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Freud's Comparative Study of Hysterical and Organic Paralyses

How Charcot's Assignment Turned Out

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rom October 1885 until February 1886, Sigmund Freud (1856-1939) visited Paris to work with Jean-Martin Charcot (1825-1893) at the Salpêtrière. His original plan was to continue his neuropathologic studies. During the first months of his stay in Paris, he was disappointed and considered returning to Vienna. His feelings changed after personally meeting Charcot, to whom he proposed translating the third volume of *Leçons sur les Maladies du Système Nerveux* into German. Interestingly, 10 of the lectures from this book were on traumatic hysteria, the reason why Freud added "particularly on hysteria" to the original French title.¹ Freud was much impressed by Charcot, and his original purpose, the study of neuropathology, changed. As he wrote to Carl Koller (1857-1944) in 1886, "I found Charcot there, a teacher such as I had always imagined."^{2(p30)} In January and February 1886, he was a frequent guest at Charcot's "hôtel" at Boulevard St Germain 217, joining the other students, including Joseph Babinski, Pierre Marie, and Georges Gilles de la Tourette. At the time, he admired Charcot and later on he even named his first born Jean-Martin.²⁻⁴

Charcot had worked at the Salpêtrière since the early 1860s and gradually, by applying the anatomicoclinical method, distinguished several neurological diseases, making the category of névroses (neuroses in the sense of the original term coined by William Cullen [1710-1790] and used in Philippe Pinel's nosology; not to be confused with Freud's term psychoneurosis)⁵ ever smaller. By these discoveries, his methods of research, and his lectures, Charcot had become a well-known specialist in nervous diseases, the reason why a professorship was created for him (1882). His lectures, many of which were edited and published by his disciples, were soon translated into English. Charcot's career has been divided into 2 periods: a first in which he made the discoveries referred to herein and a second in which he studied hysteria and hypnosis.6 His study of hysteria was at its summit in the mid-1880s. He considered anesthesias, hyperesthesias, paralyses, and contractures the most important symptoms of hysteria. He had noted that the sensory complaints did not obey anatomical distributions. The complaints rather corresponded to popular perceptions of the body. At the time, Charcot began to recognize hysteria in men. He believed that not only physical trauma but also the emotional and psychic experience played a role in hysterical symptoms, using the term *grand ébranlement psychique* (great psychic shock).⁷

Following his stay in Paris, Freud started a comparative study of organic and hysterical motor paralyses. Several grounds have been put forward as to the origin of this study, including Freud's statement in the introduction of the published article that Charcot had commissioned him to perform the study.8 In a note in the German translation by Freud of Charcot's first volume of Leçons de Mardi, this statement is repeated.9 However, in his autobiography, Freud wrote that it was his own idea. 10(pp13,14) It is remarkable that Freud did not finish the article until 1893. The article was composed during an important transitional period in Freud's career (ie, the transition from his neuropathologic to his psychoanalytical

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orientation). The cause of the delay is unknown, although several possibilities have been mentioned by Freud and his biographers. In the editor's note preceding the English translation in the Standard Edition of the Complete Psychological Works of Sigmund Freud,11 Strachey et al provided some arguments for his statement that the first 3 parts of the article were most probably written in 1888. Freud referred to the first draft of the article in several letters from that period. These parts are neurological and, according to Strachey, "were no doubt written in 1888, if not in 1886" shortly after he left Paris (Figure).

Between 1886, when he left Paris, and 1893, when the article was finally published, Freud's ideas on hysteria further evolved. Soon after returning from Paris, he presented a case of male hysteria in Vienna. He mainly dealt with the physical phenomena and paid little attention to the psychological factors. The article was not well received. Two short reviews on neurasthenia (and hysteria) followed in 1887, including one on S. W. Mitchell's treatment of neurasthenia and hysteria.12 An article on hysteria in 1888 still shows much influence of the doctrines of Charcot and partly overlaps with the 1893 French article, which I discuss herein. At the end of his 1888 article on hysteria, Freud demonstrates more independence from Charcot. Whereas Mitchell's rest cure was well appreciated by Freud,

direct treatment consists in the removal of the psychical sources of stimulus for the hysterical symptoms, and [it] is understandable if we look for the causes of hysteria in unconscious ideational life. It consists in giving the patient under hypnosis a suggestion which contains the removal of the disorder in question. ^{13(p56)}

