

MODERN ANIMAL MAGNETISM: THE WORK OF ALEXANDRE BARÉTY, ÉMILE BOIRAC, AND JULIAN OCHOROWICZ

Carlos S. Alvarado
University of Virginia

Historical discussions of animal magnetism as a concept of force generally emphasise publications appearing before the mid-nineteenth century. This article focuses on selected aspects of a later neo-magnetism that flourished between the late nineteenth and the first two decades of the twentieth century, namely the work of Alexandre Baréty, Émile Boirac, and Julian Ochorowicz. They used the concept of magnetism to explain the induction of trance and anaesthesia, as well as mental suggestion. Outside of the neo-magnetic movement, contemporary comments of the work of these men were generally negative. Regardless of this, and of current scepticism on the subject, this work should be recognised as part of the context in which the field of hypnosis developed.

General histories of the investigations and ideas of hypnotic phenomena always mention the concept of animal magnetism as a factor in the development of hypnosis (e.g., Gauld, 1992; Pintar & Lynn, 2008). Because the concept was important, we need to be aware that certain aspects of its history are sometimes neglected. In this article, I will focus on selected examples of late nineteenth- and early twentieth-century magnetism.

ANIMAL MAGNETISM

Animal magnetism was considered by many to be a force that could be used to induce trance, and other phenomena such as healing, clairvoyance, and the transference of thoughts and sensations from one person to another (for

Research for this paper was funded by a grant from the Society for Psychical Research (London). I am grateful to Nancy L. Zingrone for editorial suggestions to improve this paper.

Correspondence concerning this paper should be addressed to the author at: Division of Perceptual Studies, Department of Psychiatry and Neurobehavioral Sciences, 210 10th St. NE, Suite 100, University of Virginia Health System, Charlottesville, VA, 22902, email: csa3m@virginia.edu.

overviews see Barrucand, 1967; Crabtree, 1993; Gauld, 1992; Méheust, 1999). Writing in 1779, Franz Anton Mesmer (1734–1815) listed 27 propositions concerning this force, which he defined as a universal fluid that emanated from the heavenly bodies and that was present in nature (Mesmer, 1779/1980¹). Mesmer related animal magnetism to physical and organic matter, the human body being affected by it through the nerves. In an attempt to relate this force to other principles, Mesmer compared it to magnetism, arguing that it was polarised. He not only believed that this force could heal, but was convinced that it could be reflected and intensified by mirrors, propagated by sound, and stored in matter (Mesmer's system is thoroughly discussed by Pattie, 1994).

This concept was elaborated by later mesmerists who published their ideas and observations during the eighteenth (Tardy de Montravel, 1785), nineteenth (Du Potet, 1868), and twentieth (Durville, 1920) centuries. In the opinion of Baron Jean du Potet de Sennevoy (1796–1881), the phenomena of magnetism could be explained as follows: “The nervous, active atmosphere of the magnetiser, no doubt augmented by the impulse of his will ... enters in rapport with the passive nervous atmosphere of the magnetised person, and augments the latter to the point that, in some cases, it seems that there is a real saturation of the nervous system” (Du Potet, 1868, p. 316; this and other translations are mine). By all accounts, the mesmeric literature was vast and varied (Alvarado, 2008; Gauld, 1992, pp. 631–668).

The development of a variety of theoretical views about hypnosis (e.g., Braid, 1843; Charcot, 1882) contributed to the decline of magnetic theory. As stated by a writer in the *Revue Scientifique de la France et de la Étranger*, hypnosis was seen either as a “particular case of induced hysteria,” or as the absorption of “animal magnetism into hypnotism according to Braid's formula” (Héricourt, 1884, p. 813).

Scepticism about this hypothetical force was rampant. One author saw the “hypothesis of magnetic fluid” as one unsupported by “any good experimental demonstrations” (Richet, 1884a, p. 221). Hippolyte Bernheim (1840/1919), the leader of the Nancy school of hypnosis, affirmed that the phenomena of hypnosis “are not due to a magnetic fluid”; instead, he wrote “everything is due to suggestion” (Bernheim, 1884, p. 73).

But this is far from saying that the mesmeric tradition was over. As stated in a recent overview: “Hypnosis had not replaced mesmerism at the end of the nineteenth century, but still existed alongside it” (Pintar & Lynn, 2008, p.

¹ Editor's note: when searching for the details of this and similar double dates, go to name first and then the second date mentioned of the two; e.g., Mesmer 1980.

