



This is the pre-peer reviewed version of the following article:

Hajek, K. (2015). Imperceptible Signs: Remnants of Magnétisme in Scientific Discourses on Hypnotism in Late Nineteenth-Century France, *Journal of the History of the Behavioral Sciences*, 51(4) 366–386

which has been published in final form at <http://dx.doi.org/10.1002/jhbs.21743>  
This article may be used for non-commercial purposes in accordance with [Wiley Terms and Conditions](#) for Use of Self-Archived Versions.

# Imperceptible Signs: Remnants of *magnétisme* in Scientific Discourses on Hypnotism in Late Nineteenth-Century France.

## Introduction

For most of the nineteenth century, practices resembling hypnotism, known then as *magnétisme animal*,<sup>1</sup> were marginalized by the medical and scientific establishment as unfit subjects for scientific inquiry (Janet, 1919; Ritti, 1879). By the early 1880s, however, the situation was reversed, at least in France, and for just over a decade, research on hypnotism proliferated in learned societies, scientific periodicals, and medical faculty teaching (Magnin, 1886–1887; Pettit, 1906, p. 319; Simon, 1888–1889). As a key episode in the histories of hypnotism—widely termed its “golden age” (Barrucand, 1967, p. 3; Harrington, 1988b, p. 21)—and psychology, this context has attracted significant interest from historians (Barrucand, 1967; Carroy-Thirard, 1980; Carroy, 1985, 1991; Ellenberger, 1970; Gauld, 1992; Harrington, 1988a, 1988b; Harris, 1985; Hillman, 1965; Mayer, 2013; Nicolas, 2004; Plas, 2000). Notwithstanding the jump in hypnotism’s medico-scientific status during this “golden age,” analysis of hypnotism’s relations with its disreputable past has tended to focus on conceptual, institutional, or cultural continuities between *magnétisme* and hypnotism. Notably, Henri Ellenberger proposed that the psychoanalytic unconscious evolved out of nineteenth-century *magnétisme* and hypnotism (1970), Jacqueline Carroy explored how subjects circulated between the worlds of *magnétisme* and Salpêtrière hypnotism (1991, chap. 1), and Anne Harrington traced the persistence of neo-magnetic thinking in strands of

hypnotism research pursued in respectable Paris scientific circles through the 1880s (1988a, 1988b), an argument expanded by Régine Plas in her study of the part played by the wondrous in nascent French psychology (2000, esp. chap. 2–3).

The 1880s hypnotism context also merits attention, however, for its discontinuities, as a rare instance of a field of inquiry moving across the boundary from what we might now call “pseudo-science” into science.<sup>2</sup> Thomas Gieryn’s influential 1983 article has led us to consider science’s boundaries as demarcated, practically speaking, by means of rhetorical “boundary work.” Indeed, hypnotism texts of the late nineteenth century repeatedly recount the history of the field,<sup>3</sup> asserting that what transformed hypnotism from scientific pariah into golden topic was the new, properly scientific approach, which they insisted marked a clear break with the mysterious, even supernatural, claims of *magnétisme* (Bernheim, 1888, pp. 147–152, 276; Binet & Féré, 1887, chap. 1–3; Bourneville & Regnard, 1879–1880, pp. 149–150; Hahn, 1894, p. 379). Unlike most cases analyzed by Gieryn (1983, 1999) and others, where scientists seek to distinguish their field from synchronic rivals for authority or resources, hypnotism researchers defined and defended a diachronic boundary. At stake was to prevent hypnotism’s legitimate status from being weakened by association with the derided attributes of *magnétisme*, namely its apparently wondrous or supernatural character and its susceptibility to fraud.

But as Harrington’s (1988a, 1988b) work in particular implies, hypnotism researchers’ story of a clear break with *magnétisme* was to some extent just that: a story. In this paper, I propose to complicate this story by exploring the interplay of discontinuities and continuities between hypnotism and *magnétisme* as it emerges from close examination of 1880s scientific discourses. Previous analysis of the relationship, in contrast, has focused on the details of experiments or cultural factors, on the one hand, or only on continuities,

on the other (Harrington, 1988a, 1988b; Plas, 2000, chap. 2–3; Carroy, 1991, chap. 1).

Paying close attention to historical actors' accounts allows us to tease out a more nuanced understanding of the diverse, even contradictory, conceptual strands underpinning a particular scientific context. Such an approach has yielded rich results when deployed by Gieryn (1982) to investigate Emile Durkheim's discordant theorizations of scientific knowledge, or very recently by Robert Owens (2014) to map the varied uses of the term "laboratory" in early American sociology.

Here, I analyze the ways hypnotism and *magnétisme* interacted in 1880s thought through the conceptual context of researchers' ideas on unconscious suggestion. These ideas merit attention in their own right for their links to a major theme in the history of hypnotism: the bitter "battle" between the Salpêtrière and Nancy schools of hypnotism.<sup>4</sup> Accusations of unconscious suggestion are often considered crucial to the Nancy school's triumphant critique and ultimate defeat of its Salpêtrière rivals (Barrucand, 1967; Ellenberger, 1970; Harrington, 1988a; Nicolas, 2004; Owen, 1971).<sup>5</sup> Concern over unconscious suggestion was not limited, however, to the Nancy school, as I will demonstrate here. More importantly, both schools not only construed this phenomenon—whereby a subject would discern otherwise imperceptible signs to fulfil the experimenter's expectations—in similar terms, but strikingly converged in accounting for it in terms of somnambulist subjects' hyper-perceptive senses. Far from exciting debate between the Salpêtrière and Nancy (or beyond), this characteristic of the hypnotic state was accepted without question. In the context of their antagonism, this is astonishing in itself. Furthermore, the commonality of assumptions is attributable, I contend, to their magnetic origins.<sup>6</sup> In other words, a subtle remnant of magnetic thinking subtends understandings of unconscious suggestion shared by the vast majority of hypnotism researchers. Since other

studies of neo-magnetic thinking tend to identify it only in the “losing” Salpêtrière or Parisian schools of hypnotism (Harrington, 1988a; Plas, 2000), my argument complicates our understanding of the schools’ conflict and why Nancy emerged as the victor (if indeed it did).<sup>7</sup>

The paper begins by examining how unconscious suggestion was conceived by hypnotism researchers from across the spectrum, in the circumscribed context of hypnotism’s scientific heyday in France in the 1880s.<sup>8</sup> Subsequent sections argue that accounts of subjects’ extraordinarily acute senses universally functioned to explicate the power and penetration of unconscious suggestion, but lacked an authoritative experimental or theoretical basis. I finally trace the origins of notions of subjects’ sensorial acuity in discourses on *magnétisme*, proposing they comprise one “cognitive option”<sup>9</sup> upon which researchers could draw as they attempted to make sense of hypnotic phenomena, part of the familiar “story” of what it meant for a subject to take on this altered state, whatever it happened to be called. This leads to investigating the ways in which unconscious suggestion engages with the domain of the *merveilleux*/wondrous and what this means for our understanding of relations between hypnotism and *magnétisme*, as they played out in hypnotism discourses at the end of the nineteenth century.

One episode in particular encapsulates the themes of this paper’s argument, serving as an emblem of just what was in play when unconscious suggestion and somnambulist hyper-perception entered scientific conversations on hypnotism. At the Société de biologie on 7 August 1886, researchers voiced concern over a report by Jules Luys, neurologist at the Charité hospital. He maintained that his somnambulist subject would react physiologically to substances sealed into glass tubes and held at some distance from her body, for instance evincing nausea and vomiting in response to ipecacuanha powder (Luys, 1886). For Luys, the

origin of these reactions was evident, since “[h]ypnotized subjects acquire, by the very fact of the state in which they find themselves, a special hyper-excitability” (1886, p. 426).<sup>10</sup>

Among those who demurred, Victor Dumontpallier (1886, p. 429) of the Pitié hospital questioned whether rather than sensing the substance in the tube directly, the subject was instead responding to Luys’s “ideas” of the medicine’s expected effects. Salpêtrière researcher Charles Féré clarified that such “reading of non-expressed ideas” by the subject need not be understood as supernatural, a manifestation of thought-reading, but could be explained by the subject discerning minute physiological changes indicative of the experimenter’s thoughts (1886, p. 430). Hence it would be preferable, proposed Dumontpallier and Charles Richet, to run the tests without the experimenter knowing in advance the contents of the tube (*Des effets à distance*, 1886, p. 318). For these physicians, Luys’s experiments failed to establish the “natural” reaction of a hypnotized subject, because the subject “artificially” produced precisely those symptoms anticipated by the experimenter. In other words, Luys’s observations were tainted by “unconscious suggestion,” an accusation which served to undermine their validity.

Hippolyte Bernheim famously exploited such accusations to dismiss the Salpêtrière school’s account of hypnotism as similarly artificial, merely an “*hypnotisme de culture*” (1891, p. 1). However, what happened at the Société de biologie indicates that the story of unconscious suggestion is more than just a matter of Bernheim’s attacks on his opponents. More importantly, the episode points to a striking convergence in the ways researchers viewed their hypnotized subjects, with no one at the meeting questioning Luys’s basic premise: that hypnotic subjects are endowed with excessive sensory acuity. Why should researchers accept this uncritically, and essentially unanimously, when they disputed so bitterly the fundamental nature of the hypnotic state? How was it scientifically admissible

for research into hypnotism to include feats of perception that could easily be (mis)taken for thought reading? And why did researchers evince so little interest in investigating, theorizing, or even simply discussing, their subjects' remarkable senses?

