ON HYPNOSIS, SIMULATION, AND FAITH

THE PROBLEM OF POST-HYPNOTIC SUGGESTION IN FRANCE 1884-1896

by

André Robert LeBlanc

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ABSTRACT

The first half of this dissertation demonstrates how the concept of dissociation originated as a solution to the problem of post-hypnotic suggestion. The second half continues with investigations into hypnosis and simulation and concludes with an analogy between hypnosis and religion. In 1884, the philosopher Paul Janet introduced the problem of post-hypnotic suggestion. Give a hypnotic subject the post-hypnotic command to return in 13 days. Awake, the subject remembers nothing yet he nonetheless fulfills the command to return. The problem then is this: how does the subject count 13 days without knowing it? The philosopher and psychologist, Pierre Janet (Paul's nephew) proposed the concept of dissociation as a solution in 1886 which is discussed in the second chapter. Pierre Janet argued that a second consciousness kept track of time outside the awareness of the subject's main consciousness. Chapter 3 presents an alternative solution to the problem: the physician Hyppolite Bernheim and the philosopher Joseph Delboeuf argued in 1886 that subjects occasionally drifted into a hypnotic state in which they were reminded of the suggestion. Chapter 4 describes Janet's attempts to argue against this explanation. The fifth chapter demonstrates a logical flaw in the concept of dissociation and introduces the idea that hypnosis may well be a form of pretending. The theme of pretending is carried on in chapters 6 and 7 in relation to the impossibility of empirically confirming or refuting simulation in hypnosis. The final two chapters build on Delboeuf's work using an analogy between hypnosis and religion. Drawing upon Pascal, it is argued that, like hypnosis, religious belief may well contain an element of pretending in the way one's faith is produced and maintained. Chapter 8 relates hypnosis to what Pascal labeled "discourse

concerning the machine" (*Infini-rien*): the notion that custom and habit, by a machine-like process, shape human thought and belief. Chapter 9 discusses Pascal's analysis of the differences between superstition and religion and applies it to our understanding of hypnosis.

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INTRODUCTION

"Even before the time of psychoanalysis," wrote Freud in 1915, "hypnotic experiments, and especially post-hypnotic suggestion, had tangibly demonstrated the existence and mode of operation of the mental unconscious."[1]

The first half of this dissertation examines a series of crucial experiments in post-hypnotic suggestion in France and Belgium, 1884-1889. The second half continues with investigations into hypnosis and simulation and concludes with an analogy between hypnosis and religion.

My account begins with the problem of post-hypnotic suggestion that was formulated in 1884 by the philosopher Paul Janet (1823-1899). A subject is given the post-hypnotic command to return to the hypnotist in 13 days. Awake, the subject seems never to remember the command yet he nonetheless fulfills it. The problem then is this: how does the subject count 13 days without knowing it? Two years later, the philosopher and psychologist Pierre Janet (1859-1947), would submit the concept of dissociation as a solution to his uncle's query. He proposed that a second consciousness kept track of time and executed the suggestion outside the awareness of the main consciousness. This was the origin of the concept of dissociation, which has become so prominent in recent years with the epidemic of multiple personality disorder, renamed dissociative identity disorder in 1994.[2] Chapter 2 describes the experiments Janet conducted in support of dissociation and establishes his priority in conceptualising it.

Chapter 3 describes an alternative solution to the problem of post-hypnotic suggestion. The French physician Hyppolite Bernheim (1840-1919) and the Belgian

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[1] This passage appeared in Freud's major metapsychological paper, "The Unconscious," under the section, "Justification for the Concept of the Unconscious,"

[2] American Psychiatric Association, *DSM-IV*, 487. On the epidemic and name change, see Hacking, *Rewriting the Soul*, 8-20.

philosopher Joseph Delboeuf (1831-1896)[3] proposed and demonstrated that after being hypnotised and woken up, in subsequent days subjects occasionally switched into a hypnotic state in which they were reminded of the suggestion. Delboeuf submitted that the reason subjects usually cannot spontaneously remember the events of their hypnotic states is because of the difficulty in establishing an associative link between the waking world and the hypnotic world. He likened hypnotic amnesia to the amnesia we experience for our dreams; we do not usually remember our dreams unless we succeed in bringing together the dissimilar worlds of dreaming and waking. But according to Janet's model of dissociation, it is never actually the subject who remembers the suggestion but rather a second consciousness. The concept of dissociation is seriously undermined, therefore, if the subject remembers what only a dissociated consciousness is supposed to know.

In chapter 4 I narrate Janet's attempts to circumvent the difficulties that Bernheim and Delboeuf's theories presented to dissociation. Janet maintained, unlike his opponents, that there was a special class of subjects that never remembered their suggestions, even at the moment of their execution. He also pointed out an embarrassing flaw in Bernheim's and Delboeuf's theory: they could not explain what prompted the subject to enter into hypnosis at the moment of executing the suggestion. There must be a dissociated consciousness, he affirmed, that accounts for why the subject enters hypnosis at the right time. The chapter concludes with Janet's application of dissociation toward explaining negative hallucination, the phenomenon by which an object is rendered invisible to the hypnotic subject. Both Janet and Bernheim were able to establish that subjects somehow still perceived the objects that they supposedly could not see. One subject, for example, was made to remember through suggestion the actions that Bernheim performed while he was invisible to her. Janet performed a series of experiments to show that a dissociated consciousness always saw the invisible object

[3] For introductions to Delboeuf's life and work, see Duyckaerts, *Joseph Delboeuf;* Duyckaerts, "Delboeuf et l'énigme de l'hypnose;" and Carroy, "L'effet Delboeuf."

when the main consciousness did not. He submitted, furthermore, that possibly all hysterical and hypnotic phenomena could be explained by the presence of a dissociated consciousness.

Chapter 5 marks a break with the previous four chapters in introducing Delboeuf's view that hypnosis always contains an element of simulation. In 1889, he began to argue that the behaviour of hypnotic subjects could be easily explained if we admitted that subjects are, in good faith, only pretending negative hallucination and other hypnotic phenomena. In partial support of this hypothesis he presented cases demonstrating how it was possible for both the subject and the experimenter to simulate certain hypnotic phenomena without being aware of doing so. I discuss his arguments and similar ones advanced by Henri Bergson (1859-1941) in connection with what the latter called "unconscious simulation". I also take up a debate between Delboeuf and the French physiologist H. E. Beaunis (1830-1921) over the implications of certain post-hypnotic suggestions for our belief in the possibility of free will. I attempt to show that one of the consequences of Delboeuf's argumentation is to demonstrate a logical flaw both in the concept of dissociation and also in the associated theory, propounded by Janet and others, that memories of trauma can be forgotten yet affect our actions and thoughts. The chapter's final section presents Delboeuf's reflections on hypnosis from the point of view of therapy. In 1891 Delboeuf began asserting that there may not be any such thing as hypnosis. His experiments led him to view hypnosis as a persuasive art rather than a special state of the brain. For Delboeuf, the job of the hypnotist is to simply persuade people to do what they thought they could not do or to not do what they thought they could.

Chapter 6 examines Delboeuf's position on the possibility of whether or not a subject can be made to obey a criminal suggestion. If a subject could be made to commit an act that revolts her moral sensibilities, her absolute powerlessness to resist the suggestion would argue in favour of the state theory of hypnosis. Delboeuf held

that the question was unresolvable since no experiment could ever decide the issue. If the subject does not commit a given crime, his opponents, like Bernheim and the Nancy professor of law Jules Liégeois (1823-1908), could claim that he was not properly hypnotised. If the subject does go through with a real crime (as opposed to a "laboratory crime"), on the other hand, Delboeuf could claim that he was a born criminal. In sum, there seems to be no empirical way of demonstrating whether the subject is truly hypnotised or is only pretending, wittingly or not, to be hypnotised. This sets the stage for chapter 7 in which I propose the paradoxical idea that hypnosis is at once simulated and real.

I submit that one becomes hypnotised, or at least comes to believe one is hypnotised, by first pretending to be hypnotised. The final two chapters explore the nature of this process through an analogy between hypnotic belief and religious belief. As a way of introducing the analogy, the end of chapter 7 describes a ritual with affinities to hypnosis. Chapter 8 begins with Pascal's observation that a person can come to believe in God by first behaving as though he or she believes in God. The discussion moves on to Pascal's reflections on how custom and habit, by a machine-like process, shape belief and thought at all levels of social life. Continuing with the analogy, chapter 9 explains Pascal's reflections on religion and superstition and discusses their relevance to the practice and understanding of hypnosis. It is argued that a theory of hypnosis should not affirm the physiological reality of hypnosis, while ignoring that a kind of simulation cannot be ruled out. Nor should it deny the reality of hypnosis, and fail to recognise that pretending alone cannot account for all its mysteries.

CHAPTER ONE

Paul Janet and the Problem of Post-hypnotic Suggestion

Paul Janet (1823-1899)

Paul Janet was born in Paris in 1823.[1] His grandfather, Pierre-Etienne Janet (1746-1830) was the founder and owner of a major bookstore in Paris and his father carried on the trade, specialising in music. He died when Paul was 9 years old. Paul attended the elite lycée Saint-Louis and entered the Ecole Normale in 1841 where he was to study philosophy. He obtained his doctorate *ès lettres* in 1848 and went to teach philosophy at the university in Strasbourg. He became something of a local celebrity when, in 1855, he gave a highly successful course entitled "The Family," in the municipal hall. His course was published as a book in 1856 and, his reputation now established, he was called back to Paris where he taught logic at the Louis-le-Grand lycée. By 1862 he was teaching philosophy at the Sorbonne. In 1864 he was appointed professor of the history of philosophy and, that same year, he was elected a member of the *Académie des sciences morales et politiques*. The Larousse universal dictionary of 1879 describes him as an "excellent professor; his thought is not lacking in energy, and he is scholarly, methodical and sagacious."[2] He wrote numerous books on metaphysics, politics, morality, and the history of philosophy as well as classic textbooks on philosophy. He also exercised considerable influence in education as a member of the *Conseil supérieur de l'instruction publique*. His son (1863-1937), whose name was also Paul, became a distinguished electrical engineer. Like his father, he taught at the Sorbonne and wrote several textbooks on electrical engineering. Paul Janet père was also the uncle of the well known philosopher, physician and

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[1] For biographical information on Paul Janet see Ellenberger, *Discovery of the Unconscious*, 332-34; Lacour-Gayet "Pour la mémoire de Paul Janet;" and Picot, *Paul Janet*.
[2] Larousse, "Paul Janet."

psychologist, Pierre Janet (1859-1947) – another main figure of this dissertation – on whom he exercised considerable influence.[3]

Paul Janet was a disciple of the philosopher, Victor Cousin (1798-1867), who in effect controlled the philosophy curriculum at tertiary and, more particularly, secondary levels of education in France during much of the nineteenth century.[4] He promoted a philosophical approach he called "eclectic spiritualism", recommending "an enlightened eclecticism, that on evaluating all doctrines, takes that which they have in common and is true, and rejects that in which they have in conflict and is false – the eclecticism which is the true spirit of the sciences."[5] Such a philosophy was scientific, Cousin argued, because it took as its starting point the empirical data of consciousness, using a method he traced back to Descartes. He and his disciples claimed that it was possible to establish the spirituality of the soul and the existence of God through introspective awareness. Cousin served on the jury of Paul Janet's *agrégation* examination at the Ecole Normale in 1844, and wrote an outstanding report of his performance to the Ministry of Education:

> M. Janet scored a brilliant first place on his oral examination. He has science, nerve and precision. His examination on divine Providence is without question one of the strongest and most elegant I have heard in fifteen years. A steadfast doctrine, a rigorous method, a rare knowledge, a vigorous and clear delivery, captivated a large audience for an entire hour.[6]

Cousin then hired Janet for a year as his secretary and junior collaborator, and from the winter of 1844 through to the spring of 1845, Cousin took him on long afternoon walks developing the ideas which Janet spent his evenings putting to paper.[7] It is perhaps no surprise then that Janet remained an unflagging spiritualist philosopher all

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[3] Ellenberger, *Discovery of the Unconscious*, 401-402.
[4] Brooks, "Philosophy and Psychology at the Sorbonne," 126-127.
[5] Victor Cousin, *Du vrai, du beau, et du bien*, 11, cited in Paul Janet, *Victor Cousin et son Oeuvre*, 420.
[6] Cited in Picot, *Paul Janet*, 9.
[7] Picot, *Paul Janet*, 10. According to Picot, Cousin was working on an edition of Pascal's *Pensées*.

his life. The philosophy courses he gave at the Sorbonne between 1888 and 1894, which were published in 1897, two years before his death at age 76, were a conscious stand against the steady ascendancy of materialism, nihilism and atheism.[8] In the preface of what he called his "philosophical testament", he wrote:

> We wished to produce a concrete metaphysics, objective and real, having beings for its object and not ideas. The soul, God, the external world, freedom, such are the objects that Descartes defended in his Meditations, that Kant combatted in the transcendental Dialectic, and that we persist in supporting in their existence and truth.[9]
>
> May [these pages], in the troubled world in which we live, bring to those who will read them the same calm and the same satisfaction that I have always found in the doctrine of which they are the all too imperfect expression![10]

The historian of psychology, John Brooks, characterises the spiritualist school as anti-scientific and, by implication, unprogressive. "Despite the rhetoric of science they used," Brooks writes, "eclectic spiritualists ... resisted ... most of what would today be identified as scientific psychology – British associationist, physiological, and evolutionary psychology, German psycho-physics, and much of French psychiatry."[11] Janet deserves a more charitable assessment. He took an active part in the militant press before and during the 1848 revolution, writing in support of the short-lived Second Republic.[12] He poked fun at physiologists who "ungallantly" explained the inferior weight of womens's brains by "the inferiority of their intellectual culture". "It is maddening," he wrote, "that women do not themselves weigh brains, for perhaps we would find the roles reversed."[13] He even orchestrated the creation of a chair in experimental psychology at both the Sorbonne (where he was a professor) in 1885, and at the Collège de France in 1888, for which he recommended, in both cases, Théodule

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[8] Janet, *Principes de métaphysique et de psychologie*, v-viii.
[9] Janet, *Principes de métaphysique et de psychologie*, vi.
[10] Janet, *Principes de métaphysique et de psychologie*, viii.
[11] Brooks, "Philosophy and Psychology at the Sorbonne," 127.
[12] Picot, *Paul Janet*, 15.
[13] Janet, *Le cerveau et la pensée*, 47.

Ribot (1839-1917), a positivist philosopher and unrelenting opponent of spiritualism.[14] Janet was also keenly interested in French psychiatry. In an 1884 review of French studies in hypnosis, he championed the researches of Jean-Martin Charcot (1825-1893) and his team at the Salpêtrière hospital.[15] And, far from resisting associationism, his paper on "Hypnotic Suggestions" in the *Revue politique et littéraire* put forward a theory of hypnotic suggestion based on the systematic application of the laws of the association of ideas.[16]

That now-forgotten theory provoked two crucially important events in the history of pathological psychology: first, the war between the Salpêtrière and Nancy schools of hypnotism; second, a series of investigations into the problem of post-hypnotic suggestion (formulated by Paul Janet) that led to the concepts of dissociation and psychic trauma (formulated by his nephew Pierre). The remainder of this chapter will describe the modest theory that sparked these events.