91). In fact, magnetism, and its variants, continued to be defended by serious students during the late nineteenth and into the twentieth centuries. While it may be argued that ideas, similar to the concept of animal magnetism, are still with us in many guises (e.g., Movaffaghi & Farsi, 2009; Nelson & Schwartz, 2005), my interest in this article is to discuss some partly forgotten figures who were active at the end of the nineteenth and the first decades of the twentieth centuries. In a previous article, I discussed two such figures (Alvarado, 2009). In this article, I will focus on the work of other overlooked theorists, namely Alexandre Baréty, Émile Boirac, and Julian Ochorowicz.²

SOME MODERN MAGNETIC IDEAS

Mesmer's view (1779/1980), that the efficacy of the magnet to heal was due to animal magnetism, was echoed by others who saw the magnet as one of the means by which human magnetism could be transmitted (Durville, 1895). In this context, it is of interest to mention that the influence of the magnet was explored at the Salpêtrière by many physicians such as Alfred Binet (1857–1911) and Charles Féré (1852–1907), who focused on transfer phenomena. This was the belief that a magnet applied on a hypnotised subject could be used to move a motor or a sensory phenomenon from one side of the body to another (and later from one person to another). However, instead of animal magnetism, these authors explained their successes with the idea that the magnet “acts like a faint electric current on the nervous system, and produces a continuous peripheral excitement” (Binet & Féré, 1887, p. 262). This, and studies on the physiological effects of metals applied internally (in liquid form), or externally on contact with the skin (Charcot, Luys, & Dumontpallier, 1877, 1878), while not using the concept of animal magnetism, had a conceptual relationship to the old mesmeric claims of the efficacy of magnets as healing agents (Harrington, 1988).

In England, Edmund Gurney (1847–1888) explored the possible effect of a physical influence from the fingers of a person to induce anaesthesia and other effects (e.g., Gurney, 1884). The French were particularly interested in these ideas as seen in Ambroise-Auguste Liébeault's (1823–1904) exploration of the effects of “zoomagnetism” on the medical condition of small children

² Regarding the late magnetic movement, see Alvarado (2009), De Rochas (1902), and Harrington (1989). Gauld (1992) and Pintar and Lynn (2008) paid little attention to this literature. Aspects of it were discussed by authors such as Barrucand (1967), Crabtree (1993), Dingwall (1967–1968), and Plas (2000).

(Liébeault, 1883), in Albert de Rochas' (1837–1914) studies of the projection of tactual sensations beyond the periphery of the body during hypnosis, a phenomenon referred to as the “exteriorisation of sensibility” (De Rochas, 1899), and in Jules Bernard Luys' (1828–1897) descriptions as the abilities of hypnotised individuals to perceive “effluvia” emanating from human beings (Luys, 1892). In addition, many others defended a variety of concepts of force that formed what may be termed the late neo-mesmeric movement. The individuals discussed below represent prominent exponents of this tradition.³

THE CONTRIBUTIONS OF JULIAN OCHOROWICZ (1850–1917)

Polish psychologist and philosopher Julian Ochorowicz created a simple instrument to measure susceptibility to hypnosis and to magnetism. This consisted of a tubular magnet, called an hypnoscope, that was placed around the finger of a person (Ochorowicz, 1885). In some persons, the magnet produced physical sensations that indicated to Ochorowicz openness to hypnosis and to magnetism. Out of 100 tests, there were reports of sensations in 30 of them.

Ochorowicz believed that the effects could not be accounted for by suggestion, even though he accepted that both suggestion and magnetism could act together. In his view, the magnet “is merely the substratum of another action, which is so weak ... that it hides itself from our instruments, and exhibits itself only through the intermedium of exceptionally sensitive nervous systems” (p. 281).

In a test conducted in darkness, a woman was able to differentiate a magnetised from a non-magnetised hypnoscope (Ochorowicz, 1909, p. 750). The magnetised hypnoscope elicited sensations of cold and tingling, while the non-magnetised one felt hot and agreeable.⁴

Ochorowicz (1887/1891, p. 348) referred to “psycho-physical transmission” to account for such phenomena as differences in performance between hypnotisers. Furthermore, he discussed this transmission in terms of the ups and down of what the French called “mental suggestion,” defined by one author as “the transmission of thought or sensations of an individual to another

³ There were many other representatives of this tradition (e.g., Alrutz, 1921; Bertholet, 1927; Chazarain & Declé, 1886; Magnin, n.d.).

⁴ Both Delboeuf (1887) and Grasset (1887) reported instances in which subjects did not show reactions differently to magnetised and non-magnetised hypnoscopes.

without perceptible exterior signs to our senses” (De Rochas, 1887, p. 372).⁵ He believed that rapport between operator and subject did not take place in hypnosis. However, magnetic action could bring rapport in different stages. In this view, rapport showed “the action upon the subject of a centre of radiation from without ... and an adjustment in conformity with the dynamic nature of that centre ... effected little by little” (Ochorowicz, 1887/1891, pp. 273–274).

Ochorowicz discussed other phenomena that, in his opinion, provided evidence for the existence of a physical influence. One of these was the subject’s recognition of the magnetiser’s touch from that of other individuals. This also happened, he said, when the touch was applied through a rod or a pencil. On the latter, he wrote: “*It proves that molecular dynamic differences pass beyond the surface of the body*; that a certain vibratory tonic movement peculiar to a given organism is propagated beyond its periphery, and can influence the subject so definitively, so palpably, that there is a real action” (Ochorowicz, 1887/1891, p. 223).