## I. Situating Unconscious Suggestion

Since discussion of somnambulists' sensory powers largely occurred in a context of describing unconscious suggestion, I begin by elucidating exactly how this concept was construed and circumscribed in late nineteenth-century hypnotism discourses. A significant problem for unpacking these discourses, one which made repeated appearances at international congresses at the end of the nineteenth century (Ministère du Commerce, 1890, pp. 22–23, 25; Durand de Gros, 1902), is the marked lack of terminological stability in even medico-scientific writings on the topic (let alone more popular texts). When the very object of study could be termed not only “hypnotism,” but also “artificial somnambulism,” “*magnétisme animal*,” “hypnology,” etc., it becomes somewhat less simple to define our phenomenon of interest, unconscious suggestion. For a start, only some researchers employed this term, with “unconscious simulation,” “involuntary simulation,” or just plain “suggestion” also in use (see, respectively, Bergson, 1886; Richer & Tourette, 1887; *Des effets à distance*, 1886, p. 318). Here, I follow key representatives of the two major schools, Bernheim for the Nancy school and Alfred Binet and Charles Féré for the Salpêtrière, in designating this phenomenon “unconscious suggestion,” from the French *suggestion inconsciente* (Bernheim, 1888, p. 127; Binet & Féré, 1887, pp. 142–143). The alternative terms, however, provide useful clues on how unconscious suggestion was construed in

relation to other, overlapping phenomena. To map out the place of unconscious suggestion is the purpose of this first section.

Above all, unconscious suggestion had the potential to generate error in hypnotism experiments—this was the import of Dumontpallier’s, Richet’s, and Féré’s interventions at the Société de biologie meeting—and it is in this sense that the phenomenon overlaps with “simulation.” When researchers expressed concern about the presence of error in individual experiments (certainly not an invariable step), their major preoccupation was the “reality” of the phenomena under examination: did their observations reflect the “real” or “natural” characteristics of the hypnotic state (or associated applications), or were they “denatured” (Binet & Féré, 1885, p. 3) by artificial influences? With such artificial manifestations (*prima facie*) located in the hypnotic subject, researchers discriminated between subjects’ problematic comportment on the basis of their perceived good or bad faith. Simulation proper referred to deliberate, malicious interference in experiments by a subject faking various symptoms or reactions. Emblematic simulators included the (female) hysteric inventing symptoms to gain attention, or the stage magnetizer’s subject conniving in spectacular effects for monetary gain. When unconscious suggestion was in question, in contrast, researchers stressed the subject’s good faith. Thus, even as Henri Bergson employs the term “unconscious *simulation*,” he admits that the subject’s “good faith” means he is “not precisely a simulator” (1886, p. 529), while Binet and Féré insist that “[t]he subject remains, in these circumstances, of just as good faith as the observer: there is no simulation” (1885, p. 4). A secondary source of discrimination concerned whether the subject’s action was conscious or involuntary. The subject who knowingly produced symptoms in good faith, for instance in order to please or obey the hypnotic operator, was seen as “complaisant” or obliging, a state sometimes distinguished from simulation, but



more often associated with it.<sup>11</sup> While similarly desiring to fulfill the experimenter's wishes, the subject in unconscious suggestion was accounted unaware of both her<sup>12</sup> intentions and her efforts to comply.

Nonetheless, the "unconscious" in unconscious suggestion typically refers less to the subject's understanding of her actions (of interest to researchers mainly for the crucial step of excluding simulation), than to the experimenter, though not in any Freudian sense of "unconscious thoughts." The suggestion transmitted to the subject is "unconscious" because the experimenter does not intend to convey this instruction, and often could not possibly realize he is doing so. Effectively, from the experimenter's point of view, there are two kinds of suggestion, with intentionality and awareness separating unconscious from "regular" suggestion. As Binet and Féré put it, "the experimenter is mistaken over the means of action that he employs. He believes he is suggesting a certain *idea*, but at the same time, without his knowledge, he suggests a second [idea] which alters the first" (1887, p. 138). On reception by the subject, there is little difference; any suggestion involves either an order/request to perform a particular action, usually after waking—"when you are awake, [...] you will read this chapter [of a chemistry textbook]"—or a statement establishing conditions on his "reality"—"your hand is closed [in a fist], no one can re-open it" (Bernheim, 1888, pp. 49, 36). Thus authors sometimes omitted the adjective "unconscious," relying on contextual factors to distinguish the two (e.g. Richer & Tourette, 1887).

An unconscious suggestion could take a number of forms, but always entailed an experimenter putting the subject "on the track" (*le mettre sur la voie*) of the symptoms or behavior to adopt. In its most problematic incarnation from the point of view of experimental research, the experimenter's comportment, taken broadly to include the

conditions under which the experiment was performed, effectively incited his preferred result. Binet and Féré's more circumscribed account holds that it is "by an imprudent word or gesture" that "the operator who seeks to obtain some given result puts the subject on the [right] track (*mette le sujet sur la voie*)" (1887, p. 142). Such is the case of an experimenter who unthinkingly mentions to his assistant his intention to test for a particular symptom, like a return of sensibility to the membranes of the eye; the subject, hearing these words, treats them as a regular suggestion, and duly produces the symptom (Binet & Féré, 1887, p. 142).

Alongside this preventable behavior on the part of the experimenter and his assistants, researchers invoked a more insidious form of unconscious suggestion, in which "the slightest indication (*moindre indice*) suffices [...] to put [the subjects] on the track (*les mettre sur la voie*) of what one expects from them," as Richet affirmed at the Société de biologie meeting (Des effets à distance, 1886, p. 318). Bernheim similarly maintained that "lots of somnambulists have a very great keenness of perception; the slightest indication (*le moindre indice*) guides them" (1888, p. 133), while Belgian Joseph Delboeuf declared subjects would execute suggestions on the basis of "the lightest indication (*la plus légère indication*)" (1886, p. 169). Unconscious suggestion may consequently be apprehended as a process of "reading unconscious signs" (*la lecture de signes inconscients*) on the part of the subject (Binet & Féré, 1887, p. 45). Ironically given his resistance to an account of unconscious suggestion as inescapably pervasive (see below), Féré was the major figure in France working to establish that "every psychical phenomenon is accompanied by vascular modifications and consequently modifications of color, temperature, secretions, etc." (1886, p. 431). In other words, an individual's every "mental representation" (Féré, 1886, p. 430)

would betray itself through a large range and quantity of unconscious signs, in the form of minute physiological changes.

With this conception, we begin to uncover the complex links between unconscious suggestion and “mental suggestion,” a term even less precisely employed than “simulation.” On one hand, some researchers, including Dumontpallier and Féré at the Société de biologie, applied this appellation to “the reading of non-expressed ideas,” in which case it becomes yet another term for what I am calling unconscious suggestion (Dumontpallier, 1886; Féré, 1886). On the other hand, “mental suggestion” denoted thought transmission, “the direct emanation, without any sort of intermediary, [...] of the thought of one individual influencing that of another” (Morand, 1889, p. 299). It is in this second sense that I will use the term. Mental suggestion proper is always deliberate, unlike unconscious suggestion. Matters become messy, however, when some researchers hold that unconscious suggestion can account for any claimed observations of mental suggestion (e.g. Féré, 1886), while others take elaborate precautions to eliminate what they call “apparent” mental suggestion (i.e. unconscious suggestion) in order to access phenomena of “true” mental suggestion (i.e. thought reading), all of them using only the one term “mental suggestion” (e.g. Ochorowicz, 1886). I shall return to these issues in a later section.

A final domain overlapping unconscious suggestion is that of hypnotic “training” or “education.” In this case, the subject does not “read unconscious signs” on the person of the experimenter, or in the external experimental conditions, but is rather “put on the right track” by his memories of previous experiments. A subject could be “trained” either through experiencing sensations and symptoms himself during experiments, or by witnessing experiments performed upon others—following which he would imitate what he saw. Both kinds of training, but especially training by imitation, could potentially trouble experimental

results; they form part of Bernheim's criticism of an "*hypnotisme de culture*" at the Salpêtrière (best seen in Bernheim, 1888, p. 127), as well as of Delboeuf's troubling 1886 account of the highly contingent nature of observed hypnotic phenomena.<sup>13</sup> More ambiguously, hypnotic training could also serve to refine subjects' symptoms or permit them to be hypnotized more rapidly or more deeply (e.g. Bernheim, 1889, pp. 86–87; Richer & Tourette, 1887, p. 74).<sup>14</sup> I distinguish unconscious suggestion from training in terms of the relative location of the signs "read" by the subject: external for unconscious suggestion, internal for training.<sup>15</sup>

To summarize, then: for late nineteenth-century hypnotism researchers, the presence of unconscious suggestion in an experiment involved their hypnotized subjects "reading unconscious signs," enlisting the "slightest indication" in the experimenter's behavior or external conditions, as a means of getting "on the track" of what symptoms to manifest.

## II. Reading Unconscious Signs

Let us now turn to hypnotism researchers' explanations of how, and how infallibly, such minute indications produced by the experimenter resulted in the subject executing an unconscious suggestion. What made it possible for these usually "imperceptible" (Bernheim, 1888, p. 143) signs to be detected and interpreted by hypnotized subjects? For most researchers, detection was the more critical of the two steps, interpretation assumed to follow automatically; the problem of how a sensation became a sign, properly speaking, was not raised in conjunction with unconscious suggestion.<sup>16</sup> Indeed, the matter of a mechanism

for detecting imperceptible signs cannot strictly be said to have constituted a “question” at all. It formed, rather, the unquestioned substrate to hypnotism researchers’ explanations of unconscious suggestion. In their view, hypnotized subjects discerned invisible signs by means of their “very great keenness of perception,” their “excessive acuity of the senses,” as Bernheim put it (1888, pp. 133, v). If major French researchers displayed differing levels of interest in unconscious suggestion, none refuted the somnambulist hyper-perception which enabled it, just as no one refuted Luys’s claims of “special hyper-excitability” at the Société de biologie meeting.

