Chapter 7
Seeing and Hearing: Charcot, Freud and the Objectivity of Hysteria

Paolo Savoia

7.1 Introduction

This essay takes its origin from a problem raised by the complex and much investigated relation between the French neurologist and alienist Jean-Martin Charcot (1825–1893), and the father of psychoanalysis, Sigmund Freud. Their works on hysteria have been crucial in the rise of the sciences of the mind as we know them and are written in a period – the fin-de-siècle and the turn of the century – that saw the formation of some of their most significant conceptual tools. One of them, as we will see, is the concept of *trauma*,[1] which allowed both physicians to conceive hysteria and, more generally, nervous diseases in a new way.

Charcot and Freud write in the same years about the same psychopathological phenomenon, hysteria. Why, then, do they give such a great importance to, respectively, seeing, or eye observation, and hearing, that is, listening to the patient's account?[2] How is it possible that Charcot's texts, lectures and therapeutic practices abound with images and photographs, while Freud's texts completely lack them?

I am grateful to Arnold I. Davidson for precious criticism and advice.

[1]On Charcot and trauma see Micale 2001; for a discussion of Freud's trauma and an overview of the immense literature on the topic see Leys 2000, 18–40.

[2]At least two texts which addressed this problem have helped me in isolating it: Gilman 1993; and de Marneffe 1991. Gilman explains the shift from seeing to hearing by giving an account of the scientific interpretations of Jewishness at the turn of the century; de Marneffe focuses on the different importance that Charcot and Freud gave to the patient's subjective content of their discourses on themselves. While these are certainly both instructive interpretations, the point I would like to make is a different one, although, I hope, not incompatible with them. An interesting

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I will try to answer these questions at an historical level, taking into account different forms and practices of scientific objectivity. Freud's approach to symptoms and neuroses is much better known than Charcot's, so I will focus on the latter and use Freud's early theory of hysteria in order to compare their alternative views of the objectivity of the inner life of the human being.[3]

Despite some critical differences that will emerge in the conclusion, the framework of my analysis is given by Daston and Galison's history of objectivity as entailing a commitment to a series of epistemic virtues, conceived as epistemic and ethical elements that merged into regulative ideals. The present essay is thus situated within the trend in the historiography of science that is generally known as "historical epistemology".[4] However, as a methodological premise, in my analysis:

1. I will not try to set up a causal explanation of the passage from the primacy Charcot accorded to sight to the one Freud accorded to hearing. Rather, my aim is to describe two structurally different sets of epistemic norms and regimes of scientific perception.
2. I will not make use of a sharp and clear distinction between observation and theory, or between clinical work and theoretical reflection. The reason for this is historical as well as theoretical. Charcot and Freud both favored a clinical approach to nervous diseases: Charcot opposed clinical practices of observation to medical "systems"; Freud intended to ground the scientificity of psychoanalysis on observation. Therefore, I will deal with issues such as how they conceived and practiced observation; what senses they made use of in order to observe; and how they conceptually made sense of their "data". Besides, in this paper observation and perception will not represent universal anthropological constants, but rather fully historical activities. My emphasis will thus be on the correlations between, on the one hand, epistemic virtues and norms, and, on the other hand, the ways in which scientific observation individuates and stabilizes scientific objects.[5] As we move forward into this exploration, we will realize that the object in question is no other, and no less, than the mind, or *the self*.

discussion and overview on the literature on the topic can be found in Cartwright 1995, 47–80. For a general account of photography and psychiatry in the 19th century see Gilman 1982, 164–213.

[3]On Charcot's life and works see Bonduelle et al. 1996.

[4]On historical epistemology, broadly conceived as a Franco-American tradition, see for example Daston 1998; 2001a; Hacking 1999; Davidson 2001, ix–xiv; Lecourt 2001; Braunstein 2002; Sturm and Feest 2009; Rheinberger 2010.

[5]I am referring here to Daston and Lunbeck 2011a, 1–6. On the history of scientific observation see also Singy 2006.

7.2 Seeing Hysteria: Charcot

With respect to the problem of the objectivity of hysteria and of the mind, we are concerned here by a relatively small part of Charcot's work: his demonstration of the existence of male hysteria. This analysis seeks to demonstrate two things: a shift of the meaning of the concept of trauma from the physical to the psychological (or "moral" as it was sometimes called) and the predominance of the clinical and scientific ideal of *visibility* in the works of Charcot and his school at the Salpêtrière, an ideal that was regarded as the main feature of what could be called *objective* in the field of the psyche.

In the first lecture of the third volume of his 1885 *Lectures on the Diseases of the Nervous System delivered at the Salpêtrière*, Charcot sketches what may be seen as his research programme. First of all, he praises the anatomo-clinical method, a glorious French medical tradition. Clinical observation must be the main guide for the science of the nervous system, which is also to be connected with the whole of the biological sciences. However, Charcot goes on, the specificity of neurology consists in the particular features of its study of lesions. Of course, in principle we can say that each singular symptomatology corresponds to a specific cerebral lesion, which in turn reveals the disorders of the functions of the cerebral regions involved. Even so, Charcot admits, "on the question of cerebral lesions much uncertainty exists". There are indeed cases of pathological states located in the nervous system, "which leave in the dead body no material trace that can be discovered" (Charcot 1887/1889, 12). Hysteria is the clearest example of this kind of diseases, called neuroses:

> These symptomatic combinations deprived of anatomical substratum, do not present themselves to the mind of the physician with that appearance of solidity, of *objectivity*, which belong to affections connected with an appreciable organic lesion (Charcot 1887/1889, 12).

An attentive, patient, and repeated activity of observation is the principal means for describing the regular type of hysterical phenomena. This is in fact what Charcot did with his famous characterization of the four phases – epileptoid, great movements, passionate attitudes, terminal delirium – of the hysterical attack (Fig. 7.1a, b).

Charcot's introductory lecture serves us well to see what is at stake in his treatment of hysteria. The problem here is the absence of the anatomical substratum of the symptoms: as he explicitly points out, symptoms lack solidity and *objectivity*. Charcot's approach is thus well representative of a common way of reasoning that was typical of late nineteenth-century psychiatry: the clinical understanding of neuroses – slippery illnesses whose anatomical seat cannot be identified – has to be complemented by ad hoc anatomical and physiological hypotheses. As far as the more controversial problem, characteristic of hysteria, of the simulation by patients making up imaginary symptoms, let us just recall that Charcot was convinced to solve it by means of the experimental tool of hypnosis.[6] And hypnosis

[6]Charcot presented a famous memoir on hypnotism at the Paris Academy of Science in 1882, fully supporting the scientific character of this otherwise suspicious practice (see Charcot 1882); on the history of hypnotism see Gauld 1992.