The Polish researcher also said that it was possible to produce healing effects without actual physical contact and without the patient’s knowledge. This effect was further evidence for “an inductive action that overpasses the superficies of the body” (Ochorowicz, 1887/1891, p. 328). In addition, he argued that “moral” or psychological means could not explain the differences in the effects of the magnetic action on different people: “One hand acts differently from the other hand. Hence, there is a physical action, and a personal physical action” (p. 329). Nevertheless, he stated later that he did not believe that the right and left hands had different polarities and that he had not found that they produced different effects (Ochorowicz, 1909, p. 759).

THE CONTRIBUTIONS OF ALEXANDRE BARÉTY (1844–1918)

French physician Alexandre Baréty became interested in magnetism during the 1880s. His preliminary studies were presented to the Société de Biologie de Paris on July of 1881 (Baréty, 1881/1882) and later expanded into a long monograph entitled *Le magnétisme animal: Étudié sous le nom de force neurique rayonnante et circulante dans ces propriétés physiques, physiologiques et thérapeutique* (Baréty, 1887; see also Baréty, 1888).

⁵ For an overview of examples of this phenomenon and methodological issues in its study see Ochorowicz (1887/1891). Plas (2000, pp. 87–109) also discussed French interest in mental suggestion, such as Richet’s (1884b).

Baréty's monograph, over 600 pages long, was described by another proponent of magnetism as "the greatest scientific effort which has been made hitherto to establish the reality of animal magnetism" (Boirac, 1912/1917, p. 92). This book was about the field of "neurodynamics," or "the study of actions of neuric currents of a neuraliser subject on the neuric currents of a neuralised subject" (Baréty, 1887, p. xiv). Neuric force, a principle analogous to animal magnetism, was believed to be a bodily force "probably from the nervous system, which circulates along the nerves or *radiates* out of them ... and is susceptible to producing certain sensitive, motor and psychic modifications on other human bodies" (p. xii). The book was divided into two parts. The first consisted of physical and physiological phenomena observed with one person, a Mlle C., and the second included phenomena observed with other individuals.

The neuric force, Baréty believed, circulated within the nerves of the body and could be projected out of it as well. The latter was accomplished by means of passes, by pointing the fingers to the desired target, as well as through eyesight, and breath. The rays were said to travel in a straight line when coming out of the body, and could be reflected by some surfaces such as mirrors, or dispersed when passing through a prism.

Its effects included anaesthesia, hyperesthesia, loss of sight or hearing, contractions and trance. For example, when Baréty affected the sensibility of Mlle C, he was able to "anaesthetise and hyperesthesise the integuments of different regions ... abolish or exalt one or another sense" (p. 326).

The neuric force was said to have both internal and external properties. The internal ones were physical properties similar to heat, light and electricity. The external ones were the effects on animate and inanimate matter out of the body. The effects of this force were similar to the effects of a magnet, and some metals could augment the neuric force. Furthermore, Baréty noticed that those susceptible to "neuricity" were also susceptible to atmospheric electricity.

Direct neurisation involved radiation from the magnetiser to the patient. But it could also be achieved through reflection (when the neuric force bounced off another surface) or through refraction (through lenses or prisms). Baréty also referred to mediated neurisation, or an effect produced by another body or substance that had been charged with neuric force. An example of such a substance was water, which could "acquire the inherent properties of the neuric force" (p. 56). But water did not retain the force for long. Baréty presented a list of common objects that he was able to charge with neuric

force to use in mediated neurisation (pp. 271–272). In addition to water, this included paper, a table, a wall, a mirror, a book, a flower, a ruler, dice, and a handkerchief. Baréty believed that the hand could project this force through a sewing needle.

Neurisation also took place through induction. As Baréty explained: “The sole presence of a person close to another may affect the specific nervous state of one of them...” (p. 234).

The neuric force could produce therapeutic effects. Baréty believed it could affect general sensations, the functioning of the senses, movement and mental functions. These effects could take place while the subject was awake, or in a trance induced by the force, or appear spontaneously while the force was acting.

The first passes with Mlle C. were carried out on 30 October 1880. Baréty passed his open hand up and down the patient’s body, and she soon fell into trance and exhibited anaesthesia throughout the body. “Some days later, on 2 November, I saw that I could produce anaesthesia without trance by passes on different regions of the body, and limited to the region covered by the passes. I could thus anaesthetise a finger, the nose, and ear, one of the eyelids, [and] half of the side of the body’ (p. 211).

Baréty attempted to control Mlle C.’s stomach pain. “Her pain,” he wrote, “disappeared in a few seconds when we directed our fingers” to the region of her body that was in pain (p. 98).