In his response to Luys, Féré argued that “it is not paradoxical to suppose that certain subjects endowed with exceptional sensibility (*une sensibilité particulière*) would be capable of grasping those [physiological] changes of form [which accompany mental representations]” (1886, p. 430); it would be even less paradoxical were the subjects in question “commonly considered to be endowed with sensorial hyper-excitability” (*doués notoirement d’hyperexcitabilité sensorielle*) (1886, p. 431), like Luys’s somnambulist. Similarly, there was “nothing implausible” (*rien d’invraisemblable*) for Bergson in the “hypothesis” that unconscious suggestion, in his experiment, occurred because the subject could read miniscule text, less than 0.1 mm in height, which was mirrored in an assistant’s cornea. There was no implausibility “given the singular hyper-aesthesia [a technical term for enhanced sensibility] that has been recorded in the state of hypnotism” (Bergson, 1886, p. 527). And when Joseph Babinski of the Salpêtrière school took precautions to ensure that a suggestion given to one subject would not be heard by a second, so could not constitute an unconscious suggestion, he made sure to remove “the latter to a distance such that auditory hyper-excitability could not be implicated” (Richer & Tourette, 1887, p. 115). Further declarations of the hypnotic subject’s hyper-perceptive abilities abound: Binet and Féré held

that “certain hysterics, once asleep [i.e. in hypnotic ‘sleep’], become such sensitive, such reactive, such responsive subjects (*sujets si sensibles, si réactifs, si délicats*) that no word uttered, no slight gesture made before them is lost” (1887, p. 142); in his “revolutionary” communication to the Académie des sciences, Charcot noted the “highly remarkable hyper-acuity” of somnambulists’ senses, cutaneous sensibility, and muscular sense (1882a); Prosper Despine held auditory hyper-aesthesia to “permit [subjects] to perceive sounds imperceptible (*insaisissables*) to any other person” (1880, p. 159).

Were all hypnotized individuals expected to display “special hyper-excitability” (Féré, 1883, p. 124) of the senses? Or alternatively, were certain subjects more gifted than others in this respect? Although Binet and Féré specify hysterics as endowed with hyper-acute perception, again there is a striking absence of debate or even speculation: the faculty was accounted, in hypnotism discourses, a characteristic of the hypnotic state itself (or a sub-state thereof), not an ability intrinsic to the subject as individual or as bearer of some pathological entity. Binet and Féré invoke hysterics because the Salpêtrière school favored such subjects for epistemological reasons (mostly to do with simulation and the inter-comparability of results [e.g. Binet & Féré, 1887, pp. 60, 71–72, 75–76, 138–139]). It is well known that the two schools were divided in their views on the hypnotizability of hysterics compared to that of “healthy” subjects (e.g. Bernheim, 1886–1887, 1887–1888, 1891; Babinski, 1889); however, once a subject was hypnotized, his extraordinarily acute senses were assumed as a matter of course; there was no contention that one sort of hypnotized subject would possess keener senses than another. That enhanced sensory capabilities proceed directly from the hypnotic state was enunciated most explicitly by Luys at the Société de biologie, when he attributed his hypnotized subjects’ heightened perceptions to “the very fact of the state in which they find themselves” (1886, p. 426). More often,

though, researchers assign enhanced perception only to the deeper (sub-)state/s of hypnotism, namely somnambulism;<sup>17</sup> authors making the link include Charcot (1882a), Gilbert Ballet (1887, p. 16), Binet and Féré (1887, p. 142), Richer and Tourette (1887, pp. 79, 91–92), Bernheim (1888, pp. 142–143), and Edgar Bérillon (1886–1887). Such is the association of hyper-aesthesia and somnambulism that Binet and Féré proclaim the state the “favored domain (*domaine d’élection*) of unconscious suggestion” (1887, p. 142).

Even if hypnotizing a subject into somnambulism endows her automatically with the perceptive capacity to discern otherwise inaccessible signs, it does not necessarily follow that she should actively seek out infinitesimal indicators of the experimenter’s wishes/intentions/expectations, nor that she should unfailingly interpret those signs as suggestions directing her to manifest certain phenomena. In some cases, of course, no great effort is required on the somnambulist’s part to identify what the experimenter intends or expects, for instance in Binet and Féré’s example where the subject overhears the experimenter’s explanations to his assistant. The experimenter may even state his intentions directly as a suggestion or a question, as when Bernheim asks his somnambulists what they see through an optical instrument (1888, pp. 141–142), or when Bergson suggests to his somnambulist to indicate at what page a book is open, though with the complication that Bergson’s assistant holds up the book so that the subject has no direct view of it (1886, p. 526). On such occasions, the issue reduces to one of the force of suggestion: is it inevitable that the subject would execute directions implicit in the experimenter’s unintentionally overheard remarks? When a suggestion appears impossible, like reading the unseen page number, what degree of compulsion would the somnambulist feel to search for the right answer?

It is in the responses to these questions that subtle differences emerge between researchers' conceptions of unconscious suggestion, especially of its ubiquity and ineluctability. For Binet and Féré, on the one hand, it is not guaranteed that the experimenter's "imprudent word[s] or gesture[s]" will act on the somnambulist as a suggestion. In their view, which may be taken as representative of the Salpêtrière school position, "it could happen, *not definitely*, but quite easily, that the words heard by the subject suggest directly to him the symptom that one seeks" (Binet & Féré, 1887, p. 142; emphasis added). Hence, there is some uncertainty over whether the sign imprudently (but unconsciously) displayed by the experimenter will have any effect on the subject, even if she detects it by means of her excessive sensory acuity. Such inconstancy in the production of unconscious suggestion in no way diminishes its potential to undermine experimental results; unconscious suggestion is a danger precisely because one cannot know if it has influenced a given result. However, combined with the absence in Binet and Féré's text of any reference to the subject actively striving to elucidate the experimenter's intentions, this uncertainty points to an understanding of unconscious suggestion as a difficult, but ultimately manageable, problem in hypnotism experiments. There is no implication that unconscious suggestion is so insidious and inescapable that eliminating it from experiments would effectively be impossible; indeed, Binet and Féré, like other Salpêtrière researchers, claim to have done just that (e.g. Binet & Féré, 1887, p. 195; Richer & Tourette, 1887, pp. 115–116).

Bernheim's account of the phenomenon, on the other hand, leads by extension to the conclusion that unconscious suggestion is inseparable from the very act of performing an experiment, that the experimenter's most innocent words and actions will be scrutinized by hyper-perceptive somnambulists exerting the utmost effort to discern every possible clue



to guide their behavior. For a start, when the experimenter asks about a particular effect, like how an hallucination appears through an optical instrument (a matter of doubled images), the subjects deploy all their resources to provide the “right,” that is expected, answer:

somnambulists sometimes (not always!) deploy an astonishing sagacity in elucidating the problem before them; they want to resolve it, they strive their utmost (*s'évertuent*) to do so, and all their attention concentrated on the question, consciously or unconsciously, they find in the slightest sign (*le moindre indice*), in a crack in the wall, in an *imperceptible* ray, a reference point [to guide their answer]. (Bernheim, 1888, pp. 142–143; emphasis added)

This is no accidental overhearing of an experimenter’s explanations, but an *active* attempt to discover and deliver the expected result. Further, while Bernheim might acknowledge, here, that this is “not always” the case, he clearly envisages active somnambulist intervention in experiments, via unconscious suggestion, as the rule, rather than the exception, taking increasingly elaborate steps to deny subjects access to any, even imperceptible, reference points.<sup>18</sup>

Now, it is possible to interpret this active “seeking” on the part of the somnambulist as deriving from the compulsive power of the experimenter’s question/suggestion, in this case, the implicit order not only to describe the optical effects, but to describe them *correctly*. It is in this sense that Bergson apprehends his subject’s deployment of sensory acuity to “read” the hidden page number: “[the somnambulist] will stop at nothing (*tous les moyens lui sont bons*) because he is incapable of disobeying [the suggestion]” (1886, p. 530). Bernheim similarly tends to proceed as if hypnotic suggestions were ineluctable, particularly where unconscious suggestion is concerned, although he does admit the possibility of

resistance to direct suggestions (1888, pp. 52–54). Nonetheless, the somnambulist’s active exertions cannot be attributed solely to the effect of the experimenter’s direct suggestion/question; rather, Bernheim also seems to understand them as originating necessarily in the hypnotic state, much like hyper-acute perception: “[Somnambulists] believe they must strive hard (*s’ingénier*) to carry out (*réaliser*) the operator’s thoughts, they apply all this sensory hyper-acuity, all this concentrated attention to divining what one wants to obtain from them” (1888, p. v). Extrapolating from these two hypnotic attributes, it would seem that even the very presence of the experimenter is generative of unconscious suggestions. Bernheim’s conception of the effect, particularly in its active component, thereby sets up an insurmountable standard for hypnotic experimentation, if it is taken to require the removal of all “artificial” elements from a result.<sup>19</sup> His statement on the optical hallucination experiments is indicative in this regard: “nothing demonstrates better [...], how readily suggestion occurs, and how deceptive observation can be” (Bernheim, 1888, p. 134).

While this conception clearly has important implications for hypnotic experimentation (as discussed for instance by Mikkil Borch-Jacobsen [1997]), even where the subject is not held to strive actively after the experimenter’s expectations, she is ascribed extraordinary sensory powers, which enable her to perform feats like reading microscopically sized text (as in Bergson’s experiment). But when such “imperceptible” signs are invisible to experimenters, with what certainty can they claim hyper-perceptive abilities for their somnambulists?

### III. Justifying Somnambulist Hyper-Perception

We have observed that, despite otherwise diverse perspectives, hypnotism researchers are conspicuously united in affirming intensified sensory perception as a characteristic of their hypnotized subjects. As we ask how such claims are justified—the focus of this section—one logical assumption might be that researchers derive their beliefs from the existence of some highly authoritative observational/experimental treatment of the phenomenon. Such extended explorations ground, for instance, other major characteristics of hypnotism, such as the Salpêtrière’s three states and their various defining signs (Charcot & Richer, 1890 [1881–1883]). On further examination, however, we find few concrete references in scientific books or articles to experimental studies of sensorial hyper-acuity. If researchers do not simply declare it to exist, as does Bernheim (1888, préface), they tend to invoke in vague terms a general state of knowledge about the hypnotic state, as when Bergson states hyper-aesthesia to “ha[ve] been recorded” (1886, p. 527),<sup>20</sup> or when Féré terms it “commonly considered” (*notoirement*) to exist in such subjects (1886, p. 431). Féré’s choice of language is especially revealing, for in French, something that is *notoire* has the status of common knowledge, and so by definition, needs no further explanation or justification. If somnambulist hyper-perception was simply “common knowledge,” then it would be less surprising for it to be accepted by researchers holding otherwise opposing positions. However vaguely “known,” though, such ideas must arise from some source.