The laws of suggestion

Janet drew his theoretical approach from British associationist psychology: "When two ideas are found together, or one after the other, in the same act of consciousness, if one is produced by accident, the other tends to produce itself as well. In other words, one *suggests* the other."[17]

This law of the association of ideas has a physical counterpart – the law of the association of movements: "When two or several movements are produced once or several times together, they later tend to produce themselves together..."[18]

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[14] Paul Janet publicly recommended Ribot in an article he wrote for the *Revue de deux mondes*, see "Une chaire de psychologie expérimentale et comparée au Collège de France."
[15] Janet, "De la suggestion dans l'état hypnotique."
[16] In 1879 Paul Janet devoted considerable space to British associationism in his popular textbook of philosophy, *Traité élémentaire de Philosophie*.
[17] Janet, "De la suggestion," 103; his emphasis.
[18] Janet, "De la suggestion," 103.

When considered together and in relation to each other, these two laws give rise to two secondary laws: 1) ideas suggest the movements with which they have previously been associated; and conversely, 2) movements suggest the ideas with which they have previously been associated. Two examples of the first of these laws are yawning and nausea: these physical reactions can be brought on, respectively, by the sight of others yawning and by the belief, when aboard a ship, that the water is rough when it is in fact smooth as ice. The second of these laws, whereby movements trigger corresponding ideas, is more unusual. An outward attitude of respect or goodwill is normally accompanied, Janet noted, by the inward beginnings of analagous sentiments. His most remarkable example is from the fragment of Pascal's *Pensées* commonly known as *Infinity-Nothing* or *The Wager*: "Follow the way by which they began: by behaving just as if they believed, taking holy water, having masses said, etc. This will quite naturally make you believe and will submit your reason to your body's animal will."[19] Paradoxically, therefore, a religious rite may very well be the cause rather than the mere expression of religious belief – we pray not because we believe, but believe because we pray. I will return to Pascal's observation in the final chapters where an analogy between hypnosis and religion is developed.

Summing up Janet's exposition of the laws of association:

1) ideas suggest ideas;

2) movements suggest movements;

3) ideas suggest movements;

4) movements suggest ideas.

These four fundamental laws operate under normal conditions. What Janet called "morbid suggestion" is the exaggerated and unchecked expression of these laws under "certain unknown physiological conditions", like those which are obtained by hypnosis. He defined hypnotic suggestion as

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[19] From the Sellier edition of Pascal's *Pensées*, fragment 680.

> the operation by which, in the state of hypnotism or perhaps in certain waking states yet to be defined, we may, with the help of certain sensations, especially speech, provoke in a well-disposed nervous subject a series of more or less automatic phenomena and make him speak, act, think, feel as we wish him to, in a word transform him into a *machine*.[20]

"Automaton", "machine", and the "physiological reflex" were standard metaphors for the apparently passive and fatalistic actions of the hypnotic subject. The explicitly mechanical imagery of association was particularly well suited for describing the operations of hypnotic suggestion. Janet closely identified the nature of association with suggestion itself – "in other words, one [idea]*suggests* the other" – and shared the opinion of the Scottish philosopher, Thomas Brown, who proposed that the law of association should instead be called the law of suggestion.[21] Hence, in Janet's formulation, the hypnotist manipulates the most fundamental of mental operations – the association between ideas.

The problem of simulation

Janet proposed three different types of hypnotic suggestion, ranking them in order of complexity:

1) Suggestion of movements

2) Suggestion of sensations

3) Suggestion of acts

The first class of suggestion comprises simple actions or movements. Impart a rotating movement to the subject's arm and it will continue to rotate on its own until stopped. Or suggest that the limb cannot move and the arm is paralysed.

The suggestion of sensations provokes or negates, in the hypnotic subject, various sense experiences, from mistaking ammonia for perfume to not seeing one of the occupants of a room (a negative hallucination) or to not feeling physical pain.

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[20] Janet, "De la suggestion," 103; his emphasis.
[21] Janet, "De la suggestion," 103. Janet mentions Thomas Brown's proposal in his aforementioned *Traité Elémentaire de Philosophie*, 73.

The third class of suggestion involves the performance of an explicitly deliberate action. For example, going through the motions of taking a bath under the spell of a hypnotic hallucination, kissing a stranger, signing for a counterfeit debt, or stabbing an imaginary person. This class of suggestion contains the subclass of post-hypnotic suggestion in which an action is performed at some time after the subject is wakened from the hypnotic state in which the suggestion was made. The subject is typically unable to resist the command or to remember the events of the hypnotic state.

This last class of suggestion, the suggestion of acts, is the most problematic when it comes to the possibility of co-operative simulation. The movements suggested in the first class of suggestions tend to be too simple to arouse much suspicion. As for the suggestion of sensations, we might suspect that a paralysis or a bath is pretended, but insensibility to burns and needles would seem more difficult to simulate. Now in the case of the suggestion of acts and, especially, the suggestion of post-hypnotic acts, how can an observer be certain that the subject cannot remember the suggestion or resist performing it? How can the possibility of simulation be ruled out?

Janet devoted two sections of his paper to this vexing problem. In the first section, entitled "Simulation," he discussed the dangers of simulation and encouraged the use of countermeasures like those practiced at the Salpêtrière where an attempt was made to confirm the presence of physical symptoms, such as anaesthesia, muscular hyperexcitability or catalepsy, that presumably could not be easily simulated. There are also "moral proofs" that are inspired by the sincerity of the subjects and the authority of the experimenters. The other section is titled, "The hypnotic subjects" (*Les sujets hypnotiques*). Here Janet subscribed to the Salpêtrière doctrine that hypnotism is a pathological condition allied to hysteria. That view was put forward by Charcot with great effect in his 1882 communication to the *Académies des sciences*, "Sur les divers états nerveux déterminés par l'hypnotisation chez les hystériques."[22] Charcot claimed

[22] Charcot, "Sur les divers états nerveux."

that hypnosis was made up of three successive nervous states, namely, lethargy, catalepsy, and somnambulism, that were found most frequently and in their most developed form among women suffering from full-blown hysteria – *la grande hystérie*. In his presentation he set out to identify the stages and laws that governed hypnosis – *le grand hypnotisme* – just as he had done with hysteria four years earlier.[23] The states themselves and their physical characteristics had, moreover, much in common with the symptoms of hysteria. These similarities strongly supported the supposition that hypnosis and hysteria were of the same fundamental nature. Thus if hysteria was a real illness, then so was hypnosis. Alfred Binet (1857-1911) and Charles Féré (1852-1907) made this argument explicit in an article published in the summer of 1884. They affirmed that if the facts of hypnosis have remained so long outside the purview of science, "it must be attributed to their lack of objective traits, to the impossibility of assuring oneself of the subject's sincerity. The principal merit of contemporary research has been to attach itself to physical traits, as Charcot has done, from which hypnotism can be described like any other illness according to regular nosological rules."[24] In identifying hypnosis with an established medical entity, Charcot appeared to offer a means for getting around the delicate problem of simulation.

Unfortunately for Charcot, a loosely associated group of investigators in Nancy claimed that the mental health of many of their subjects was perfectly normal. From the standpoint of the Salpêtrière, these investigators, the professor of medicine Hyppolite Bernheim, the country doctor Auguste Ambroise Liébeault (1823-1904) and the eminent lawyer and professor of law Jules Liégeois, were undermining the best hope for a science of hypnotism. Paul Janet responded with a highly polemical critique of their work contained in the section on hypnotic subjects. He claimed that, apart from a

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[23] Charcot had worked out the four phases of *la grande hystérie* with his student Paul Richer who published the theory in his 1878 medical thesis, *Étude descriptive de la grande attaque hystérique*. The standard version of the theory is found in Richer, *Études cliniques sur la grande hystérie*. See also Goetz, Bonduelle and Gelfand, *Charcot: Constructing Neurology*, 196-200.

[24] Binet and Féré, "Les paralysies par suggestion," 45-49. The passage includes a footnote citation of Charcot's 1882 presentation to the *Académie des sciences*.

scattering of poorly defined diagnoses, the majority of the subjects in Bernheim's book, *De la suggestion dans l'état hypnotique et dans l'état de veille,* were either hysterics or afflicted with some other nervous trouble. He similarly criticised the observations in Liébeault's book, *Du sommeil et des états analogues,* as "vague" and "badly defined."[25] And he summarily dismissed Liégeois's experiments as "badly done and crudely conducted" for not having properly determined the mental and physical state of their subjects.[26]

This was the first round in the famous war between Nancy and the Salpêtrière. Bernheim replied to Janet less than a month later in the *Revue médicale de l'Est.*[27] Instead of Charcot's three distinct phases of hysterical hypnotism, Bernheim observed in his subjects only "varying degrees of suggestibility" corresponding to varying depths of hypnotic sleep. In later publications he positively affirmed what he only hinted at here: that the phenomena observed at the Salpêtrière – the three stages of *le grand hypnotisme*, the transfer of symptoms with the use of magnets, and so on – are artifacts of suggestion. The cause of all hypnotic phenomena, Bernheim continued, is suggestion. Everyone is in principle hypnotisable, he stated, the difficulty is in finding the right procedure for each individual subject. Bernheim produced detailed examples of mentally healthy hypnotic subjects to show that his diagnoses were neither "poorly defined" nor "poorly characterised." Janet misrepresented his case histories, he charged, in order to conform to the view of hypnosis as a pathological condition that can only be provoked in nervously disordered subjects.

Bernheim's reply was detailed and incisive – but incomplete, for it did not address the problem of simulation upon which Janet had founded his attack. The key to hypnotism is suggestion, said Bernheim – "the penetration of the idea of the phenomenon in the brain of the subject."[28] What then makes the subject's brain so

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[25] Janet, "De la suggestion," 184.
[26] Janet, "De la suggestion," 202.
[27] Bernheim, "A M. Paul Janet."
[28] Bernheim, "A M. Paul Janet," 549.

susceptible to suggestion? "Hypnotism," Bernheim had claimed exactly a year before, "puts the subject's brain in a state such that the idea suggested to the brain imposes itself with a more or less great force and determines the corresponding act by a kind of cerebral automatism."[29] In other words, suggestion engenders hypnotism and hypnotism engenders suggestion. The Salpêtrière ridiculed the circularity of Bernheim's view.[30] No evidence can be presented in favour of the hypothesis that "all in hypnotism is suggestion" since any would-be evidence is itself subject to the vicissitude of suggestion. Similarly, how could Bernheim be certain that his subjects were not simulating the suggestibility he claimed as the unique causal principle behind hypnosis? Neither the Salpêtrière nor Nancy was able to resolve the problem of simulation. Both assumed a physiological substratum in hypnosis. The dispute was over the nature of that substratum: the Salpêtrière maintained it was hysteria; Bernheim, a mechanism of suggestibility.

The problem of simulation is underscored by the parallel problem of post-hypnotic suggestion which received the serious attention of just about every major investigator of hypnosis during the 1880s. Indeed, the problem was formulated by Paul Janet in the self-same paper that started the Salpêtrière and Nancy war.

The problem of post-hypnotic suggestion

The philosopher Alfred Fouillée remarked that "the principal merit of M. Janet, in his [book *La Morale*], is ... the great number of incidental views and secondary questions studied by him and not found in any other treatise on morality."[31] As we shall see, the same can be said for his treatment of hypnotism.

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[29] Bernheim, "A M. Paul Janet," 551.

[30] Binet, "Review of H. Bernheim *De la suggestion*," and Pierre Janet, *L'automatisme psychologique*, 172-173.

[31] Fouillée, *Critique des systèmes de morale contemporaine*. Ellenberger mentions Fouillée's remark in *Discovery*, 401-402, but paraphrases it in such a way that it refers to all of Janet's work and not only his book *La Morale*.

Paul Janet concentrated his analysis on two similar sets of experiments in post-hypnotic suggestion that had been independently conducted by Charles Richet and Bernheim. While under hypnosis, subjects were given a suggestion that they performed after waking from hypnosis. The subjects did not remember what had happened during hypnosis yet they successfully performed the suggestion. Paul Janet's theory of suggestion was able to account for such unconscious memories:

> Whatever the case may be, when it comes to immediate recall, an image may persist and automatically produce the suggested act. The known and previously mentioned laws of the association of ideas and movements can account for this much.[32]

It could not account, however, for the kind of memory found in the following experiment described by Bernheim:

> I instructed S that he would come back and see me after thirteen days at ten in the morning. Awake, he remembered nothing. On the thirteenth day, at ten in the morning, he was present [...] He told me that he had not had this idea during the preceding days. He did not know that he was supposed to come. The idea presented itself to his mind only at the moment at which he was required to execute it.[33]

The problem with Bernheim's experiment was that it could not be explained by a mere association of ideas since the subject somehow had to keep track of time without being aware of doing so. Here is Paul Janet's formulation of the problem:

> These facts are extraordinary and almost incomprehensible. It is not a reason to reject them; but it is interesting, from a psychological perspective, to precisely identify the points wherein the inexplicable lies.
>
> What surprises me in these facts is not the impregnation and persistence in memory of an image of which we are not conscious: the facts of unconscious and automatic memory are today too numerous and too well noted to be the object of doubt.
>
> I admit, moreover, that these unknown memories *(souvenirs ignorés),* as M. Ch. Richet calls them, can waken at a particular moment, following such and such circumstance. I would furthermore understand the return of these images and acts at a fixed date, if the operator associated them with the appearance of a vivid sensation; for example, "the day you see M. so-and-so, you will kiss him," the sight of M. so-and-so thus acting as the stimulant that wakens the idea.

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[32] Janet, "De la suggestion," 201.
[33] Bernheim, "De la suggestion," (15 September 1883) 555 and 556.

