



“Spreading the word of the master”: the contribution of Italian physicians in the early dissemination of Jean-Martin Charcot’s theories

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Abstract

Jean-Martin Charcot (1825–1893) laid the foundations of modern neurology. The lectures he gave at La Salpêtrière Hospital in Paris attracted a large number of visitors from all over the world. Some of them transcribed these clinical lessons, translating and publishing them when returning home. This article discusses the contribution of some Italian physicians (Gaetano Rummo, 1853–1917; Domenico Miliotti; Giulio Melotti, 1857–19?; and Augusto Tebaldi, 1833–1895), who were pioneers in disseminating the ideas and discoveries of Charcot. The early Italian translations were based on personal handwritten notes and memories, not relying on official French versions personally revised or edited by Charcot himself. As such, their veracity cannot always be verified, particularly in the lack of other independent works reporting details on the same lectures. However, the Italian transcriptions providing information which cannot be found elsewhere in Charcot’s *corpus* of works represent an invaluable and a unique source for fully understanding some theories by the French neurologist. Furthermore, they are the first documents providing original materials related to Charcot’s teaching translated in a foreign language. The first Italian publications that included photographs of patients were deeply influenced by and clearly modeled on the famous volumes of the *Iconographie photographique de la Salpêtrière* and further contributed to the early dissemination of Charcot’s theories.

Keywords Astasia-abasia · History of neurology · Hypnotism · Hysteria · Gilles de la Tourette syndrome

Introduction

Jean-Martin Charcot (1825–1893) is widely considered the father of modern neurology. During his activity as Chief of

Service at La Salpêtrière Hospital in Paris (1862–1893), he discovered or contributed to the full description of several neurological disorders, including—among others—Charcot-Marie-Tooth disease, amyotrophic lateral sclerosis (also known as Charcot disease), multiple sclerosis, and Parkinson’s disease [1, 2]. During the last 20 years of his career, he became increasingly interested in hysteria. Around him, he gathered a group of students who would have continued shaping the history of modern neurology [3].

The lectures that Charcot gave at La Salpêtrière attracted a large number of visitors from all over the world, particularly from Europe and North America. Several international physicians spent some time in Paris, becoming his students and attending his lessons [4]. In some cases, they transcribed the clinical presentations held by Charcot, and upon return to their countries, they translated and published them after editing and revision [1]. Sometimes Charcot himself agreed in writing an introduction or a preface to these texts. Incidentally, a parallel could be drawn between the case of Charcot and that of Aristotle, whose corpus is mostly based on students’ notes. In both cases, oral lectures included the revised version of the

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lecturer and that reported by the students and translators into other languages.

Probably the most famous translations of Charcot's lessons are those made by Sigmund Freud (1865–1939), who was in Paris from October 13, 1885, to February 28, 1886. Freud was deeply influenced by Charcot, whom he held in high esteem; the French master taught the young Freud about hypnosis and led him to think about the importance of psychogenic factors in hysteria. While still in Paris, the 29-year-old Freud offered to translate into German the third volume of Charcot's *Leçons sur les maladies du système nerveux*, which was particularly focused on hysteria and had not yet been published. Freud's translation, to which he added a preface and footnotes, appeared in 1886 [5], several months before the appearance of the first French edition [6].

However, a few years before this Freud's work, some translations into Italian had already been published. The first translation of Charcot's lessons in a foreign language was made by Karl Berthold von Fetzter (1846–1931) and published in 1874 [7]; however, this was a translation of the official French version collected and edited by Désiré-Magloire Bourneville (1840–1909) [8]. Bourneville in the *Avis de l'éditeur* to the *Oeuvres complètes de J.M. Charcot* [9] cites as the first Italian translation that of Angelo Scambelluri (dates unknown) and Scipione Giordano (1817–1894), with notes of Prof. Borelli, published in Naples in 1877. Although we were unable to retrieve more details on this translation, it was probably based on the official French version that had already been printed. Similarly, the Italian translations of Charcot's lectures [10] published in 1880 made by Angelo Scambelluri were also based on the prior French version. Conversely, the Italian translations were based on personal transcriptions and notes by the authors themselves, and they were published before the corresponding French versions appeared; sometimes they are the only source of Charcot's lessons which never appeared in French. Their historical relevance is hence enormous, as they are the first documents providing original material related to Charcot's teaching translated in a foreign language.