Digital rays could go through different obstacles, he thought, such as walls, wool, and a shawl folded in eight sections. But the effects of the force passing through obstacles were weaker than those obtained with the direct projection of “neuric radiation.” In November of 1880, Baréty tested the possibility of neuralisation through a brick wall; the wall was 50 cm thick. His patient was situated between 10 to 12 cm from the wall’s surface. From another room, Baréty placed his hand 50 to 60 cm from the wall pointing his fingers at the subject. He was able to induce contractions in the patient’s hand and wrist (p. 116).

Baréty believed the neuric force could explain some medical conditions. Hysteria was a case in point, representing a “modification in the direction, the force and the distribution of nervous or *neuric* currents” (1887, p. 627).⁶

⁶ For other late magnetic views of hysteria see Baraduc (1893, p. 162), and Bonnaymé de la Flachère (1917, p. 137). Ochorowicz (1884, p. 558) believed that sensitivity to the effects of magnets indicated that a person could be cured of nervous maladies through the influence of “magnetism, of hypnotism, of imagination, of metallotherapy, of weak electrical influences and of other minimal stimulants.”

THE CONTRIBUTIONS OF ÉMILE BOIRAC (1851–1917)

French philosopher Émile Boirac, a professor of philosophy at the Lycée Condorcet (Paris), and chancellor of the Académie de Grenoble and of the Université de Dijon, was well known for his strong defences of magnetism. In an early essay written to classify what we refer to today as parapsychological phenomena, Boirac (1893) referred to “psychodynamy,” or the phenomena in which an individual could affect persons or physical matter at a distance through a force housed in the human body that was “different from all known forces, but analogous to radiating or circulating forces such as heat, light, electricity and magnetism” (pp. 346–347). Later, in a similar way, he referred to magnetism as “a personal and psychophysical action of the operator, an action emanating from its brain, which is exerted by currents more or less analogous to electrical and magnetic currents ... ” (Boirac, 1895b, p. 60). The effects of this force on individuals included sensations of attraction and healing, but also such effects as the exteriorisation of sensibility (Boirac, 1895a) and the induction of trance at a distance (Boirac, 1896a).⁷

For all the merits of the Nancy School of Hypnosis, Boirac (1895b) argued, suggestion was not enough to explain all the phenomena produced. But he believed that mesmeric hypothesis had acquired a bad reputation and was ignored by most scientists: “Animal magnetism is [like] an America [in] that [it] has been lost and recovered during the [last] twenty or thirty years” (Boirac, 1907, pp. 1–2).

Boirac was aware of the influence of suggestion, but wondered “whether the ancient hypothesis of animal magnetism, in a more or less modified expression, was not the source” of some hypnotic phenomena (Boirac, 1912/1917, p. 80), as he wrote about a force he called “biactinism”:

[This] is the agent which transmits to the nerve centres the excitations coming from the periphery and gives birth to the sensations. It is this also which transmits to the muscles the orders of the will, and determines the movements of the exterior organs. It is this, too, which excites and regulates the different vital functions; respiration, circulation, assimilation, and catabolism. But we do not know what constitutes it. (Boirac, 1917/ n.d., p. 158)

Boirac classified the phenomena dependent on this nervous force as “magnetoid.” He argued that, when acting on a person, their physical basis could be separated from suggestion by keeping information from the subject,

⁷ Caratelli (1996, pp. 146–171) reviews accounts of induction of trance at a distance. See also Ochorowicz (1887/1891) and Myers (1886).

by conducting observations in complete silence, and “by acting only at a distance, without contact, through the supposed radiation of some organ of the operator, principally the hand” (Boirac, 1917/n.d., p. 60).

In attempting to show the existence of this force, Boirac used passes and a steady gaze to influence a 16-year-old young man: “Seated in front of the subject ... I slid my right foot slowly over the carpet, the toe pointing toward the subject’s left foot. I noticed immediately a slight movement, a sort of tremor, in his foot. Again I slid my right foot, very slowly and without noise; this time the subject’s foot glided visibly toward mine ... ” (Boirac, 1917/n.d., pp. 165–166). Similar effects were reported when Boirac moved his hand nearer to the subject’s own hand. In these movements, the subject “behaved as if his nervous system were, so far as voluntary movements are concerned, in communication with my own” (pp. 166–167).

CONTEMPORARY CRITIQUES

The work of Ochorowicz, Baréty and Boirac was not accepted by most of their contemporaries involved with hypnosis. An indication of this was an editorial note published in the *Revue de l’Hypnotisme Expérimental & Thérapeutique* on the first page of an article about the neuric force authored by Baréty (1888). The note stated that Baréty’s opinions were in “complete opposition with the ideas generally admitted today” (p. 80). Suggestion was the generally accepted explanation for the phenomena of hypnosis, and ideas of magnetism, fluids and the like were considered unscientific and unacceptable by many.