> But what I absolutely do not understand is the awakening on a fixed day without any point of attachment other than the numeration of time: *in thirteen days,* for example. Thirteen days do not represent a sensation; it is an abstraction. To understand these facts, we must infer an unconscious faculty for measuring time. Now that is an unknown faculty for which we can supply no analogies. Up until now, everything could be explained by the laws of the association of ideas, images and movements; but here we make a sudden leap. No association can explain counting thirteen days without knowing it.[34]

Richet was the first person to publish a possible solution to the problem. He held that there were unconscious intellectual operations that could keep track of time, attributing them to the same unconscious intelligence that finds that word we are looking for only some time after we have abandoned our attempts to produce it. Keeping track of time, he argued, "is obviously a much simpler operation than finding a word, making verses, solving a geometrical problem," all of which can be "accomplished without the participation of the *moi.*"[35]

The physiologist H. Beaunis advanced a similar idea.[36] He proposed that we all have a kind of internal clock that keeps track of time without our knowing it. The thirteen day period between the moment the suggestion is given and the moment it is executed represented, according to Beaunis, a sensation rather than an abstraction. Unlike Paul Janet, Beaunis claimed that a day is itself a succession of sensations and unconscious reactions: "The regular periodicity of days, weeks, months, and seasons correspond to periodical organic reactions, which, in certain conditions, can acquire enough intensity to constitute a kind of unconscious faculty for measuring time."[37] He noted for instance, that barnyard animals know when it is time to eat and that some people can wake at fixed times. Might not this natural ability to unconsciously measure

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[34] Janet, "De la suggestion," 201.
[35] Richet, "De la suggestion et de l'inconscience," 254.
[36] Beaunis, "L'expérimentation en psychologie," 18-21.
[37] Beaunis, "L'expérimentation en psychologie," 20.

time have the potential, wondered Beaunis, to achieve an "unknown intensity and precision" in somnambules with remarkably sensitive and acute nervous systems?[38]

No one seems to have taken Richet's or Beaunis's theories too seriously. As we shall see in chapter 3, Bernheim's own theory for explaining the problem of long term post-hypnotic suggestion includes a more plausible explanation of how some people succeed in waking at a fixed time. And in the next chapter, we shall see how Pierre Janet demonstrated that the problem consists of explaining not only the unconscious awareness of time but also the unconscious exercise of judgement in general.

[38] Beaunis, "L'expérimentation en psychologie," 21.

CHAPTER TWO

Pierre Janet and the Concept of Dissociation

In 1886 Pierre Janet introduced the concept of dissociation as a solution to the problem of long term post-hypnotic suggestion.[1] He proposed that post-hypnotic suggestions were carried out by a secondary consciousness of which the subject's primary consciousness was not aware. His solution also provided a psychological framework for describing multiple personality, hysteria, spirit possession and spirit mediumship. It led to the first purely psychological conceptualization of the traumatic memory, and it furnished Freud with a theoretical base upon which to build his theory of psychoanalysis. This chapter will describe the experiments that led Pierre Janet to the idea of dissociation and to the connection between dissociation and psychic trauma. My main objective is to prepare the ground for a critical analysis, in the chapters to come, of certain key ideas in the psychology of the unconscious. To this end, I will also discuss the work of Charcot.

Janet, Lucie and Adrienne

Janet's paper was fittingly titled "Unconscious acts and doubling of the personality during provoked somnambulism."[2] "Doubling of the personality" was the standard name for "multiple personality" before the physicians Hippolyte Bourru (1840-1914) and P. Burot introduced the latter term in 1885.[3] Janet's paper described a series of experiments conducted on Lucie, a 19-year-old woman suffering from "grande hystérie". These experiments took place in Le Havre, where, between February 1883

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[1] Janet, "Les actes inconscients." The idea of dissociation is present in the 1886 paper but the term itself appears in May 1887 in Janet, "L'anesthésie systématisée et la dissociation des phénomènes psychologiques."

[2] Janet, "Les actes inconscients."

[3] Bourru and Burot. "Un cas de la multiplicité des états de conscience." See chapter 12, "The Very First Multiple Personality," in Hacking, *Rewriting the Soul*, 171-182.

and July 1889, Janet taught philosophy in a lycée. He met Lucie in the Le Havre Hospital where Doctor Powilewicz "had placed a little ward at his disposal where he could examine hysterical patients."[4] Lucie had daily hysterical attacks that lasted several hours. Hypnotic sleep(or somnambulism – Janet used the terms interchangeably) was first induced by means of hand passes during one of her attacks. Lucie had apparently never before been hypnotised, but she learned fast. Janet found that he could easily induce all the phenomena characteristic of somnambulism such as contractions, movements, hallucinations and post-hypnotic suggestions. Once awake, Lucie could not remember the events of her hypnotic sleep. At first, she would not obey suggestions that very much displeased her, but after the fourth session, according to Janet, she no longer presented any resistance to his suggestions. Moreover, in the first sessions she was aware of the suggestions and of executing them, but after the fourth session she claimed that she was no longer aware of hearing or of executing suggestions. "Put your thumb to your nose," commanded Janet in the middle of a conversation with Lucie. She obeyed and continued to converse, apparently oblivious of the thumb in front of her face. How then did she distinguish his suggestions from normal conversation? By the way he addressed her: Janet shifted the tone of his voice, speaking abruptly whenever he gave a suggestion. The suggestions were obeyed yet they apparently did not enter Lucie's consciousness – they were obeyed unconsciously. Janet then set out to determine the full extent of this unconscious and, in the process, to solve the problem of post-hypnotic suggestion. While Lucie was in a state of somnambulic sleep, he gave her the following suggestion: "When I have clapped my hands twelve times, you will fall asleep." Awake she remembered nothing. While she was engaged in conversation with a group of people, Janet stood away from them and clapped his hands lightly five times. He approached her and asked: "Did you hear what I was doing? – What? I wasn't paying attention. – And this [Janet claps his hands]. –

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[4] Ellenberger, *Discovery of the Unconscious*, 338-339.

You clapped your hands. – How many times? – Once." Janet withdrew, clapped his hands six more times (making the total twelve) and Lucie fell into somnambulic sleep. "Why are you sleeping?" he asked her. – "I have no idea, it came upon me all of a sudden."[5] Instead of counting days unconsciously as in Bernheim's experiment his subject counted the number of claps. This ruled out Beaunis's hypothesis, Janet remarked, of the existence of an unknown faculty for counting time because Lucie was required to unconsciously keep track of events rather than time. He next varied the experiment and showed that Lucie could also perform unconscious multiplication and division and other acts that required the exercise of judgment. Janet pressed on. "There obviously existed in Lucie's mind," wrote Janet, "important psychological operations outside of normal consciousness. How to render them perceptible by some sign or language? Speech revealed nothing. Let us try by another kind of sign, writing for instance." He then gave her the post-hypnotic suggestion to pick up a pencil and write the word "bonjour" after he clapped his hands once. She was next asked to write a full sentence, to work out a multiplication, and to improvise a letter to a friend.[6] Janet thus produced a variation of the phenomenon known as automatic writing. In a standard automatic writing experiment, a subject is given a pencil and is told to let his or her hand move on its own accord without making any conscious attempts to influence its movement. The experiment is conducted with the purpose of detecting the influence of either external spirits or internal thoughts.[7] Janet instead used a post-hypnotic suggestion as a means of first provoking these thoughts into manifesting themselves as automatic writing in the waking state. After having Lucie write a number of automatic letters, it occurred to Janet that she might answer his questions in writing. And so while she was engaged in conversation with a group of people and paying no attention to him, Janet asked her questions to which she responded in writing. At this point, he

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[5] Janet, "Les actes inconscients," 582-584.
[6] Janet, "Les actes inconscients," 584-586.
[7] On automatic writing see Koutstall, "Skirting the Abyss."

remarked that the notion of unconscious mental operations has now become meaningless. "What is an unconscious judgment, an unconscious multiplication?" he asked. "If speech is for us a sign of consciousness in the other, why could writing not also be a characteristic sign? We could no longer say that in Lucie there had been absence of consciousness, but rather that there were two consciousnesses." Janet then had conversations with this second consciousness. He even gave her a name, Blanche, which was later changed to Adrienne. Thenceforth, he held conversations both with Lucie who responded in speech and with Adrienne who responded in writing.[8]

Now in addition to purportedly solving the problem of post-hypnotic suggestion, Janet's demonstration of a dissociated consciousness served also as a general theory of hypnosis. Adrienne, for instance, was both aware of and responsible for carrying out all the hypnotic suggestions. "The suggestions which I had always considered as unconscious were in reality only unconscious to Lucie; Adrienne always knew them and could write them after waking. It was she who lifted her arms; it was she who counted the signals."[9] From here, it was a small step to suppose that the same process was going on in all hypnotic phenomena. "All suggestions," Janet concluded, "must be accompanied by a certain degree of unconsciousness or rather, if I generalize from what I have seen, by a certain doubling of consciousness."[10] Cases of spirit possession and mediumship, he conjectured, were the result of the same doubling of consciousness. Janet also hit upon the idea, somewhat by chance, that doubling was also the mechanism behind hysterical phenomena. Adrienne relived a frightening childhood event, Janet learned, during each of Lucie's hysterical attacks. Adrienne explained in writing how she had been terribly frightened one day because of two men who had hidden behind a curtain that they had hung from the trees in her grandmother's garden. Except for a vague recollection of having been sick after a fright at the age of

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[8] Janet, "Les actes inconscients," 586.
[9] Janet, "Les actes inconscients," 589.
[10] Janet, "Les actes inconscients," 592.

seven, Lucie had apparently no memory of her attacks or of the event described by Adrienne.[11] Thus, in working out his solution to the problem of post-hypnotic suggestion, Janet had arrived at the ideas of the traumatic memory and the cathartic cure.

The idea of psychic trauma emerged, therefore, from experiments in post-hypnotic suggestion. Today's generally accepted view, however, is that the idea of trauma is a direct descendant of Charcot's neurological theory of traumatic paralysis. Such a view needs to be nuanced, and my next section examines the conceptual similarity between Charcot's work and Janet's. I will show that the psychological side of Charcot's theory was, like Janet's theory of dissociation, drawn from the idea of post-hypnotic suggestion. I also hope to demonstrate why Janet and not Charcot was the first to arrive at a full psychologisation of the trauma concept – the idea that there are forgotten traumatic memories that nonetheless affect us.

Charcot

In two lectures delivered in May 1885, Charcot outlined how the mere idea of a physical injury could give rise to bodily symptoms, like paralysis, without there being any material damage to the nervous system.[12] The idea of "psychic paralysis" had been around since at least 1869, when the British physician, Russell Reynolds, published his paper "Certain forms of Paralysis Depending on Idea", but no one before Charcot had proposed a plausible theory for explaining its mechanism.[13] His demonstration of the theory is well known. Briefly, Charcot used suggestion to reproduce in two hypnotic subjects exactly the same symptoms of paralysis and anaesthesia found in two patients afflicted with psychic paralysis. He then deduced that the nervous shock that

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[11] Janet, "Les actes inconscients," 590-592.
[12] Charcot, *Leçons sur les maladies*.
[13] The paper was first presented at the 37th annual meeting of the British Medical Association in Leeds, July 27-30, 1869 and then published in the November 6, 1869 issue of *The British Medical Journal*. Reynolds developed this work a bit more in a second paper also in 1869, "Remarks on Paralysis."

follows a physical accident is a kind of hypnotic state during which the victim's physical symptoms are self-induced by auto-suggestion:

> Thus because of the clouding of the ego[14] produced in one case by hypnotism and in the other case, as we supposed, by the nervous shock, this idea once installed, fixed in the mind, independent and uncontrolled, would have developed and acquired enough force to objectively realise itself in the form of paralysis. The sensation would have therefore in both cases played the role of a genuine suggestion.[15]

And just as awakened hypnotic subjects do not remember their hypnotic state, Charcot pointed out that victims of traumatic paralysis do not remember the events that immediately followed their accident. Also, in the above quotation Charcot alluded to a period of incubation of the symptoms that is analogous to the period between the state of hypnosis and the execution of a post-hypnotic suggestion.[16] The following table displays, point for point, the analogy between Charcot's theory of post-traumatic paralysis and the phenomenon of post-hypnotic suggestion.

Post-hypnotic suggestion	Post-accident auto-suggestion
The suggestion occurs during a hypnotic state characterised by a clouding of the ego.	The auto-suggestion occurs during a kind of hypnotic state characterised by a clouding of the ego.
The subject is unaware of the suggestion.	The patient is unaware of the auto-suggestion.
The suggestion is the cause of the subject's actions.	The auto-suggestion is the cause of the patient's symptoms.
The suggestion is realised at a later date.	The auto-suggestion is realised after a period of incubation.

The historian of psychiatry, Mark Micale, praises Charcot for his seminal work on traumatic neuroses but criticises him for "his use of the hypnotic parallel to account for the mental processes of traumatic symptom-formation [which] led to more

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[14] *Obnubilation du moi* : a kind of mental fogginess.
[15] Charcot, *Leçons sur les maladies*, 355.
[16] Mikkel Borch-Jacobsen mentions the analogy in "L'effet Bernheim," 162.

confusion than enlightenment."[17] But this is to misunderstand Charcot's line of reasoning since hypnosis and, especially, post-hypnotic suggestion are clearly essential to Charcot's conceptualisation of the theory of traumatic paralysis. The very idea of there being mental processes in the formation of hysterical symptoms owes its existence in large part to the parallel between hypnosis and hysteria. We have just seen how Janet argued that a dissociated consciousness is responsible for producing the symptoms of trauma. It is the same dissociated consciousness that carries out post-hypnotic suggestions and writes automatically. Both Charcot and Janet used the same hypnotic parallel but Janet went further: in Charcot's formulation it is an *idea* that generates the symptoms whereas in Janet's it is a *consciousness*. We cannot therefore reject Charcot's parallel with a hypnotically induced idea without also rejecting Janet's still more radical parallel with a hypnotically induced consciousness.

