence of the fluid and the explanation of its effects.

Could have been acknowledged ... if Mesmer's apparatus had been able to withstand its 'scandalisation'. With the doctor Léon Chertok, I have studied in some detail the methods of the commission appointed by the king Louis XVI.<sup>1</sup> Among the participants were important scientists of the time, such as Antoine Laurent Lavoisier and Benjamin Franklin. To cut a long story short, they tried, without too much success, to 'purify' the phenomena occurring around Charles Deslon's magnetic tub (Mesmer had refused to cooperate with the inquiry). After they submitted themselves to the 'fluid', then some poor people, then some representatives from respectable society, all this without arriving at any clear result, the commission invented a much more active method of investigation. It asked an accomplice magnetiser to magnetise a 'likely subject' without warning him, to pretend to magnetise another person, or even, the subject having had his eyes blindfolded, to magnetise one part of his body while announcing another part was to be magnetised. The commission was then able to conclude that 'the fluid is powerless without imagination, while the imagination without the fluid is able to produce the effects that are attributed to the fluid'. In short, the fluid, to the extent that its effects would prove its existence, did not exist.

Bearing this scene in mind, let me make a point about one of its features, which is the emergence of the new definition of 'charlatan'. In order to explain the cures that nevertheless happened, for good or ill, around Mesmer's tub, the 'interdisciplinary' commission noted:

We see men succumb, it seems, to the same sickness, cured by taking contradictory treatments, and in taking entirely different treatments; Nature is thus powerful enough to support life in spite of poor treatment, and able to triumph over both illness and its remedy. If she has this power to resist remedies, then she has all the more reason to have the power to work without them.

As for the second commission, composed entirely of doctors, it went one step further:

There are multiple and sufficient causes for the results supposedly observed in similar circumstances: the hopes conceived by the patients, the exercise they carried out every day, the suspension of the remedies which they might have been using previously and of which the quantity is often negligible in similar cases.

In other words: *the cure proves nothing*. I am going to suggest a modern definition of medicine as the discipline that, in contrast to traditional therapies or to medieval medicine, does not follow a particular doctrine or set of practices, for these are continually changing, but rather acts through an awareness of this very changeability. It has a correlate: the aim

of medicine (curing) is not sufficient to establish the difference between rational practice and the practice of the charlatan. The imperative to be rational and the denunciation of the charlatan join voices in this matter. The charlatan is henceforth defined as he who puts forward his cures as proofs.

This definition of the 'charlatan' makes a modern protagonist of him as well. Using cures as demonstrations, he makes use of a model of scientific truth and not a tradition of the supernatural (the latter implying a 'supernature' that, for its part, would not let itself be paraded for examination on the whim of people's curiosity or demands). It is precisely because the 'fluid' was presented as a 'modern' referent, on a par with Newtonian force, as a 'cause' capable of imposing its own existence on the basis of the examination of its effects, that it could succumb to the critical counter-examination of the commissioners. In other words, not only does the definition of the charlatan I propose not carry any value judgement, since it is only meant to count as the definition that modern medicine is inventing itself against, but its range is also strictly limited. It is Mesmer, and not the exorcists whose practice Mesmer believed he had 'laicised' or 'rationalised', who falls under the blows of the 1784 commissions' critique. The devil would have laughed at the clever trick pulled off by the commissioners.

The commissioners invoke three types of causes to explain the cures attributed to Mesmer's magnetic fluid: Nature's healing power, evidenced by the spontaneous cures of which the living human body is capable; the patients' confidence in Mesmer's treatment; and other remedies of negligible importance. I will not discuss this third explanation, which medical progress is perhaps slowly eliminating. However, the two others have lost none of their contemporary relevance. On the contrary, under the label of the 'placebo effect', the curing power of trust, hope and 'faith healing' are today systematically set out in the protocols that determine the elevation of a chemical formula to the status of a medicine.<sup>2</sup> Modern scientific medicine can thus officially take into account the virtues of 'faith healing', even though it only recognises the negative side, in the manner of a parasitic effect that runs the risk, if not taken into account, of impeding medical progress.

So now we can already understand why, unlike astrology, alchemy or creationism in biology, the 'other' of medicine, the charlatan, has not been disqualified once and for all. It is because the charlatan does not just feed off gullibility and ignorance. From the perspective of modern medicine, he is the exact correlate of the 'placebo effect', which has a parasitic relationship between a substance and its curative effects. In the same way that the clandestine effect of the placebo must be identified each time, for each new product, so too must gullibility and ignorance be disqualified each time, for each new remedy to which the charlatan attributes a healing power. This also allows us to understand, in a parallel way, the curious meaning of the term 'irrationality' in medicine. In many doctors' writings, this term is used in

order to condemn not only charlatans who use cures as proof of some kind of snake oil's effectiveness, but also the public that lets itself be taken in by this proof. Doctors themselves even speak of irrationality in relation to these inexplicable cures, as if, witness to the irrational trust of the sick person, they relate to the fact that this trust has created some sort of obstacle to the rational progress of medicine.

There is no doubt that we have here a strange use of the notion of irrationality. *A priori*, particular calculations and decisions can only be called 'irrational' if they are firmly inscribed in the framework of a determined rational procedure and yet fall outside of or contradict the guidelines of this procedure. Now, neither the patient nor *a fortiori* the illness he or she suffers has taken up the challenge to submit to the rules of a particular procedure. It seems to me that we have to understand this usage not only in terms of propaganda—aiming to deflect the public's attention away from alternative medicines or other non-standardised practices—but also in more affective terms. 'Irrationality' is here invoked to express the perception of a real deception in relation to the suffering body, to express the feeling that the suffering body, when acting as an accomplice of the charlatans, provides a poor and always marginal return on the investment of efforts towards rationality made on its behalf.

So while other modern practices hark back to some original triumph, or to a marvellous narrative about the invention of questions and interpretations that in the end made their object a reliable witness, capable of making the distinction between a scientific statement and a fiction, I suggest that modern medicine has an origin that can be read in terms of frustration: the suffering body is not a reliable witness. It can happen that it will be cured for the 'wrong reasons'.

This frustration awakens old echoes and puts them into dialogue with more recent disappointments. In 'Plato's Pharmacy',<sup>3</sup> Jacques Derrida brought to our attention once again the network of allusions, more technical than metaphorical, which play upon the term '*pharmakon*'—poison or remedy—a network through which Derrida's reading of Plato authorises a return to the question of writing. Is writing a remedy for memory? In Jean Racine's 1677 play *Phèdre*, this is how Thot, the inventor of writing, presents it to the King of the Gods. But the latter disqualifies it and calls it a poison: 'Things are recollected from the outside, thanks to foreign impressions, and not from the inside of their own accord. So you have discovered a cure, not for memory, but for recollection.' This cure for recollection is a poison for memory, and for the soul rendered forgetful for lack of exercise. With due homage to the ambiguity of the *pharmakon*, whose effects vacillate and shuttle between remedy and poison, I would like to call this privileging the 'Royal Road', the road recommended by the King of the Egyptian Gods. It presupposes a clear distinction: living memory, present to itself, and operating 'on the inside', as against forgetful recollection with its links to prostheses and to foreign impressions. Let me stress that only the soul itself has the power to create the contrast

between the spoken word and writing and to distinguish between memory and recollection, and therefore to relegate the so-called remedy to the status of poison. The king limits himself to the role of witnessing what the soul requires in its truth. The Royal Road is not that which the king decides, the king himself speaks in the name of the soul.