One possibility is that researchers view this source as so prestigious as to require no specific citation. In 1880s hypnotism research, the only candidate with sufficient renown would be Charcot’s landmark 1882 paper before the Académie des sciences, which established hypnotism as a domain of scientific study (1882a, 1882b). Charcot does, in fact,

include exaltation of the senses as an attribute of somnambulism in the paper, but qualifies the phenomenon as “yet little studied” (1882b, p. 405), which rather weakens the publications’ authority on this point. Further studies are not forthcoming in his major publications on hypnotism (Charcot, 1890), while, unlike other Salpêtrière school discoveries reported in the 1882 paper, somnambulist hyper-aesthesia is not linked to his name. Researchers mobilizing imprecise common knowledge of hyper-aesthesia are likely, therefore, to have as their inspiration some other, less-defined model.

The basis for notions linking somnambulism to sensory powers continues to appear diffuse, even when we take account of authors advancing more specific claims. Although relatively few observations were published during the 1880s, a number of minor figures described sensory enhancement in hypnotism; they included provincial alienist Henri Taguet (Garnier, 1884), a C. Sauvaire (1887), and the duo of medical student Georges Poirault and Russian researcher Stéphane Drzewiecki (1889). Their work concentrated on feats of perception which could only be explained by the subject possessing hyper-acute senses, or more strictly, by possession of one isolated augmented sense, usually either that of vision or smell. Notwithstanding the scientific value of studying individual phenomena in isolation, both individually and as a group, such discrete reports seem insufficient to ground widespread belief in comprehensive somnambulist hyper-perception. Binet and Féré were certainly of this view, when after one-sentence summaries of observations involving, respectively, hyper-acute cutaneous sensibility (Braid, Berger), sense of smell (Taguet), and hearing (Azam), they concluded: “[t]hose are interesting, but isolated, facts. We lack any general comprehensive work (*travaux d’ensemble*) on these questions, which it would, however, be easy to study in a regular manner, with the methods of investigation that we have in hand” (1887, p. 99).

Adding, secondly, to the sparsity of observations is a similar sparsity in references to them, with Binet and Féré's short summary constituting by far the most comprehensive overview of existing observations in a scientific text.<sup>21</sup> Popularizations, like Jean-Salvy Morand's 1889 *Le Magnétisme animal*, by their nature contain more references, but Morand only mentions Fernand Bottey (who in turn cites Taguet), Paul Brémaud, and Bergson, a list which notably has small overlap with Binet and Féré's. Moreover, few of the authors cited by either Morand or Binet and Féré are particularly prominent in late nineteenth-century French hypnotism; by far the best known would be British physician James Braid, who was understood to be a pivotal *historical* figure from the mid-century transition of *magnétisme* into hypnotism (a term he coined). Of those active during the 1880s, Taguet and Bergson are the only researchers to elaborate upon their experiments; however, neither study quite suffices to corroborate, let alone justify, the general conception of hyper-acute perception in somnambulism outlined in the previous section. Taguet's subject displays exceptional visual and olfactory ability only after waking from hypnotic sleep (Garnier, 1884). Similarly, Bergson's 1886 experiments only test enhanced visual acuity due to suggestion, not as arising from the hypnotic state alone, although they merit notice for aiming precisely to determine whether the subject can routinely discern the level of detail required to account for (hypothesized) unconscious suggestion (pp. 527–528).

The only researcher to investigate sensory changes due to the hypnotic state itself was physiologist Henri-Etienne Beaunis, who, while counted a member of the Nancy school, distinguished himself from the other members by employing positivist experimental methods, in a manner resembling Binet and Féré's approach.<sup>22</sup> In his 1886 book *Le Somnambulisme provoqué*, Beaunis reports testing, among other physiological characteristics such as heart rate and reaction time, changes in subjects' auditory acuity

arising both from hypnotism alone and from an explicit suggestion of enhanced hearing (*l'ouïe très fine*) (1886a, pp. 93–101). What he finds is promising, but far from conclusive: out of four subjects, three exhibit augmented auditory perception in hypnotism (in the absence of suggestion); in two of these, the augmentation is increased by suggestion, whereas for the third, the opposite is observed (pp. 97–100). The final subject's auditory acuity is diminished in hypnotism (pp. 100–101). More importantly, Beaunis draws no general conclusions, and certainly makes no link to unconscious suggestion; this is not his aim.<sup>23</sup> Neither do other researchers deploy Beaunis's work to justify their affirmations of somnambulists' heightened sensory perception; in any case, as with the other published observations discussed above, the link between hypnotized subjects and hyper-perceptive senses pre-dates the publication of Beaunis's text.

Hence, with the possible exception of Binet and Féré's brief list of historical or minor researchers, nineteenth-century French hypnotism researchers may be said to assert the existence of somnambulist hyper-perception unanimously, but uncritically. Vanishingly few experimenters attempted to test this characteristic of the hypnotic state, with those investigations that were published essentially ignored and, anyway, not entirely conclusive. Finally, there is no further examination of observations in which hyper-excited senses are not displayed, as is the case for several of Bergson's subjects.<sup>24</sup> Combined with the chronology, this implies that notions associating hyper-aesthesia with somnambulism circulated independently of any experimental studies; hypnotism researchers were drawing upon something more like Féré's common knowledge when they so uniformly announced the "highly remarkable hyper-acuity" (Charcot, 1882a) of somnambulists' sensory perception. Strikingly, the notion was clearly both available and acceptable to researchers with otherwise divergent stances: we have seen it expressed by members of the Salpêtrière

school, who view hypnotism as a series of physiologically defined states, as well as by their counterparts at Nancy, who vehemently deny such a conception, not to mention many unaffiliated researchers. Indeed, this state of affairs only serves to reinforce the diffuse origin of insistence on somnambulist's sensory powers, for theories and experiments directly attributable to one school tended to attract almost automatic opposition on the part of the opposing school.<sup>25</sup> What, then, compensated for this marked absence of concrete justification to make the notion of somnambulist sensorial acuity so available, so attractive, so widely adopted in late nineteenth-century hypnotism discourses?

#### **IV. The Figure of the Lucid Somnambulist**

That hypnotism researchers declared their somnambulist subjects to possess extraordinarily acute senses on the basis of strikingly little in the way of experimentation, justification, or even discussion, but did so in equally striking unanimity, suggests they shared some less-defined source of inspiration. A useful term for this sort of widely available way of thinking is "cognitive option," used by Harrington in her analysis of persistent fluidist and biomagnetic trends in hypnotism research (1988a, p. 230). In this final section, I propose that the association of somnambulists with sensory enhancement constituted a cognitive option for researchers in their efforts to describe hypnotic phenomena, one, moreover, which shares the same roots as the biomagnetic thinking traced by Harrington: an origin in discourses on *magnétisme*. The adoption by researchers of this cognitive option perturbs any straightforward account of how *magnétisme* and hypnotism intersected in late

nineteenth-century thought—even more so than the biomagnetic tendencies mapped by Harrington, which were at least critiqued at the time.

Harrington sketches a potential lineage by which magnetic ideas of the earlier part of the nineteenth century became available to researchers working on hypnotism from the late 1870s. She invokes the involvement of Charcot and others in a Société de biologie commission examining claims by physician Victor Burq that metal plates could be used to restore sensibility in hysterical patients, a technique known as “metalloscopy.” The connection with *magnétisme* arises from Burq’s longstanding interest in the practice, which Harrington suggests prompted him to work on hysterics (1988a, pp. 229–230; 1988b). Of most relevance for our purposes is that metalloscopy merges into hypnotism through work on “aesthesiogens,” substances (metals, magnets, etc.) which could alter subjects’ sensibility and sensory functions.<sup>26</sup> Interest in this technique on the part of many hypnotism researchers (including Bernheim<sup>27</sup>) provides one pathway by which notions on altered sensory states may have circulated in scientific discourses on hypnotism.

It is not necessary, however, to delineate any particular trajectory for ideas passing between *magnétisme* and hypnotism; for it is clear from the ubiquity of historical surveys in scientific and popular works on hypnotism (e.g. Bernheim, 1888, chap. 7; Binet & Féré, 1887, chap. 1–3; Morand, 1889, chap. 1–7; Richer & Tourette, 1887, pp. 67–77) that there existed widespread familiarity with the phenomena of *magnétisme*. In other words, to recall Féré’s description of somnambulist hyper-perception, they were common knowledge (*notoire*).<sup>28</sup> Two, potentially competing, aims were served by these historical reviews. On the one hand, they provided a vehicle through which authors could address persistent anxiety over the apparent similarity between hypnotism and *magnétisme*. At stake, here, was to defend hypnotism’s scientific legitimacy against any charge that it perpetuated the



mystical or wondrous themes perceived (particularly by the public) as synonymous with *magnétisme*. On the other hand, researchers also sought to cement hypnotism's status as "real," or to buttress their own particular theorizations,<sup>29</sup> by retrieving a "portion of truth" (*part de vérité*) (Binet & Féré, 1887, p. 10) of universal fact hidden behind the magnetizers' mystifying divagations.