In this article, we discuss the contribution of the Italian physicians who had a major role in the early dissemination of Charcot's theories. We also present the early Italian publications that included photographs of patients, which were modeled on the volumes of the *Iconographie photographique de la Salpêtrière*, published by Désiré-Magloire Bourneville (1840–1909) and Paul Regnard (1850–1927) between 1876 and 1880 [11–13].

Gaetano Rummo (1853–1917)

Gaetano Rummo (1853–1917) was born in Benevento on 6 July 1853 and graduated at the University of Naples in 1879. In 1881, he moved to Paris after failing to be appointed as a medical assistant at the "Ospedale degli Incurabili" in Naples.

At the Salpêtrière, Rummo attended Charcot's lectures, and in 1884, he published the Italian translation of all the lectures on aphasia delivered by Charcot in the summer of 1883 [14]. Charles Féré (1852–1907) transcribed and published the first five lessons in the *Progrès médical* in 1883 [15–19]; in the same year, Pierre Marie (1853–1940) had provided a summary of the course on aphasia in the *Revue de médecine* [20]. However, the book edited by Rummo represents the only complete collection of the 1883 "Friday Lessons" devoted to aphasia. Charcot himself wrote the preface to the volume, praising the efforts made by Rummo in his work of translation and dissemination. Remarkably, the book includes the first reproduction of the famous scheme representing Charcot's theory on language function, with the various centers (center of visual memory, of auditory memory, of writing, of spoken language, and the general center of ideas) involved in different types of aphasia. This graph, known as the "Charcot's Bell" diagram (Fig. 1), was reproduced 1 year later in the book containing the transcriptions of the 1883–1884 lectures translated by Domenico Miliotti [21] (see below) and in the thesis by Désiré Bernard (1853–1887) [22]; in 1886, the scheme appeared in a book by Gilbert Ballet (1853–1916) [23].

In 1890, Prof. Rummo published a book that included a series of 70 photographs depicting "Great Hysteria" or

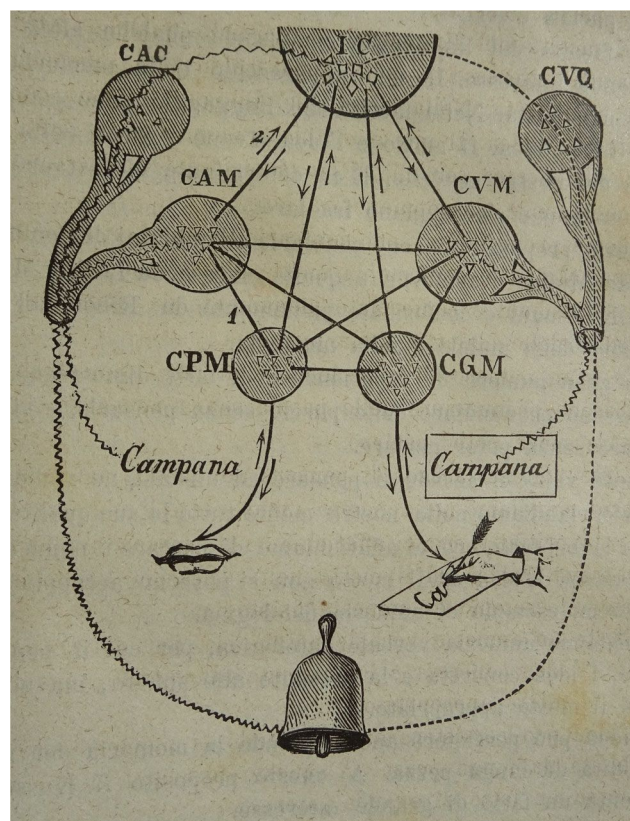


Fig. 1 Graph representing Charcot's theory on language function, with the various centers (center of visual memory, of auditory memory, of writing, of spoken language, and the general center of ideas) involved in different types of aphasia. From [13]