An example of incredulity about the dynamic ideas of Ochorowicz was the reviewer of his book on mental suggestion. The reviewer, who praised Ochorowicz for his empirical approach, simply stated that he was not convinced (Colas, 1888). Another reviewer, English psychical researcher, Frank Podmore (1856–1910), referred to the hypnoscope as a “dubious little toy,” and considered that it was premature to discuss the merits of Ochorowicz’s force concepts to explain mental suggestion (Podmore, 1887).

Baréty was said not to have taken (or reported) proper precautions against suggestion, especially because most of his results were obtained with a single subject and “everyone knows that hypnotisable subjects are susceptible, through training, to a special education of incredible perfection, that renders them suitable to seize the suggestions” (Anonymous, 1887, p. 566). Similarly, the reviewer of the *American Journal of Psychology* saw the book as a document suggestive of a “joint product of pseudo-scientific methods gradually evolving a set of systematised symptom-reaction in an interesting hysterical subject, half

whimsical originations, half subtle divination of theories of the experimenter almost before they are known to himself” (Anonymous, 1888, p. 502).

Pierre Janet, well known for his studies of dissociation, suggested that Baréty’s beliefs led him to accept ambiguous responses of his subjects that may have had explanations other than the projection of a neuric force (Janet, 1888, p. 94). Janet also felt that the psychological aspects of the subjects were not explored, something that could explain or interact with other factors. However, he admitted that ideas such as Baréty’s could contain some truth.

Boirac’s ideas were also debated by several individuals. One of them wrote that he used a “truly scientific spirit” (Jankelevitch, 1908, p. 552), while another saw his work as possibly being the effect of “unsuspected sources of error rather than the existence of a psychic force” (Pierce, 1908, p. 471).

It was noticed that Boirac’s concept of a force was ambiguous, but seemed to be analogous to physical magnetism (Leaf, 1895, p. 600). As this critic wrote: “We know far too little to say that it is not so; but I am not aware of any experiments which tend to prove it, and M. Boirac’s seem to me to go certainly against it” (p. 600).⁸ Furthermore, another critic accused Boirac of showing a “loose and vague way of handling theories” (Sidgwick, 1908, p. 288).

Another reason for the rejection of the work discussed here was the psychical research work these men engaged in, particularly Boirac and Ochorowicz.⁹ Both of them wrote about mental suggestion (Boirac, 1896a; Ochorowicz, 1887/1891). Similarly, both men discussed telekinesis, assuming that it was explained by the projection of a biophysical force of a person’s body (Boirac, 1912/1917; Ochorowicz, 1910). Such interests were demonstrated as well by other neo-mesmerists (e.g., Durville, 1909; De Rochas, 1887). Closely related to the late magnetic movement, there was a spiritualistic and psychical research literature on concepts of forces emanating from the human body to explain mental and physical phenomena that preceded, and later overlapped with, the neo-mesmeric movement (Alvarado, 2006).

CONCLUSION

Compared to earlier authors, Baréty, Boirac and Ochorowicz represent a late mesmeric tradition. Among other aspects, they used magnetic theory to

⁸ A later exchange between Boirac (1896b) and Leaf (1896) did not solve the controversy. One of the issues discussed was the hypothetical distinction between thought transference and the effects of a physical effluence to explain the effects reported by Boirac.

⁹ On nineteenth-century European psychical research, see Biondi (1988), Oppenheim (1985), Plas (2000), and Wolfram (2005).

explain action at a distance. In addition, both Baréty and Boirac discussed magnetic effects on the human body.

While their ideas were not widely accepted at the time, and may seem to many today to be methodologically weak, this does not mean that they were the work of cranks, or that they should be treated with disdain, as some have done in the past (Barrucand, 1967). Such ideas were part of the history of attempts to understand hypnosis, interacting in many ways with other developments that became part of the accepted canon.

Following the interest historians of science have in rejected practices such as alchemy and phrenology, and in constructs, such as the ether and phlogiston, a proper history of hypnosis should not be made only of past work and ideas that resemble the present. Studying the work of such men as Baréty, Boirac and Ochorowicz illuminates the context in which Charcot, Bernheim and others worked to develop their ideas. In a wider context, re-examining such ideas is helpful to understand the development of science itself (e.g., Hanen, Osler, & Weyant, 1980), a topic beyond the scope of this article.