Hypnotism researchers acted to further the first of those aims when they recalled the figure of the lucid somnambulist, whose apparently "supernatural" gifts made her by far the magnetizers' most successful and spectacular subject-type, and consequently the emblem of the superstitious excess that was *magnétisme*. But as this figure circulated in discourses around hypnotism, it also became available to nineteenth-century researchers as a cognitive option for understanding their own subjects, particularly when it came to ascribing hyper-acute perception to (hypnotized) somnambulists. "Discovered" by the Marquis de Puységur in 1784, lucid somnambulism was associated, in late nineteenth-century discourses, with an ability to predict the future and "the faculty to divine the magnetizer's thought, without any material communication" (Binet & Féré, 1887, p. 21). The lucid somnambulist was furthermore reputed to be able to "see" through opaque bodies (Binet & Féré, 1887, p. 32), as well as to "see" her own malady and that of other sufferers.<sup>30</sup> This last property was exploited in so-called *cabinets somnambuliques* where the somnambulist (illegally) offered medical consultations, usually for a fee (Binet & Féré, 1887, p. 21; Richer & Tourette, 1887, pp. 127–129). Hence, in the lucid somnambulist, we have a magnetized/hypnotized subject whose sensory functions are not merely altered, but specifically construed as exceeding the normal limits of perception. The resemblance is striking: like her hypnotized counterpart, the lucid somnambulist possessed the capacity to perceive invisible signs and to divine the experimenter's/magnetizer's intentions. We can

thus trace out how it might have been natural for 1880s hypnotism researchers to view their subjects in these terms: With the lucid somnambulist's extraordinary perception commonly available as a cognitive model of subject behavior, it became possible for researchers to conceive similar altered nervous states—hypnotic somnambulism—as including, by default, a capacity for hyper-acute perception.<sup>31</sup>

Confirming our contention, the latent influence of the lucid somnambulist bubbles to the surface in certain discussions of hypnotized somnambulists' sensory powers. Luys, for instance, relating his subject's highly sensitive reactions to medicines held at a distance, describes her as “enter[ing] into a period of lucid somnambulism” at the critical moment (1886, p. 428). The term “lucid” is not mentioned by Sauvaire, but the figure of the lucid somnambulist is clearly present when he raises the possibility, following an observation of extreme olfactory acuity, that subjects with this faculty could be employed to diagnose illnesses by their particular odor (1887, pp. 22–23). Alienist Auguste Voisin's similar proposal in response to Taguet's experiments on visual and olfactory hyper-aesthesia, and its vehement rejection by a M. Lunier, implicitly reference the same background motif (Garnier, 1884, p. 342); for what is this but a new version of the *cabinet somnambulique*?

As signaled above, when hypnotism researchers invoke lucid somnambulism explicitly, at stake is to disclaim any association with the “mysterious” or “supernatural” qualities usually understood, in the late nineteenth century, as underlying the lucid somnambulist's extraordinary feats (e.g. Binet & Féré, 1887, p. 12).<sup>32</sup> For it is on this point that the two conceptions, magnetic and hypnotic, diverge; since the legitimacy and importance of hypnotism derived precisely from its sober, scientific nature, researchers took pains to stress that the question was no longer “confus[ed] (*confond[ue]*) [...] with the extraordinary and supernatural phenomena announced by the [stage] magnetizers” (Binet

& Féré, 1887, pp. 28–29).<sup>33</sup> As Bernheim asks rhetorically, “[o]f the wondrous (*merveilleux*), such as lucidity, [...], interior vision, vision [...] through opaque bodies, [...], the instinct for remedies, do I need to say that I have seen nothing?” (1888, pp. 147–148). That researchers condemned overtly what they adopted implicitly further complicates their story, already perturbed by Harrington’s work on biomagnetism, of a sharp transition from an unscientific *magnétisme* to a scientific hypnotism.

In contrast to biomagnetic ideas, however, somnambulist hyper-perception is not simply another wondrously tinged remnant from *magnétisme* that persists in purportedly scientific hypnotism discourses. Rather, in an ironically circular process, somnambulist hyper-aesthesia is also deployed actively by hypnotism researchers in order to neutralize the magnetizers’ troublesome accounts of the very phenomena which inspired it: those relating to lucid somnambulism. If the apparently supernatural phenomena of *magnétisme* could be “explained away” as simply due to subjects’ enhanced sensory perception, apprehended as a purely natural physiological occurrence, then hypnotism’s scientific and non-wondrous character would be vindicated; there would be no further question of this unexplained residue of magnetic phenomena unsettling hypnotism’s legitimacy. In the broad view, such moves to explicate the apparently supernatural in natural terms fit into a context of Third Republic anti-clericalism and scientisation (Goldstein, 1982). More importantly, in our narrower view, hypnotism researchers’ attempts to explain just how the magnetizers were mistaken shed light on the complexity of relations between hypnotism, *magnétisme*, and the *merveilleux*/wondrous, as they intersected in discourses on hypnotism.<sup>34</sup> Morand attempts one such demonstration when he summarizes Bergson’s experiments on (suggested) visual hyper-acuity for his popular audience. He commends Bergson’s findings as “highly instructive” because

they lead to the conviction that all the strange-seeming and initially incomprehensible phenomena that one notices in certain somnambulists, in those that the magnetizers delighted in calling *lucid*, are, at bottom, all subject (*passibles*) to an interpretation falling under the laws of nature, in such a way as to eliminate any possible idea of the miraculous and the supernatural. (Morand, 1889, p. 285; emphasis in original)

Medical-faculty professor Ballet similarly only raises the “remarkable (*singulière*) sensorial hyperacuity of somnambulists” in order to show how it accounts for claims of thought transmission (1887, pp. 16–17), and Beaunis makes the same connection (1886, p. 214). Here we see the motif of hyper-perceptive somnambulists turn about itself; a remnant from *magnétisme*, it also functions, via unconscious suggestion, to bring supernaturally tinged manifestations into the domain of the natural. In a seeming paradox, the supernormal powers implicitly appropriated from magnetic into hypnotic discourses, and thereby ostensibly divested of their supernatural connotations, are (re-)deployed by hypnotism researchers anxious to consolidate this very process of de-mystification.

Efforts to bring problematic magnetic claims of supernatural influence into the domain of natural laws focused particularly on the question of thought reading. There is a clear parallel between pure transmission of thought from a magnetizer to a lucid somnambulist and unconscious suggestion, where a hypnotized subject reads unconscious, otherwise imperceptible signs to deduce the operator’s intentions. Hypnotism researchers thus enlisted notions of unconscious suggestion and hyper-acute sensory perception to argue that “[i]n reality, there is no communication by thought, but [only] by signs that the subject grasps with a truly extraordinary (*inouïe*) acuity of perception” (Binet & Féré, 1887, p. 51). On the one hand, when writing of stage magnetizers, those who promoted their

wondrous powers for monetary gain, these signs were understood to be pre-arranged by “the magnetizer, who had come to an agreement with his subject to trick the audience” (Binet & Féré, 1887, p. 51). “It is thus that [Binet and Féré] explain how, in certain public exhibitions, the magnetizer, [...] succeeds in making [the subject] obey orders which he thinks mentally without expressing them” (1887, p. 51). Referring to their fellow experimenters, on the other hand, researchers tended to forego any notion of bad faith, instead portraying these purveyors of the mysterious as simply misguided. (There is a parallel here with the distinction established between simulation and unconscious suggestion.) This was Swiss neurologist Paul-Louis Ladame’s contention as he proceeded to “verify” (*contrôler*) M. M... of Bienne’s claims regarding imperceptible sounds transmitted to his hypnotized subject by means of a microphone cord wrapped around her head:<sup>35</sup>

We will see for probably a long time yet, people of good faith, experimenting on hypnotics, announce extraordinary observations, based, they think, on the most absolute scientific principles, while in reality the phenomena observed are produced by “suggestions” given unconsciously to the experimental subjects by those who surround them. (Ladame, 1886–1887, p. 100)

In a similar vein, Bergson undertook his experiments on unconscious suggestion (mediated by acute visual perception) precisely as a critical appraisal of “remarkable effects of mental suggestion” asserted by a M. V... (1886, p. 525).<sup>36</sup> Displaying an awareness of his own errors rare among *fin-de-siècle* researchers, provincial physician Bourdon of Méru first reported performing mental suggestion at a distance—“it sufficed for me to formulate mentally the wish that she come, to see her arrive several instants later” (1889, p. 210)—before coming to the realization that it was not thought transfer that he had seen, but rather hyper-acuity of the senses (1889, p. 216).<sup>37</sup>

Recalling that “mental suggestion” could also denote what I have termed, in this paper, “unconscious suggestion,” what emerges is a strange imbrication of unconscious suggestion with the domain of the *merveilleux*/wondrous. With the magnetizers’ mental suggestion dismissible as “really” physiological in nature, complicating matters further, a number of hypnotism researchers flipped the structure again: their purpose, to probe whether eliminating the now-scientific “apparent” mental suggestion would reveal a residue of “true” mental suggestion as pure thought transmission, uncoupled from any physiological process.<sup>38</sup> Despite some clustering of this more “serious” engagement with the mysterious side of hypnotism, notably in the Société de psychologie physiologique, its interest lies precisely in its entanglement with “mainstream” hypnotism discourses.<sup>39</sup> Beaunis was one, often physiologically minded, researcher who attempted to influence his somnambulist purely via thoughts, taking great care to send his suggestions “without making any sign which could put [the subject] on the [right] track (*le mettre sur la voie*)” (1886b). Similar reasoning prompted Pierre Janet to concentrate on studying mental suggestion performed from a distance (Janet, 1885, esp. p. 27; 1886).<sup>40</sup> Even greater care was taken by Polish philosopher-psychologist Julian Ochorowicz, who detailed ten causes which could be mistaken for mental suggestion. All but one—pure chance—involve some aspect of unconscious suggestion, from “an *involuntary verbal suggestion* by the experimenter,” or “a *muscular suggestion* by the experimenter, imperceptible to him,” to hyper-perceptive abilities in the subject, like “*olfactory hyper-aesthesia*,” “*hyper-aesthesia of touch*,” “*hyper-aesthesia of hearing*” (Ochorowicz, 1886, p. 208; emphasis in original). Although Beaunis equivocated over the ultimate reality of pure thought reading, Ochorowicz proclaimed emphatically that “[t]his phenomenon exists” (1886, p. 209), taking quite seriously a supernatural side to *magnétisme* already appropriated into hypnotism with the

transformation of the lucid somnambulist into a hyper-perceptive hypnotized subject, then further processed as “natural” by analogy with unconscious suggestion.<sup>41</sup>

## Conclusion

Despite its status of professional legitimacy, late nineteenth-century French hypnotism research had to deal with the legacy of *magnétisme*, a precursor widely denigrated for the distinctly *merveilleux*/wondrous orientation of its claims. In response, hypnotism researchers undertook rhetorical boundary work to mark the discontinuity between the scientific rigor of their own practices and preceding misguided efforts. On one hand, this emphasis on rigor spilled over into concerns that observations and experiments should reflect the “real” substance of hypnotic phenomena. On the other hand, the very prevalence of such boundary work ensured that ideas and themes from magnetic discourses continued in circulation, now in hypnotism discourses, albeit in the role of counterpoint to hypnotism’s scientificity. Such an interlacing of discontinuities and continuities makes 1880s French hypnotism a privileged site for exploring the complex ways in which newly legitimate sciences relate to their “pseudo-scientific” past (to use today’s term).