Freud can be read as the descendant of the King of the Gods when, disqualifying seeming curative power by calling it suggestion, he turns psychoanalysis into what the human psyche requires as its truth. Analysis does not proceed 'from the outside' via suggestive prostheses, or by a layer of paint applied on the outside (*per via di porre*). It knows how to get through the surface (*per via di levare*) to the real meaning of the symptoms, without using the least prosthesis or the smallest new element. In this way analysis makes itself the witness to the soul, creating a firm disjunction between rational procedure, faithful to the requirements of what it is addressing, and the *pharmaka* of many non-viable effects, poison-remedies that fail to recognise this requirement.

Some will no doubt think, even today, that psychoanalysis is this 'Royal Road' authorised by what the human psyche really demands. I am not among them. That is why the 1784 'scene' (where the commissioners play a trick to disqualify animal magnetism, this early form of hypnosis, the use of which is precisely what Freud was criticising when he spoke of old techniques of suggestion acting *per via di porre*) inaugurates for me the question that runs through the whole of the modern 'art' of healing. Imagination, to which the commissioners attributed the power to explain the effects Mesmer had set down to the fluid, is equally present in the 'placebo effect' that haunts the pharmaceutical industry, as well as in the hint of suggestion that haunts the analytical scene, all the more significant in that it is implicit. Imagination is also present at the heart of the history of psychiatry, where the semiological categories of the 'clinical gaze', which are supposed to decode mental problems, emerge as part and parcel of the uncontrollable mixture that is the historically changing and common matrix shared by the psychiatrist and the patient. The suffering body, or soul, does not have the power to make the distinction the Royal Road needs: these are not reliable witnesses for identifying the charlatan as he who would illegitimately claim the power to cure.

#### — THE POWER OF EXPERIMENTATION

And yet, Mesmer's magnetic fluid does not exist. The commissioners' method certainly made the magnetised subjects admit this truth, in the same way that double-blind placebo trials, which occur on a regular basis wherever a chemical substance aspires to the status of medicine, attribute this capacity of truthfulness to the substances that emerge triumphant, the ones that have proved that they have the gift of true therapeutic power. So wouldn't experimentation, then as now, be the 'Royal Road' capable of transforming the materials we have at hand into reliable witnesses?



Quite often, distinctions between fields that, in one way or another, relate to modern scientific rationality tend to be underestimated. So one might cite the example of astronomy vanquishing astrology, or that of alchemy made a fool of by chemistry, in order to promote the idea of the same glorious future for all, then to announce that the half light of battle—where the difference between ‘rational’ and ‘irrational’ has not been clearly imposed—only has a transitory nature, and that all hesitation will evaporate to the extent that scientific progress will augment the power of rational procedures in each area. From this perspective, the singularity of medical practice is well and truly in the domain of the ‘not yet’.

The history of science does not have the power to condemn an attitude or a hope, but nor does it offer the slightest guarantee for this longed-for triumph of experimental rationality.

In fact, I think it even possible that the successes of modern medicine, remarkable as they are, are not headed in this direction, and therefore confront medicine with a ‘practical challenge’. But in order to explain this clearly, I have to first distinguish the real meaning of experimentation as the technique that creates reliable witnesses, from the inoffensive and generalist image it often has of a neutral practice, governed by objective observation and stripped of belief and bias so that it is limited to the establishment of general relations that should in principle give birth to a theory.

There is no doubt that when the commissioners tricked Deslon’s subjects, they were using the power of experimental method. They didn’t just observe; they actively staged something; they invented a manner of setting out the problem of the fluid such that any parasitical causalities were removed from the scene. Experimentation is an active, inventive practice and, above all, selective.<sup>4</sup> It assumes, implies and turns into reality the possibility of staging a phenomenon, controlling it and purifying it in such a way that it becomes what it was not, a witness responding reliably to the experimenter’s questions. But this possibility, which experimentation brings about, is not at all like a law that can be generalised. Phenomena are not subjected to experimentation through the simple exercise of power, the one with the most authority being the one who can manipulate and purify. It is even the case that the phenomenon must be in a position to answer to the requirements of experimentation, and capable of bearing witness to whether or not it is fully purified and not just ‘constructed’.

Let me provide what I think is a counter-example, an example of pseudo-experimentation. It is the kind of experimental psychology created by John B. Watson and Burrhus F. Skinner, who had the idea of carrying out experiments on rats and pigeons. In order to do this, they invented a laboratory arrangement that assumed and activated the elimination of everything that, in the behaviour of the animal, might bear witness to the site being anything but a passive one where two types of observable phenomena came together—stimulus and response. The description that resulted from this procedure could certainly be called ‘objective’, since it only discovered observable and quantifiable elements. The upshot was that this method



defined itself by transforming into obstacles the whole set of activities that would make a rat, for example, a meaning-creator, living in an environment that made sense for it. The imperative for objective description eliminated as simply obstacles everything that, for instance, is pertinent for ethological description: the fact that the rat is a different animal to the other inhabitants of psychological laboratories, pigeons or mice. In this sense, the 'objective rat' of quantifiable behaviour can be defined as an 'artefact', a being of scientific allure, but which, because of the manipulation that produced it, has been deprived of any capacity to bear witness to anything that, as it happens, it is being interrogated about ...

So here, experimentation has not been able to put on stage a purified natural behaviour so that this would become intelligible and capable of bearing witness to its own nature. Experimentation has cobbled together an artificial, laboratory-created behaviour. It did not endow the rat with the capacity to confirm or refute hypotheses made about it; rather it 'created a laboratory rat', a rat that is reduced to a mode of existence subjected to the imperative of observable, quantifiable objectivity, a rat incapable of teaching us anything about free rats, a rat witness above all to the abuse of power that manufactured it.

Experimentation always runs risks: the risk of silencing something while trying to make it speak, of remaining the sole author on stage instead of putting on a production. Galileo took this kind of risk. He took into account the air, its friction merely complicating the movement of falling bodies. The 'real' movement, which corresponds to mathematical intelligibility, would happen in a vacuum. And this risk was crowned with success. Ever since the beginning of the nineteenth century, engineers, who work in a world where (thankfully as far as our machines are concerned) there is friction, have learned to understand it from the foundation of an ideal world described by mechanics, then taking into account the effects of friction which are thus seen as responsible for the complication of real movement.