“hystero-epilepsy” [24]. Commenting these pictures, he accurately referred to the four sequential phases of hystero-epilepsy described in detail by Paul Richer (1849–1933), as formulated by Charcot: (1) the epileptoid, (2) the grand movements (or *clownism*), (3) the emotional or *attitudes passionnelles* (hallucinatory phase), and (4) the delirious [25]. Rummo stated that previous cases of hysteria reported by the Italian authors Maragliano (probably Dario Maragliano, 1852–1889), Seppilli (probably Giuseppe Seppilli, 1851–1939), and Tamburini (probably Augusto Tamburini, 1848–1919) did not correspond to the classical form of “hystero-epilepsy.” Conversely, while he was in charge of the Medical Clinic of Siena in 1889, Rummo had observed five patients with “great hysteria”; the clinical features of the hysterical attacks of four of them, all women, were described in detail. Rummo also discussed the characteristics that help to differentiate hysterical from epileptic seizures. The photographs showing the different phases of the hystero-epilepsy were combined in a way that was modeled on the famous volumes of the *Iconographie photographique de la Salpêtrière*, published by Désiré-Magloire Bourneville (1840–1909) and Paul Regnard (1850–1927) between 1876 and 1880. The title itself given by Rummo to his book (*Iconografia fotografica del Grande Isterismo*) is an explicit reference to its French antecedent. In the pictures, the postures of the women are consistent with those drawn by Paul Richer, and some of them are based Regnard’s photographs [25]. However, unlike the dark and uniform background of the French photos, the pictures reported by Rummo show the patients surrounded by cushions and mattresses, as precautions are taken to prevent injuries (Fig. 2). The name of the photographer was not reported, but it seems likely that pictures were taken using the nine-lens camera invented in 1883 by Albert Londe (1857–1904), the photograph in chief of La Salpêtrière [26].

In his iconographic book, Rummo mentioned a forthcoming volume of him entirely devoted to “great hysteria.” However, we failed to find evidence that this book was ever printed.

Following Charcot’s studies on hypnotism, which in the mid-1880s exerted a great influence in Italy [27], Gaetano Rummo gained a certain celebrity in practicing hypnotic therapy in Naples [28]. In 1890, Charcot himself mentioned an article by Rummo, published in 1888 in *La riforma medica* (vol. 3, page 14) [29]. In this article, Rummo had described the case of a hysterical young woman who—under the influence of simple gaze fixing, and without any intervention of the suggestion—underwent the three phases of “great hypnotism” (lethargy, catalepsy, and somnambulism), previously described by the French master [30].

Finally, it is worth remembering that Gaetano Rummo was the very first Italian scientist using cinematograph in medicine, realizing four video recordings documenting animals

and patients with various neurological disorders in 1898 [31]. He therefore anticipated by some years the more famous cinematographic recordings of neurological patients made between 1906 and 1908 by Prof. Camillo Negro (1861–1927), his assistant Giuseppe Rovasenda (1879–1959), and the cinema operator Roberto Omegna (1876–1948) [32].

Domenico Miliotti (dates unknown)

Almost nothing is known of the life of Domenico Miliotti (dates unknown). He attended all the twenty-six “Friday lectures” given by Charcot in the academic year 1883/1884 (from December 7, 1883, to June 23, 1884), translating in Italian and publishing them in 1885 [21]. In the introduction to this book—dedicated to Angelo Minich (1817–1893), professor of *surgery* at the University of Padua—Miliotti praises Charcot’s teaching methods, which he defines as “lezioni di cose” (lessons by things) for their vivacity due to clinical demonstrations and patient examinations, as opposed to the more ordinary “lezioni di parole” (lessons by words).

Some lessons in the book edited by Miliotti contain fascinating materials that cannot be found elsewhere.

Lesson XVII (May 16, 1884) includes the only record of a new syndrome, described by Charcot in a male trombonist. The 45-year-old player had developed difficulties in copying music notation and playing his instrument, leading Charcot to identify a syndrome consisting of what he termed “music aphasia” and “music agraphia” without verbal aphasia. The translations by Miliotti include also the only record of the 1884 lessons devoted to astasia-abasia (lesson XII, March 7, 1884; lessons XIII and XIV, March 14, 1884). In 1883, Charcot and Paul Richer (1849–1933) had described the main features of this condition in an article published in Italian in the journal *Medicina contemporanea* [33]. They were further elaborated in 1888 by Paul Oscar Blocq (1860–1896) [34], who also coined the term “astasia-abasia.” Remarkably, the transcriptions of lessons XII (March 7, 1884) and XIII (March 14, 1884) include the first explicit mentions of psychic paralysis (“paralisi psichiche” or “ideo-paralisi”), which Charcot—following the theory exposed by Russell Reynolds (1828–1896) in 1869 [35]—attributed to an “idea that creeps into the brain, following a suggestion outside hypnotism.” Charcot further discussed this theory in the lectures of May 1885 [36].