REFERENCES

- Alrutz, S. (1921). Problems of hypnotism: An experimental investigation. *Proceedings of the Society for Psychological Research*, 32, 151–178.
- Alvarado, C. S. (2006). Human radiations: Concepts of force in mesmerism, spiritualism and psychical research. *Journal of the Society for Psychological Research*, 70, 138–162.
- Alvarado, C. S. (2008). Mesmerism online: A bibliographic review. *Australian Journal of Clinical and Experimental Hypnosis*, 36, 115–120.
- Alvarado, C. S. (2009). Late 19th- and early 20th-century discussions of animal magnetism. *International Journal of Clinical and Experimental Hypnosis*, 57, 366–381.
- Anonymous. (1887). [Review of the book *Le magnétisme animal*]. *Revue Scientifique*, 13 (s. 3), 565–566.
- Anonymous. (1888). [Review of the book *Le magnétisme animal*]. *American Journal of Psychology*, 1, 501–502.
- Baraduc, H. (1893). *La force vitale: Notre corps vital fluidique, sa formule biométrique* [The vital force: Our vital fluidic body, its biometric formula]. Paris: G. Carré.
- Baréty, A. (1882). *Contribution à l'étude des propriétés du système nerveux: Des propriétés physiques d'une force particulière du corps humain (force neurique rayonnante), connue vulgairement sous le nom de magnétisme animal* [Contribution to the study of properties of the nervous system: The physical properties of a particular force of the nervous body (radiating neuric force), popularly known under the name of animal magnetism]. Paris: Octave Doin. (Original work published 1881).
- Baréty, A. (1887). *Le magnétisme animal: Étudié sous le nom de force neurique rayonnante et circulante dans ces propriétés physiques, physiologiques et thérapeutique* [Animal magnetism:

- Studied under the name of radiating and circulating neuric force, its physical, physiological and therapeutic properties]. Paris: Octave Doin.
- Baréty, A. (1888). La force neurique [Neuric force]. *Revue de l'Hypnotisme Expérimental & Thérapeutique*, 2, 80–85.
- Barrucand, D. (1967). *Histoire de l'hypnose en France* [History of hypnosis in France]. Paris: Presses Universitaires de France.
- Bernheim, Dr [H.]. (1884). *De la suggestion dans l'état hypnotique et dans l'état de veille* [On suggestion in the hypnotic state and in the waking state]. Paris: Octave Doin.
- Bertholet, E. (1927). *Le fluide des magnétiseurs: Réponse aux adversaires des effluves humains* [The fluid of magnetisers: Response to the adversaries of human effluvia]. Lausanne: H. Held.
- Binet, A., & Féré, C. (1887). *Animal magnetism*. London: Kegan Paul, Trench.
- Biondi, M. (1988). *Tavoli e medium: Storia dello spiritismo in Italia* [Tables and mediums: History of spiritism in Italy]. Rome: Gremese.
- Boirac, E. (1893). Un essai de classification des phénomènes parapsychiques [An essay of classification of parapsychic phenomena]. *Annales des Sciences Psychiques*, 3, 342–354.
- Boirac, E. (1895a). Expériences sur l'extériorisation de la sensibilité [Tests on the exteriorisation of sensibility]. *Annales des Sciences Psychiques*, 5, 169–173.
- Boirac, E. (1895b). [Review of the book *Le magnétisme curatif*]. *Annales des Sciences Psychiques*, 4, 58–64.
- Boirac, E. (1896a). Un cas de sommeil provoqué a distance [A case of sleep induced at a distance]. *Annales des Sciences Psychiques*, 6, 56–58.
- Boirac, E. (1896b). Correspondence. *Journal of the Society for Psychical Research*, 7, 221–224.
- Boirac, E. (1907). Préface. In E. Gasc-Desfossés, *Magnétisme vital: Contributions expérimentales a l'étude par le galvanomètre de l'électro-magnétisme vital* [Vital magnetism: Experimental contributions to the study of vital electro-magnetism with the galvanometer] (pp. 1–13, 2nd ed.). Paris: F. R. de Rudeval.
- Boirac, E. (1917). *Our hidden forces: An experimental study of the psychic sciences* (from 2nd French ed.) (W. de Kerlor, trans.). New York: Frederick A. Stokes. (Original work [2nd ed.] published 1912).
- Boirac, E. (n.d.). *The psychology of the future* (W. de Kerlor, trans.). New York: Frederick A. Stokes. (Original work published 1917).
- Bonnaymé de la Flachere, Dr (1917). Hystérie, neurasthénie et force psychique [Hysteria, neurasthenia and psychic force]. *Journal du Magnétisme et du Psychisme Expérimental*, 45, 130–139, 146–150.
- Braid, J. (1843). *Neurypnology or the rationale of nervous sleep considered in relation with animal magnetism*. London: John Murray.
- Caratelli, G. (1996). *Psicologia psicoanalisi parapsicologia* [Psychology psychoanalysis parapsychology]. Rome: Sovera.
- Charcot, J. M. (1882). Sur les divers états nerveux déterminés par l'hypnotisation chez les hystériques [On the various nervous states caused by the hypnotisation of hysterics]. *Comptes-rendus Hebdomadaires des Séances de l'Académie des Sciences*, 94, 403–405.