Galileo took a risk, and the fact that the movement he was talking about revealed itself to be sensitive to the requirements of the assessment mode he invented belongs to the class of things I called an 'event' in the *Invention of Modern Sciences*. The event creates a distinction, which I think is crucial, between theoretico-experimental sciences, which in every case have 'made events' and pseudo-sciences, experimental psychology for example, which make the laboratory a place where scientific rationality reaffirms its right to submit whatever it is interrogating to the status of experimental object.

Now, wouldn't it be the case that, with Pasteur, an event saw the light of day, which is similar to those that created 'theoretico-experimental' sciences? Did he not take the risk of distinguishing, among epidemic sicknesses, the question of germs and their propagation from that of the 'field', that is, the question of knowing how, when in contact with the same germs, some fall sick and others not? Should we not acknowledge that in this case we are dealing with a genuine intervention of medicine into experimental science? Pasteur

and Koch were able to isolate germs as the specific causes of specific sicknesses. They were thus able to 'make them speak', to make them perform in such a way that they became reliable witnesses of their own power to cause a sickness and to become its medium for transmission. In a correlative manner, Koch's postulations were able to justify a theory of infectious disease, in other words a way of thinking about disease from a more economic, that is, more powerful, standpoint than a mere empirical description. These postulates make medicine capable of anticipating and ranking problems, with the summit being the identification of the germ and the establishment of its role.

The examples of Pasteur and Koch show, do they not, that experimentation is the Royal Road of medicine? The need to have recourse to proof via comparison with a placebo seems to signify, quite simply, that we do 'not yet' have available to us this Royal Road as far as the whole set of our illnesses are concerned. The expression 'rational pharmacology' is a translation for this kind of hope. One day, the curing power of a chemical substance will be able to be deduced from a theoretico-experimental knowledge of the human body, and it is to this knowledge that the substance will owe its status of medicine. For each affliction, one will be able to deduce the appropriate type of action, the structure of the molecule that has the power to heal, and it will become less and less necessary to ask if effectiveness alone will be sufficient to warrant the patient's trust. On the other hand, the stubborn character of the charlatan, this artist who works the relationships between the susceptibility of the suffering body and 'irrational' influences, will finally meet its match, something capable of immediately disqualification, since medicine will have the power to act on the 'real causes' of the problem. Both the placebo effect and the charlatan will have a clear part to play in the perspective of a future theoretico-experimental medicine. They must disappear: the placebo because it is the bearer of the basic empirical character of pharmacological research, and the charlatan because, to the extent that medicine increases its effectiveness, he will lose, for his part, his power of parasitical seduction.

And yet, the precedent set by Pasteur's scientific triumph does not constitute either a promise of or a first step towards this luminous future. This brings me back to question of the 'field', which Pasteur opened up in regard to micro-organisms. As far as a micro-organism is concerned, it makes no difference whether it is in a test tube or a living body. This indifference allows the biologist to characterise this position: what environment allows the organism in question to reproduce itself, and what one diminishes its virulence? Of course, with immunology, biology and medicine have, ever since Pasteur, contributed massively to the understanding of the field from the point of view of the contaminated organism itself. But this is exactly where any resemblance to the theoretico-experimental sciences disappears.

There is nothing simple or spontaneous about the way in which the theoretico-experimental sciences extend their field of inquiry and the relevance of their practices.<sup>5</sup> Nevertheless, there

is a recognisable style to the story, which can, *a posteriori*, set the scene for this extension. *A posteriori*, what is recounted and transmitted in scientific manuals resembles what the philosopher Immanuel Kant characterised as the effects of the ‘Copernican revolution’, which allows a scientific field to depart from empirical practice. For Kant, this so-called ‘Copernican revolution’ translates the fact that the scientist no longer learns from the phenomenon, but imposes his own questions on it. This means that the scientist imposes a point of view on the phenomenon and this allows him to predict *a priori* which questions are relevant and which adjustments will bring to light the dominant causal relationships organising all the others.

This is certainly the story one can tell about the extension of Galilean mechanics, but not about the kind of medicine derived from Pasteur and Koch. We know now that the question left hanging by Pasteur (that of the epidemic ‘field’ from the point of view of the infected organism’s reactions) opened a real Pandora’s box, and that there is now no story that can, *a posteriori*, give it a ‘Copernican’ spin. To the question ‘why does one fall sick?’, the immune system, a network where many interdependent causalities are operating, offers no simple answer. Certainly there has been progress both in terms of knowledge and modes of treatment, but this progress is a long way from keeping pace with a mode of explanation that is becoming more economical, more powerful, and capable of always establishing more stable distinctions among what is cause, what is consequence and what is of no importance at all. The definition of sickness that begins with the micro-organism has not had the power to rank things and become the Royal Road towards the definition of sickness from the point of view of the patient. It has been the entry point into a labyrinth of subtle questions, the ins and outs of which biologists and doctors must explore, now and in the future, in order to learn from the living body what it is capable of doing.

Pasteur and Koch thought they had discovered the perspective determining the landscape of causal or functional relationships that define epidemic illness. I maintain that, no matter how sophisticated its technical instrumentation has become, epidemiology is today defined by a form of empiricism: by the necessity to test, observe and describe, in short, to learn from the phenomenon without having the power of deciding *a priori* what questions to ask it. I stress this point because often the highly technical character of biomedical description is deceptive. How, for example, when we talk of the chemistry of the brain, can we dare speak of empiricism while we have, on an ongoing basis, more and more precise pictures conveying metabolic intensities of different cerebral regions, and while we can identify specific neuronal sites and their corresponding neurotransmitters? Still, one speaks comfortably, even in this case, of fundamentally empirical research. In fact, between the richness of the psychic effects of a drug, for example, and the hypothesis that states that the drug is modifying the effects of a class of neurotransmitters, there is a gulf that no contemporary

theory is able to leap over. What this mode of description puts on stage is, first and foremost, a set of correlations between two distinct modes of approach to psychic function, two modes that are privileged by the sole fact that they are both accessible to observation.

Of course, nobody would deny that there 'must' be a relationship between the effect of a drug and the modification of neurone transmission. But it is exactly this 'there must be a relationship' which defined the practical field of empiricism: the research is dominated by whether or not the observations are accessible, observations between which 'there must be a relationship' and between which all sorts of correlations can in fact be established. But the significance of what is observable as well as their correlations is open to an indeterminate number of interpretations. No doubt we have increasingly powerful technical means to measure, and even to create, new possibilities of observation as far as the different aspects of cerebral activity are concerned, but what we measure and observe does not have the power to determine the correctness of what is, in that way, observed and measured.