Both strands come together in the phenomenon of unconscious suggestion, and its proposed mechanism, somnambulist hyper-aesthesia. Accusations of unconscious suggestion were capable of undermining the reality value of experiments; at issue was the potential for information to be transmitted from the experimenter to the hypnotized subject, unbeknownst to either. To account for how such information transfer would be possible, researchers invoked the hyper-acute sensory perception possessed as a matter of

course by hypnotized subjects. There is a striking parallel, however, between these subjects' perceptive capacities and those of *magnétisme's* lucid somnambulist, whose supernatural perception enabled her, among other feats, to read her magnetizer's thoughts, but whose wondrous gifts were frequently denounced as part of boundary work defending hypnotism's legitimacy. Since the figure of the lucid somnambulist thus continued to circulate in hypnotic discourses, it was available to hypnotism researchers as a cognitive model for what it meant for a subject to take on this altered nervous state. In appropriating this model to explain unconscious suggestion, I propose, late-century researchers implicitly drew on themes from (their understanding of) *magnétisme*.

In the first instance, this diffuse origin lets us account for the striking coincidence in researchers' assumptions that the hypnotic state, especially that of somnambulism, automatically conferred excessive sensory perception on a subject. It is because belief in somnambulist hyper-perception was somehow already present in how researchers viewed their subjects, that it was rarely the subject of overt debate, investigation, or even discussion. What is noteworthy in this uncritical acceptance of somnambulists' sensory perception, as in concern over the effects of unconscious suggestion, is that it was shared by otherwise bitter enemies from the Salpêtrière and Nancy schools. To remark this convergence is, in itself, to perturb standard accounts of the notorious "battle" of the schools, for their opposition is revealed to be far from total, while Nancy's "victory" appears more complex than a simple matter of its concern for an unconscious suggestion neglected at the Salpêtrière.

Secondly, researchers' appropriation of this magnetic remnant establishes an implicit continuity—in 1880s discourses—between *magnétisme* and scientific hypnotism. That this continuity is furthermore tinged by the *merveilleux*/wondrous seems paradoxical, since



boundary work asserting hypnotism's scientific legitimacy rested on the practice having divested itself of *magnétisme's* wondrous legacy. Does unquestioned belief that somnambulists possess hyper-acute senses make such boundary work less effective, even undermine it? It is not clear, for as we have seen, the interconnection in hypnotic discourses of unconscious suggestion, somnambulist hyper-aesthesia, and the domain of the *merveilleux/wondrous* is far from straightforward. While notions of unconscious suggestion based in hyper-perception draw upon the supernatural side of *magnétisme*, researchers also deploy precisely these notions to naturalize those very supernatural phenomena, thereby cementing the divestment process crucial to demarcation of hypnotism's scientific boundaries. In particular, the thought reading claimed by magnetizers for lucid somnambulism does not exist, researchers maintain, for it involves no more than the "reading" of unconscious physiological signs by subjects with heightened sensorial acuity. Complicating matters further, some researchers re-inverted the relation: accepting the naturalized view of most mental suggestions as "really" unconscious suggestions facilitated by hyper-perception, they seek to bring this seemingly supernatural question inside the boundaries of hypnotic science by seeking the "true" residue of thought reading that might remain once unconscious suggestion is eliminated.

When it comes, then, to analyzing the nineteenth-century construction of hypnotism as scientific, because no longer wondrous in nature, the tangled interlacing of unconscious suggestion with precisely this side of *magnétisme* troubles any straightforward evaluation of researchers' claims. Far from simply demarcating their practice from the suspect operations of *magnétisme*, French hypnotism researchers relate to the technique's past in complex ways, simultaneously appropriating and rejecting it. In addition to asserting the existence of a pronounced discontinuity between hypnotism and *magnétisme*, scientific discourses of

the 1880s reveal implicit continuities between the two practices. In broad terms, this reminds us of the often-latent persistence in scientific practices of ways of thinking they purport to have superseded. More narrowly, we can speculate whether having a diachronic, rather than the more usual synchronic, scientific boundary to defend means that boundary is more porous, and thus less stable.

## References

- Babinski, J. (1889). Grand et petit hypnotisme. In Charcot, Hémorragie et ramollissement... (pp. 505–537).
- Ballet, G. (1887). L'hypnotisme et la suggestion. Conférence faite à Reims, le 11 février 1887, par le Dr Gilbert Ballet. Reims: H. Matot fils.
- Barrucand, D. (1967). Histoire de l'hypnose en France. Paris: P.U.F.
- Beaunis, H.–E. (1886a). Le Somnambulisme provoqué: Etudes physiologiques et psychologiques. Paris: J.–B. Baillière et fils.
- Beaunis, H.–E. (1886b). Société de psychologie physiologique: Un fait de suggestion mentale. *Revue philosophique*, **XXI**, 204.
- Bergson, H. (1886). Simulation inconsciente dans l'état d'hypnotisme. *Revue philosophique*, **XXII** (11), 525–531.
- Bérillon, E. (1886–1887). Considérations générales sur l'hypnotisme. *Revue de l'hypnotisme*, **1** (1), 2–4.
- Bérillon, E. (Ed.). (1889) Premier congrès international de l'hypnotisme expérimental et thérapeutique. Tenu à l'Hôtel-Dieu de Paris, du 8 au 12 août 1889 sous la présidence du Dr Dumontpallier. Comptes rendus. Paris: Octave Doin.
- Bernheim, H. (1886–1887). Réponse à l'article de M. Binet sur le livre de M. Bernheim: De la suggestion et de ses applications thérapeutiques. *Revue de l'hypnotisme*, **1** (7), 213–218.

- Bernheim, H. (1887–1888). L'Hypnotisme et l'école de Nancy. *Revue de l'hypnotisme*, **2** (11), 322–325.
- Bernheim, H. (1888). De la suggestion et de ses applications à la thérapeutique (2nd ed. corrigée et augmentée). Paris: Doin [reprinted 2005 Elibron Classics].
- Bernheim, H. (1889). Rapport de M. le professeur Bernheim: Valeur relative des divers procédés destinés à provoquer l'hypnose et à augmenter la suggestibilité au point de vue thérapeutique. In Bérillon (Ed.), *Premier congrès international...* (pp. 79–98).
- Bernheim, H. (1891). Hypnotisme et suggestion: Doctrine de la Salpêtrière et doctrine de Nancy, *Le Temps* (supplément), 29 janvier, pp. 1–2.
- Binet, A. (1886). Bernheim.—De la suggestion et de ses applications à la thérapeutique. *Revue philosophique*, **XXII** (11), 557–563.
- Binet, A., & Féré, C. (1885). L'hypnotisme chez les hystériques. Le Transfert. *Revue philosophique*, **XIX** (1), 1–25.
- Binet, A., & Féré, C. S. (1887). *Le Magnétisme animal*. Paris: F. Alcan.
- Borch-Jacobsen, M. 1997. L'effet Bernheim (fragments d'une théorie de l'artefact généralisé). *Corpus*, **32**, 147–173.
- Bourdon de Méru. (1889). Applications diverses de l'hypnotisme à la thérapeutique. In Bérillon (Ed.), *Premier congrès international...* (pp. 206–226).
- Bourneville, D. M., & Regnard, P. (1879–1880). Procédés employés pour déterminer les phénomènes d'hypnotisme. In *L'Iconographie photographique de la Salpêtrière* (Service de M. Charcot) (pp. 149–186). Paris: Aux Bureaux du Progrès médical et V. A. Delahaye & Lecrosnier.
- Carroy, J. (1985). Hypnose, psychothérapie et expérimentation: l'école de Nancy et l'école de la Salpêtrière. *Bulletin de psychologie*, **XXXVIII** (370), 537–541.