Although in Vienna hypnotism had been considered with much criticism, in Paris Freud had been impressed by Charcot's use of it. Following his visit to Paris, he started studying and applying it. Later in his career, Freud had less positive views on hypnosis. In the controversy on hypnotism between the Paris and Nancy schools, although at first defending Charcot's view, he finally criticized it in his obituary of Charcot. ³ (pp310,311), ¹⁴ Freud referred to his



Freud took a copy of Brouillet's well-known *Leçon Clinique à la Salpêtrière* to Vienna and subsequently to London, where it still hangs above the couch (courtesy Freud Museum, London, England).

Viennese collaborator Joseph Breuer's method to lead the patient back to the psychical occasion on which the symptoms originated, and he gradually became involved in the latter's cathartic procedure. Freud and Breuer published the famous article "Studien über Hysterie" in 1895, 15 which is considered a landmark study in the history of psychoanalysis.

Strachey explained that the fourth part of the article under discussion⁸ probably dates from 1893, because there is a reference to Breuer and Freud's preliminary communication (1893; preceding "Studien über Hysterie" of 1895) on the psychical mechanism of hysterical phenomena.16 The fourth part was based on the new ideas, including repression and abreaction, although Freud did not mention the terms explicitly.17 The article may be considered important for 2 reasons. It provides an interesting differential diagnosis between organic and hysterical paralysis, and it may be considered to have been written in the transitional phase of Freud's career. For the following analysis, I used the original French text8 and the English translation, from which the quotes were taken.¹⁷

NEUROLOGICAL SECTION, PART 1

The article is divided into 4 parts. In the first part, Freud mentioned the important classification of organic

motor paralysis in clinical neurology. Distinction was made between peripherospinal paralysis, for which he proposed the term projection paralysis ("the periphery is, so to say, projected upon the grey matter of the cord, point by point ... "17(p161); it is a "detailed" paresis, comparable to the current peripheral paresis, eg, Bell's palsy), and cerebral paralysis, for which he proposed the term representation paralysis (a "massive" paresis, "it never affects an individual muscle; . . . the reproduction of the periphery in the cortex is no longer a faithful reproduction point by point ... "17(p161); it is comparable to the current central paresis). 17(pp160,161) Freud noticed that hysteria never simulates projection (peripheral) paralyses; hysterical paralyses only share the characteristics of organic representation (central) paralyses. For the argumentation, he only considered flaccid paralysis and not hysterical contractures. Similar to representation paralysis, hysterical paralyses "never affect single muscles (except where the muscle concerned is the sole instrument of a function)"17(p162) and

they are always paralyses *en masse*. . . . Furthermore, in the matter of the nutrition of the paralysed parts and their electrical reactions, hysterical paralyses present the same characteristics as organic cerebral paralyses.

Next to these similarities, Freud reasoned, there were also differences be-

Distinction Between Organic and Hysterical Paralysis as Noted by Freud in the First 3 Parts of His 1893 Article

Organic Paralysis

Hysterical Paralysis

Part 1

- 1. May be central or peripheral; if central, distal muscles more affected than the proximal and there are the following (2-7):
- 1. Resembles the massive *paralysie cérébrale*, the current central paresis, but in a "piecemeal" way (morcelés)

Part 2

- 2. Vague boundaries (eg, hemiparesis)
- 3. Variable intensity: paralysis of one limb will be accompanied by paresis of the other ipsilateral limb (or lower face)
- 4. Rarely, severe sensory disturbances
- 5. Lower facial paresis may be observed
- 6. Homonymous hemianopia may be present
- 7. Anatomical demarcation

- - 2. Exact demarcation (eg, monoplegia)
 - 3. Excessive intensity: isolated paresis of one limb may be complete (paralysis)
 - 4. Often severe sensory disturbances (anesthesia)
 - 5. Lower facial paresis not observed
 - 6. Homonymous hemianopia not observed

Part 3

7. Independent from anatomy; demarcation according to popular ideas (eg, doll's arm) as proposed by Charcot

tween hysterical and cerebral paralysis. In cerebral paralysis and in particular cortical paralysis

. . the distal segment is always more affected than the proximal one. In hysteria, the shoulder or the thigh may be more paralysed than the hand or the foot. Movements may appear in the fingers while the proximal segment is still absolutely inert. ¹⁷(pp162,163)