Notably, lesson IX (February 15, 1884) includes the description of an 18-year-old man affected by Friedreich’s ataxia. This was the first time that Charcot presented and discussed the neurological disorder that had been described in 1863 by the German pathologist Nikolaus Friedreich (1825–1882); Charcot presented two further cases in the Tuesday lesson on March 13, 1888 [37]. In the 1884 lesson transcribed by Miliotti, Charcot emphasizes the clinical features

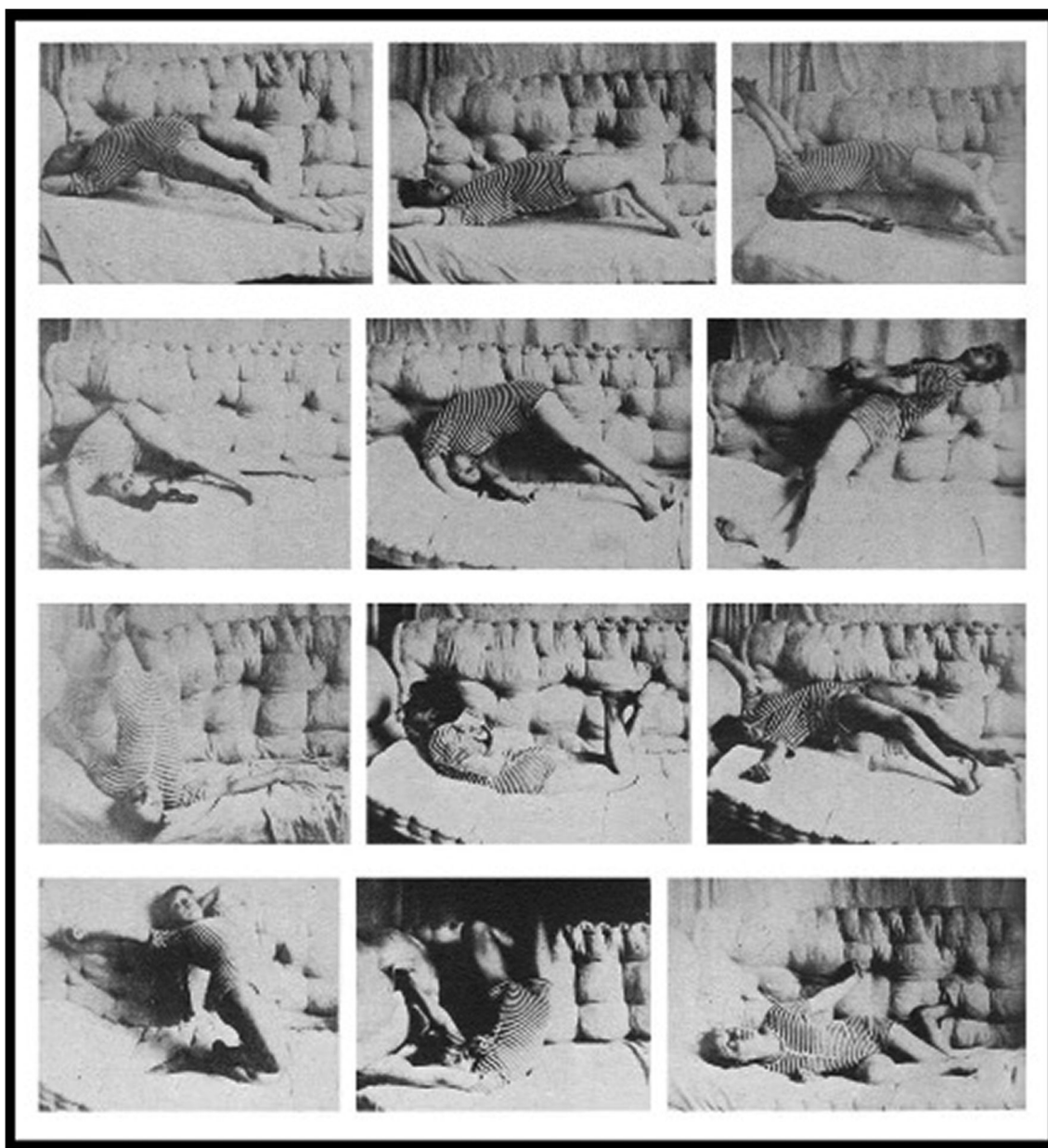


Fig. 2 Photographs showing a female patient in different phases of hystero-epilepsy. From [23]

characteristic of Friedreich’s ataxia, which are useful for the differential diagnosis with locomotor ataxia (i.e., ataxia due to degeneration of the dorsal white column of the spinal cord) and “sclerosi in placche” (i.e., multiple sclerosis).

Lesson XX (June 6, 1884) describes a hysterical patient (called Habillon) affected by prolonged hysterical fits (“stato di male istero-epilettico,” hystero-epileptic status). This is the first time that Charcot gave a lesson on this subject, emphasizing how this condition—unlike true status epilepticus—is not associated with a significant increase in body temperature. Ernest Dieu had already reported this method of differentiating the two conditions in his 1876 thesis, which he wrote under the supervision of Charcot himself [38]. In 1884, Pierre Marie

(1853–1940) and the Brazilian José-Dantas de Souza Leite (1857–1904?) independently transcribed and published this lesson [39]. Remarkably, alongside Félida X. and Marie Wittman (“Blanche,” 1859–1913), [Marie] Habillon was one of the most famous cases of hysterical patients with a double personality [40]. Charcot explored this aspect in detail in a later lesson given on December 2, 1890 [41].

Finally, the book includes a lecture (lesson IV, December 28, 1883) on a case of hysterical sleep (“attacco di sonno,” sleep attack). A description of the woman affected by this condition (whose real name was Eudoxie and who had been initially treated by Bourneville) had already appeared in the third volume of the *Iconographie photographique de la*