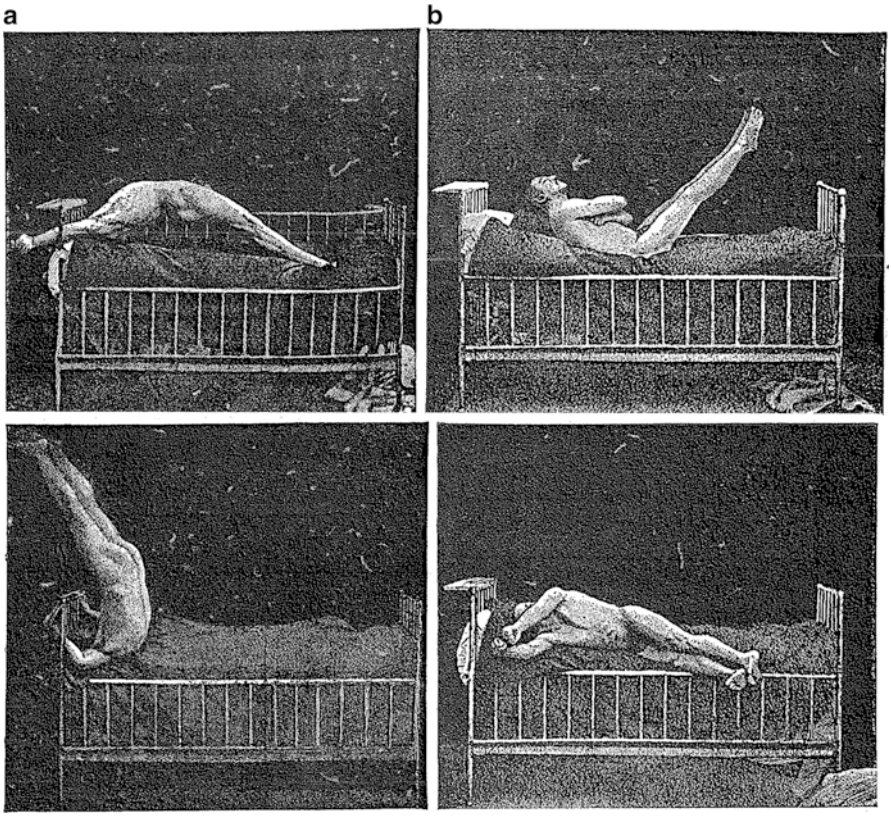


Fig. 7.1 (**a** and **b**) Hysterical attack in a male patient. J-.M. Charcot, *Leçons sur les maladies du système nerveux*, Paris: Delahaye 1887, vol. 3

for Charcot should produce *visible and recordable effects*. For example, if we hypnotize a subject and we graphically compare, through an apparatus that measures the movement of the chest, his movements' quality and regularity to those of a suspected malingerer, then we will easily be able to verify whether this suspicion is well founded or not. In the hypnotized subject's movements there will be no intervention of the will, for hypnosis is the abolition of conscious will, and therefore the lines traced by the apparatus will be regular. On the other hand, the image of the movements of the simulating subject will be irregular, marked by the presence of a more or less conscious will to simulate. In fact, the will of the malingerer is objectively represented by the irregular lines in the graph. This apparatus does not record anything, but it is graphically able to tell us whether we are dealing with a simulator or with a real hysteric (Charcot 1887/1889, 14–18) (Figs. 7.2, 7.3 and 7.4).

Let us now return to the issue of male hysteria. Charcot's aim is to make hysteria become objective by making it visible by means of experimentation and

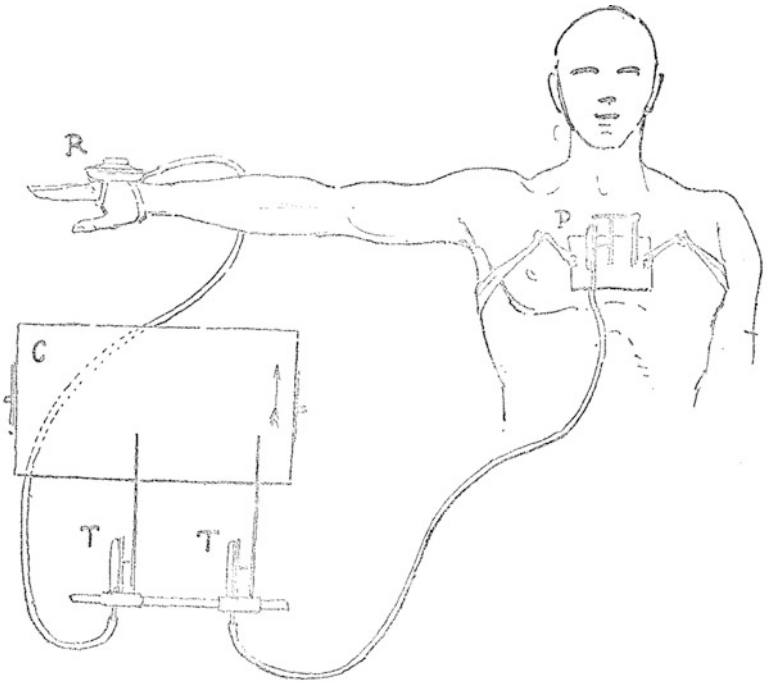


Fig. 7.2 The visualization of the simulator. This device, called pneumograph, was used by Charcot in order to identify and distinguish hysteric patients from simulators. Detectors of the movement of the chest of hypnotized patients are linked to a pen tracing lines on a piece of paper; depending on the regularity of these lines the physician will be able to see if there is an intervention of the will (when the line is irregular) or not (when they are regular). Given the fact that hypnotization is the abolition of the will, in the former case we are in presence of a malingerer who is only simulating the absence of the will. J-.M. Charcot, *Leçons sur les maladies du système nerveux*, Paris: Delahaye 1887, vol. 3

observation. In other words, for Charcot, demonstrating the existence of male hysteria is tantamount to demonstrating its objectivity.