In a note, Freud referred to Charcot, who, following Robert B. Todd (1809-1860), had drawn attention to the fact that "the hysteric drags the leg like an inert mass instead of performing a circumduction with the hip as does the ordinary hemiplegic."17(p163)

NEUROLOGICAL SECTION, PART 2

In the second part of the article, Freud further elucidated in which respects hysterical paralysis differs from cortical paralysis 17(p163): "The symptoms of organic paralysis appear piecemeal, as it were, in hysteria." In organic hemiplegia, a characteristic combination or association of paralysis of the limbs and face is present, but in hysteria there is often "paralysis of the arm and of the leg in the form of monoplegias."17(p163) In aphasia, there may be isolated motor aphasia or total aphasia for a particular language without affecting another language. Freud used the term dissociation in this respect in contrast to association in organic paralysis or aphasia:

This same power of dissociation is manifested in isolated paralyses of one segment of a limb while other parts of the same limb remain completely unimpaired or, again, in the total abolition of a function (e.g. in abasia and astasia) while another function performed by the same organs remains intact. This dissociation is all the more striking when the function that is unimpaired is the more complex one. In organic symptomatology, if there is an unequal weakening of several functions, it is always the more complex function, the one that has been more recently acquired, that is most affected as the result of the paralysis. 17(p164)

Freud again referred to Charcot, stating that hysteria is a disease of "excessive manifestations." There may be bizarre contractures and anesthesia. The paralysis of a limb may be complete, and the aphasic patient may be unable to utter a word. The characteristics of hysteria in this respect may be summarized by "precise limitation" and "excessive intensity":

. . . it possesses both these qualities at once, and it is in this that it shows the greatest contrast to organic cerebral paralysis, in which it is regularly found that these two characteristics are not associated with each other. . . If the arm is paralysed as the result of an organic cortical lesion, there is almost always a minor concomitant affection of the face and leg; and if this complication is not apparent at a particular moment, it will certainly have existed at the start of the illness [italics by Freud]. 17(pp164,165)

Freud knew that pure cortical monoparesis exists but stated that the intensity would be moderate: "It can not at the same time become absolute and retain its delimitation" [italics by Freud]. 17(p165) In hysteria, there often is a monoplegia without any signs in the leg or face. He added that in addition to these differences, hysterical paralyses are more often accompanied by disorders of sensibility, and these are often severe (eg. anesthesia and analgesia, which are unusual for organic disorders) (Table). Finally, the typical distribution in central facial paresis is not seen in hysterical paresis and "hemianopsia has not yet been observed in hysteria, and, I believe, never will be."17(p166)

NEUROLOGICAL SECTION, PART 3

In the third part of the article, Freud stated that the extent and localization of the lesion determine the character of the symptoms in organic cerebral lesions. The associations in hemiparesis may be explained from neuroanatomy:

In organic paralyses the *nature* of the lesion plays a secondary part; it is rather the extent and localization of the lesion which, in the given structural conditions of the nervous system, produce the characteristics of organic paralysis which we have indicated [italics by Freud]."17(p168)

In hysterical disease, there must be another explication:

We have several times heard from M. Charcot that it is a cortical lesion, but one that is purely dynamic or functional What, after all, is a dynamic lesion? I am quite sure that many who read M. Charcot's works believe that a dynamic lesion is indeed a lesion, but one of which no trace is found after death, such as an oedema, an anaemia or an active hyperaemia. These, however, although they may not necessarily persist after death, are true organic lesions even if they are slight and transitory. $^{17(p168)}$

However, if Charcot was right, the same relations as in organic lesions would be expected. Edema or anemia, as supposed dynamic lesions that may not be visible after death, could never result in the dissociation and intensity that are observed in hysterical paralyses, because these phenomena would also obey anatomical relationships:

I . . . assert that the lesion in hysterical paralyses must be completely independent of the anatomy of the nervous system, since in its paralyses and other manifestations hysteria behaves as though anatomy did not exist or as though it had no knowledge of it [italics by Freud]. 17(p169)

In hysterical paralysis, the symptoms most often do not respect the distribution of peripheral nerves or the optic chiasm. There rather is a popular understanding of "anatomy," resulting in monoplegia or complete motor aphasia with normal comprehension.