Salpêtrière [13] but had not yet been the subject of a clinical lesson by Charcot. In this lecture, the French neurologist provided a detailed semiological presentation, emphasizing the clinical features to differentiate hysterical sleep from physiological sleep. To provide a more comprehensive picture, Miliotti supplemented the transcription of the lecture with a summary of the description of the case taken from the *Iconographie photographique*. The transcription of a second lesson on the same patient (November 13, 1888) appeared in 1889 [42].

Giulio Melotti (1857–19?)

Giulio Melotti was born in Bologna on November 18, 1857. He studied at the University of Bologna, defending his thesis on July 1, 1882. In 1884, he moved to Paris where he stayed until 1886, studying at la Salpêtrière under Charcot.

In 1884, Melotti published an Italian transcription of lectures by Charcot, one of them dealing with intermittent claudication [43]. In the subsequent year, he published an article appearing in three successive issues of *La Riforma Medica* [44], a journal founded by Gaetano Rummo (1853–1917) in 1885. Herein, Melotti provided the transcription of a lecture given by Charcot on some cases of convulsive tics with coprolalia and echolalia. Although explicitly ascribed to Charcot, this lecture cannot be found in the collection of complete works of the French neurologist, and it provides some statements conflicting with Charcot's other pronouncements on the tic disease. This article is currently considered “a compilation from a variety of sources” [45], including information given to Melotti by Georges Gilles de la Tourette (1857–1904) himself, to provide more details on the “maladie des tics” to the Italian readers [46, 47]. With the approval of Charcot, Melotti subsequently translated into Italian a selection of lectures held by the French Neurologist at la Salpêtrière between May 1 and June (day not reported) 1885 and between May 30 and July 4, 1886; he published them in 1887, dedicating the book to Prof. Gaetano Rummo [48]. Charcot accepted to write a short introduction to the volume. Probably to emphasize the authenticity of his relationship with the Master, Melotti decided to reproduce the handwritten introduction penned by Charcot rather than have it typewritten. As evident from the full-length title, among the arguments of the lectures reported by Melotti, the book gave special emphasis to hysteria in men, as recently acknowledged by Charcot.