- Charcot, [J. M.], Luys, [J. B.], & Dumontpallier, [A.]. (1877). Rapport fait à la Société de Biologie sur la métalloscopie du Docteur Burq [Report made to the Society of Biology about Doctor Burq's metalloscopy]. *Comptes Rendus des Séances de la Société de Biologie*, 30, 1–24.
- Charcot, [J. M.], Luys, [J. B.], & Dumontpallier, [A.]. (1878). Second rapport fait à la Société de Biologie sur la métalloscopie et la métallothérapie du Docteur Burq [Second report made to the Society of Biology about Doctor Burq's metalloscopy and metallothérapie]. *Comptes Rendus des Séances de la Société de Biologie*, 31, I–XXXII.
- Chazarain, Dr [L. T.], & Declé, C. (1886). *Découverte de la polarité humaine ou démonstration expérimentale des lois suivant lesquelles l'application des aimants, de l'électricité et les actions manuelles ou analogues du corps humain* [Discovery of human polarity or an experimental demonstration of laws from the application of magnets, electricity and manual actions or similar ones on the human body]. Paris: O. Doin.
- Colas, A. (1888). [Review of the book *De la suggestion mentale*]. *Revue de l'Hypnotisme Expérimental & Thérapeutique*, 2, 60–62.
- Crabtree, A. (1993). *From Mesmer to Freud: Magnetic sleep and the roots of psychological healing*. New Haven, CT: Yale University Press.
- Delboeuf, J. (1887). Note sur l'hypnoscope et sur les phénomènes de transfert par les aimants [Note on the hypnoscope and on the phenomena of transfer through magnets]. *Revue de l'Hypnotisme Expérimental & Thérapeutique*, 1, 370–372.
- Dingwall, E. J. (Ed.). (1967–1968). *Abnormal hypnotic phenomena: A survey of nineteenth-century cases*. New York: Barnes and Noble.
- Durville, H. (1895). *Application de l'aimant au traitement des maladies* [The application of the magnet in the treatment of diseases] (5th ed.). Paris: Librairie du Magnétisme.
- Durville, H. (1909). *Le fantôme des vivants* [The phantom of the living]. Paris: Librairie du Magnétisme.
- Durville, H. (1920). *Cours de magnétisme personnel: Magnétisme expérimental & curatif, hypnotisme, suggestion* [Course of personal magnetism: Experimental & healing magnetism, hypnotism, suggestion] (5th ed.). Paris: Henri Durville.
- Gauld, A. (1992). *A history of hypnotism*. Cambridge: Cambridge University Press.
- Grasset, Docteur [J.]. (1887). Note sur l'hypnoscope d'Ochorowicz [Note of Ochorowicz's hypnoscope]. *Revue de l'Hypnotisme Expérimental & Thérapeutique*, 1, 316–317.
- Gurney, E. (1884). An account of some experiments in mesmerism. *Proceedings of the Society for Psychical Research*, 2, 189–206.
- Hanen, M. P., Osler, M. J., & Weyant, R. G. (1980). (Eds.). *Science, pseudo-science and society*. Waterloo, Ontario: Wilfrid Laurier University Press.
- Harrington, A. (1988). Metals and magnets in medicine: Hysteria, hypnosis, and medical culture in fin-de-siècle Paris. *Psychological Medicine*, 18, 21–38.
- Harrington, A. (1989). Hysteria, hypnosis, and the lure of the invisible: The rise of neo-mesmerism in fin-de-siècle French psychiatry. In W. F. Bynum, R. Porter & M. Shepherd (Eds.), *The anatomy of madness: Essays in the history of psychiatry* (Vol. 3, pp. 226–246). New York: Tavistock.