Let's go back to Deslon's tub, where what was revealed was the power of experimental method in the fight against the modern version of the charlatan, the one who makes himself the representative of a 'cause' claiming the power to bring about physiological transformations in whatever circumstances. So what was going on around the Mesmerian tub? The scene of the tub illustrates the asymmetrical nature of experimental method as far as medicine is concerned. It allowed for elimination, for the destruction of pretensions, and refutations, but it remained silent on the cures that were actually observed. No doubt these were attributed to the 'imagination' of the patients. But imagination, as much as 'faith healing', is just a way of disqualifying the phenomenon rather than understanding it. Incidentally, Deslon complained that the commissioners did not define what they meant by this 'imagination', to which they attributed the power to cure.

It is interesting to note that among the commissioners the only one to criticise the judgement of the commission, in a minority report, claiming no interest in Mesmerian practices, was a naturalist, that is, a practitioner of empirical method: the great botanist Antoine Laurent de Jussieu. Jussieu stressed that even if the commission successfully refuted an incorrect idea, that did not mean they had a greater understanding of what was going on around Deslon's tub. Because the procedure of his majoritarian colleagues depended on a hypothesis of simple causality, all they did was substitute a hypothetically 'simple' cause, imagination, for another simple cause, fluid. In fact they had staged the phenomenon by defining it as the site of a contest between two possible causes: either fluid or imagination. By why not imagine multiple causality, where 'moral' causes (whence 'imagination') would interfere with 'physical' causes (the 'touchings' that magnetisers performed and that Jussieu himself had occasion to test the effectiveness of). If the two types of causes could have, in certain circumstances, the same type of effect, the protocols for the commissioners' inquiry would lose

their demonstrative value. In fact, one could, claimed Jussieu, conceive that the ‘moral cause’, the idea that one is not magnetised, thwarts the action of the hypothetical ‘physical cause’, while on the other hand, when the two causes are effectively married, the effect is increased, which is what is observed around the tub. Jussieu finished by calling for an empirical study of the therapeutic possibilities of what he called a ‘touching medicine’, removed from any influence of fashion or any study of the spectacular.

Jussieu, in his own way, put a question to his experimenting colleagues about the limits of experimentation in the situation where one is addressing a being capable of hope and imagination. He did, in fact, underscore the proposition that ‘the idea that one is not magnetised’ is not simply the absence of factors linked to the imagination, but also brings in a certain type of imagination, perhaps as active as the other and even capable of annulling other effects. The commissioners reduced imagination to a binary variable, which they could activate on its own, when, for example, they falsely supposed that a subject was magnetised, or which they could reduce to zero when they had a subject magnetised without knowing it. But the imagination does not allow itself to be reduced to zero under experimental conditions. Subjects can’t be stopped imagining, interpreting, or taking up a position on what they are being subjected to, or on what they feel.

#### — WHO DEFINES THE CAUSES?

As the inquiry of Lavoisier and his colleagues showed, followed by the medicine of Pasteur, experimental procedure constitutes a Royal Road in as much as it puts to the test whether the candidates for causality (the cause of a cure or an illness) have in themselves the power of causality. But this Road cannot be adopted by decision (be it Royal, methodological or rational). The King of the Egyptian Gods was not able to disqualify writing except by making himself representative of the soul, which is to suppose that the soul can qualify a representative. In the same way, experimental procedure requires that what one is dealing with can become capable of engendering ‘experimental facts’. This comes about when, in one way or another, the experimenter invents a way of taking the initiative, of staging a situation that responds to his question: the magnetiser’s accomplice magnetising a subject while pretending to magnetise another; Pasteur inoculating sheep; a doctor medicating double blind, giving some a substance without physiological effect and others a possibly active substance. The initiative means that the experimenter, faced with a possible ‘cause’, requires this ‘cause’ to show its effects in an unambiguous manner, in a situation that has been actively stripped of any possibility that other unidentified clandestine factors might intervene. This initiative always takes the form of a variation on the situation, whether this variation is continuous, which is most often the case in physics, or binary (presence/absence), when the staging of the scene relates to logic rather than an activation of quantitative measures.

The fluid invoked by Mesmer was in fact a candidate for the type of cause that is supposed, by definition, to respond to the requirements of experimental testing. But this is not the same for the imagination. Imagination is not a true variable because the experimenter is not free to control the variations. He cannot, for example, tell the subjects what they are supposed to be imagining and stop them incorporating 'parasitical' elements that would transform the meaning of the experimental situation. From the experimental point of view, the question of imagination emerges as an obstacle, because it constitutes a rival counter-power opposing the experimenter's monopoly on the definition of the therapeutic scene. The living body itself intervenes in the definition of the causes that act on it.

And if the body thus has an initiatory power, if it intervenes instead of submits, the experimental *mise en scène* is no longer in itself a simple *mise en scène*, which was a condition for proof. It becomes an irreducible ingredient of the situation. The researcher's initiative, posing the questions, looking for proof, comes up against the fact that the other, the one he is addressing, has not been submitted to this initiative, like a chemical compound is submitted to purification, for example. The proof, for this other, is a test, to which the researcher gives a meaning. This test affects him in ways that the very conditions of the procedure of proof render untestable. The procedure of proof can henceforth become the creator of artefacts, 'facts' that are purely relative to the experimental situation. This is, by the way, what for fifty years the history of experimental attempts to define hypnosis have shown, at their own expense.<sup>6</sup>

Certainly statistical inquiries allow us to circumvent this uncontrollable individual dimension. But between statistics involving large numbers and the understanding of individual cases, we find the same difference as that which lies between the negative power to eliminate illegitimate candidates to the status of causality and the positive power to understand how 'causes cause'. The first, the negative power, does not lead to the second, the power of understanding, but rather allows us to forget it. And it is when doctors are confronted by this difference, when they are frustratingly reminded of the annoying fact that the living body is an obstacle to the procedures of proof, that they are tempted to speak of irrationality, or, with derision, of the 'placebo effect'.

The dissymmetry between the negative power of experimentation in medicine and the obstacles in the way of positively defining, in other instances, the situations it is interrogating is therefore not a simple anecdotal difficulty, which sooner or later would be eliminated after the usual progress is made. The 'question of the imagination' is the symptom of a practical contradiction between the constraints defining the laboratory and the modes of existence of the living creatures who are interrogated there. The laboratory needs a system that will respond to a definition in terms of variables, such that it can 'make it speak', while the beings about whom the question of the imagination is being asked 'respond' in a totally different sense, according to the meanings they themselves lend to their environment. How can one

avoid the artefact if the laboratory must eliminate, in order to give the scientist the power to ask his own questions, the counter-power constituted by 'interpretation', whether conscious or not, coming to them from the beings interrogated?