We won't be able to discuss all the complex gender issues involved in the attribution of hysteria to male patients here,[7] so let us confine ourselves to the structure of Charcot's argument and proofs, characteristic of his powerful clinical

[7]On gender and the history of hysteria see Showalter 1993; King 1998, 205–246; Micale 1995; Edelman 2003; Goldstein 2009, 49–55. Charcot was interested in debunking the medical opinion according to which only weak and effeminate boys could be seized by hysteria. He builds on the works of some English and American physicians who diagnosed the so-called "railway spine", a nervous disorder that followed episodes of trauma caused by accidents that happened to strong and virile workers of the railways. These kind of male subjects served well Charcot's purpose of making hysteria a universal phenomenon. On this complicated history of traumatism see Micale and Lerner 2001a, b; Harrington 2001; Caplan 2001; Hacking 1995, 183–197; Leys 2000.

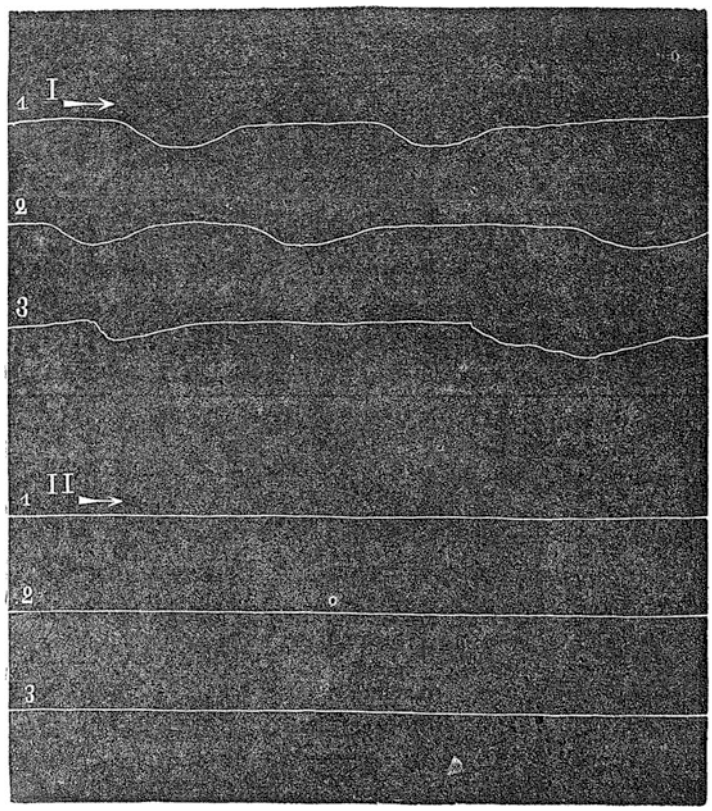


Fig. 7.3 The visualization of the simulator. Real hysteric: no voluntary movement traced, absence of the will; J-.M. Charcot, *Leçons sur les maladies du système nerveux*, Paris: Delahaye 1887, vol. 3

lectures. First, Charcot presents six cases of male patients, all of them characterized by two main features: they have classic and clear hysterical symptoms, and above all the typical forms of paralyses; their pathological state can be traced back to one or more episodes (such as accidents and assaults) that impressed on them a vivid emotion of fear, terror, etc., but left no appreciable material, organic lesion that could count as a cause for their paralyses. Charcot begins then to show the process that led him to recognize the reality of male hysterics.

The first step is a comparison between the cabdriver named "Porcz.", a difficult case of right brachial "monoplegia" (paralysis) mysteriously originated by a traumatic fall, and "Deb.", a second patient with a paralysis doubtlessly originating in an organic lesion of the peripheral nerves of the shoulder. Although the two paralyses seem identical, a careful clinical inspection supported by graphical representation reveals that the area indicating the distribution of the first patient's monoplegia is

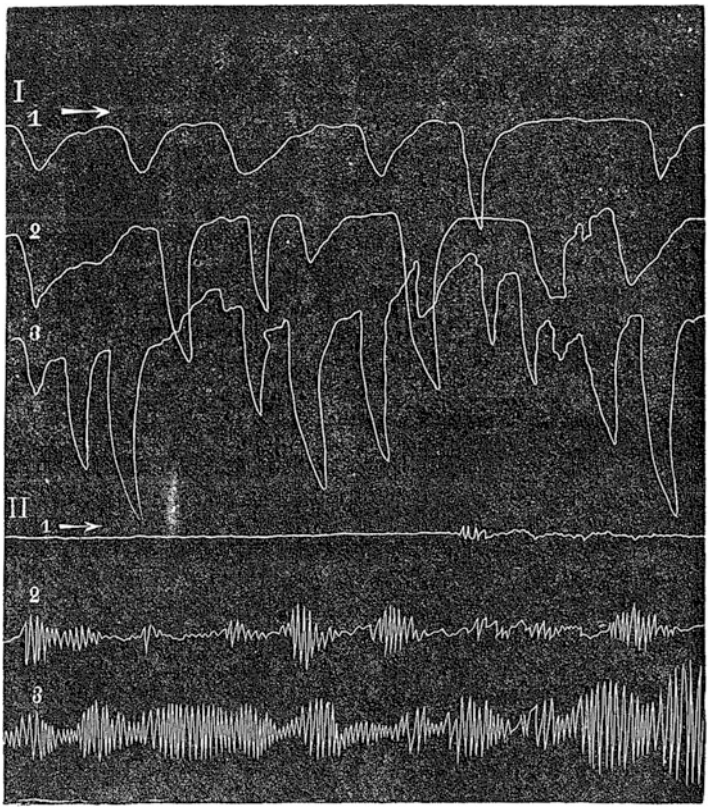


Fig. 7.4 The visualization of the simulator. Simulator: voluntary movement traced, presence of the will; J-.M. Charcot, *Leçons sur les maladies du système nerveux*, Paris: Delahaye 1887, vol. 3

completely different from the one observed in a case of organic lesion of the brachial plexus (Charcot 1887/1889, 270) (Fig. 7.5a, b, respectively). No doubt, Charcot goes on, we are dealing with a lesion of the nervous system, but:

> We have here unquestionably one of those lesions which escape our present means of anatomical investigation, and which, for want of a better term, we designate *dynamic* or *functional* lesions (Charcot 1887/1889, 278).