We can see now why Janet's conceptualisation of trauma is more fully psychological than Charcot's. Charcot's theory of suggestion is incomplete from a psychological point of view since it cannot account for the problem of long term post-hypnotic suggestion – a mere idea cannot keep track of time. Charcot did not address the problem of post-hypnotic suggestion but he should have been aware of it for he cited Paul Janet's paper in the publication of his theory of traumatic paralysis.[18]

Priority

Pierre Janet first used the term "dissociation" in print in May 1887 to designate the apparent doubling or splitting of consciousness in hypnotism, hysteria, spirit possession and mediumship, and the term "subconscious" in early 1888, to underscore the fact that so-called unconscious acts were unconscious only to the primary consciousness and not to the dissociated consciousness that performed them.[19] The

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[17] Micale, "Charcot and *les névroses traumatiques*," 503.
[18] Charcot, *Leçons sur les maladies*, 359
[19] Janet, "L'anesthésie systématisée et la dissociation des phénomènes psychologiques;" and "Les actes inconscients."

ideas of dissociation and the subconscious, however, were already clearly present in the 1886 paper described above.[20]

Janet's priority in conceptualising the concept of dissociation has long been recognised. Already in 1890 William James was introducing the concept to the anglo-saxon world in his book *Principle of Psychology*.[21] In 1906, the Boston physician Morton Prince built upon Janet's work and popularised the condition of multiple personality in his sensational book *The Dissociation of a Personality*.[22] But by 1925 dissociation was hardly spoken of on either side of the Atlantic, because cases of multiple personality and hysteria all but disappeared. The concept made a startling comeback in the early 1970s, however, when three lines of inquiry converged upon it. The first was the publication in 1970 of Henri F. Ellenberger's well known *Discovery of the Unconscious*. Ellenberger gave renewed prestige to Janet's work by presenting him as one of the principal pioneers of the psychology of the unconscious. He was keen to show Janet's priority over Freud and Breuer in viewing psychic trauma as a partial cause of hysteria and hitting upon the cathartic cure. Although he almost never referred to the term "dissociation", Ellenberger nonetheless highlighted the fact that Janet had been the first to formulate the equivalent notion of "subconscious" processes and ideas.[23]

Dissociation received another major boost when the Stanford experimental psychologist Ernest Hilgard advanced his "neodissociationist" view of hypnosis in 1973.[24] He called his theory neodissociationist because, unlike Janet, he did not believe that dissociated processes could function without interfering with each other. Hilgard's

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[20] The historians Adam Crabtree and Allan Gauld also acknowledge Janet as having been the first to formulate the concept of dissociation. Gauld seems not to have noticed that the concept originated as a solution to the problem of post-hypnotic suggestion although he does mention that some researchers, especially L. Loewenfeld, worked on the problem. See Crabtree, *From Mesmer to Freud*, 307-326; and Gauld, *History of Hypnotism*, on Janet, 369-375, and on Loewenfeld, 454-457.
[21] James, *Principles of Psychology*, 165, 203-213.
[22] Prince, *Dissociation of a Personality*.
[23] Ellenberger, *Discovery of the Unconscious*, 413.
[24] Hilgard, "A Neodissociation Interpretation."

work lent scientific respectability to the multiple personality movement in North America.[25] The movement began in the early 1970s and grew exponentially until it was bogged down by the memory controversies of the early 1990s.[26]

The movement largely patterned its cases after Cornelia Wilbur's case of Sybil. In treating Sybil, Wilbur, a psychoanalyst, drew chiefly upon Prince's *Dissociation of a Personality* although her conceptualisation of dissociation resembled the more refined formulation that Freud and Breuer had given it under the name of repression in their "preliminary communication" in 1893.[27]

The multiple personality movement fell into disrepute when it became apparent that many of the dissociated traumatic memories elicited in therapy could not possibly be real. This respected Freud's views in 1897 when he began to conclude that many of his patients's memories were not true and that it was impossible to distinguish between fantasies and memories in the unconscious.[28] One of the consequences of this recent scandal was to substitute the term dissociative identity disorder for the term multiple personality disorder. This was done in part to divert attention away from the more sensational aspects of the dissociative disorders and to forestall a complete repudiation of the field of dissociation. These circumstances may explain why the dissociation psychologist Onno van der Hart wishes to dispute Janet's priority in introducing dissociation to psychology. The concept would appear more legitimate if it could be shown to have been advanced by several writers before Janet.

"The first French author to use the term, with its more or less current meaning," writes van der Hart, "was Moreau de Tours (1845). In the 1880s the concept of dissociation was similarly used by Richet (1884), Charcot (1887), Gilles de La

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[25] See also Hilgard, *Divided Consciousness.*
[26] See Hacking, *Rewriting the Soul.*
[27] Schreiber, *Sybil*; Freud and Breuer, "Preliminary Communication."
[28] Freud first expressed this view in a letter to Wilhelm Fliess of September 21, 1897. He proposed the idea of "screen memories" as a way of accounting for this phenomenon. See Freud, "Screen Memories." See also Ellenberger, *Discovery of the Unconscious,* 488 and 494.

Tourette (1887), and Myers (1887)."[29] Charcot, Gilles de la Tourette, Myers and Janet did all use the "term" dissociation in the same year, but since Janet was the first to introduce the "idea" of dissociation in the previous year we are obliged to lean in his favour in granting priority for the concept. Moreau de Tours did use the term in *Du hashish et de l'aliénation mentale,* but he did not use it in its present psychiatric sense.[30] Moreau de Tours was concerned with describing our inability to control the association of our ideas while under the influence of the hallucinogenic effects of hashish. He was referring to a dream-like scramble of ideas and not a splitting of consciousness. Richet used the word "dissociation" in another way in *L'Homme et l'intelligence*.[31] He was referring to the apparent separation of the ego, perception and the personality in provoked somnambulism. For example, the somnambule's personality could change although his or her underlying ego would remain the same. He described a dissociation of the different components of a single consciousness and not the dissociation of a consciousness into several consciousnesses with all their components intact.

Though we may credit Janet with inventing the current psychiatric meaning of "dissociation," the concept of the simultaneous existence of more than one consciousness in the same individual was foreshadowed by experiments in automatic writing and doubtless by the many cases of "doubling of the personality" that began appearing around 1876 and were being frequently diagnosed during the 1880s.[32] Indeed, in his seminal paper, Janet cited at length a passage by Hyppolite Taine on the coexistence of two consciousnesses in the phenomenon of automatic writing:

> There is a person who while chatting or singing writes, without looking at her paper, linked sentences and sometimes entire pages without being conscious of what she is writing. To my mind, her sincerity is perfect; moreover, she declares at the end of her page that she has no idea what

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[29] Van der Hart, "Ian Hacking on Pierre Janet," 80.
[30] Moreau (De Tours), *Du hachisch et de l'aliénation mentale.* The word "dissociation" appears only in the title of a section called "DEUXIÈME PHÉNOMÈNE: Excitation, dissociation des idées, etc." The section runs from page 59 to 68.
[31] Richet, *L'homme et l'intelligence,* 250-251.
[32] See chapter 11, "Doubling of the Personality," in Hacking, *Rewriting the Soul,* 159-170.

> she has scribbled down; when she reads it she is surprised, sometimes alarmed [...]. We undoubtedly have here a doubling of the ego, the simultaneous presence of two parallel and independent series of ideas, of two action centres or, if you will, of two moral beings juxtaposed in the same brain, each has a task and a different task, one on stage, the other in the wings [...].[33]

But Janet was probably much more inspired by Frederick W. H. Myers, a founding member of the Society for Psychical Research. The society was established in London in 1882, its purpose being to investigate inexplicable phenomena "designated by such terms as mesmeric, psychical, and spiritualistic."[34] Much early psychic research focused on telepathy. French researchers of hypnosis contributed to the field, and Charles Richet, for one, as Ian Hacking points out, introduced the use of probability as an inferential technique for psychic research and for psychology in general.[35] Pierre Janet's first scientific publication was on telepathy. In "Note sur quelques phénomènes de somnambulisme", he claimed that he, and his associate Dr. Gibert, had succeeded in hypnotising and giving suggestions to a subject from a distance.[36] Their subject was the extraordinary natural somnambule, Léonie Leboulanger.[37] The paper was read by his uncle, Paul Janet, in December 1885 before a session of the *Société de psychologie physiologique* with Charcot presiding. Dr. Ochorowicz gave a first hand description of the session:

> One can understand with what interest I listened to this talk. Every one did the same, and not without a large dose of incredulity. M. Janet abstained from any theorising; he told only facts – one had to

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[33] Taine, *De l'intelligence*, I, 16. Cited in Janet, "Les actes inconscients," 584-586.
[34] Myers, *Proceedings of the Society for Psychical Research*, 3-6.
[35] Hacking, "Telepathy: Origins of Randomization," 437-440; Richet, "La suggestion mentale."
[36] Janet, "Note sur quelques phénomènes;" and Janet, "Deuxième note sur le sommeil provoqué à distance." See also Ellenberger, *Discovery of the Unconscious*, 337-338.
[37] Léonie would serve as Janet's subject for decades to come. She was born into a peasant family in Normandy in 1838. Twenty years before meeting Janet she had already served as a somnambulic subject for Dr. Alfred Perrier in nearby Caen. Since it was then believed that somnambules had clairvoyant powers, a Caen merchant, Madame Frigard, enlisted Léonie in looking for a supposedly hidden treasure at a château in the region. This story became famous in 1867 when Frigard was tried and found guilty of murder in a trial in which Léonie appeared as a witness. Later, in 1895, it was Mathieu Dreyfus, brother of Alfred, who hired her as a maid and clairvoyant. For all this and more see Carroy, "Dreyfus et la somnambule."

> believe or not. The talk, listened to in silence, was passed over in silence, except for a few reservations of a very general character by M. Charcot, our president.[38]

In order to verify Janet's results, the Society for Psychical Research sent a delegation, which included the brothers Frederic and A. Myers, and Henry Sidgwick, to visit Janet in Le Havre in April 1886. The results were positive but Janet soon came to doubt their validity and seems to have forever remained suspicious of parapsychological research. At any rate, we can be reasonably sure that Janet must have read Frederic Myers's paper, "On a telepathic explanation of some so-called spiritualistic phenomena" by 1886.[39]

In this paper, Myers wished to explore the possibility of using automatic writing as a telepathic technique. One of the problems in trying to detect telepathic influence is to distinguish between the subject's own thoughts and the thoughts originating from an outside source. Myers believed automatic writing offered a way around this problem. He reasoned that since the motion of the hand seems to occur independently of the subject's will, the writing would be relatively free of unwanted intrusions from the subject's conscious mind. It would, at the least, be produced by "unconscious cerebration" if not by external agency. Myers served as his own subject and briefly developed something of an alter personality (or a relationship with a spirit) which he (or she) named Clelia. He published his results in 1884 and visited Le Havre in the spring of 1886, making it highly plausible that Janet drew the idea for the concept of dissociation, which he published in December 1886, from Myers's almost identical experiment in automatic writing.

What about simulation? Could Myers have been the dupe of his own simulation? He noted that whenever he thought that he might be anticipating the letters he was about to write, he would be unable to go on. He took this to be an indication that he only wrote automatically when he wrote unconsciously and, consequently, that

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[38] Ochorowicz, *De la suggestion mentale*, 118-119.
[39] Myers, "On a telepathic explanation."

either the spirit or the unconscious intelligence he invoked was genuine. But the opposite interpretation is no less – and no more – legitimate. It could be that he only wrote automatically when he was not conscious of anticipating the words, that is, when he was alive to the fact he was himself willing the dialogue, the illusion would disappear.

We might well wonder whether or not Lucie simulated hypnosis in the experiments she underwent with Janet. She might have been pretending to have a second consciousness that conversed with Janet through automatic writing. Janet himself followed the Salpêtrière school – and his uncle – in making the repeated claim that hypnosis was symptomatic of underlying pathology. To his mind, subjects no more simulated hypnosis than patients did hysteria. I return to the problem of simulation in the second half of the dissertation, and in chapter 5 in particular.

Chapter 4 will describe a number of refinements that Janet brought to the concept of dissociation. These were mainly in response to alternative ways of seeing Paul Janet's problem, as well as hypnosis itself, that will be described in the next chapter.

CHAPTER THREE

Bernheim and Delboeuf on the Problem of Post-hypnotic Suggestion

Bernheim, in 1886, and the Belgian philosopher and psychologist Joseph Delboeuf, in 1885, independently advanced similar solutions to the problem of post-hypnotic suggestion.[1] They each proposed that from time to time subjects drifted into a hypnotic or dream state in which they were reminded of the suggestion and of the time remaining until its execution. Like Pierre Janet, they subscribed to a kind of double consciousness theory. But unlike Janet, *the consciousnesses of their theory alternate whereas in Janet's they are concurrent.* These solutions are very different and, as we shall see, deeply incompatible.

This chapter has three parts. The first part focuses on Bernheim's solution to the problem of post-hypnotic suggestion.

The second part discusses the similarities between the state of dissociation and a peculiar hypnotic state that Beaunis called "waking somnambulism".[2] Waking somnambulism describes the state of someone under the spell of a hypnotic suggestion of which he or she is presumably not aware: the person appears to be fully awake but for the influence of the hypnotic command. It describes, for instance, the hypnotic subject who is wakened after having been given a post-hypnotic suggestion that she cannot remember. The subject is normal except for the suggestion to which he or she is bound. I hope to show that Beaunis's state of waking somnambulism corresponds rather well to Janet's state of dissociation. The third part of this chapter describes Delboeuf's critique of waking somnambulism – and, by extension, dissociation – and his concomitant solution to the problem of post-hypnotic suggestion. In a major paper

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[1] Bernheim, "Souvenirs latents et suggestions à longue échéance"; Delboeuf, "Sur les suggestions à date fixe."

[2] Beaunis, "L'expérimentation en psychologie," 27-31. This is the same paper in which Beaunis put forward his human alarm clock hypothesis to explain the problem of post-hypnotic suggestion. See chapter 1 footnote 35.

in 1887, Delboeuf subjected Beaunis's idea of waking somnambulism to an intense and thorough critique.[3] His analysis was based on a series of experiments conducted in the spring of 1886 but which he had been prevented from publishing sooner because of a painful family event. Before publishing, however, he applied the arguments he developed therein to his solution to the problem of post-hypnotic suggestion in a short paper published in December 1886.[4]

Bernheim on post-hypnotic suggestion

In February 1886, in a paper entitled "Souvenirs latents et suggestions à longue échéance" ["Latent Memories and Long-term Suggestions"], Bernheim put forward what he believed was the first solution to the problem of post-hypnotic suggestion.[5] It was grounded on a speculative theory of memory and suggestion. He divided the intellectual activity of the brain into a higher and a lower level. The higher level of the brain is the seat of voluntary action, reasoning and judgment. The lower level is the seat of automatic action, "psychic reflexes," and imagination. Under normal waking conditions, the higher level controls and analyses ideas and decides whether to accept or reject them. It "neutralizes the effects of the imagination and holds the automatic activity in check" (100). In hypnotic sleep, the lower level predominates: imagination is given free rein and docility and suggestibility are enhanced. The lower level of the brain is not, incidentally, equivalent to the body's autonomic nervous system, rather it is analogous to it. "[T]he higher level of the brain exercises a moderating influence on psychic reflexes, on cerebral automatism ... just as the brain has a moderating action on spinal reflexes, on spinal automatism" (100). "In sleep," Bernheim continued,

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[3] Delboeuf, "De la prétendue veille somnambulique."
[4] Delboeuf, "Les suggestions à échéance."
[5] Bernheim, "Souvenirs latents et suggestions à longue échéance," to which refer all page numbers cited in this section. The paper is reproduced in his book *De la suggestion et ses applications à la thérapeutique.* My translation of the cited texts draws upon the English translation *Hypnosis and Suggestion in Psychotherapy.*

> this influence ceases. The higher level is dulled, the cerebral activity is concentrated on the reflex centres, the imagination centres, and the automatic centres. Intellectual control is diminished. Instead of diffusing itself in the cortical cells where it is analyzed and elaborated, the communicated impression [the suggestion] penetrates straight into the motor, sensitive, and sensorial cells of the inferior levels which produce (and without control) the direct transformation of the idea into act, movement, sensation or image. There is exaltation of the idea-motor, idea-sensitive, idea-sensorial reflex excitability which makes the unconscious transformation, outside of the subject's awareness, of the idea into movement, sensation or image (100).

The theory posited, therefore, how the brain receives and then realises hypnotic suggestions without the subject's conscious awareness or control. It was both a theory of the mechanism of suggestion and a theory of memory. According to Bernheim, the memories of events that occur during hypnotic sleep are stored by the inferior level of the brain. And, when the subject is hypnotised, cerebral activity is also concentrated on a limited number of sensations, images and ideas in the lower level of the brain. When awake, cerebral activity spreads out into the higher level and "the impressions perceived during sleep are evaporated, so to speak, because, produced with a great quantity of nervous force, of nervous light, if I may be allowed this comparison, they are no longer sufficiently illuminated to be conscious..." (101).