Apparently, the meanings that a micro-organism gives to its environment are stable enough so that experimental interrogation does not, in its case, create mere artefacts of the situation. This is why Pasteur was able to study the question of the 'field' (test-tube or living body) from the point of view of its germs. But the almost paranoid precautions to ensure the reproducibility of experiments in the case of experimental psychology are witness to the fact that, even for rats and pigeons, the experimental *mise en scène* creates an 'artefact'. In effect it creates observable variables (how many times does a rat swim in a Porsolt tank before going under?) for which the first significance is to set oneself up against what one is supposed to be studying. Whatever definition we might think of giving to the 'mind' of a rat, one thing is sure: the art of experimental proof carried out in laboratories, where 'animal models' are used to test 'medications' aiming to modify human psychic behaviour, does not take this mind into account, but actively denies the problem of its existence.

But in speaking of practical contradictions, isn't one attributing to the 'mind' of a rat, or that of the patient, something of a spiritual capacity to create their own meanings? Why abandon the hope for a future where this capacity would itself become one of many variables, at the very least because it keeps in the background the good old opposition between material at hand and the free spirit of inquiry. It is because of this type of objection that it is not useless to consider the example given today by the sciences in which experimental procedure has dominated. It is not a question of looking among these sciences for a 'point of view' for imagination, suffering, interpretation or suggestion. Contemporary physics or chemistry do not offer us interpretative resources. They authorise the simple statement that there is nothing mysterious or spiritualist in supposing that a living body may not satisfy experimental requirements. That there is nothing surprising in encountering 'causes' that can be identified as variables, which one can identify and put into play as one pleases. In fact, the exploration of the qualitative difference between, on the one hand, systems that function in equilibrium, or close to it, and those, on the other, whose relationships with their environment keep them far from equilibrium allows us to conclude that it is in exceptional situations where one can separate a cause from its effects in a general and reproducible manner.

Apparently the difference between these two situations, in equilibrium and way out of equilibrium, is purely quantitative and certainly without mystery. In a state of equilibrium, the exchanges between a system and its environment are either nil or balanced, as is the case, for example, when a glass of water is in thermal equilibrium with the room it is in. Maintaining something out of equilibrium simply means that the exchanges with the environment carry out certain processes for which the system is the base. It stops them therefore



from evolving towards a situation where they are statistically compensated by opposite processes. From the point of view of the definition of the system—that is, the definition of the processes for which it is the base, the interactions that characterise it, and therefore the mathematical equations that describe it—it did not seem that non-equilibrium should be able to contribute anything new at all. This is why, incidentally, physical chemistry remained for a long time centred on the study of systems in equilibrium, by far the more simple.

Today we know that this is no longer the case. Far from equilibrium, certain physico-chemical systems are likely to adopt a new kind of behaviour, the behaviour that Ilya Prigogine has called ‘dissipative structures’.

Dissipative structure was introduced into the heart of physics as a concept that, until then, had belonged exclusively to biology or to political thought: the concept of ‘self-organisation’. I will limit myself here to highlighting that physico-chemical self-organisation indicates first and foremost a transformation in the type of causality on the basis of which it is possible to describe the entropy-producing macroscopic activity of a physico-chemical system. In equilibrium, or in regimes approaching it, it is possible to assert that the dissipative activity of a system is entirely determined by its relations with the environment: it is nil in equilibrium, and it corresponds, in a near-to-equilibrium state, to a minimum compatible with the exchanges, and is therefore deducible from these exchanges. On the other hand, the activity of dissipative structures can no longer be defined as deducible from the exchanges with the environment that are nevertheless its necessary condition. In other words, the ‘control variables’ that describe the exchanges with the environment, here lose their status of sufficient and necessary determinants, in order to become constraints that make an activity possible. It is in this sense that this activity could be called ‘self-organised’.

The very identity of the system can be transformed in another way: factors insignificant to equilibrium, such as the existence of a gravitational field, can come to play a crucial role when one is far from equilibrium, that is, they render the ‘system’ capable of differentiated but coherent regimes of activity. So, without gravitation, whose influence can be negligible when a layer of liquid is in equilibrium, the spectacular Bénard cells do not form in this liquid layer when it is heated from beneath. Far from equilibrium, gravitation is not simply a synonym of ‘weight’, acting in the same manner on each molecule, it makes possible qualitatively new collective behaviours.

The sensitivity of a system far from equilibrium to factors that were insignificant, or negligible in equilibrium, is a very important conceptual discovery. In effect it means that whatever has the status of cause, which should intervene in the description and the prediction of a behaviour, is not given once and for all. It is the very activity of the system, which here determines what will, for it, have the status of a cause and how this cause will cause. Physical chemists had the habit of deducing the possible behaviours of a system on the basis

of its definition. They presupposed, therefore—and this is what we usually mean by ‘system’—that the power of defining a system’s activity comes from its definition. The notion of physico-chemical self-organisation gives us the idea that, in the far-from-equilibrium situation, it is the other way around: activity determines the manner in which the system should be defined.

Of course, physical chemists maintain the notion of system, even in far-from-equilibrium situations. They have the power to do this since what they study is prepared in a laboratory, because the elements in interaction are known to them, because they know what their definition of system in equilibrium has neglected. The fact that the system can integrate into its activity factors insignificant to the equilibrium thus constitutes for them a new tool for exploration: since the regime of the activity of a system far from equilibrium is not deducible from its equilibrium definition, to study this regime is also to study the stability or instability of this definition, or to ask the question of knowing under what conditions the system can become ‘sensitive’ to what was, in other conditions, nothing but noise.

Theories coming from physics or chemistry always enjoy enormous prestige. This is why I hesitated to use an argument linked to these sciences, fearing it would come back in an inverted form: so that’s what the secret of this ‘placebo effect’ is—a simple question of sensitivity in a far-from-equilibrium situation ... Now, the term ‘sensitivity’ can perhaps keep the precise meaning physical chemistry gives it when it is a matter of posing the problem of phenomena that escape the laboratory definition but respond to the same type of model, atmospheric phenomena for example. The term only functions as an *a fortiori* type of argument when the laboratory definitions no longer communicate with the possibility of a practical application of the problem, that is, when the dissymmetry between the positive and negative powers of experimentation comes to bear.

The example of physical chemistry in far-from-equilibrium situations does not have the function of proposing a new model, but of dismantling the general view that sees rationality coincide with the triumph of experimentation. There is no need for dramatic oppositions, between the submission of the object and the liberty of the subject, for example, in order to articulate the limits of experimentation. Already the system far from equilibrium stops responding to its limit conditions in way that the system in equilibrium responds to them. The obedience of a dog implies yet another set of meanings, and as far as human obedience goes, like doing exactly what the experimenter tells you to do (and Milgram’s experiment is witness to this<sup>7</sup>), this is enough to turn more than one person into an executioner in the name of science. It is the same thing when it comes to the term ‘respond’, which is found just as much in physical chemistry (how a system ‘responds’ to a perturbation or to a transformation to its limit conditions) as in a clinic (how a patient ‘responds’ to the varied doses of a medication). Every clinical *mise en scène* that establishes a relationship of

resemblance between these two sorts of response has devoted itself to the systematic production of artefacts.