At this point, Charcot explicitly formulates the hypothesis of hysteria and starts looking for other symptoms that might confirm his earlier findings regarding cases of complete hysteria. Once the diagnosis is established, Charcot can start thinking about a therapy. However, another problem arises, since every therapeutic intervention – as Charcot points out, referring to Claude Bernard – should be based on physiological grounds, namely on the knowledge of the mechanism that

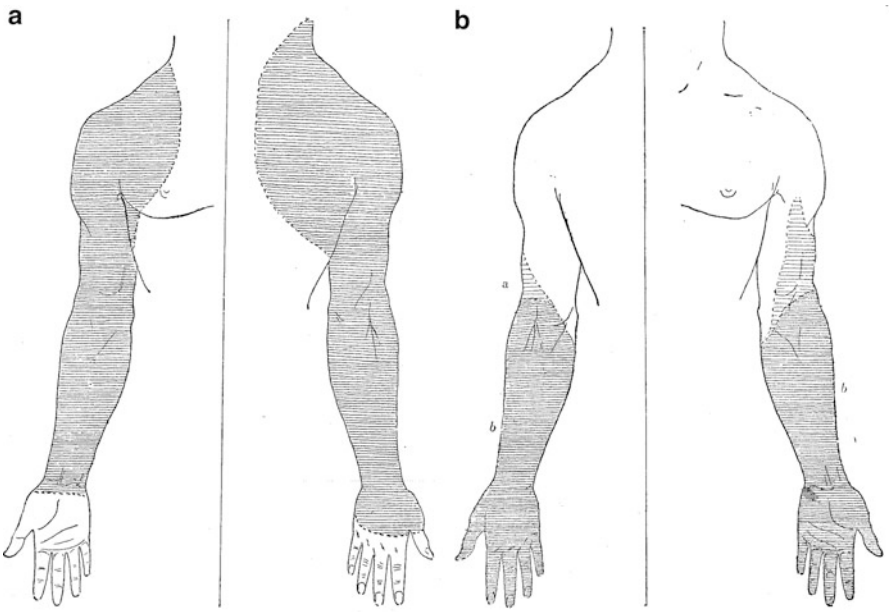


Fig. 7.5 (**a** and **b**) Graphic comparison between the bodily regions involved in a hysterical traumatic paralysis (Porcz.) and in a organic lesion of the peripheral nerves of the shoulder (Deb.). J-.M. Charcot, *Leçons sur les maladies du système nerveux*, Paris: Delahaye 1887, vol. 3

produced these traumatic hysterical paralyses in the first place (Charcot 1887/1889, 288).[8] This mechanism must be understood in order to undo its effects.

But how is it possible, then, to show that these *psychical paralyses* are "as objectively real as those depending on an organic lesion" (Charcot 1887/1889, 289)? Charcot's answer is based on the introduction of hypnosis as an experimental device that should lead us *to see* the objectivity of psychic paralyses, of psychic trauma, and *of the psyche itself*. Hypnosis enables the physician to induce by suggestion in the experimental subject the idea of a paralysis, thereby producing it as a visible phenomenon. Hypnosis experimentally produces the phenomenon that should be passively observed and recorded because it allows us to see what would have been otherwise invisible, namely the subjective process of the etiology of a hysterical paralysis. Charcot thus presents a new character on the scene, a hysterical girl; he hypnotizes her, and induces in her a paralysis identical to Porcz.'s, simply producing a small shock on her shoulder (Fig. 7.6). Since, as proved by another comparison,

[8]It has been often said that Charcot – unlike Freud – only looked for clinical descriptions and neglected etiological analyses, but there are plenty of references to Claude Bernard's model of experimental medicine to be found in Freud's works as well. The difference with Freud is thus less at the level of the opposition between clinic and etiology, than at the level of the one between physiological and psychological causes.

Fig. 7.6 Hypnotism. Desiré Malgloire Bourneville et Paul Regnard (sous la direction de), *Iconographie photographique de la Salpêtrière*, Delahaye, 1879–1880, vol. 3

there are people pathologically predisposed to trauma,[9] people who live in a sort of a state of constant hypnosis, and who do not need to be hypnotized in order to suffer the pathological consequences of a trauma, the demonstration is successfully concluded. So Charcot can finally provide his own definition of trauma:

> This nervous shock is produced by some strong emotion, a fright, a feeling of terror determined by an accident, especially when this accident menaces life … On these occasions a peculiar mental condition is often developed … which is very intimately connected, in my judgment, with the hypnotic state. In both of these conditions, in fact, the mental spontaneity, the will, the judgment, is more or less suppressed or obscured, and suggestions become easy (Charcot 1887/1889, 335).

According to Daston and Galison, the second half of the nineteenth century is the time in which a conception of mechanical objectivity emerged in connection with innovative modes of representation expressing new epistemic virtues, such as the

[9]Like all of his fellow physicians and alienists at the fin-de siècle, Charcot firmly believed that nervous and mental illnesses had a hereditary organic basis, and that trauma was just the episode that could trigger it. On this topic the most complete study is Coffin 2003.

ideal of the purity of observation. The techniques underlying mechanical objectivity consist in practices such as training the senses in scientific observation, keeping laboratory notes, monitoring one's hypotheses and opinions, the control over one's beliefs and fantasies, and so on. The typical scientific self pursuing mechanical objectivity is the one who works to eliminate all aesthetic and moral judgment, and all kind of preconception from his observational activities, and who tries to be, as much as possible, like a recording machine, a merely recording eye.

This is exactly the case with Charcot. Georges Canguilhem clearly showed that already in 1865 Claude Bernard thought that medicine became adult, that is to say that it became an experimental science (Canguilhem 1968, 127–141): the physician, the neurologist in our case, should be an active inquirer of nature, he has to actively ask questions to nature. But once he has done that, he has to observe, because experiments are nothing more than "provoked observations". For Claude Bernard,

> The observer must be the photographer of phenomena, his observations must represent nature in exact terms. One has to observe without any preconceived idea; the observer's mind must be passive, that is, it must be silent; he listens to nature and writes what it dictates (Bernard 1865/2008, 64).