In one instance, Bernheim woke his subject after a half hour of active conversation and noted:

> She remembers nothing, absolutely nothing. Singular phenomenon! All is evaporated. The nervous impulse which was concentrated on certain parts of the brain is diffused all over; the light now distributed differently no longer illuminates the preceding impressions: a new state of consciousness exists. I put the somnambule back to sleep: the previous state of nervous concentration reappears and, with it, the previous state of consciousness. The extinguished impressions are revived, the latent memories are reborn (101).

The memories are not unconscious, Bernheim emphasised, they are latent. They lie dormant and are revived each time the subject's brain returns to a state of hypnotic consciousness. To bring back these memories, Bernheim simply told his subjects that they would remember and they reverted spontaneously to a state of hypnotic

consciousness. His subjects switched states very easily; for some it was simply a matter of opening and closing the eyes. All somnambules, he believed, could be made to remember the details of their hypnotic or somnambulic state. He argued, furthermore, that we do precisely the same thing whenever we concentrate on recalling something or on creating a deep impression. The sensation disappears when we scatter our attention onto several objects at a time but immediately reappears when we re-focus our concentration. "The hypnotic state is not an abnormal state," Bernheim added. "It does not create new functions or extraordinary phenomena;... it exaggerates in favor of a new psychic modality the normal suggestibility that we all possess to a certain degree..." (103).

Having thus formulated his theory of the mechanism of amnesia – and suggestion – Bernheim proceeded with his explanation of the problem of long term post-hypnotic suggestion (104-111). He began with an interpretation of how some people are able to wake up at predetermined times. From the outset, he rejected the human alarm clock hypothesis, arguing that people who can wake at a set moment are thinking throughout their sleep about having to wake up. The mind continues to work in its sleep; it solves problems and performs various operations. Some people actually get up and do things; "they are *active sleepers or somnambules*" (107).[6] If the person has a good sense of time, she will wake up at the appropriate time. If she does not, she will be preoccupied with the set hour and will periodically wake up in the middle of the night to check the time.

Long term post-hypnotic suggestions, Bernheim proposed, operate by a similar mechanism:

> Put an idea into their brains during the state known as somnambulic, an idea which should be manifested on a fixed day. During the state known as waking, the idea seems extinguished; but it does not remain latent until the day fixed upon. It revives and becomes conscious again every time that the same nervous concentration, the same psychical state, is reproduced ...(108-109).

[6] His emphasis.

The moment after the suggestion is accomplished, the state of psychic concentration disappears and the memory is extinguished. The somnambules "believe in very good faith that the idea had been freshly hatched, spontaneously hatched in their brain; *they do not remember having remembered*"(109).[7]

So much for theory, how about facts? Do subjects actually remember the post-hypnotic suggestion during the period between receiving it and executing it? Bernheim verified his hypothesis with two somnambules. Here is the text of a conversation with the first:

> To one, I tell her during her sleep: – "Next Thursday (in five days) you will take the glass that is on the night table and put it in the suitcase that is at the foot of your bed." Three days later, having put her back to sleep, I say to her: "Do you remember what I ordered you to do?" She answers: "Yes, I must put the glass in my suitcase Thursday morning, at eight o'clock." – "Have you thought about it since I told you?" – "No" – "Think hard." – "I thought about it the following morning at eleven o'clock." – "Were you awake or asleep?" – "I was in a drowsy state" (109-110).

Bernheim ordered his second subject to ask him a medical question the next day. After the suggestion was executed, Bernheim hypnotised his subject and asked him if he had thought about the suggestion since the hypnotic session of the day before. His subject answered that he had dreamt about it (110).

According to Bernheim, these experiments demonstrated: 1) that subjects spontaneously remember the events of their hypnotic sleep when awake; and 2) that post-hypnotic suggestions are remembered in a sleep-like state that resembles the hypnotic state in which they received the suggestion. In sum, Bernheim's solution to the problem of post-hypnotic suggestion was therefore the following: subjects periodically fall into a hypnotic state in which they remember, and ultimately perform the suggestion during wakefulness. They cannot remember the suggestion in their

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[7] His emphasis.

waking state simply because the memory of the suggestion is only available in a hypnotic state.

Delboeuf had already put forward the same hypothesis, minus the speculative brain theory, a year previously, in 1885.[8] In his page-long note "On fixed date suggestions", Delboeuf wrote that "[t]he subject must be reminding himself of the suggested date each time he enters into his hypnotic state – and how many times could this happen without our knowing anything about it!"[9] His solution to the problem of post-hypnotic suggestion was further developed following a series of studies in hypnotism during 1886. The results of these investigations were published in three major papers in the *Revue philosophique* as well as in a short paper that dealt specifically with the problem of post-hypnotic suggestion in the *Revue d'hypnotisme.* The first paper was concerned with memory in hypnosis, the second with the unwitting training of hypnotic subjects, and the third with the dubious existence of "waking somnambulism". The fourth paper on post-hypnotic suggestion was essentially a summary of the waking somnambulism critique which was the natural continuation and, in many respects, the culmination of the first two papers. Before describing Delboeuf's solution to the problem of post-hypnotic suggestion, therefore, I must next outline the idea of waking somnamnbulism to which it was opposed.

Waking somnambulism

In 1885, Beaunis coined the term "waking somnambulism" to describe the state of mind of someone who is given and executes a suggestion while awake.[10] Bernheim had observed that many subjects become susceptible to suggestion in their waking state after a few hypnotic sessions. But although apparently awake, the subject is not in a

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[8] Delboeuf, "Sur les suggestions à date fixe."
[9] Delboeuf, "Sur les suggestions à date fixe," 514.
[10] Beaunis, "L'expérimentation en psychologie," 27-31, to which refer all page numbers cited in this section.

normal waking state, according to Beaunis. In his paper, "L'expérimentation en psychologie par le somnambulisme provoqué", Beaunis cited Liégeois's observation of this state:

> He does not present the least appearance of sleep; his eyes are open, his movements are relaxed, he speaks, walks, acts like everyone else, he participates in conversation, replies to objections, discusses them, has many joyful repartees; he seems to be in an absolutely normal state, except for the singular point upon which the experimenter's prohibition is directed (28).[11]

So the subjects appear to be perfectly normal except for their submission to the hypnotic command. There is a crucial trait, however, which Liégeois neglected to mention. "[I]t is precisely this trait which constitutes the real characteristic of this special state," Beaunis admonished. "I mean the partial loss of memory that I signaled before, a loss that applies only to the suggestion that has just been made, while the memory is conserved for all the rest. That is a capital distinction and it has not been made by any of the previously cited authors" (29).[12] A few paragraphs later, Beaunis summed up his own definition of the state:

> [W]e can determine in certain subjects a particular state that is neither a hypnotic sleep nor a waking condition. This state distinguishes itself from hypnotic sleep by many features: the subject is perfectly awake, his eyes are open, he is in rapport with the external world; he remembers perfectly everything that is said or done around him and everything that he has himself said or done; the memory is intact but for one particular point, the suggestion that has just been made; it is by this trait and by the docility to suggestions that this state resembles somnambulism. These two characteristics are moreover the only ones which distinguish it from the ordinary waking state (30).

In 1884, the year before Beaunis wrote on waking somnambulism, Liégeois had suggested that the state be called *"condition prime"*, which he derived from the term *"condition seconde"* used by the Bordeaux doctor, Eugène Azam, to describe the

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[11] Cited from Liégeois, "De la suggestion hypnotique," 190.

[12] The authors previously cited include, among others, Bernheim, James Braid, Paul Janet, Auguste Ambroise Liébeault, Liégeois, A. Pitres and Richet. Liégeois later claimed that he had indeed noticed the trait of partial amnesia and failed to mention it because he took it for granted as characteristic of the *condition prime* or of waking somnambulism. See Liégeois, *De la suggestion et du somnambulisme*, 384. The introduction is signed August 8, 1888, Nancy.

apparent existence of a second personality in the case of Félida X.[13] He held that there were therefore three distinct states: *condition seconde, condition prime* and *condition normale.* Beaunis preferred the term "waking somnambulism" because it had the advantage of indicating the state's distinctive traits. He admitted that the term was contradictory but he noted that the similar terms *coma-vigil* and *somno-vigil* had been used by doctors and magnetisers, respectively (30).[14]

The state of waking somnambulism is almost exactly that of someone who is responsive to a post-hypnotic suggestion. The post-hypnotic subject appears to be perfectly normal and has no memory of the suggestion. And, as with waking somnambulism, the performance of the suggestion is what confirms that he or she is not, despite appearances, in a normal state of mind. The only possible difference between the states of post-hypnotic suggestion and waking somnambulism is that in the first case the suggestion is given during hypnosis and in the second it is given either during hypnosis or during the waking state. But this difference is rendered insignificant by the fact, mentioned above, that many subjects become suggestible in their waking state after a few sessions of hypnosis.

Waking somnambulism also includes the state of someone who is writing automatically. In his follow-up article on dissociation in 1887, Pierre Janet wrote:

> The hand answers my questions and signs by the name of Adrienne, but the mouth speaks spontaneously and answers by the name of Lucie. This state corresponds, I believe, with individual variations, to the state that has often been described under the name of *somno-vigil* and more recently by M. Beaunis under the name of *waking somnambulism.*[15]

Thus, except for the fact that she was conversing in writing with Janet, Lucie appeared to be in a normal state of mind while she conversed orally with a group of people. And like many of Bernheim's subjects, Lucie became susceptible to suggestion in her waking state after she had been hypnotised a few times.

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[13] Liégeois, "De la suggestion hypnotique," 190-192; Azam, "Amnésie périodique."
[14] Beaunis does not say when or by whom these terms were used.
[15] Janet, "L'anesthésie systématisée," 450; and *Automatisme Psychologique,* 323.

Let us now consider Delboeuf's examination of these matters.

Delboeuf on post-hypnotic suggestion and waking somnambulism

Throughout the rest of this chapter and the others that follow, I will draw extensively upon four articles Delboeuf published, between 1885 and 1887, using the abbreviations given in the bibliography. Here are Delboeuf's arguments for his solution to the problem of post-hypnotic suggestion and against the notion of waking somnambulism.

1. The first time one of his subjects performed a post-hypnotic suggestion, he was "struck by her strange air" which led him to suspect that she was not awake (Echéance, 168; Mémoire, 450 and 467; Influence, 153).[16]

2. On two occasions in which a subject was prevented from successfully executing a post-hypnotic suggestion, she returned to tell him that she was "now awake". This indicated that falling asleep was perhaps a pre-condition for the successful execution of a suggestion (Echéance, 168; Influence, 156; Veille, 119-120).

3. His subjects considered their hypnotic state to be "completely analogous" to "physiological sleep" (Echéance, 169). He noted, furthermore, that Bernheim had made the same observation in a paper published in the *Revue de l'hypnotisme* a month previously. There Bernheim had written: "I would like to show them that so-called hypnotic sleep does not differ from normal sleep, that all the phenomena provoked in one can be provoked in the other."[17]

4. His subjects reported experiencing the hypnotic state exactly as they would a dream (Echéance, 169). Delboeuf noted that this was invariably the case ever since his

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[16] See also Delboeuf, *Magnétisme animal*, 315-16.

[17] Bernheim, "De la suggestion envisagée au point de vue pédagogique," 133. Bernheim had expressed the same view in "Souvenirs latents et suggestions à longue échéance," – "in my opinion, nothing, absolutely nothing, distinguishes natural sleep from induced sleep" (106).

memorable visit to the Salpêtrière in December 1885, when he set out to contradict the accepted doctrine that waking subjects could not remember the events of their hypnotic sleep. He believed that the amnesia upon waking from hypnotic sleep was analogous to the amnesia upon waking from normal sleep (Veille, 113). The reason we do not normally remember our dreams, he stated, is because of the difficulty of establishing a link between our waking and dream states. We remember our dreams most often, for instance, when we wake up in the middle of one, because our first waking experience is also our last dreaming experience – the common experience bridges together the two dissimilar worlds. If the same conditions of recall applied to hypnotic sleep, Delboeuf theorised, it should be possible for subjects to remember their hypnotic sleep if they are awakened in the middle of performing an action. Delboeuf first demonstrated his theory with Blanche Wittman, the star subject of the Salpêtrière. He and Charles Féré abruptly woke Wittman in the middle of a hypnotic hallucination in which she was frantically attempting to extinguish her scarf that had caught fire. "On seeing her scarf intact," Delboeuf wrote, "she wore the physiognomy of a person emerging from a distant dream and cried (the moment was solemn for me, and her words engraved themselves indelibly in my mind): "My God! It was a *dream* that I had! It's strange. *That is the first time that I remember what I did while a somnambule.* It's strange. I remember absolutely everything" (Echéance, 169; Mémoire, 447).[18]

Delboeuf repeated the experiment with other subjects and consistently obtained the same result: "[E]verything that they think, say or do in somnambulism, they think it, say it or do it as in a dream" (Echéance, 169).

These experiments convinced Delboeuf of the total analogy between hypnotic hallucinations and ordinary dreams. They also enabled him, as we have seen, to account for the amnesia of hypnotic subjects. The reason amnesia was so long considered a distinctive trait of hypnosis, he reasoned, is because attention had not been

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[18] His emphasis.

directed to the conditions necessary for the recall of memories of hypnosis (Mémoire, 471). We will have occasion, in the chapters to come, to reexamine Delboeuf's dream theory of hypnotic amnesia in greater detail.

5. His subjects all claimed to fall into a somnambulic/dream state when executing a post-hypnotic suggestion (Echéance, 169). Their surroundings would change and they could think of nothing else but the action or dream that they were told to realise. All post-hypnotic suggestions, Delboeuf therefore argued, are accompanied by an unspoken command to go into hypnotic sleep (Veille, 134-135).

> As for the explanation of the phenomenon, it is most simple. All suggestion or injunction of which execution is fixed at a future time is presumably formulated in the following terms: "At such-and-such time, you will fall asleep and you will see or do such-and-such thing." It is this latent order that is the cause of the later hypnosis (Veille, 135-136).

The same situation is obtained, Delboeuf remarked, for suggestions that are given to subjects in their waking state. "Most suggestions are, at bottom, counter-realities. To see or feel what is not there, is to be outside of the real world and to inhabit the world of dreams. The suggestion therefore implicitly includes the sign which plunges the subject into hypnosis" (Veille, 266). "If I say to one of them: 'You see full well that I have a silver nose', this simple affirmation plunges the person into the hypnotic state, and it is in this manner that the hallucination can be produced and is produced. It's as though I had begun by telling him: Sleep! and then: You will see me with a silver nose" (Echéance, 170; Veille, 135 and 269).

6. By chance, Delboeuf stumbled upon a strong proof of the analogy between dreaming and so-called waking somnambulism. On two occasions his subjects failed to execute a suggestion because they had instead dreamt of doing so (Echéance, 169; Veille, 128). "When, after a more or less prolonged wait, believing that the suggestion had not taken, I woke him and reproached him for his lack of condescension, he maintained

that he had obeyed me, told me his dream and was deeply surprised to learn that he had not moved" (Echéance, 169).