According to the French neurologist, this condition—which for centuries had been considered a prototypical female disorder—could affect both men and women. Of note, male hysteria was the subject of the thesis written by Charcot's student Émile Batault (1859–1929), reporting more than 200 such cases, nine of whom from la Salpêtrière, and published in 1885 [49]. Furthermore, exclusively for accompanying this

book, Charcot wrote a two-page preface in the form of a letter dated January 9, 1887 (it appears also in the *Oeuvres complètes de J. M. Charcot*, volume IX, pages 479–480). In it, he complained about the “*vulgar propagation* of hypnotism” [italics in the text] and commended the Italian government for the choice of suppressing the public theatrical performances of somnambulism by magnetizers, which in Charcot's opinion would prove beneficial in preventing the spread of hysterical epidemics. Furthermore, he emphasized that medicine alone should take full control of hypnotism, to apply it properly and rightly “for the treatment of the sick, or physiological or psychological research,” formally rejecting any intrusion. This text is extremely intriguing, as here Charcot seems to have an open attitude towards the therapeutic use of hypnotism. He had advocated the use of hypnotism for studying purposes, because—contrary to the claims of the representatives of the so-called Nancy School—he believed that only hysterical subjects could be hypnotized. However, during his entire career, he had always had concerns about the use of hypnosis in the treatment of hysteria [50, 51].

The volume edited by Melotti reproduced also the lecture “On Some Cases of Convulsive Tics with Coprolalia and Echolalia, making an analogy to Beard's Jumping, Malaysia's Latah and Hammond's Myriachit” that he had previously published in 1885 [44]. However, in a footnote, Dr. Melotti reports that his father (“Dr. N. Melotti”) had evaluated a further case when he was a medicine student at the Medical Clinic of Bologna in 1848. According to a note by his father dated January 1, 1848, and reproduced by Giulio Melotti, the Prof. Gian Battista Comelli (1776–1867) had made a diagnosis of a neurological disorder similar to chorea. This 76-year-old man at the age of approximately 70 had acutely begun having episodes during which he imitated words or gestures of those around him; the man was not able to suppress the behaviors that continued until he died at the age of 80. Giulio Melotti writes that he had discussed about this patient with Charcot, and he had suggested him to publish the note on this case. Correctly, Melotti attributed the symptoms of this patient (echopraxia and echolalia with automatic obedience) to the same spectrum of disorders encompassing Jumping Frenchmen, Myriachit, and Latah [52].

Augusto Tebaldi (1833–1895)

Augusto Tebaldi (1833–1895), born in Verona, was a psychiatrist who graduated in medicine in Padua in 1859 and was appointed as the first holder of the Chair of Clinical Psychiatry at the University of Padua in 1874. Following Cesare Lombroso's tradition (1835–1909), he studied mental illness explored through physiognomy and expression. In 1863, he spent 1 month at the Charenton Hospital in Paris as part of the sabbatical he took to research the insane asylums of France,

Belgium, Britain, Sweden, and Germany; however, there is no evidence that he ever attended la Salpêtrière. Like most of his contemporaries, Tebaldi was well aware of the works of Charcot and his pupils. In 1884, he published a book on physiognomy and deviation, which included an appendix with numerous images of delirium in art [53]. Tebaldi explicitly referred to the *Iconographie photographique de la Salpêtrière* as a direct antecedent and model for this work. Each page contains one photo, labeled in capital letters, sometimes with very concise descriptions, and placed below the pictures, just as they appear in the *Iconographie photographique*. He even reused a photo that had been published in the second volume of the *Iconographie photographique de la Salpêtrière* [Bourneville, Regnard, 1878]: this picture (number XXXII) showed a hysterical woman (Louise Augustine Gleizes, 1861–?) in a posture of “erotic attitude” (Fig. 3). With this choice, Tebaldi paid homage to the achievements of Charcot’s school in the study of hysteria.

The influence of Charcot’s theories on other Italian physicians

The theories of Charcot exerted a wide influence in Italy, even beyond medicine, as shown in the literary representation of hysteria in the novels by Matilde Serao (1856–1927) and Luigi Capuana (1839–1915) [54].