This picture of the observer as the champion of mechanical objectivity is exactly the picture to which Charcot wanted to adjust himself, as he declared in a 1888 lecture: "But in truth I am nothing but a photographer; I register what I see" (Charcot 1892, 178). The wide use he made of photography and images of all sorts should not be considered as a mere technical device, but as a part of a complex epistemic and ethical attitude of the scientist.[10] Charcot and his collaborators talked about the camera *in ethical terms*. Albert Londe, the head of the photographic service of the Salpêtrière, wrote in his important book on medical photography that this device has the virtue of being "*sincere*" (Londe 1893, 4). In accordance with Charcot's ideal of seeing patients *and not letting them speak*, Londe recalls several important functions that photographs play: as devices for the training of the medical eye, as a means of mechanical reproduction of the whole of the observable, and as a valuable tool for the writing of the clinical cases (Fig. 7.7).

> During the study of certain nervous affections ... we encounter attitudes and essentially transient states. Here photography is useful, because it allows us to record the image of these too much fast phenomena ... Thanks to our photocronographic methods we will overcome the incapacities of the eye (Londe 1893, 4).

[10]The Salpêtrière had a well equipped photographic service, and between 1876 and 1880 were published, under Charcot's direction, the famous photographic atlases of hysteria, under the title of *Iconographie photographique de la Salpêtrière*; see Didi-Huberman 2003. For example, Charcot once wrote that "photographs are impartial documents, which place under the medical observer's eyes a faithful image of the investigated matter" (Londe 1893, viii).

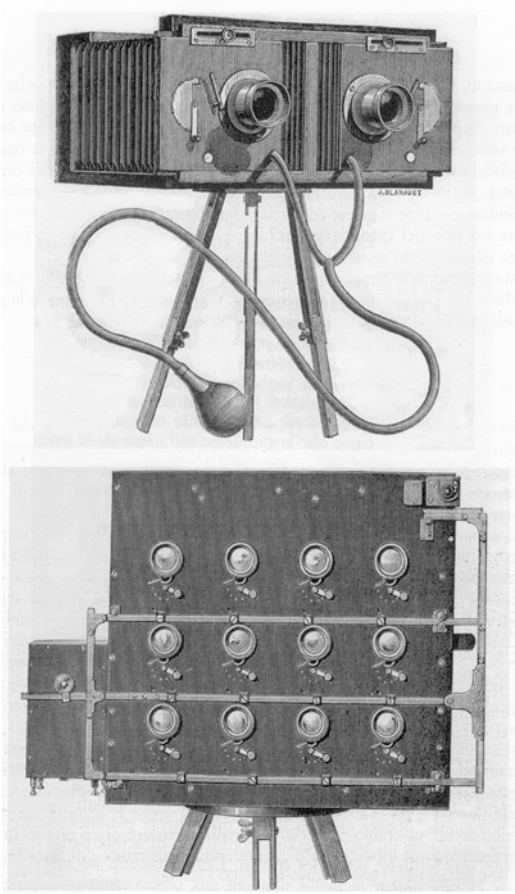


Fig. 7.7 Photographic devices; A. Londe, *La photographie médicale. Applications aux sciences médicales et physiologiques*, Paris: Gautier-Villars, 1893

The patients' bodies and behaviours should speak to the observer, to the expert and seeing physician. Only by eliminating the patients' subjective and ambiguous narratives can their psyche (i.e., their most subjective part) be made objective.[11]

[11] It is also worth noting that against the background given by mechanical objectivity, we can make a reinterpretation of the famous struggle on suggestion and the artificiality of hypnotic phenomena between the schools of Charcot and Hyppolite Bernheim in Nancy. Bernheim denied the status of experimental tool to hypnosis, and believed that there was no such thing as hysteria, given that all of these phenomena were to be reduced to the physician's "suggestions" over the patient. And that's why suggestion was for Bernheim a very effective therapeutic means. Their debate can be seen as the opposition between Bernheim's refusal to acknowledge the possibility of a mechanical objectivity of the psyche, and Charcot's vindication of it. For Bernheim there was simply no material to passively record, since states of mind were produced by the physician's suggestion. Therefore, no mechanical objectivity was possible. See Bernheim 1891; Nicolas 2004; Castel 1998.

7.3 Hearing Hysteria: Freud

The analysis below will focus primarily on the epistemic virtues and observational techniques associated with the emergence of psychoanalysis and will take a lot of things for granted about the Viennese neurologist. Freud takes up Charcot's concepts of dynamic lesion and psychic trauma, but, unlike the French physician, he considers them as fully psychological concepts, and he claims that one has to make use of hearing and listen to what the hysterical patients say about themselves. Moreover, the patients' accounts should be interpreted by the physician, because they are in a relation of symbolic expression with pathological somatic symptoms and can therefore reveal their etiology. The hysteric's somatic symptoms thus became *conversion*s of a psychological trauma.[12] The therapy will therefore have to discover the traumatic memory and free its pathological energy through complex techniques of hearing and talking. Here are some passages Freud wrote in the footnotes that he added to his translation of Charcot's *Tuesday Lectures* at the Salpêtrière:

> The core of a hysterical attack … is a *memory*, the hallucinatory reliving of a scene which is significant for the onset of the illness. It is this event which manifests itself in a perceptible manner in the phase of '*attitudes passionnelles*' … The *content of the memory* is as a rule either a psychical *trauma* … or is an event which, owing to its occurrence at a particular moment, has become a trauma". Psychical trauma is now "an *accretion of excitation* in the nervous system, *which the latter has been unable to dispose of adequately by motor reaction* (Freud 1892–1894/1953–1974, 137).

Freud and Breuer's famous 1895 book entitled *Studies on Hysteria* achieved a complete psychologization of dynamic lesions, functional or traumatic they were, and extended them to the etiology of all the neuroses. Moreover, Freud's critique of the theories of the hereditary character of nervous pathologies left room for the elaboration of a psycho-sexual etiology rooted in the singular personal life of each subject. Finally, by putting together and linking the patients' confessions made in the hypnotic state and the memories of forgotten events in the patients' past, Freud and Breuer set up a new therapeutic technology that coincided in principle with experimentation and the collection of scientific data. According to Freud, it is the memory of the psychic trauma that "behaves like a foreign body", like "an infiltrate" from somewhere else (the unconscious), with respect to the psychological personality of the suffering subject (Breuer and Freud 1895/1953–1974, 255). Therefore, it is this strange object, namely a memory not remembered by its own subject, that is the direct cause of hysteria: "*Hysterics suffer mainly from reminiscences*" (Breuer and Freud 1895/1953–1974, 10). According to Freud, the

[12] I don't mean to claim that Freud's work is a "purely" psychological one, nor that he "discovers" a supposed realm of the psychological. I am referring here only to the psychologization of the concept of trauma (on Freud's biological background and claims see the classic Sulloway 1979).