Counter arguments

Delboeuf's critique of waking somnambulism – and dissociation – was still unsatisfactory in one important respect. Neither he nor Bernheim could explain how the subject knows *when* he or she must enter a state of sleep, be it normal or hypnotic, in order to execute the command. Beaunis pointed out this flaw in the second edition of his book *Le somnambulisme provoqué.* He wrote: "If the suggestion is spontaneously recalled in the interval, instead of remaining latent up to the time fixed upon, there is the same difficulty; the explanation reduces it, but does not solve it."[19] Bernheim's response was feeble: "To reduce a difficulty is to solve it partly; to reduce it sufficiently is to solve it totally."[20] He argued that the subjects not only switched states easily and frequently but also spent the greater part of their day in their somnambulic state. If this were true, and the subjects appeared otherwise normal, then Bernheim succeeded only in reducing his explanation to a description of the notion of waking somnambulism. Delboeuf mentioned this limitation of his theory in his paper "On So-called Waking Somnambulism." He admitted that "the subject, in whom we have inspired a suggestion, is, after all, under the dominion of the suggestion so long as it remains to be accomplished; he is in the expectation of a moment or signal" (Veille, 127). He noted, moreover, that his subjects often felt uneasy, as though a weight were oppressing them, during the interval between the moment of the suggestion's acceptance and the moment of its execution. Perhaps they felt the anxiety we all feel when we do not wish to miss an important appointment. As Delboeuf said in his very first publication on the problem of post-hypnotic suggestion, "who among us, in his ordinary state, would dare to agree to execute at a date fixed long in advance an act that

[19] Beaunis, *Le somnambulisme provoqué,* 243. Janet takes up the same criticism; see chapter 4 below.
[20] Bernheim, *De la suggestion* , 157.

has no natural relationship to this date?"[21] As we shall see at the end of chapter five, Delboeuf will use this post-hypnotic suggestion anxiety as evidence against the idea – intrinsic to the concept of dissociation – that post-hypnotic subjects believe themselves to be free without actually being free. For now, it would be good to consider how Janet dealt with the difficulties raised by Bernheim and Delboeuf.

[21] Delboeuf, "Sur les suggestions à date fixe," 514.

CHAPTER FOUR

The Concept of Dissociation: 1887-1889

Delboeuf and Bernheim's solutions to the problem of post-hypnotic suggestion presented serious difficulties for Pierre Janet's concept of dissociation. At stake were the issues of memory and awareness.

Memory: Delboeuf and Bernheim demonstrated that subjects remember the events of their hypnotic state by either falling into that state or, as Delboeuf showed, by using an artifice to bridge the waking world and the hypnotic/dream world. But according to Janet's dissociation model of hypnosis, it is never actually the "subject" who remembers the suggestion but rather a dissociated consciousness. The concept of dissociation is meaningless if the hypnotic subject remembers what only a dissociated consciousness is supposed to know.

Awareness: When executing their post-hypnotic suggestions, Delboeuf and Bernheim's subjects are usually aware of the suggestion although they cannot help themselves from performing it. Janet's subjects, on the other hand, are usually not aware of the post-hypnotic suggestion, even at the moment of its execution. For Janet, it is a dissociated consciousness and not the official consciousness that is responsible for executing the suggestion.

The first part of this chapter describes Janet's response to these difficulties. The second part examines his use of the concept of dissociation in attempting to explain another psychological problem in hysteria and hypnosis, the problem of negative hallucination – the disappearance of an object through hypnotic suggestion. During the period I consider, from 1886 to 1889, Janet elaborated the concept of dissociation in

three articles and a doctoral thesis which I refer to using the abbreviations in the bibliography.[1]

Janet on memory and somnambulism

From the very beginning, Janet tried to weaken and contradict the inferences Delboeuf drew from his hypnotic memory experiments. In the opening pages of his first dissociation paper he noted an exception to the general rule, put forward by Delboeuf, that a subject will remember her hypnotic state as she would a dream if she is abruptly wakened in the middle of performing a hypnotic act: "When the subject has already been abruptly put to sleep in the middle of a waking act, the idea that appears in the consciousness after an equally abrupt awakening is not the memory of the somnambulism, it is the continuation of the act begun and interrupted during the waking state" (Dédoublement, 579). Thus, if the subject is awakened suddenly, having been put to sleep with equal suddenness, she will remember not her last somnambulic act, as Delboeuf claimed, but rather the last act she performed before being put to sleep.

Janet further restricted the range of Delboeuf's rule by arguing that it is only true in cases of light somnambulism because subjects in deep somnambulism cannot be wakened with sufficient suddenness. According to Janet, it takes time to wake subjects who have undergone the profound changes in personality, sensibility and intelligence that characterise deep somnambulism, and this delay interrupts the somnambulic act in such a way that the memory of the act cannot be preserved (*Automatisme,* 96). Janet arrived at this observation by repeating the experiment Delboeuf had performed with Blanche Wittman at the Salpêtrière: he suggested to Lucie that her dress (rather than her scarf) had caught fire and he woke her in the middle of her attempts to extinguish it. He obtained Delboeuf's result at first, but in time Lucie's somnambulism deepened to the

[1] All page references to Janet's *Automatisme* refer to the text of the fourth edition reprinted in Paris in 1989 by the Société Pierre Janet. The text of the first edition is unchanged except for the addition of Janet's prefaces to the second and third editions in 1893 and 1898 respectively, and Henri Faure's 1989 preface to the fourth edition.

point that it took at least a full minute to wake her (*Automatisme,* 96). Janet did not state the period of time over which the quality of somnambulism changed. He merely remarked that subjects normally only enter a light sleep when they are first hypnotised but fall into deeper sleep if the process is repeated.

And even when subjects do remember their somnambulism after waking from light somnambulism, Janet continued, this memory is of short duration. The same is true, he claimed, of subjects who remember the post-hypnotic suggestion while performing it: "M. Beaunis has completely demonstrated what I have always observed. If a subject executes a suggestion with consciousness and memory at the moment of its execution, it is only a few moments before he completely loses not only the memory of the command, but the memory of its execution as well" (*Automatisme,* 94).[2] He reasoned that if the memory persists at all, it is because the subject has not fully wakened from somnambulism. "In reality," he wrote, "the psychological states are continuous and the subject does not jump from one to the other. There is a post-hypnotic period that sometimes extends itself a fair amount of time after waking, and it is perfectly natural that the memory of the somnambulism persists for some time during this period" (*Automatisme*, 97). In other words, for the somnambulic act to continue after waking, it is necessary that the somnambulism continue as well. Hence, according to Janet, when Delboeuf or Bernheim succeed in lifting the subject's amnesia during the waking state, it is only because 1) the somnambulism is too light or 2) because the subject is still in somnambulism and only apparently awake.

The reader may have noticed that Janet seems to assume the very thing he wishes to demonstrate, that is, amnesia upon waking. For Janet, it is *a priori*

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[2] He cited Beaunis's *Somnambulisme provoqué*, second edition, 122. Later in his thesis he repeated the same point : "A [...] very important fact has been noticed by M. Beaunis: regardless of the way in which they executed the command, once the action is accomplished, they lose complete memory of it, they no longer know what they have done, despite having performed the suggestion while awake" (*Automatisme*, 245-246). This does not so far contradict Delboeuf's explanation of post-hypnotic suggestion since hypnotic subjects need only *momentarily* fall into somnambulism at the moment they execute the suggestion.

impossible to remember one's somnambulic state while awake. As far as he was concerned amnesia upon waking is a characteristic trait of somnambulism and if this trait is lacking, it is because the somnambulism never occurred: "Hence we conserve forgetting upon waking as the most important trait of the state of somnambulism and we persist in believing that, if it is completely absent, there has been suggestion during the waking state and no somnambulism" (*Automatisme,* 97). In the next chapter, I take up this and other apparent instances of questions begged by the work of Janet and others.[3] In the present chapter, I restrict my attention to the development of Janet's ideas and to the countercriticisms he directed at his opponents.

Janet on memory and awareness in waking somnambulism

The hypnotic phenomena described above belonged to the study of what Janet called total automatism, the subject of the first half of his thesis. (The second half dealt with partial automatism.) By automatism, Janet meant the automatic psychological activity that is thought to characterise hypnosis or somnambulism – hence the title of his thesis, *L'Automatisme psychologique.*[4] The hypnotic subject is considered to be an automaton in the hands of the hypnotist. Total automatism refers to the psychological condition of complete somnambulism – the opposite of being completely awake. Partial automatism refers to the condition in which both the waking and somnambulic states are present – Beaunis's state of waking somnambulism. The automatism is said to be partial because only a portion of consciousness is subject to an automatism of which the remaining consciousness is unaware (*Automatisme*, 221-222). Automatic writing and post-hypnotic suggestion are examples of partial automatism. They are unconscious acts, that is, "actions having all the features of a psychological phenomenon except one,

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[3] See the section "Delboeuf on memory" in chapter 5.
[4] Janet makes this point clear in the preface to the second edition (1893) of *Automatisme*, page 24 and on pages 221-222.

that it is always ignored by the person executing it at the very moment it is being executed" (Inconscients, 239; *Automatisme*, 222).[5]

Now since Delboeuf argued that there is no such thing as waking somnambulism, he would of course hold that partial automatism is equally non-existent. According to Delboeuf, at the moment of executing a post-hypnotic suggestion, hypnotic subjects fall into the same somnambulic state in which they first received the suggestion. They are conscious of executing the suggestion but they experience and remember it exactly as one would experience and remember a dream. To use Janet's terminology, Delboeuf's post-hypnotic subjects experience the alternating states of total automatism and not the simultaneous consciousnesses of so-called partial automatism.

Janet attempted to counter Delboeuf's (and Bernheim's) critique in two important ways. The first was to affirm again and again what Delboeuf would always deny: the fact that some hypnotic subjects perform conscious actions of which they are not aware (Anesthésie, 451-452, 462; Inconscients, 240-241; *Automatisme*, 221-223, 253, 288, 315). Janet claimed that post-hypnotic suggestions, for instance, could be executed in three different ways: 1) the subject executes the suggestion with full awareness; 2) the subject falls into a somnambulic state and executes the suggestion; or 3) the subject executes the suggestion without memory or awareness (Inconscients, 240-241). Janet repeatedly criticised Delboeuf for apparently failing to note these different ways in which post-hypnotic suggestions could be carried out, and for consequently making tenuous generalisations based on a limited number of cases (Inconscients, 240; *Automatisme,* 248).

One of these hasty generalisations is presumably Delboeuf's critique of waking somnambulism. Delboeuf claimed that waking somnambulism is in fact a pure somnambulism without the admixture of waking phenomena. But it is obvious, wrote

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[5] This is also the defining feature of waking somnambulism; see the section on waking somnambulism in chapter 3.

Janet, that the subject is not in a normal waking state: "[W]e are not in the habit, when we are perfectly awake, of walking or writing without knowing it. We should not conclude, therefore, that the subject is in a complete state of hypnotic sleep" (Anesthésie, 450-451; *Automatisme*, 323). Beaunis had amply demonstrated, Janet continued, that there is continuity of memory between the normal waking state and the state of waking somnambulism.[6] Since the subject "will indefinitely remember part of what he did, he was therefore at least partly in a waking state" (*Automatisme*, 323). For example, when a subject performs a post-hypnotic suggestion of which she is not aware, she remains awake except for some of the actual moments of the performance. He added that his own experiments had, on the other hand, similarly demonstrated a continuity of memory between the dissociated part of the subject's consciousness and the subject's state of somnambulism. For example, as we saw in chapter 3, Adrienne, the dissociated consciousness of Lucie, is present both during somnambulism and after. It is theoretically Adrienne's continuous presence, after all, that ensures the success of long term post-hypnotic suggestions. But the somnambulic state is, like the waking state, not altogether present either, Janet claimed. "It is therefore a semi-somnambulism, analogous to a state of semi-waking," he wrote, "and M. Charles Richet obviously found the right word, which we will keep for designating this state, when he called it a *hemi-somnambulisme*" (Anesthésie, 451; *Automatisme*, 323).[7] Janet perhaps saw in the new name a way of distancing Delboeuf's critique of waking somnambulism from the identical notion of a dissociated state he espoused in his own work. The substitution of "hemi" for "waking" may also have helped deflect attention from the idea, so problematic for Delboeuf, of performing hypnotic suggestions while awake.

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[6] Janet cited Beaunis, *Somnambulisme provoqué*, 166.
[7] Janet cited Richet, "Les mouvements inconscients," in *l'hommage à Chevreul*, 93. I was unable to locate a copy of this very rare book.

The second way in which Janet defended the concept of dissociation was by pointing out Delboeuf's and Bernheim's inability to adequately explain the problem of post-hypnotic suggestion (*Automatisme*, 248-262). Janet maintained, contrary to Delboeuf and Bernheim, that some subjects execute post-hypnotic suggestions without memory of the suggestion, without consciousness of executing it and without falling, therefore, into the same hypnotic state in which they received the suggestion. But where subjects do fall into somnambulism when executing a post-hypnotic suggestion, Janet argued that the phenomenon remained unexplained. If the suggestion were performed immediately on waking, he believed that it could reasonably be assumed (as discussed in the previous section) that the subject was not yet fully awake. But if the suggestion is long term, he asked, why does the subject fall asleep at precisely the right moment?

> It serves no useful purpose to say, and it is at any rate inexact, that all post-hypnotic suggestions amount to saying: "You will fall asleep at such-and-such moment and you will do such-and-such thing", because the post-hypnotic suggestion to sleep is just as difficult to explain as any other. Why does this forgotten memory appear at that moment? (*Automatisme*, 248)[8]

To understand what is really going on we must examine, Janet proposed, "other subjects who present in a clear and somewhat typical manner, another way of executing the suggestion" (*Automatisme*, 249). One such subject was Lucie:

> A hysterical woman, whom I had the chance to study, displayed in the highest degree and in an extremely clear manner an important phenomenon that exists in all subjects in a more or less concealed manner. It is one of those prerogative instances of which Bacon spoke that must be well understood before moving on to others (*Automatisme*, 249).

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[8] This passage was directed explicitly at Delboeuf. Four pages later he criticised Bernheim on the same point:

> [Bernheim's] explanation has the advantage of simplifying things and of substituting a phenomenon of forgetting for a phenomenon of unconsciousness. I believe that it is nonetheless insufficient; first of all, this theory does not explain why the memory of the suggestion, which does not seem to exist, returns from time to time and what pushes the subject to take precautions (*Automatisme*, 252).