#### — A PRACTICAL CHALLENGE

Let's go back to the identity of 'modern medicine' as I defined it in the beginning. It might seem now that this definition certainly recognises the 'power of the imagination', but in such a way that the practical question this power gives rise to might rather be avoided than elaborated on. More exactly, it implies the hope that one day this challenge will disappear of its own accord, when the dissymmetry that characterises experimental power in medicine will be reabsorbed, when this experimentation, the Royal Road finally opened, will be able to identify positively viable modes of action, instead of limiting itself to the elimination of illegitimate candidates.

Here the famous parable of the streetlight might come to mind. A helpful passer-by, after having assisted a certain man for a time who has lost his keys near the illuminated streetlight, ventures to ask him if he is sure he lost them there; no, replies the man, not at all, but this is the only place where one can see ...

Can one 'see' otherwise? Asking this question in terms of a 'practical challenge' means abandoning the perspective of progress that the illumination of other streetlights might symbolise, and thus would stretch even further the field of investigation. I have not the slightest doubt that streetlights will multiply in the future, nor the slightest scepticism about the interest in what they will illuminate. But here I want to speak of medicine as the 'art of curing' and take seriously its rationalist task. This implies putting into the spotlight the situation that prevails today, where rationality is entirely on the side of techniques and of medicines emerging from ever more varied and rigorous testing, while the doctor is limited to a representative role, even if it means that his 'human' or 'psychological' qualities create the 'added effect of soul', incontrollable and precious, which signs the medical act. Such a situation purely and simply reproduces the dissymmetry marking the powers of experimentation: all the dynamism lies on the side of the accumulation of 'means', incited by the streetlights of progress in the laboratory, while the relation between the doctor and the patient remains in the shadow of good will and difficult-to-communicate experiences.

A practical challenge does not mean 'only' a practical challenge. The term practical is steeped in meaning, while certain people give subaltern connotations to its usage, of the type, 'in theory that is what should happen, but in practice ...' I use the word 'practical' in the sense that all theories presuppose a practice, to the point where a practice is implied even if we say something exists or not, and this relates back to the practice. Practice is first of all the manner in which we address ourselves to whatever it is we are dealing with, the requirement that it satisfy certain criteria, and, finally, the need for it to be obliged by the way in

which it responds to this mode of address. At the risk of being trivial, I will recall that what we require of a table has little to do with what a specialist in microscopy is looking for in wood fibres, which for their part have little relevance for the techniques of analysing atoms in the chemical sense, which ... To be more relevant, I will stress that Mesmer's 'fluid' does not exist according to the criteria of practical experimentation, because it does not satisfy its requirements, but the question that Mesmerian practices evoke is nevertheless still there. They only become 'irrational', retrospectively, through pretence to a type of rationality that didn't suit them in the first place.

How can one understand the practical challenge of a 'rational' medicine without going back to the streetlight of experimental progress? In other words, how can we become worthy of the problems we impose on our object of enquiry, in this case, the suffering body. The experimenter subscribes to the obligations of rationality with which his practice is engaged to the extent that he is obliged to ask questions about the difference between experimental fact and artefact. In this sense his practice is, and should be, a polemical one, centred as much on dispensing with artefacts as on inventing new types of facts. If the art of curing does not allow one to oppose experimental fact and artefact, if the suffering body cannot become a reliable witness, authenticating the 'real doctor' as against the 'charlatan', then wouldn't the 'polemical' definition of medicine, centred on chasing charlatans, become incongruous?

I do not want to suggest by this that the figure of the 'modern charlatan', who believes proof lies in the successful cures he has brought about, should be revived. As far as that goes he is of no more interest than the 'placebo effect' itself, symptom like him of the difference between cure and experimental demonstration. The 'placebo effect' is one of these proofs that a chemical substance has to overcome in order to be considered a medicine, and the charlatan will continue to be considered the 'other' of the pharmaceutical industry to the extent that the industry is obliged to establish that it is not just producing snake oil. But hunting down charlatans has the same limitations as the art of proof in medicine, in that it allows for the disqualification of the false pretenders and not the positive identification of genuine ones. And it is to these limitations that positive requirements have to be attached, thus defining the singularity of the art of healing.

So I will suggest, at my own peril, a radical disjunction between those sites that are no doubt relevant for medicine but do not control it, where the hunt for the charlatan and negative proof prevail, and those where, on the contrary, these two ingredients should stop haunting medical practice, sites where it is a matter of curing rather than proving. Whether my proposal is considered 'rational' or not can be verified from the predictable reactions it will provoke: 'But if we renounce our differences from these vulgar charlatans, the doctors will say, it will be *carte blanche*; we will be able to do whatever we like!' So a true proof is really needed to create something 'worthy' of a practice that will be more than just

arbitrary, particularly if all reference to the Royal Road is to be lost, along with the fictional idea that the suffering body 'should' be able to tell the difference between the real doctor and the charlatan.

At this point we should bear in mind that the charlatan, as I have defined this figure, is the modern charlatan: like the doctor, this charlatan considers his activity 'rational' because it is proven by the success of his treatment. Consequently he thinks he is gleaning theoretico-experimental practices from real life. He thus has no direct relation with what I would call, to use the generic term, 'curers'. And it is thus that Tobie Nathan's challenging question comes into play: wouldn't we have something to learn from those curers, whose common characteristic is of not being haunted by the ideal of a Royal Road capable by definition of disqualifying Others, but rather of having cultivated what one could call, following Nathan, an 'influencing practice'.<sup>8</sup>

It is appropriate here to distinguish 'influence' in Nathan's sense, from 'suggestion', 'imagination' or 'placebo effect' because these last three terms—even if they are not defined pejoratively in line with the pervasive theme of the irrational—designate an ingredient held to be 'natural', 'psychological', 'found everywhere', and not a technical thought likely to bring specific teaching to the art of curing. Suggestion is what we are all likely to be able to carry out, like Monsieur Jourdain,<sup>9</sup> without even knowing it. Influence implies the expert; it implies a knowledge whose power and interest are, as Nathan shows, to 'technicise the therapeutic relation'.