Studies on Hysteria discovered that symptoms disappeared when the physicians succeeded in "*bringing clearly to light*" the memory of the traumatic event. This could happen only if the patient could *verbally* describe the event with the most accurate details, that is, by expressing through words his pathogenic past (Breuer and Freud 1895/1953–1974, 9). Freud would then start asking his patients to free themselves of their will and "to adopt an attitude of completely objective observation towards the psychical processes taking place in them" (Breuer and Freud 1895/1953–1974, 239). In other words, the patient becomes, all at once, the subject to be cured, the physician-scientist's assistant, and the experimental matter through which it is possible to gather and, at a later stage, organize knowledge.

If we turn to *The Interpretation of Dreams* we can focus on the web of techniques that both the analyst and the patient are required to apply to themselves, and we can better understand Freudian claims to objectivity.[13] After the *Studies on Hysteria*, Freud argues, psychoanalysis continued to develop certain techniques, which serve to psychologically prepare the patient for the analysis: the patient must concentrate her attention on her own inner psychic representations, and eliminate every kind of criticism from the account she gives of her ideas. According to Freud, this is what differentiates self-observation from simple reflection: saying one's own involuntary thoughts without criticism (Freud 1900/1953–1974, 100–02). The therapist has to *hear* this material and interpret it in order to use it both as a therapeutic tool and as experimental material offered by a collaborator. We can say that the virtue underlying mechanical objectivity is fully at work and informs Freud's procedures. Indeed, he asks the patients – who are at the same time his collaborators and his experimental subjects – to practise this epistemic virtue with respect to themselves through what Michel Foucault would have called a technique of power-knowledge.

But who is or has to be the analyst, and what does he have to do in order to become this kind of scientific self? At first glance, Freud claims that the psychoanalysts are the ones who engage in the work of self-observation, namely the ones who turn towards themselves the virtue of mechanical objectivity and neutrally record the material that comes from their interiority.

> The adoption of an attitude of uncritical self-observation is by no means difficult. Most of my patients achieve it after their first instructions. I myself can do so very completely, by the help of writing down my ideas as they occur to me (Freud 1900/1953–1974, 103).

And he goes on, significantly mentioning Claude Bernard:

> Anyone who seeks to do so [. . .] must [. . .] endeavour during the work to refrain from any criticism, any *parti pris*, and any emotional or intellectual bias. He must bear in mind Claude Bernard's advice to experimenters in a physiological laboratory: "*travailler comme une bête*" – he must work, that is, with as much persistence as an animal, and as much disregard of the result" (Freud 1900/1953–1974, 535).

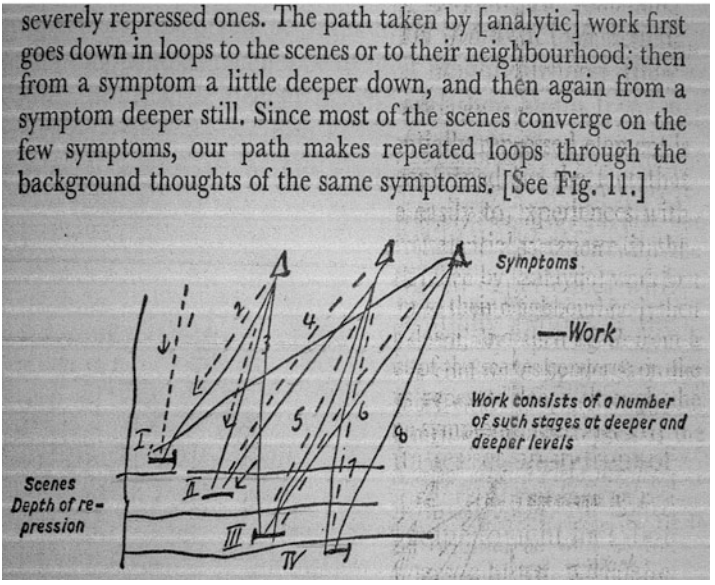
[13] I have started to explore this topic in another context (see Savoia 2010).

There are two obstacles to this apparently not difficult task of "uncritical self-observation":

1. Since the observers speak of themselves, the content of their speech is absolutely singular, subjective, hard to generalize; moreover, the part of themselves the scientists have to use for the sake of knowledge is a new emerging scientific object, *the unconscious*, which is, among other things, impossible to visually record.
2. Freud will soon recognize that self-observation is not simple at all and that the presence of someone who interprets and leads the process is necessary.

Already in the preface of the first edition of the dream-book, Freud mentioned a sort of epistemic embarrassment due to the fact that he was presenting such a personal and subjective material to the scientific community, more "than is necessary for any writer who is a man of science, and not a poet" (Freud 1900/1953–1974, xxiv). A scientist, one might expect, doesn't speak about himself, his life and subjectivity, but rather tries to suppress them in the search for objectivity. One of the major risks was that of compromising the reliability of one's own scientific enterprise. *As we can see, this is precisely Charcot's problem: how is it possible to make objective something that is subjective, something that is not immediately recordable with the eyes?* Daston and Galison described one of the differences between the epistemic virtues characterizing mechanical objectivity and *structural objectivity* on the grounds of the different aspects the scientific self has to fight against. In the latter case, what one has to fight against is a solipsistic self, a self-centered subjectivity incapable of communicating its own observations. We can say that one of Freud's major preoccupations was to express in an understandable and universal language the absolutely idiosyncratic content of the self, both his own self and his patient's self. The answer to this problem was to describe the *structure* of the psychical apparatus, which led to the so-called first topic, namely the description of the mind as divided in three parts or regions: the conscious, the pre-conscious, and the unconscious. Given the fact that the dynamics of psychological behaviour couldn't be represented by plastic images that recorded specific gestures, it had to be the result of the interpretation of the patient's stories. And these stories had to be made intelligible by hypothesizing a system of interrelated parts, a structure. Structural objectivity has nothing to do with the sight, the gaze, and images (Daston and Galison 2007, 256–57) (Figs. 7.8 and 7.9).