The phenomenon was of course an apparently dissociated consciousness that performed post-hypnotic suggestions that her main consciousness knew nothing about. In a section entitled "The subconscious execution of post-hypnotic suggestions," Janet reiterated, near the middle of his thesis, his solution to the problem of post-hypnotic suggestion. The argument and much of the text was the same as in his 1886 paper, but he now placed greater emphasis on the fact that his hypnotic subjects had no memory of the suggestion and were completely unaware of performing subconscious actions. He pointed out, for example, that in order to return after 13 days, "from the moment he wakes and during the entire interval, [the subject] must constantly be thinking: 'Today is the first day, or the second...' and once he thinks to himself: 'It is the thirteenth,' the association will occur. Now of course it is obvious to everyone that waking somnambules do not *at any time* have such memories, and that they have no consciousness of counting or of making these remarks" (*Automatisme*, 253). The exact same passage can be found in his first publication on dissociation except for the addition of the words "at any time", which I have italicised (Dédoublement, 583). In discussing Bernheim's solution, moreover, Janet held that it did not reflect the facts: "If we seriously examine the mind of a subject during every moment that precedes the execution of the suggestion, we will not find one moment in which he truly remembers. There is not forgetting, but a true unconscious, as M. Beaunis remarked in discussing M. Bernheim's hypothesis" (*Automatisme*, 252).[9]

Janet's direct attack on Bernheim's findings was a crucial move in his defence of subconscious phenomena. This state, call it unconscious, subconscious, dissociated or partial psychological automatism, was presented less as theory by Janet, than as fact. It was therefore important for him to ensure that nothing contradicted the apparent reality of a consciousness that could exist beyond the awareness of the subject's main consciousness. And besides, the problem of post-hypnotic suggestion seemed to be

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[9] Janet here referred to Beaunis, *Somnambulisme provoqué*, 243

insoluble in the absence of this purported fact. Even for those who fall into somnambulism at the moment of executing a post-hypnotic suggestion, the somnambulism is only secondary to the execution of the act, argued Janet, because there must be a subconscious process that accounts for why the subject falls asleep at the right time:

> Post-hypnotic suggestions [...] only apparently present different features. In reality, these phenomena always include a common element. The idea that was suggested during somnambulism does not disappear after waking, though the subject seems to have forgotten and to retain no consciousness of it; the idea subsists and develops outside and beneath normal consciousness. Sometimes it reaches full completion and brings on the execution of the suggested act without ever having penetrated into this consciousness; sometimes, when it reaches completion, during its execution, it enters the mind for a moment, modifies it, and brings about the more or less complete and initial somnambulic state. *The main thing, however, is the existence of the subconscious thought that is revealed by post-hypnotic suggestions, more than by any other phenomenon, because they cannot be understood without it* (*Automatisme*, 261-262, my emphasis).

Thus, even in the case of a subject who falls into somnambulism when executing a post-hypnotic suggestion, it is not an alternate consciousness but rather an area of an ever-present state of dual consciousness that dominates at the preassigned moment. Bernheim's and Delboeuf's positions are thus subsumed within Janet's more comprehensive solution of dissociation.

Given the apparent success of his solution to the problem of post-hypnotic suggestion, Janet naturally sought to extend the concept of dissociation to other hypnotic phenomena. In chapter 2, I briefly mentioned how he presented the concept of dissociation as the general psychological mechanism operating in hypnosis and hysteria. The next section describes his attempts to apply dissociation to the problem of "negative hallucination", before turning to Delboeuf's consideration of the problem at the beginning of chapter 5.

Negative hallucination

The term "negative hallucination" was coined by Bernheim to refer to the disappearance of a sensation by hypnotic suggestion.[10] What we would ordinarily call an hallucination he named a "positive hallucination". His examples of negative hallucination consisted typically of suggestions to subjects that they would no longer be able to see him once awake. One of his subjects was Elise B., a well mannered and honest 18 year old domestic servant. Apart from sciatica, she suffered from no physical ailments.[11] Here follows the text of one of Bernheim's "demonstrative experiments":

> She was, from the first session, very easy to put into somnambulism, with hypnotic and post-hypnotic hallucinability and amnesia upon waking. I easily induce in her a negative hallucination. I say to her, during her sleep: "When you wake, you will no longer see me – I will be gone." When she wakes, she looks for me and does not seem to see me. I may speak to her, shout in her ear, insert a needle in her skin, in her nostrils, beneath her nails, apply the needle point to the mucus membrane of her eye...try as I may, she does not show the least reaction. I no longer exist for her and all the acoustic, visual, tactile, etc., impressions that emanate from me, leave her impassive; she is unaware of everything. As soon as someone else touches her with a needle without warning, she keenly perceives it and retracts the pricked limb.[12]

Bernheim pointed out that this experiment did not succeed so well with all somnambules. Some ceased to see him but continued to hear him or to feel him touching them. In Elise B., however, negative hallucinations were realised to striking effect:

> Logical in her hallucinatory conception, she did not perceive me, by all appearances, with any of her senses. Try as I did to tell her that I was there, that I was speaking to her, she was convinced that she was being made fun of. I look at her obstinately and say to her: "You do see me, but you are acting as though you do not! you are a joker, you are putting on an act!" She does not budge and continues to speak to other people. I add, with conviction: "Besides, I know everything! I am not fooled by

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[10] Bernheim, "De la suggestion dans l'état hypnotique et dans l'état de veille,"(15 septembre 1883) 559. See also *Hypnotic Suggestion in Psychotherapy*, 43-50 and 137-138; and "Des hallucinations négatives suggérées." All translations of "Des hallucinations" are my own.
[11] Sciatica is pain in the lower back, thighs and legs associated with inflammation of the sciatic nerve.
[12] Bernheim, "Des hallucinations," 162.

> you! You are a bad girl. It's been two years now that you had a child and that you got rid of it! Is it true? It is what I was told!" She does not bat an eye; her physiognomy remains placid. Wishing to see, from a medico-legal perspective, if a serious abuse could be committed owing to a negative hallucination, I brusquely lift her dress and shirt. This woman is by nature very prudish. She allows this to go on without blushing the least bit. I pinch her calf and thigh: she shows absolutely no reaction. I am convinced that rape could be committed while she is in this state without her putting up the least resistance.[13]

Bernheim argued that she perceived the sensations associated with him but formed no conception of him; there was perception but not conception. He held that perception is a physiological act that may or may not reach consciousness whereas conception is itself an act of consciousness. He used the example of a beam of light striking the retina which then sends a signal along the optic nerve to the visual centre in the brain where the sensation is perceived. "But the subject need not be conscious of this perceived sensation; he does not conceive it; it does not exist for him. That is what constitutes a negative hallucination. The imagination neutralises, or the consciousness ignores the truly perceived sensation; the subject does not know of it and denies that he has perceived it."[14] How does Bernheim know that the subject perceived him at all? Because he is able to make her remember everything that she apparently did not see:

> "You saw me a while ago! I spoke to you." Surprised, she answers: "Well no, you were not here!" – "I was; I spoke to you. Ask these gentlemen." – "I did see these gentlemen. M. P. wanted me to believe that you were here! But he was joking! You were not here!" – "Well then!" I say to her "you are going to remember everything that happened while I was not here, everything that I said to you, everything that I did to you!" – "But you could not have said or done anything to me since you were not here!" I insist in a very serious tone and, looking at her face to face, I lean on every word: "I was not here, that is true! You are going to remember anyway!" I put my hand on her forehead and affirm: "You remember everything, absolutely everything! Now! Be quick! What did I say to you?" After a moment of concentration, she reddens and says: "But no, it is not possible: you were here! I must have been dreaming!" – "Well then! what did I tell you in this dream!" Ashamed, she does not want to say. I insist. She ends up by telling me: "You told me that I had had a child!" – "And what did I do to you?" – "You pricked me with a needle!" – "And then?" After a few moments: "No, I

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[13] Bernheim, "Des hallucinations," 163.
[14] Bernheim, "Des hallucinations," 161.

> would not have allowed it! It was a dream!" – "What did you dream?" – "That you uncovered me, etc."[15]

Bernheim concluded that she had indeed seen him but that her consciousness had either shut itself off from the impressions that came from him or neutralised them as soon as they were produced. "She saw me with her body's eyes, she did not see me with her mind's eyes," Bernheim wrote. "She was struck by psychic blindness, deafness, and anaesthesia for me: all the sensorial impressions emanating from me were perceived, but they remained unconscious for her. It is truly a negative hallucination, an illusion of the mind to sensory phenomena."[16] He maintained, furthermore, that exactly the same process was going on in cases of the hysterically and hypnotically suggested blindness of a single eye. Using optical devices he was able to show that such blindness was only psychical since both his hysterical and hypnotic subjects saw patterns that could be seen only if both eyes were used.[17]

Binet and Féré arrived at similar conclusions in an article published in the *Revue Philosophique* in 1885, only they preferred the term *"anesthésie systématisée"* to "negative hallucination".[18] They argued that the systematic anaesthesia of vision was analogous to the systematic paralysis of a limb in hysterical subjects. If a hypnotic subject is told that he can no longer write, for example, he will lose the ability to write but conserve the ability to perform other types of movements. It is a *systematic* paralysis because it only affects a specific type of movement. It is the same with vision. In cases in which a person is rendered invisible through hypnotic suggestion, the subject continues to see everything else.

> The eye of the patient is in the same functional state as his arm, when we have caused him to lose the faculty of executing a particular movement without affecting other movements. It is for the eye as for the arm a phenomenon of inhibition which produces a systematic paralysis.[...] Calling these anaesthesias *negative hallucinations*, is not

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[15] Bernheim, "Des hallucinations," 163-164.
[16] Bernheim, "Des hallucinations," 164.
[17] Bernheim, "De l'amaurose hystérique et de l'amaurose suggestive," 585-588.
[18] Binet and Féré, "L'hypnotisme chez les hystériques," 21-24.

> only to misjudge their nature and significance, it is also to impose upon them a name that misleads the mind into false comparisons: it is almost as if the systematic paralyses of movements were instead to be called *negative motor impulsions.*[19]

"It seems to me," Bernheim retorted in the second edition of his book published in 1887, "that my esteemed opponents deserve the reproach which they have cast upon me, of having imperfectly grasped the nature of the phenomenon."[20] He argued that when he caused his subjects to be blinded to something, he produced the disappearance of an image in the mind and not a paralysis in the eye. A year later in 1888 he charged Binet and Féré with mistaking an imaginary paralysis for a real one. The eye sees, he asserted, but the image is not conscious because it is neutralised by the imagination.[21]

Outside of terminology, it is not clear that Binet and Féré actually disagreed with Bernheim's general view of the phenomenon. They too seemed to believe that the blindness, whether total or systematic, occurred at the level of perception and not the eye. By 1887, they were conducting experiments like Bernheim's that demonstrated the paradoxical fact that hypnotic subjects somehow saw the objects that they apparently could not see. In one experiment, for instance, they designated one of ten identical cards as invisible to the subject during hypnotic sleep. Upon waking, the subject was unable to see the designated card – but not always, as when the cards were too minutely similar or only a small portion of each card was shown. Binet and Féré reasoned that the subject must unconsciously be relying on visual reference points in order to be blind to the designated card.

> [T]he subject must recognise the object in order not to see it...The recognition of the card, which requires a very delicate and complex operation, amounts however to a phenomenon of anaesthesia; it is therefore probable that the act occurs entirely in the unconscious...There is always an unconscious reasoning that precedes, prepares and guides the phenomenon of anaesthesia.[22]

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[19] Binet and Féré, "L'hypnotisme chez les hystériques," 23-24; their emphasis.
[20] Bernheim, *Hypnosis and Suggestion in Psychotherapy*, 151; Bernheim, *De la suggestion*, 160.
[21] Binet and Féré, "L'hypnotisme chez les hystériques," 161-162.
[22] Binet and Féré, *Magnétisme animal*, 236.

This unconscious is not only probable, Janet admonished Binet and Féré in 1887 and 1889, but also necessary. When awakened the subject has neither memory of the suggestion nor awareness of what is expected of her. Yet she must somehow recognise the card without being aware of doing so. "It seems to me," Janet continued,

> that there is something of an analogy between this problem and the problem I previously studied. How does a somnambule whom we have ordered to return in eight days, count these eight days when she has no memory of the suggestion? How does she recognise a sign that she does not remember and that she does not even seem to see? These two problems are identical, and if [my] observations [...] of Lucie have allowed me to cast some light on the first one, perhaps they will allow me to illuminate the second (Anesthésie, 457; *Automatisme*, 268).[23]

Janet began by repeating Binet and Féré's experiment (Anesthésie, 457-458; *Automatisme*, 268-269). While Lucie was in complete somnambulism, Janet placed on her lap five white cards of which two were marked with a cross. She was told that once awake she would not see the cards marked with a cross. He later woke her as much as possible (for, as the reader will recall, the post-hypnotic state was supposed to be a state of waking or hemi-somnambulism) and noted that she remembered neither the suggestion nor the somnambulism. When asked to pick the cards up from her lap, she took three and left the two cards marked with a cross. He asked for more. She answered that there were no more. Next, he placed all five cards on her lap, this time flipped over so that the crosses were hidden. Now she picked up all five cards. Janet concluded, in line with Binet and Féré, that the crosses were somehow recognised without being seen. He then asked Adrienne to tell him what was on her lap by way of automatic writing.

> There are two pieces of paper marked with a small cross. – Why did Lucie not hand them over a moment ago? – She cannot, she does not see them. – Did she recognise a cross on the pieces of paper? (She does not

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[23] For the purposes of clarity, the quotation is a blend of the very nearly identical passages in "Inconscients" and *Automatisme*.

> answer right away and writes:) – I do not know, I am the one who sees them with a cross (Anesthésie, 458).[24]

And so just as a second consciousness was responsible for performing post-hypnotic suggestions, so it was with negative hallucinations or systematic anaesthesia. "In a word," Janet wrote, "this anaesthesia is but a simple dissociation of [psychological] phenomena, such that any sensation or idea removed from the normal consciousness continues to exist and can sometimes be found to form part of another consciousness" (Anesthésie, 462).

In another experiment, Janet rendered Lucie completely blind through a post-hypnotic suggestion, but was able to confirm through automatic writing that Adrienne in fact saw everything (Anesthésie, 459; *Automatisme,* 271). He pointed out that the same results could be obtained with all the other senses (*Automatisme,* 271). He further argued not only that systematic anaesthesia and post-hypnotic suggestion operated by the same mechanism of dissociation but also that they were one and the same phenomenon, and demonstrated his claim in a series of variations on Bernheim's negative hallucination experiment (*Automatisme,* 269-270). For instance, he gave Lucie the post-hypnotic suggestion that Dr. Powilewicz, who was in fact present, had left the room. Awake she no longer saw him and asked why he had left. Janet told her not to worry about it. Then placing himself behind her while she spoke, he told her in a soft voice to get up from her chair and shake Dr. Powilewicz's hand. She walked immediately over to the doctor and shook his hand. But when asked to explain what she was doing and with whom she was shaking hands, she answered, laughing, "But as you can very well see, I am sitting in my chair and I am shaking hands with no one" (270). Since Lucie was performing an action of which she was not aware, it naturally followed that she was insensible to all the sensations associated with that action. After describing a similar set of phenomena three pages later, Janet wrote "...we have already

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[24] Janet reproduces the text verbatim two years later in 1889, omitting the part where she hesitates (*Automatisme*, 271).

seen phenomena of this kind while studying post-hypnotic suggestions. The subconscious acts thus obtained have a general, obvious and even necessary feature: they are accompanied, if not constituted, by a systematic anaesthesia of the same type that we are currently studying" (273).