- Carroy, J. (1991). *Hypnose, suggestion et psychologie. L'invention des sujets*. Paris: P.U.F.
- Carroy-Thirard [Carroy], J. (1980). Hypnose et expérimentation. *Bulletin de psychologie*, **XXXIV** (348), 41–50.
- Charcot, J.-M. (1882a). Essai d'une distinction nosographique des divers états compris sous le nom d'hypnotisme. *Progrès médical*, **10** (7), 124–126.
- Charcot, J.-M. (1882b). Sur les divers états nerveux déterminés par l'hypnotisation chez les hystériques. *Comptes rendus hebdomadaires des séances de l'Académie des sciences*, **94**, 403–405.
- Charcot, J.-M. (1890). Hémorragie et ramollissement du cerveau. Métallothérapie et hypnotisme. Electrothérapie. (Vol. **IX** of *Œuvres complètes de J.-M. Charcot*). Paris: Bureaux du Progrès médical & Lecrosnier et Babé.
- Charcot, J.-M., & Richer, P. (1890 [1881–1883]). Contribution à l'étude de l'hypnotisme chez les hystériques; du phénomène de l'hyperexcitabilité neuro-musculaire. In Charcot, Hémorragie et ramollissement... (pp. 309–422).
- Delboeuf, J. (1886). De l'Influence de l'imitation et de l'éducation dans le somnambulisme provoqué. *Revue philosophique*, **XXII** (8), 146–171.
- Des effets à distance de quelques substances sur les hystériques somnambules. (1886). *Semaine médicale*, **6** (32), 317–318.
- Despine, P. (1880). *Etude scientifique sur le somnambulisme*. Paris: F. Savy.
- Dumontpallier, V. A. A. (1886). Séance du 7 août 1886. Remarques sur la communication de M. Luys. *Comptes rendus hebdomadaires des Séances et Mémoires de la Société de Biologie*, **XXXVIII**, 428–429.
- Durand de Gros, J.-P. (1902). De la terminologie hypnotique. In E. Bérillon & P. Farez (Eds.), *Deuxième congrès international de l'hypnotisme expérimental et thérapeutique*,

- tenu à Paris du 12 au 18 août 1900. Comptes rendus (pp. 216–223). Paris: Revue de l'hypnotisme et Vigot Frères.
- Ellenberger, H. F. (1970). *The discovery of the unconscious*. New York: Basic Books.
- Féré, C. (1883). Société médico-psychologique. Séance du 28 mai 1883. Présidence de M. Motet. Les hypnotiques hystériques considérées comme sujets d'expérience en médecine mentale. (Illusions, hallucinations, impulsions irrésistibles provoquées; leur importance au point de vue médico-légal). *Archives de Neurologie*, **VI** (16), 122–135.
- Féré, C. (1886). Séance du 7 août 1886. La question de la “suggestion mentale” est une question de physiologie (Réponse à M. Luys). *Comptes rendus hebdomadaires des Séances et Mémoires de la Société de Biologie*, **XXXVIII**, 429–431.
- Garnier, P. (1884). M. Taguet. Hypnotisme avec hyperesthésie de l'ouïe et de l'odorat. Société médico-psychologique. Séance du 24 décembre 1883. Présidence de M. Motet. *Annales médico-psychologiques*, **11**, 325–342.
- Gauld, A. (1992). *A history of hypnotism*. Cambridge: Cambridge University Press.
- Gieryn, T. F. (1982). Durkheim's sociology of scientific knowledge. *Journal of the History of the Behavioral Sciences*, **18** (2), 107–129.
- Gieryn, T. F. (1983). Boundary-work and the demarcation of science from non-science: Strains and interests in the professional ideologies of scientists. *American Sociological Review*, **48** (6), 781–795.
- Gieryn, T. F. (1999). *Cultural boundaries of science: Credibility on the line*. Chicago: University of Chicago Press.
- Goldstein, J. (1982). The hysteria diagnosis and the politics of anticlericalism in late nineteenth-century France. *The Journal of Modern History*, **54** (2), 209–239.

- Gordin, M. D. (2012). *The pseudoscience wars: Immanuel Velikovsky and the birth of the modern fringe*. Chicago: University of Chicago Press.
- Guinon, L. (1889). Congrès international de l'hypnotisme expérimental et thérapeutique (suite). *Semaine médicale*, **35**, 302–303.
- Hahn, G. (1894). Charcot et son influence sur l'opinion publique. *Revue des questions scientifiques*, **VI**, 230–261, 353–379.
- Hajek, K. M. (forthcoming). The fear of simulation: Scientific authority in late nineteenth-century French disputes over hypnotism. *History of Science*.
- Harrington, A. (1988a). 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). London: Routledge.
- Harrington, A. (1988b). Metals and magnets in medicine—Hysteria, hypnosis and medical culture in *fin-de-siècle* Paris. *Psychological Medicine*, **18** (1), 21–38.
- Harris, R. (1985). Murder under hypnosis in the case of Gabrielle Bompard: Psychiatry in the courtroom in belle époque Paris. In W. F. Bynum, R. Porter & M. Shepherd (Eds.), *The anatomy of madness: Essays in the history of psychiatry* (Vol. **2**, pp. 197–241). London: Tavistock Publications.
- Hillman, R. G. (1965). A scientific study of mystery: The role of the medical and popular press in the Nancy-Salpêtrière controversy on hypnotism. *Bulletin of the History of Medicine*, **39**, 163–183.
- Janet, P. (1885). Note sur quelques phénomènes de somnambulisme. *Bulletins de la Société de psychologie physiologique*, **I**, 24–32.

- Janet, P. (1886). Deuxième note sur le sommeil provoqué à distance et la suggestion mentale pendant l'état somnambulique. *Bulletins de la Société de psychologie physiologique*, **II**, 70–80.
- Janet, P. (1889). L'Automatisme psychologique: Essai de psychologie expérimentale sur les formes inférieures de l'activité humaine. Paris: Félix Alcan.
- Janet, P. M. F. (1919). Les médications psychologiques: Etudes historiques, psychologiques et cliniques sur les méthodes de la psychologie. Paris: Félix Alcan.
- Ladame, P.-L. (1886–1887). Expériences sur l'ouïe dans l'hypnotisme: Au moyen du microphone, du téléphone et du courant galvanique. *Revue de l'hypnotisme*, **1** (4), 100–105.
- LeBlanc, A. (2004). Thirteen days: Joseph Delboeuf versus Pierre Janet on the nature of hypnotic suggestion. *Journal of the History of the Behavioral Sciences*, **40**, 123–147.
- L'un de vos abonnés. (1886–1887). L'Ecole de Paris et l'école de Nancy. *Revue de l'hypnotisme*, **1** (2), 33–41.
- Luys, J. B. (1886). Séance du 7 août 1886. Sur l'action des médicaments à distance chez les sujets hypnotisés. *Comptes rendus hebdomadaires des Séances et Mémoires de la Société de Biologie*, **XXXVIII**, 426–428.
- Magnin, P. (1886–1887). L'Hypnotisme à la Faculté de médecine de Paris. *Revue de l'hypnotisme*, **1** (5), 151–156.
- Maury, L.-F.-A. (1861). Le Sommeil et les rêves. Paris: Didier.
- Mayer, A. (2013). Sites of the unconscious: Hypnosis and the emergence of a psychoanalytic setting. (C. Barber, Trans.). Chicago: University of Chicago Press.



- Ministère du Commerce de l'Industrie et des Colonies. (1890). *Congrès international de psychologie physiologique. Tenu à Paris du 6 au 12 août 1889. Procès-verbaux sommaires*. Paris: Imprimerie nationale.
- Moll, A. (1890). *Der Hypnotismus* (2nd vermehrte und umgearbeitete ed.). Berlin: Fischer's Medicinische Buchhandlung.
- Morand, J.-S. (1889). *Le Magnétisme animal (hypnotisme et suggestion): Etude historique et critique*. Paris: Germer frères.
- Nicolas, S. (2004). *L'hypnose: Charcot face à Bernheim. L'école de la Salpêtrière face à l'école de Nancy*. Paris: L'Harmattan.
- Ochorowicz, J. (1886). Sur le problème de la suggestion mentale. *Revue philosophique*, **XXII**, 208–212.
- Owen, A. R. G. (1971). *Hysteria, hypnosis, and healing: The work of J.-M. Charcot*. London: Dennis Dobson.
- Owens, B. R. (2014). "Laboratory talk" in US sociology, 1890–1930: The performance of scientific legitimacy. *Journal of the History of the Behavioral Sciences*, **50** (3), 302–320.
- Pettit, A. (1906). *Table cinquantennale des auteurs et des matières. Société de biologie 1849–1898*. Paris: Masson.
- Plas, R. (2000). *Naissance d'une science humaine: la psychologie. Les psychologues et le "merveilleux psychique."* Rennes: Presses Universitaires de Rennes.
- Poirault, G., & Drzewiecki, S. (1889). Observations d'hyperacuité visuelle, auditive et tactile chez un sujet hypnotisé. In Bérillon (Ed.), *Premier congrès international...* (pp. 188–189).

- Richer, P., & Tourette, G. G. de la. (1887). Hypnotisme. In Dictionnaire encyclopédique des sciences médicales (pp. 67–132). Paris: Masson, Asselin.
- Richet, C. (1886). Commentaire sur l'article de M. Magnin. Les Etats mixtes de l'hypnotisme. *Revue scientifique*, **3e série**, **XI** (24), 751.
- Ritti, A. (1879). Rapport sur le prix Aubanel. *Annales médico-psychologiques*, **6e série**, **II**, 98–113.
- Sauvaire, C. (1887). Observations d'hyperesthésie des sens dans l'état hypnotique. *Bulletins de la Société de psychologie physiologique*, **3**, 21–23.
- Simon, G. (1888–1889). Bibliographie de l'hypnotisme contemporain. (Bibliographie des Modernen Hypnotismus) Par Max Dessoir. *Revue de l'hypnotisme*, **3** (1), 31–32.

---

<sup>1</sup> In keeping with my historically contextualized approach, I employ the term *magnétisme* (accompanying adjective, magnetic), rather than the English “Mesmerism,” which, in late-nineteenth-century France, denoted only one particular strand of magnetic practice.

<sup>2</sup> While neither category structures this analysis, “pseudo-science” appears more apt than “non-science” to describe how *magnétisme* was portrayed in late-century hypnotism discourses, in that it was both attributed scientific aspirations by hypnotism researchers and perceived as a threat to their work. I take the distinction from Gordin (2012, esp. pp. 1–2, 202).

<sup>3</sup> A rare exception to this trend is Pierre Janet’s 1889 thesis *L’Automatisme psychologique*.