Many other lesser-known Italian physicians visited the Salpêtrière and were influenced by the French master. Fabio

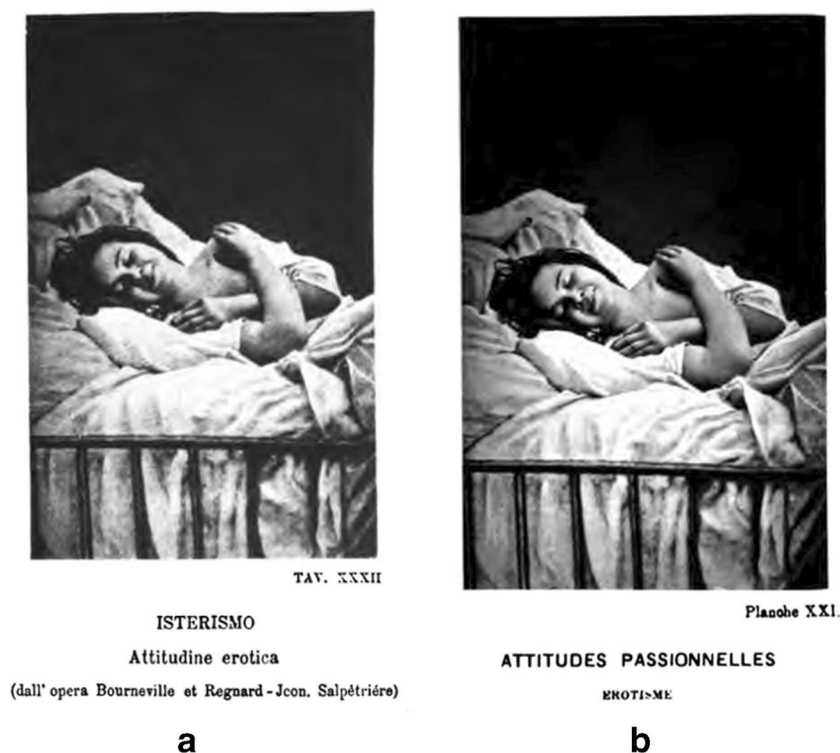
Rivalta (1863–1938) attended Charcot’s lessons in Paris in March and April 1889 and reported his teaching in a diagnostic book on paralyzes [55]. Giuseppe Portigliotti (1875–1933), a pupil of Cesare Lombroso, spent 2 years in Paris under Charcot, and on his return to Italy, he worked in Genoa at the private clinic called, remarkably, Villa Charcot.

Numerous references to Charcot’s work appeared in the *Rivista Sperimentale di Freniatria*, the first Italian journal devoted to psychiatry (founded in 1875), especially under the direction (since 1877) of Augusto Tamburini (1848–1919). In this journal, Tamburini and his pupil Giuseppe Seppilli (1851–1939) published experimental studies on hypnotism, in the wake of Charcot’s interest in this topic [56, 57]. Tamburini replicated and confirmed Charcot’s studies on hypnotism, showing that the hypnotic state is similar to a state of “split consciousness” [58].

Conclusions

Several of the first transcriptions and translations of Charcot’s lectures were made by young Italian physicians, who were pioneers in disseminating the ideas and discoveries of the great French neurologist. They were based only on personal handwritten notes and memories and did not rely on official French translations personally revised or edited by the French master. As such, their veracity cannot be always assured, particularly in the lack of other independent works reporting details on the same lectures. For this reason, the accuracy of

Fig. 3 **a** The photo showing a hysterical woman (Louise Augustine Gleizes, 1861–?) in a posture of “erotic attitude” reproduced in the iconographic book by Augusto Tebaldi [51]. **b** The same photo originally published in the *Iconographie photographique de la Salpêtrière*. From [11]



some transcriptions (like those of Charcot's lectures on tics by Giulio Melotti) has been questioned. However, the Italian translations providing interesting material that cannot be found elsewhere in Charcot's *corpus* of works are extremely important and they are unique exemplars in the history of neurology. They are an invaluable source of information and shed a fascinating light on some ideas and theories by the eminent French neurologist. The early Italian publications that included photographs of patients were deeply influenced by and clearly modeled on the famous volumes of the *Iconographie photographique de la Salpêtrière* and further contributed to the dissemination of Charcot's theories.

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Compliance with ethical standards

Conflicts of interest/competing interests The authors declare that they have no conflict of interest.

Ethics approval Not required.

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