The way in which Nathan proposes to rehabilitate the 'thought constraint', created by so-called 'traditional' therapeutic apparatuses, a constraint that 'affiliates' the sick person to a world where what he lives makes sense, and in relation to which he can construct himself as a member of a group for whom what he is living has a signification, crashes head-on into the double idealist register we inhabit. Equally scandalised would be the two western rivals vying for the Royal Road of therapy: the 'knowing how to listen' of psychoanalysis and the experimental purification of 'modern' medicine. Through coercion, violence, suggestion and the deliberate creation of artefacts, these two enemy brothers will denounce the treachery constituted by 'the fabrication of brainwashed patients' in relation to the truth project that defines them respectively.<sup>10</sup>

But the price that the ideal of the Royal Road must pay appears at the same time. The King of the Gods pretended to tell the truth about memory, and the experimental method was produced when, in relation to often quite insignificant phenomena, such as rolling balls or micro-organisms, a claim of this type managed to resist any tests likely to challenge it. Western therapies, haunted by the ideal of a Royal Road, and by the idea of constituting the suffering body as viable witness of its symptom, are moved by a requirement that, even if it could never be satisfied, works: they can and must, writes Nathan, 'weld the symptom

to the person'. This means that the patient must be 'alone', in the face of an apparatus of knowing that defines him through a problem whose parameters relate to the collective to which the therapist is, for his part, connected.

So the proposition engages us strongly, but not in any arbitrary way. To the contrary, the inductive apparatus of links and meanings, which Nathan describes, takes up the practical challenge that I have tried to identify: to recognise that whatever throws up obstacles to our ideals and our practical requirements is nothing other than the singularity of the thing we are dealing with, and to become capable of addressing ourselves to this singularity without trying to eliminate it or skirt around it. If the psyche, 'the spirit', but also the body, which the 'placebo effect' is witness to, are made in relation to each other, they cannot 'respond' to a treatment without also 'making each other' on the basis of this treatment. 'Influence' designates a practical thought with a bearing on this fabrication.

Having said that, learning does not mean imitating. As Tobie Nathan often highlights, cultural affiliations are not improvised. If the curer does not do 'whatever he likes', it is because he too has come from the very culture that he affiliates his patient to. The 'culture' of modern medicine, haunted as it is by the charlatan and the art of proof, defines the sick person *a priori* as a virtual member of the statistical group that is tested for whatever ends up being prescribed, or, for the psychoanalyst, as a 'case' who can appear in publication for the edification of his colleagues. This culture is certainly likely to 'affiliate' the patient—that is, transform him into a living witness believing in his powers—and no doubt this affiliation is an ingredient of the therapeutic effectiveness. But, short of founding his own sect, the doctor, as far as 'modern' culture defines him today, cannot aim for such an affiliation, or find a way of cultivating it, or admit it as an official player on the therapeutic stage.

At this point, I am the closest I will get to one of the great specialities of western intellectual production, to the very signature of its modernity when it is at its most lucid. The sad fact is that we have lost forever a resource whose precious nature we only now recognise, but which we are also unable artificially to recreate. So only the grand final movement remains: the appeal to carry out the heroic task of deepening our uniqueness, while accepting the disenchantment of the world of which we are vectors, yet simultaneously falling once again for what is no more than a caricature of what we have destroyed, those sects that are proliferating and know how to 'affiliate' those who approach them. I do not have the least intention of falling into this convenient formula; the best it has going for it is safety in numbers and less risk of being called naive.

In the anonymous area where the question is kept open are certainly those whose work of apprenticeship Nathan appeals to, as they learn to describe in a careful way the therapists and their techniques. The question here is less one of imitation than the transformation of the one who is interested by what interests him. His stake is not just to stop the destruction

of the therapeutic techniques of 'others', in accordance with the maxim 'to each his technique'. For this type of tolerance, work is not necessary. Its stake is indissociable from the role of inventing and being invented by those who, among us, will come out of this work, those who will have learnt the requirements and accepted the obligations. We do not know what kinds of resources they will be able to mobilise in the heart of our tradition, or which fragments, which seem to us to have nothing to do with medicine, they will appropriate in order to reconvert them. Did not the Darwinians, for example, redefine techniques of police investigation—traces and indexes—in their own way? We do not know; nevertheless, one thing for me seems certain: it is not just what we call a doctor that will be reinvented, but also what we call a patient.

The example that Tobie Nathan gives is very significant on this point: from the first steps of a piece of research, which he tells us has not yet begun, he begins his assault on the 'city' and interrogates not only the way in which we 'care for' migrants and their descendants, but also the way in which we, with the help of our standards, facts and good intentions, deny their essential right to maintain the obligations and requirements of their culture.<sup>11</sup> In other words, Tobie Nathan is setting out a political problem.

There is nothing accidental or tangential about this. It comes from the living singularity of our tradition that is eclipsed by the very plausible narrative we have inherited about the disenchantment of the world. If there is a tradition that singularises us, it is, for me, that called 'politics'. The questions of knowing what the city is, who it belongs to, and what rights and responsibilities are translated by this belonging, as well as the movements of struggle, inventing new requirements, obligations and identities, are questions which singularise in the first instance our history.

'Rationality' itself is in part linked with this political invention, because it was produced first of all as a power of the contestation and transformation of relations of authority and of once dominant modes of legitimation. Today rationality is not detached from them: it does not constitute an instance of neutral consensus, overhanging conflicts and forceful relations, but it is an ingredient that itself changes meaning, according to whether it is aligned with the powers that maintain and reproduce the categories through which we define the city, or with the social movements that interrogate and destabilise the obviousness of these categories.

I do not have the intention of transforming this text into a political dissertation, so I will limit myself to affirming quite simply that the connection of rationality with disenchantment places the one who utters this statement, whatever his intentions, on the side of the conquerors in our history, those who have known how to capture and suppress their powers of transformation. In a correlative fashion, the practical challenge of inventing for medicine other paths than the Royal Road, which 'weld the symptom to the person', place the one who



utters this statement on the side of political invention, which is to say the singular mode according to which, in our culture, minorities invent things and invent themselves.

In our history, the ‘fools’ the ‘beggars’ or the *sans culottes* maybe even be the slaves recognising themselves through the Christian god, were able to invent themselves via the adjective that disqualified them. But isn’t this also what is happening now, in the field of medicine, with the so-called ‘junkies’ who accumulate erudite dissertations on the legitimacy of this adjective to reclaim themselves as such in ‘non-reforming’ users associations (the Dutch baptised themselves ‘junkie’ in the act of creating the *junkiebonden*)? I know organisations of users are not easy things for the medical profession to talk to, because they demand help while refusing to pay the expected price, and they demand that their submission to medical categories be recognised, while refusing to allow themselves to be ‘welded to their symptom’. For myself, I consider them to be the ones, like organised victims of AIDS trying to get their rights and claims upheld, who are the vectors, no doubt stuttering and sometimes incoherent, of the tradition that singularises us, the one that we can call ourselves the inheritors of. And this heritage includes those preoccupied with rationality as much as those preoccupied with justice, because the ‘junkies’ who invent themselves as part and parcel of the city, and not as objects of medical and police definition, create in doing this, for us all, citizens, doctors and experts, the constraints and the risks on the basis of which we will be able to work out a discourse on drug use that will in the end be ‘rational’.<sup>12</sup>