- Héricourt, J. (1884). Le magnétisme animal en dehors de l'hystérie [Animal magnetism outside of hysteria]. *Revue Scientifique de la France et de l'Étranger*, 7 (s. 3), 812–813.
- Janet, P. (1888). [Review of the book *Le magnétisme animal*]. *Revue Philosophique de la France et de l'Étranger*, 25, 91–95.
- Jankelevitch, S. (1908). [Review of the book *La psychologie inconnue*]. *Revue Philosophique de la France et de l'Étranger*, 66, 550–552.
- Leaf, W. (1895). [Review of the article “L'Hypothèse du magnétisme animal”]. *Proceedings of the Society for Psychological Research*, 11, 599–600.
- Leaf, W. (1896). Correspondence. *Journal of the Society for Psychological Research*, 7, 224–228.
- Liébeault, A. A. (1883). *Étude sur le zoomagnétisme* [Study of zoomagnetism]. Paris: Georges Masson.
- Luys, J. B. (1892). De la visibilité, par les sujets en état hypnotique, des effluves dégagés par les êtres vivants [On the visibility, by subjects in the hypnotic state, of effluvia emitted by human beings]. *Compte rendu hebdomadaires des séances et mémoires de la Société de Biologie*, 4 (s. 9), 657–659.
- Magnin, E. (n.d. ca. 1905). *L'art et l'hypnose: Interpretation plastique d'oeuvres littéraires et musicales* [Art and hypnosis: Plastic interpretation of literary and musical works]. Geneva: “Atar.”
- Méheust, B. (1999). *Somnambulisme et médiumnité (1784–1930): Vol. 1. Le défi du magnétisme animal* [Somnambulism and mediumship (1784–1930): Vol. 1: The challenge of animal magnetism]. Le Plessis-Robinson: Institut Synthélabo pour de Progrès de la Connaissance.
- Mesmer, F. A. (1980). Dissertation on the discovery of animal magnetism. In G. Bloch (Ed.), *Mesmerism: A translation of the original scientific and medical writings of F. A. Mesmer* (pp. 43–78). Los Altos, CA: William Kaufmann. (Original work published 1779).
- Movaffaghi, Z., & Farsi, M. (2009). Biofield therapies: Biophysical basis and biological regulations? *Complementary Therapies in Clinical Practice*, 15, 35–37.
- Myers, F. W. H. (1886). On telepathic hypnotism, and its relation to other forms of hypnotic suggestion. *Proceedings of the Society for Psychological Research*, 4, 127–188.
- Nelson, L. A., & Schwartz, G. E. (2005). Human biofield and intention detection: Individual differences. *Journal of Alternative and Complementary Medicine*, 11, 93–101.
- Ochorowicz, J. (1884). Le sens du toucher et les sens du magnétisme [The sense of touch and the sense of magnetism]. *Revue Scientifique de la France et de l'Étranger*, 7 (s. 3), 553–538.
- Ochorowicz, J. (1885). A new hypnoscope. *Journal of the Society for Psychological Research*, 1, 277–282.
- Ochorowicz, J. (1891). *Mental suggestion* (J. Fitzgerald, trans.). New York: Humbolt. (Original work published 1887).
- Ochorowicz, J. (1909). Hypnotisme et mesmérisme [Hypnotism and mesmerism]. In C. Richet (Ed.), *Dictionnaire de physiologie* (Vol. 8, pp. 709–778). Paris: Félix Alcan.

- Ochorowicz, J. (1910). Les rayons rigides et les rayons X^o: Études expérimentales [Rigid rays and X^o: Experimental studies]. *Annales des sciences psychiques*, 20, 97–105, 129–136, 172–178, 204–209, 225–231, 257–263, 295–302, 336–344, 357–370.
- Oppenheim, J. (1985). *The other world: Spiritualism and psychical research in England, 1850–1914*. Cambridge: Cambridge University Press.
- Pattie, F. A. (1994). *Mesmer and animal magnetism: A chapter in the history of medicine*. Hamilton, NY: Edmonston.
- Pierce, A. H. (1908). [Review of the book *La psychologie inconnue*]. *Journal of Philosophy, Psychology and Scientific Methods*, 5, 470–471.
- Pintar, J., & Lynn, S. J. (2008). *Hypnosis: A brief history*. Malden, MA: Wiley-Blackwell.
- Plas, R. (2000). *Naissance d'une science humaine: La psychologie: Les psychologues et le "merveilleux psychique."* [The birth of a human science: Psychology: The psychologists and the "psychic marvellous"]. Rennes: Presses Universitaires de Rennes.
- Podmore, F. (1887). [Review of the book *De la suggestion mentale*]. *Proceedings of the Society for Psychical Research*, 4, 562–566.
- Du Potet, Baron. (1868). *Manuel de l'étudiant magnétiseur* [Manual of the student magnetiser] (4th ed.). Paris: Germer Baillière.
- Richet, C. (1884a). *L'homme et l'intelligence: Fragments de physiologie et de psychologie* [Man and intelligence: Fragments of physiology and psychology]. Paris: Félix Alcan.
- Richet, C. (1884b). La suggestion mentale et le calcul des probabilités [Mental suggestion and the calculation of probability]. *Revue Philosophique de la France et de l'Étrangere*, 18, 609–674.
- De Rochas, A. (1887). *Les forces non définies: Recherches historiques et expérimentales* [Non-defined forces: Historical and experimental investigations]. Paris: G. Masson.
- De Rochas, A. (1899). *L'extériorisation de la sensibilité: Étude expérimentale & historique* [The exteriorisation of sensibility: Experimental & historical study] (5th ed.). Paris: Chamuel.
- De Rochas, A. (1902). *Les frontières de la science* [The frontiers of science]. Paris: Librairie des Sciences Psychologiques.
- Sidgwick, E. M. (1908). [Review of the book *La psychologie inconnue*]. *Journal of the Society for Psychical Research*, 13, 285–288.
- Tardy de Montravel, A. A. (1785). *Essai sur la théorie du somnambulisme magnétique* [Essay on the theory of magnetic somnambulism]. London: n.p.
- Wolffram, H. M. (2005). *On the borders of science: Psychical research and parapsychology in Germany, c. 1870–1939*. PhD thesis, University of Queensland, Australia.