Freud overcame the second above-mentioned obstacle by claiming that the only condition to be an analyst is to be analysed, but this analysis can't be a self-analysis and will always have to be conducted by another, already trained, analyst (Freud 1910a/1953–1974, 144–45; 1910b/1953–1974, 226–27; 1912/1953–1974, 115–17). Of course, this argument leads to the paradox that the only one who has achieved and could ever achieve an auto-analysis is Freud himself. However, my main concern here is the concept of *interpretation* and its relations to structural objectivity. Interpretation, as the art of uncovering the deep and hidden meanings of the patient's ideas, is the bridge that connects, and makes coincide, therapy with analysis. Freud's art of interpretation has to be modulated on the individuality of



Figs. 7.8 and 7.9 Mechanical objectivity and structural objectivity of hysteria. Figure 8 is the mechanical reproduction of the phase of "passional attitudes" of a hysterical attack suffered by the famous Augustine, treated by Charcot. Figure 9 is the hand-written scheme of the deep structure of the psyche when a hysterical symptom occurs, drawn by Freud in 1897. Desiré Malgloire Bourneville et Paul Regnard (sous la direction de), *Iconographie photographique de la Salpêtrière*, Delahaye, 1878, vol. 2 and S. Freud, letter to Fliess, May 25th, 1897, in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, ed. J. Strachey, London: Hogarth Press 1953–1974, vol. 1

the patient, and has to deal with his unconscious; therefore, it requires particular intuitive abilities. The analyst has to put into play his own unconscious, and the techniques he must perform will also aim at acquiring a certain capacity to master and use his own most subjective part during the interpretation process.[14]

In 1910, Freud takes up again the comparison between the poet and the scientist: the creative writer, he claims, is always better at describing love life because he draws on a special quality, namely "the courage to let his own unconscious speak" (Freud 1910c/1953–1974, 11, 165). However, his purpose is to produce emotional effects, and aesthetic and intellectual pleasure. Therefore, he is not able to faithfully represent reality since the scientist is needed for this latter task, as he is the one who renounces pleasure and uses a different language in describing reality. But the courage to let one's own unconscious (and that of other people) speak seems to be a quality shared by both of them, while only modalities and goals are different. That is to say, the distinction between the poet and the scientist is not longer so rigidly articulated around the opposition between subjectivity (that the poet has to express regardless of objectivity) and objectivity (that the scientist has to obtain by suppressing her own subjectivity) as it was in the second half of the nineteenth century – a distinction that is beautifully expressed by Bernard's aphorism: "l'art c'est *moi*; la science, c'est *nous*" ['Art is *me*, science is *us*'] (Bernard 1865/2008, 96).[15]

Generally speaking, we can notice that in psychoanalysis: (1) *hearing* is privileged over sight; (2) an exchange is required between two selves, in which the physician uses his own subjectivity in order to acquire knowledge; (3) the aim is interpretation, which in turn is correlated with the description of structures and not to a passive recording of data.

The characterization of what has been called *trained judgment* (Daston and Galison 2007, 308–61) seems appropriate to describe Freud's work. However, there are also two important differences. First, we are dealing here with interpretations of discourses and not of images. Second, in Freud's early writings we can see the simultaneous emergence of, and a connection between, at least one epistemic virtue – structural objectivity – and one new clinical and therapeutic practice, based on a *trained* and subjective interpretation of people's discourses.

[14]If the physician wishes to interpret – as Freud writes in a 1912 technical paper – he "must turn his own unconscious like a receptive organ towards the transmitting unconscious of the patient" (Freud 1912/1953–1974, 12, 117).

[15]In the 1980s the psychoanalyst Heinz Kohut will express this idea of a new kind of objectivity in aphoristic fashion: analytic-depth psychology posited a "new kind of objectivity, namely a scientific objectivity which includes the subjective" (Kohut 1982, 399), quoted in Lunbeck 2011, 267.

7.4 Conclusion

We can say that the epistemic virtue entailed by mechanical objectivity was one of the conditions of possibility for Charcot's visual objectivity of the psyche, which was grounded in a solid set of epistemological practices and concepts. On the other hand, the sort of epistemological crisis Freud experienced forced him to build a science of the self without appealing to any form of mechanical objectivity. In this way, he had to take into account the specificity of the verbal relation between two human subjects, which is one of the main characteristics of psychoanalysis, and focus on structure and interpretation. A shift in the concept of the self would come as a result. If we follow the historian Jan Goldstein's terminology, we can say that while the self of late the nineteenth-century neurology was marked by a *horizontal fragmentation* (between the body, the brain and the mind), being a self whose roots lie in biology, in the Freudian meta-concept of subjectivity the self is characterized by *vertical fragmentation* (between consciousness and the unconscious), and becomes a much more "psychological" self (Goldstein 2005, 3–6). Peter Galison in an essay on Rorschach also indicated that there is a correlation between, on the one hand, mechanical objectivity and "aggregated self" and, on the other hand, judgmental objectivity and an "apperceptive self", suggesting the same kind of dynamic coupling between the object to describe and the subject who describes it (Galison 2004, 292).

These two epistemic models could also help us to historically understand the correlations between the well known late twentieth-century retreat of psychoanalysis-related theories, and the new avalanche of brain images and pyschopharmacology. It is now almost common sense to say that twentieth-century psychiatry moved from a state of "brainlessness" to one of "mindlessness", meaning that with the introduction of psychoactive drugs in the 1950s psychiatry progressively abandoned Freudian and para-Freudian assumptions on unconscious psychological conflicts that affected the mind, and began to extensively explore the material aspects of the physical brains supported by the impressive development of functional brain imaging technologies.[16]

I would like to finally argue that this historico-epistemological approach to the sickness of the mind and the self can be potentially fruitful even when applied to more contemporary issues. Let's take for example a relatively recent brief research paper published by a Oxford neuropsychology unit on "the functional anatomy of hysterical paralysis" (Marshall et al. 1997, B1). The authors deal with a case of "conversion disorder" (recorded by the DSM-IV) and soon point out that this kind of disorder has been and still is quite controversial. "Many physicians – they remark – still regard such disorders either as feigned or as a failure to find the responsible organic cause for the patient's symptoms". They present a woman with left-sided paralysis in whom no organic disease or structural lesion could be found.

[16]This kind of language has been used by Eisenberg 1986.