My conclusion, even if it seems paradoxical, was perfectly predictable. It was predictable in so far as ‘psychiatry’ and ‘medicine’ are concerned, here as everywhere else, with inseparable problems about what makes collectives work. Their practical identities depend quite obviously on the way they accept this inseparability, or define it as an obstacle to a professional practice finally getting respectable. And yet, this conclusion is no recipe, ‘order word’ or denunciation. It does not finger the ‘good’ and the ‘bad’, the ‘unfortunate alienated sick’ and the ‘repressive institutions’, as if it might be sufficient to throw the latter into question so that the former wake up by some miracle to the possibility of redefining all by themselves what in the exterior world was qualifying them. This conclusion has in mind, above all, the images that can make inroads into the dynamics of invention happening now or in the future: first the image that opposes rationality and politics; then the one that would lead a doctor in good faith to favourably consider the self-help movements for drug users or victims of AIDS, merging them for instance with Narcotics Anonymous groups (‘associations very useful to keep up the spirits of those involved’); and finally that which would lead to their merging with associations for sick people ‘sticking in a group according to their symptom’, which proliferate mostly in the USA. My conclusion aims to propose that the doctor recognise these movements as having vital interest for the future of medicine.

Allow me to recall, in conclusion, that this future poses, in all likelihood, a political problem. Today medicine cannot be reduced to the response to individual suffering because this is not just the business of the doctor and his patient. It has become one of the great vectors of human history itself, one of the sites where it is decided in what way human beings construct both their individual and collective identities. I will simply remind us that it would not be impossible for our descendants in the quite near future to find themselves in a position where they, along with their relatives, and under pain of social opprobrium, are classified into 'risk groups', and constrained to submit from an early age to procedures that will bring about, in a 'responsible' present, a statistical probability that today appears still to eventuate. Insurance companies, employment procedures, techniques for procreation, the right to health care—all these things in one way or another are going to be redefined on the basis of technical developments for which the sole purpose at the beginning was for the relief of individual suffering. Beyond the legal and regulatory problems, what is at stake is the way in which humans hope, anticipate, fear and imagine, the way in which they not only conceive but also construct their own identities. Because of course, societies today make all this up just as much as so-called traditional societies. The only difference, and it is a weighty one, is that now they refuse, on this point, to think about what they are doing.<sup>13</sup>

Of course it is not the doctors' job to decide this future. But the terms in which the question of this future are put depends nevertheless on the way in which they are situated. The dominant position today is that it is certainly a question which medicine puts to society, but that doctors should stick to being modest representatives of a rationality and a vocation that orders them to do what they have to do, which is to say, demand, wait for, or submit to the rules and regulations decided by 'the politicians'. Everyone knows that the situation is not one of such luminous simplicity, but the guiding word is nonetheless one of avoiding thinking too much about what will throw into question the categories of the medical act in the city, which is to say, avoiding thinking.

I began with defining modern medicine against the charlatan, and I have arrived at the question of medicine in the city. What sleight of hand was this? One can certainly stress, from the beginning, that the two questions are associated. To return one last time to the tub, the question that preoccupied the commissioners was political as well as scientific. It is true Mesmer was disturbing not only the medical order, but also the order of the city, because many of those assembled around the fluid constituted the active symbol of equality among men: the King, as much as his most lowly valet, it was said, could be effected by the fluid, as the 'magnetic relationship' united all humans and affirmed their fundamental equality. But the movement of my argument claims a more profound meaning, which harks back to the political singularity of our tradition. The question of the rationality of medicine does not

belong to the unique landscape of the practices that reference modern science, and nor is it a question of the 'epistemological' type. We, citizens and doctors, are engaged in a tradition that invented rationality as a gage, as a discriminating reference for the futures that we are constructing. For us it is a vector of obligations and requirements, which, for good or ill, constructs us and forces us to think. In this way, we are inscribed in a redoubtable tradition. Here where neutral masks of objectivity, good intentions or professional seriousness justify a halt to thought, there where the light cast by our streetlamps actively keeps in the shadows the things that stand in our way, this tradition makes those who refer to it into devotees, and authorises itself to make them accomplices to a blind history, which is to say a criminal one. That is why the 'practical challenge' of a medicine capable of becoming worthy of what it is dealing with cannot be understood as a simple local stake, according to whatever definition the drift of history gives to it, whatever practice wants to call itself modern. To become capable of hearing this challenge is also to become capable of recognising what makes it, whether taken up or ignored, a crucial element of our future.

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1. Léon Chertok and Isabelle Stengers, *Le Cœur et la Raison*, Payot, Paris, 1989.
2. Philippe Pignarre, *Les Deux Médecines*, La Découverte, Paris, 1995.
3. Jacques Derrida, *Dissemination*, trans. Barbara Johnson, Athlone, London, 1981.
4. Isabelle Stengers, *L'Invention des Sciences Modernes*, La Découverte, Paris, 1993.
5. Bruno Latour, *Science in Action: How to Follow Scientists and Engineers through Society*, Harvard University Press, Cambridge, 1987.

6. Léon Chertok and Isabelle Stengers.
7. Readers will recall that Milgram set up an experiment where his subjects, thinking they were taking part in an experiment to do with memory, found themselves summoned to sanction via electric shocks of increasing power, the errors of memory committed by others (Milgram's accomplices). The majority followed orders and continued to administer the shocks, while the 'victims' screamed and begged for the torture to stop.
8. Tobie Nathan's is the first of the two essays in *Médecins et Sorciers*: 'Manifeste pour une Psychopathologie Scientifique'. [trans.]
9. As in Molière's famous play *Médecin Malgré Lui*, where Jourdain discovered he had been speaking prose all his life without even knowing it. [trans.]
10. For psychoanalysis, which is first inscribed within a field of 'experimental' rationality, only to later define itself on the base of an ethics that opposes the 'subject' from the 'object of knowledge', see also Léon Chertok and Isabelle Stengers; Isabelle Stengers, *La Volonté de Faire Science*, Editions Delagrang/Synthélabo, collection 'Les Empêcheurs de Penser en Rond', Paris, 1992; and Isabelle Stengers, 'Les Déceptions du Pouvoir', in *La Suggestion: Hypnose, Influence, Trance*, Editions Delagrang, collection 'Les Empêcheurs de Penser en Rond', Paris, 1991, pp. 215–31.
11. Tobie Nathan, *L'Influence qui Guérit*, Editions Odile Jacob, Paris, 1994.
12. See Isabelle Stengers, 'L'Expert et le Politique', in *Drogues et Droits de l'Homme*, Editions Delagrang/Synthélabo, collection 'Les Empêcheurs de Penser en Rond', Paris, 1992.
13. See Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter, Harvard University Press, Cambridge, 1993.