<sup>4</sup> With Hippolyte Bernheim as its figurehead, the Nancy school advocated the paramount role of suggestion in all hypnotic phenomena, in opposition to the more physiological approach of the Salpêtrière school, grouped around celebrated neurologist Jean-Martin Charcot. For analysis of the battle, see among others Barrucand (1967), Harris (1985), Hillman (1965), Nicolas (2004).

<sup>5</sup> While Harrington (1988a) argues that associations of neo-Mesmerism with the Salpêtrière school contributed to its eventual defeat, elsewhere, she rightly points out the contingent nature of this “ultimate triumph” (1988b, p. 34).

<sup>6</sup> Plas (2000, p. 87) touches on the link between hyper-perceptive abilities and *magnétisme*, but does not develop it.

<sup>7</sup> Other accounts questioning the standard view are those of Mikkel Borch-Jacobsen (1997), Kim Hajek (forthcoming), and Ruth Harris (1985). Borch-Jacobsen proposes the schools held common conceptions of the automatic, or reflex-like, functioning of subjects under the

---

influence of suggestion, Hajek suggests they shared some sense that scientific reality ultimately possessed a physical basis, while Harris argues persuasively that they mobilized similar assumptions about the social implications of hypnotism (1985, p. 203).

<sup>8</sup> This context includes some francophone authors, for example Swiss Paul-Louis Ladame or Belgian Joseph Delboeuf (incidentally fierce opponents), who were active in French hypnotism circles.

<sup>9</sup> The term is Harrington's (1988a, p. 230).

<sup>10</sup> All translations are my own. Unlike most other researchers, Luys expanded the scope of hypnotic hyper-excitability beyond the sensory domain, his later work forming part of the neo-mesmeric trend identified by Harrington (1988a).

<sup>11</sup> While understanding "complaisance" and (malicious) "simulation" as distinct, Bernheim confusingly uses the terms interchangeably when designating obliging behavior (for example, 1888, p. 19). He defines neither term. For an exploration of Bernheim's and Binet and Féré's conceptions of simulation, see Hajek (forthcoming); Mayer (2013, pp. 60–64).

<sup>12</sup> It is something of a cliché that the subjects of hypnotism experiments were overwhelmingly female. Although this is certainly the case for the Salpêtrière school's work, it is less so in regard to unconscious suggestion, with Bernheim and Bergson both experimenting on male subjects (Bergson, 1886; Bernheim, 1888). I use gendered pronouns interchangeably here, except where individual subjects' gender is specified in the texts.

<sup>13</sup> In this 1886 paper, Delboeuf explores in detail how education and imitation can be used to produce hypnotic subjects with specific characteristics. His ideas are taken up by Richet (1886), and to some extent by Joseph Babinski (1889). On the later development and implications Delboeuf's ideas, see Borch-Jacobsen (1997); LeBlanc (2004).

---

<sup>14</sup> As Janet noted, Bernheim undertook far more systematic training of his subjects than occurred at the Salpêtrière (1919, p. 307). This aspect of Bernheim’s practice, and its inconsistencies with his strident criticism of the Salpêtrière school have been little remarked by historians.

<sup>15</sup> It was largely in relation to internal signs that unconscious suggestion was sometimes known by the older, English term “expectant attention” (e.g. *L'un de vos abonnés*, 1886–1887, pp. 34–35; Bernheim, 1889, p. 95; Binet & Féré, 1885), although, strictly speaking, this referred to symptoms resulting from the subject’s concentrated attention on a particular body-part (Charcot, 1890, p. 238), and thus falls under “complaisance” or “simulation.”

<sup>16</sup> Hypnotism researchers did, however, speculate on such issues in their attempts to propose a mechanism for suggestion, e.g. Bernheim (1888, chap. VIII).

<sup>17</sup> Terminological confusion is again an issue here. While “somnambulism” could denote the entire domain of hypnotism, it more usually referred, though in a fairly vague sense, to a deeper “sleep” in which a wider range of phenomena, particularly those relating to suggestion, were possible. In Salpêtrière doctrine, somnambulism was one of the three states of hypnotism exhibited by hysterical subjects (Charcot, 1882a), whereas at Nancy, Bernheim’s classification scheme comprised nine degrees of hypnotism, the deepest three of which were loosely termed somnambulism (Bernheim, 1888, pp. 13–21).

<sup>18</sup> Thus, he finishes by conducting his experiments in a completely darkened room, though, of course, this only eliminates visual cues (Bernheim, 1888, pp. 142–143).

<sup>19</sup> Delboeuf developed the implications of this position (which he held independently of Bernheim) to a much greater extent, his work leading to a view of the subject’s active striving as only one of a number of “artifacts” of the hypnotic encounter (Borch-Jacobsen,

---

1997). Luys also recognized the troubling nature of such ramifications, warning the Société de biologie to “beware of the theory of mental suggestion [i.e. unconscious suggestion], as it will allow all your observations to be attacked or denatured” (Des effets à distance, 1886, p. 318). Similar considerations would impel the nascent experimental psychology (particularly as developed by Binet) to devise alternative tactics to produce objective results (Carroy-Thirard, 1980).

<sup>20</sup> Bergson proceeds to perform his own experiments, however; see below.

<sup>21</sup> Outside the French context, German physician Albert Moll provides a relatively extensive overview of the phenomenon (1890, pp. 77–80).

<sup>22</sup> Beaunis later wrote, in unpublished memoirs, that the Nancy school was only united on several points, essentially those opposing certain Salpêtrière ideas (Carroy, 1991, pp. 61–62; Nicolas, 2004, p. 25).

<sup>23</sup> Unconscious suggestion is not discussed in his book. His purpose, in the section in which these experiments appear, is to explore those phenomena of hypnotism “that it would be absolutely impossible to simulate” (Beaunis, 1886a, p. 44).

<sup>24</sup> Bergson only tests the visual acuity of one of his four subjects because the others do not reliably (or not at all) exhibit behavior indicative of unconscious suggestion (1886, p. 526).

<sup>25</sup> See, for instance, the exchanges between Salpêtrière-affiliated Binet (1886) and Nancy leader Bernheim (1886–1887) following the publication of Bernheim’s *De la suggestion* in 1886.

<sup>26</sup> Harrington does not treat the question of sensibility as it relates to somnambulist hyperaesthesia, but focuses on themes surrounding the influence of physical magnets and the

---

potential existence of a biomagnetic fluid. It is in this light that she discusses Luys's presentation to the Société de biologie on the effects of medicines at a distance (1988a).

<sup>27</sup> It is little acknowledged (with the exception of Harrington [1888b, p. 34]) that, for all his later criticism of similar work as the product of unconscious suggestion, Bernheim advocated the therapeutic use of metals and magnets in the early 1880s, and even in 1888 did not rule out the possibility that something other than suggestion was responsible for their effects (1888, pp. 273–277).

<sup>28</sup> On a more concrete level, Carroy argues that, despite academic refusal of the practice, *magnétisme* was familiar to a wide spectrum of late nineteenth-century society thanks to the persistence of private and public demonstrations of its phenomena (1991, pp. 35–55).

<sup>29</sup> Witness the different ways in which Braid, the “founder” of scientific hypnotism, is portrayed by Salpêtrière and Nancy authors (e.g. Binet & Féré, 1887, pp. 46–52; Bernheim, 1888, pp. 155–157).

<sup>30</sup> On the lucid somnambulist's supposed powers and their familiarity to nineteenth-century audiences, see also Plas (2000, pp. 24–25).

<sup>31</sup> It is possible that as well as deriving directly from *magnétisme*, this cognitive model also became available indirectly to hypnotism researchers, for instance through the work of mid-century “psychologists” like Alfred Maury. Such a pathway would only add an additional intermediary to the process, for, although some hypnotism researchers drew on Maury's work, none invoked him as an authority or source for their affirmations of somnambulist hyperaesthesia. Moreover, Maury himself may have adopted the notion from *magnétisme*; he only cites magnetic works, or does not provide a source, to support remarks that hyperaesthesia is present in various states (1861, pp. 170, 241, 276–277).

---

<sup>32</sup> Unlike some contemporary historians of the wondrous, nineteenth-century hypnotism researchers had no stake in differentiating the “preternatural” (mysterious, marvelous) from the “supernatural.”

<sup>33</sup> The specific context of this criticism is one of the Académie de médecine commissions into *magnétisme* in the 1820s.

<sup>34</sup> Plas (2000, pp. 111–119) also discusses such naturalizing moves, but from the perspective of how wondrous aspects in hypnotism research were constitutive of experimental methods in psychology and French notions of the unconscious.

<sup>35</sup> It is not clear whether the subject is supposed to possess hyper-acute perception of sound or of electrical impulses travelling through the microphone cord.

<sup>36</sup> Bergson is also skeptical of certain more prestigious observers’ accounts of mental suggestion (1886, p. 531).

<sup>37</sup> A report in the *Semaine médicale* noted that Bourdon’s communication—to the 1889 International Congress on Hypnotism—was met with “smiles of incredulity” (Guinon, 1889, p. 303).

<sup>38</sup> The designations “apparent” and “true” are from Ochorowicz (1886).

<sup>39</sup> Articles taking mental suggestion seriously (e.g. Ochorowicz, 1886), appeared in the same periodical, the *Revue philosophique*, as naturalizations of the phenomenon (Bergson, 1886), and Binet and Féré’s (1885) original research on hypnotized hysterics. On the “mainstream” nature of researchers’ engagement with the *merveilleux*/wondrous, see Plas (2000).

<sup>40</sup> Interestingly, in a follow-up publication, Janet insists that what he has reported “does not relate to what people call, wrongly or rightly, the lucidity of somnambulists” (1886, p. 80).



---

<sup>41</sup> That the *merveilleux*—in hypnotism, among other domains—was taken seriously and thus shaped early French psychology, is precisely Plas’s thesis (2000). Harrington also notes in passing that there was nothing to stop naturalizing tendencies from returning the other way, from science to the supernatural (1888a, p. 239).