PSYCHOLOGICAL SECTION, PART 4

The fourth part of the article is different from the first 3 parts. Freud tried to explain how functional changes may occur without organic lesions: "... for that purpose I only ask permission to move on to psychological ground—which can scarcely be avoided in dealing with hysteria." ^{17(p170)} He assumed that in hysterical paralysis (eg, of the arm), there would be a change in the conception of the arm:

... the conception of the arm cannot enter into association with the other ideas constituting the ego of which the subject's body forms an important part. The lesion would therefore be the abolition of the associative accessibility of the conception of the arm. The arm behaves as though it did not exist for the play of associations [italics by Freud]. ^{17(p170)}

How could this arise without structural damage? Freud gave a few examples from social life (eg, the person who did not want to wash his hand after the King had touched it):

The quota of affect [valeur affective in the French article] which we attribute to the first association of an object has a repugnance to letting it enter into a new association with another object and consequently makes the idea of the [first] object inaccessible to association." 17(pp170,171)

In hysterical paralysis of the arm, the conception of the arm is situated in a subconscious association of major affective significance (usually a mental trauma):

The arm will be paralysed in proportion to the persistence of this quota of affect or to its diminution by appropriate psychical means. This is the solution of the problem we have raised, for, in every case of hysterical paralysis, we find that the paralysed organ or the lost function is involved in a subconscious association which is provided with a large quota of affect and it can be shown that the arm is liberated as soon as this quota is wiped out. Accordingly, the conception of the arm exists in the material substratum, but it is not accessible to conscious associations and impulses because the whole of its associative affinity, so to say, is saturated in a subconscious association with the memory of the event, the trauma, which produced the paralysis [italics by Freud]. 17(p171)

At the end of the article, Freud admitted that Charcot was the first to teach him to turn to psychology for explaining hysterical neurosis. He was still cautious with respect to the new ideas and explained that he had shown what the nature of the lesion in hysterical paralysis "would have to be in order to explain the differences between it and organic cerebral paralysis [italics by Freud]." 17(p172)

COMMENT

As indicated by Freud in the first 2 parts of the article, Charcot had taught him several of the lessons he presented. In the third part, he clearly demonstrated his doubts with respect to Charcot's ideas about a dynamic or functional explanation for hysterical phenomena, arguing that even dynamic lesions would obey anatomical relationships. In the fourth part, which was probably written 7 years after leaving Paris, Freud presented his own (and Breuer's) ideas with respect to the psychological explanation of the observations. In this way, Charcot's views on traumatic hysteria contributed to Freud's early psychoanalytical work. For several Freud scholars. Freud's visit to Charcot is considered of crucial importance for the origin of psychoanalysis.^{2,18} However, as others have pointed out, Charcot's role with this respect should not be exaggerated.3

Although Freud admired Charcot, he also criticized his work (eg, with respect to Charcot's attribution of a hereditary character to certain diseases). Freud, like others, did

not agree with Charcot's view on the syphilitic character of tabes dorsalis and general paralysis. Charcot considered syphilis to be only an "agent provocateur" (ie, an environmental factor) and opined that the hereditary constitution was the more important factor.4 The critical attitude was also observed in the third part of the article described herein. Therefore, it would be interesting to know Charcot's reaction to Freud's 1893 publication. Charcot had promised to publish the results of the study in the Archives de Neurologie (Paris) 7 years previously. In the last letter from Charcot to Freud, probably written in June 1893, he wrote that he had received the article4: "I am glancing over it and it seems to be quite interesting. The publication will be in the Archives de Neurologie. I shall see about it as soon as I return." At the time, Charcot was leaving for London "to refortify myself a little with Shakespeare" and probably intended to comment on the manuscript after returning.4 The article was published in July of that year. Charcot did not get a chance to comment on it because he died in August.

Reading Freud's 1893 article still is most instructive, because it provides a clinical distinction between organic paralysis and conversion based on anatomical arguments. It gives evidence of his sound knowledge of neurological symptoms and signs. We learn about the diagnostic problems in a period in which our predecessors had to rely on the patient's history and on observation and how physicians tried to solve clinical problems by accurate observation and analysis of phenomena. Further objective signs for the distinction of organic paralysis from hysteria were found during the years following the publication of the article under discussion, one of the most important being the Babinski sign (1896).

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