"By contrast, psychological trauma was associated with the onset and recurrent exacerbation of her hemiparalysis". So far, the description of the case could have been presented virtually in exactly the same terms both by Charcot and the early Freud. But at this point this article starts to diverge from both of them, and especially from Freud's account.

> We recorded brain activity when the patient prepared to move and tried to move the paralysed (left) leg and when she prepared to move and did move her good (right) leg. Preparing to move or moving her good leg, and also preparing to move her paralysed leg, activated motor and/or premotor areas previously described with movement preparation and execution. The attempt to move the paralysed leg failed to activate right primary motor cortex. Instead, the right orbito-frontal and right anterior cingulate cortex were significantly activated. We suggest that these two areas inhibit prefrontal (willed) effects on the right primary motor cortex when the patient tries to move her left leg (Marshall et al. 1997, B1).

Roughly speaking, this description could look like one by given Charcot with the addition of modern techniques of brain imaging. For sure, it would surely be misleading to say that we are back to mechanical objectivity, both because history never repeats itself and because brain images are all but "passive" recordings of mere data, but on the contrary these techniques and images blur the boundaries between the process of production of the image and the representative content of the image: what we see is not a representation, a product, but a visual elaboration of the actual process of representation[17] (Fig. 7.10). However, it doesn't seem misleading nor wrong to say that the new technologies of functional brain imaging gave an answer (one of the many possible answers) to an epistemological problem formulated by Charcot and others in the late nineteenth century. Current technologies enabling scientists to visualize the brain seem to represent a solution to a problem that arose in the nineteenth century, and create new forms of practical and ideal objectivities of the self that have just started to be explored.[18] In doing so, these technologies seem to bypass the "psychological trauma" mentioned even by the authors of the paper quoted above: physicians and researchers do not have to listen to patients and experimental subjects, but instead they have to "see" – no matter what seeing a functional brain image exactly means – their brains, and we can say, their *selves*.

We will need to examine the correlated changes of the techniques of inscription and stabilization of the very object of these sciences, namely the self. To study the relationships between the self as a scientific object, and the self as the target of objective knowledge, must be one of the major tasks of an historical ontology of the self.

[17] For an accurate epistemological, technical, and cultural analysis of functional brain images see Dumit 2004.

[18] See for example Rose and Abi-Rached 2013.

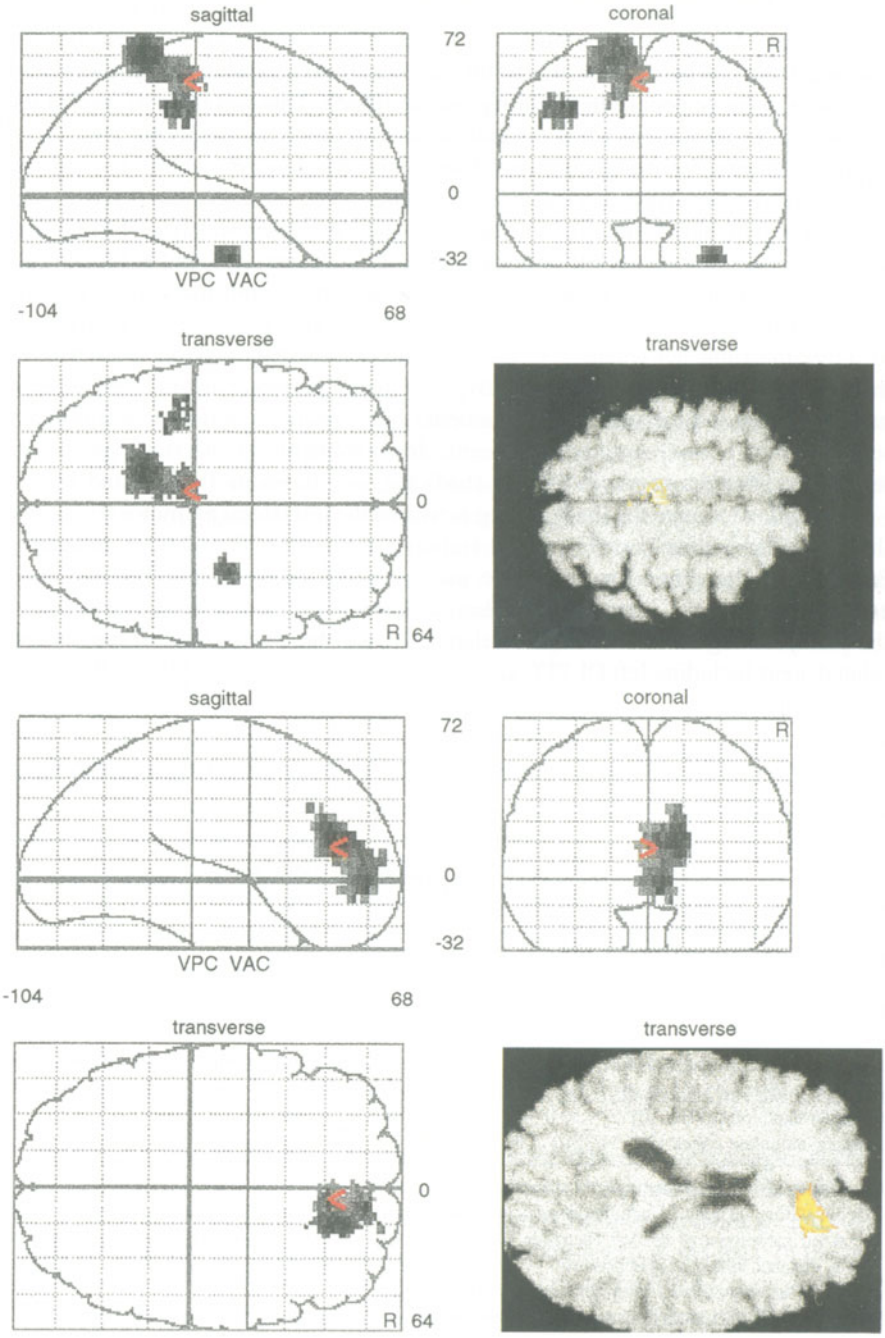


Fig. 7.10 Functional brain image of a hysterical paralysis. John C. Marshall, Peter W. Halligan, Gereon R. Fink, Derick T. Wade and Richard S.J. Frackowiak, "The Functional Anatomy of a Hysterical Paralysis", *Cognition*, 64 (1997)

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