To bring his point home, Janet placed his work at the end of a long line of earlier attempts to explain negative hallucination (Anesthésie, 453-455; *Automatisme,* 264-266). Some magnetists like Teste, writing in 1845, believed that "[i]t is the magnetic fluid, an inert, opaque and whitish vapour, lingering like a fog where it is left by the hand, that conceals objects from the somnambule."[25] Charpignon, in 1848, likewise attributed negative hallucinations to a thick layer of magnetic fluid.[26] Janet remarked that other more scientifically respectable writers like Bertrand, Braid and Liébeault explained negative hallucinations as mental operations that either completely eliminated the sensation or replaced it with another. "Finally we suspected," he continued, "that the sensation was not really destroyed but merely 'neutralised by the imagination' (Bernheim), or it became an 'unconscious perception' (Binet and Féré)" (Anesthésie, 471). But these more recent studies were still incomplete in Janet's judgment. He preferred, for example, Binet and Féré's term "systematic anaesthesia" over Bernheim's "negative hallucination". Since everything seemed to indicate that the same mechanism was at work in the disappearance, by hypnotic suggestion, of visual, auditory, olfactory, gustatory and tactile sensations, it was preferable to adopt the more general term "anaesthesia" instead of the visually specific term "hallucination". It was simply too awkward, Janet believed, to call a suggested or hysterical anaesthesia a negative hallucination (Anesthésie, 455; *Automatisme,* 266). Janet also took issue with Bernheim's talk of sensations being "neutralised by the imagination", such as the following passage he quoted from "On Hysterical Blindness and Suggested Blindness": "The visual image is perceived but the hysteric neutralises it with his imagination...The

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[25] Teste, *Le magnétisme expliqué,* 415, cited in "Anesthésie," 454 and *Automatisme,* 265.
[26] Charpignon, *Physiologie du magnétisme,* 81, cited in *Automatisme,* 265.

psychic blindness is a blindness by imagination; it is due to the destruction of the image by the psychic agent" (*Automatisme,* 293). In opposition to this view, Janet wrote:

> I find that the image is neither neutralised nor destroyed, because it continues to exist and manifests its existence by subconscious acts and automatic writing. Moreover, there is no need to neutralise this image since it has never been in the subject's consciousness: we cannot say that Mary [a hypnotic subject] begins by seeing my drawing and then ceases to see it; no such negation is necessary since she has never seen this drawing (*Automatisme,* 293-294).

Finally, Janet felt that Bernheim's conceptualisation was at odds with the common sense view of the imagination as a faculty that conjured rather than negated images (*Automatisme,* 294).

Notwithstanding his disapproval of Bernheim's terminology, Janet declared his article on hysterical and hypnotically suggested blindness to be the best study on the topic. He was in complete agreement with Bernheim's analogy between hysterical anaesthesia and hypnotically induced anaesthesia and with his contention that the sensations continued to exist fully intact though they did not enter the subject's consciousness (*Automatisme,* 293). He agreed with Binet and Féré's work in general but disapproved of their conceptual terminology. "I admit that I do not understand," he wrote, "the expression 'unconscious perception' or 'unconscious reasoning'. If a phenomenon is not conscious, it cannot be a psychological fact, it cannot, that is, be a perception or a form of reasoning, it changes its nature and becomes another thing, perhaps a simple movement. A thought can only be formed in someone's head if it is conscious" (Anesthésie, 471). In short, Janet agreed with his colleagues but he felt that they should have pushed their arguments "still further in the same direction" by concluding that:

> "The apparently suppressed sensation remains as perfectly real and conscious as before, it is simply separated from the totality of psychic phenomena whose synthesis forms the idea of the ego [*moi*]." Facts in science are only explained by subsuming a specific fact into a more general one; systematic anaesthesia is a case of the dissociation of

> psychic phenomena like the long term suggestions that we have studied and perhaps many other facts as well (Anesthésie, 471).

Pierre Janet called for the need, in other words, to take the next step and accept dissociation as the only psychological theory capable of adequately explaining the problem of post-hypnotic suggestion, negative hallucination or systematic anaesthesia, and possibly all hysterical and hypnotic phenomena. In my next chapter, we begin to explore in detail the ever-present alternative for explaining these phenomena – the hypothesis of simulation.

CHAPTER FIVE

Delboeuf on Dissociation and Freedom

Delboeuf on negative hallucination

In January of 1889 Delboeuf published a short article, "On M. Bernheim's explanation of suggested negative hallucinations".[1] He began by praising his colleague's explanation and by correcting his terminology. Bernheim held that the suggested sensation is perceived by the sense organ but not conceived by the subject's consciousness. Such language would not do for Delboeuf who had devoted a large part of his life to the study of sense perception.[2] Perception is a psychical act, and not a physiological one, he admonished. "[I]t is, strictly speaking," he continued,

> a judgement (often unconscious) on the cause of the sensation, a cause that presents itself to the mind as coming from the outside. Perception presupposes therefore a real exterior cause, whether that judgement be correct or false. The illusion of the mirror is possible only if luminous rays strike the retina. The rays, these are the real exterior cause from which the mind creates an imaginary object that it situates behind the mirror.
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> Conception is a creation of the mind, in the fashion of a perception. He who represents to himself the features of an absent person has a conception but not a perception of that person (Sur l'explication, 202).

Delboeuf then mentioned a remark he had made in 1886 to the effect that negative hallucinations were difficult to explain because the subject was required to see the invisible object in order not to see it.[3] "If this is the case," he added, "it is clear that the subject is only pretending not to see the object, that he is putting on an act exactly as would any waking person behaving with total goodwill. There is not one of Elise B.'s

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[1] Delboeuf "Sur l'explication fournie par M. le Dr. Bernheim des hallucinations négatives suggérées." All subsequent references will use the abbreviation "Sur l'explication" in the body of the text.
[2] See Nicolas, Murray and Farahmand, "The psychophysics of J-R-L Delboeuf (1831-1896)"; and Nicolas, "Delboeuf et la psychologie comme science naturelle."
[3] He referred to p. 21 of an article called "Visite à la Salpêtrière" published in the *Revue de Belgique*. I have not located the original.

actions [Bernheim's subject] that she could not have performed while awake. Everything that she does or allows to be done can be explained without difficulty if we admit an absolute willingness, on her part, to please and accommodate [*complaisance*] (Sur l'explication, 202-203)."[4]

Delboeuf supported this strong and unexpected statement with evidence that included the following:

1) The subject who is told that she or he will not be able to hear, feel or see you will nonetheless wake the moment you tell her to – unless, Delboeuf added, you suggest that they will not wake, even when ordered to (Sur l'explication, 203).

2) Proof that they see the object is revealed in the care they take to avoid it – "unless, again," he repeated, "you expressly command them to bump into the object without feeling it" (Sur l'explication, 203).

3) The somnambule will not be surprised – unless told to be surprised, he reiterated, – by the fact that the unseen object obscures the view of the objects hidden behind it (Sur l'explication, 203).

4) Further proof of their *complaisance*, he continued, is that they will see these hidden objects more or less accurately when told to do so. "They then go to incredible pains to guess, by certain clues, what these objects are and how they behave. Needless to say they are frequently mistaken" (Sur l'explication, 203).

5) Delboeuf here related the case of a young woman undergoing the magic mirror experiment. The woman was given a small screen and told it was a mirror in which she would see behind herself. "The young girl applied all her senses to succeed, and, in particular, projected her eyes out of their sockets to literally enlarge the visual

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[4] The term "willingness to please and accommodate" is my translation, in this context, of the French word "*complaisance.*" The first entry in the *Nouveau Petit Robert* (1993) defines *complaisance* as "A disposition to acquiesce to someone's tastes and sentiments so as to please the person. *(Disposition à acquiescer aux goûts, aux sentiments d'autrui pour lui plaire).*" It is a key word in Delboeuf's vocabulary. To ensure clarity, I will include the original word in brackets alongside each translation.

field.[5] It would be difficult to imagine to what point she could guess, from subtle clues, our actions and movements"(Sur l'explication, 203).[6]

To all intents and purposes, subjects behave like waking people, Delboeuf maintained. When a subject sees into a mirror or through a supposedly invisible object, her imagination fills the void just as "we ourselves, in our waking state, can *see* through the partition that separates us from a neighbouring apartment, the people that we *hear* walking or talking"(Sur l'explication, 205).

In *Le magnétisme animal* Delboeuf noted that we all have a blind spot on our retina that we learn, by habit, to cover over. He was himself afflicted with a cataract that was accompanied by a black spot that hung in his vision like a fly. He decided that he would give himself conscious suggestions to no longer see the annoying spot. In very little time, he said, he succeeded in erasing the pesky fly from his vision.[7]

"There is therefore perception," he continued in his critique, "and no actual neutralisation of the sensation, but only a simulated neutralisation. It is enough to say that I am at [Bernheim's] side in rejecting the real and systematic paralysis by which Messrs. Féré and Binet, and others, have tried to explain negative hallucination. These types of hallucinations are the apparent result of the subject's directed will" (Sur l'explication, 205).

Bernheim was, to say the least, somewhat surprised by Delboeuf's paper. In his reply, he upheld his interpretation against Delboeuf's.[8] He was willing to modify

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[5] It is very unlikely that her eyes were actually coming out of their sockets. Rather, they probably only appeared to do so as her eyelids widened to expand her peripheral vision. As confirmed by my ophthalmologist, the eyeballs are horizontally fixed by the eye muscles and, especially, by the bones of the sockets.

[6] On the subtle cues upon which hypnotic subjects rely, Delboeuf cited Henri Bergson's article "La simulation inconsciente," with which he agreed completely. I take up Bergson's article later in this chapter.

[7] See Delboeuf, *Le magnétisme animal,* 321-322. The book consisted of four articles previously published in the *Revue de Belgique*: 60 (15 November 1888):241-259; 60 (15 December 1888):386-408; 61 (15 January 1889):5-33; and 61 (15 March 1889):286-324. All subsequent references to the book will use the abbreviation "*Magnétisme*" in the body of the text.

[8] Bernheim, "Réponse à M. le Professeur Delboeuf."

his terminology, but only slightly, and regardless continued to conceptualise the phenomenon in exactly the same way. He agreed, using Delboeuf's words, that the subject obeys "with passivity, but with intelligence."[9] "Did I not say, in my book," he added one sentence later, "that the somnambule always acts with spontaneity, that he plays an active role in invoking the suggested phenomenon, that each of them produces it in his own way, according to how he conceives and interprets it?"[10] He preferred to believe, however, that Delboeuf had overstated his case in saying that the subjects were only pretending the negative hallucinations. Some subjects, he wrote, do not succeed in fully realising the hallucination. They then "believe that to fulfil the suggestion they must in good faith adopt an accommodating attitude [*complaisance*] and affirm that they do not see me when in fact they do. [...] There are some, I admit, who believe that the suggestion commands them to simulate. "[11] It is for this reason, he pointed out, that he only uses subjects like Elise B. in whom the hallucinations are produced with the greatest clarity and vividness. He again described all the embarrassing things he did to Elise B. while she was under the spell of a negative hallucination and then her apparent shame and disbelief at being told what had happened, adding:

> This entire scene, the first time I realised it and ever since, unfolded with an appearance of truth, candour and ingenuousness that I defy the most able actor to imitate. No! It is not simulation. The subject did not see me; she was not conscious of seeing me; she was convinced that I was not there, that she did not sense or hear me. I affirm that rape, without the least resistance or any willingness to please and accommodate [*complaisance*], was possible as the subject would have been convinced that nothing unusual was going on.[12]

He gave two explanations of the phenomenon along the same lines he had followed before. The first involved a two-tiered interpretation of perception and memory by which the sensations are recorded in the sensorial cells and only come to

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[9] Delboeuf, "Sur l'explication," 205, cited in Bernheim, "Réponse à M. le Professeur Delboeuf," 226.
[10] Bernheim, "Réponse à M. le Professeur Delboeuf," 226.
[11] Bernheim, "Réponse à M. le Professeur Delboeuf," 227.
[12] Bernheim, "Réponse à M. le Professeur Delboeuf," 228.

consciousness when, by suggestion, the brain's nervous concentration awakens the psychic cells to produce consciousness of the stored sensations. He put forward a very similar theory to explain the problem of long term post-hypnotic suggestion as I described in chapter three. The second explanation theorised, as we saw in chapter four, that the imagination somehow neutralises the perceived sensation.

Bernheim ended his article by apologising to Delboeuf for the length of his reply, adding that:

> The reader could have concluded from [Delboeuf's] article that the phenomenon of negative hallucinations and, by extension, all the phenomena of hypnotism are but the result of pure simulation, of an unconscious and accommodating [*complaisante*] game of play acting. This is surely not what M. Delboeuf wished to say.[13]

But this was precisely what Delboeuf had said and meant to say. Delboeuf's understanding of hypnosis will be fleshed out over the course of the next two chapters. The present chapter focuses on the work he published in 1889 and 1890. Attention will be given to aspects of his work that are of special significance to the concept of dissociation and the problem of post-hypnotic suggestion.

Delboeuf on memory

This section takes up Delboeuf's continued pursuit of the question of hypnotic memory. As we saw in chapter 3, Delboeuf argued that the amnesia that subjects displayed with regard to their hypnotic states was analogous to the amnesia we all experience following our dreams. Our dreams are so difficult to remember, he reasoned, because of the difficulty of linking the thoughts of our waking world with those of our dream world. And in *Magnétisme animal* Delboeuf asserted, more confidently, that hypnotic sleep and hypnotic dreams were simply normal sleep and normal dreams by another name. The only difference between them is that the hypnotic subject is "put and *maintained* in a certain state, itself normal, but ordinarily *fleeting*, of

[13] Bernheim, "Réponse à M. le Professeur Delboeuf," 229.

the passage between waking and sleeping" (*Magnétisme,* 341). He believed that each of us experiences this twilight state at certain moments of the day during which we are at our most suggestible (*Magnétisme,* 332). Hypnosis would then be "the art of creating this moment and state, and especially the art of prolonging and maintaining it" (*Magnétisme,* 332).

If this were true, he wrote, "remembering and not remembering are but accidental, without any characteristic value" (*Magnétisme,* 342). And again elsewhere, "[t]here are dreams that we remember, and others that we do not. They do not differ from each other. It is an accident that causes recall in one case and forgetting in the other" (*Magnétisme,* 327). He twice reminded his readers that he had first investigated the nature of this accident while studying the conditions of dream recall in his work on *Le sommeil et les rêves* (*Sleep and Dreams*) (*Magnétisme,* 327 and 342).

He pointed out that all of his subjects spontaneously remembered their hypnosis, while most of Bernheim's did not. This in itself was proof, he said, that remembering or forgetting are but accidental phenomena (*Magnétisme,* 327). He mentioned, in this connection, a collaborative experiment conducted with Liégeois. Having hypnotised and woken two of Delboeuf's subjects, Liégeois found that one remembered her hypnotic state and the other did not. This was more proof, Delboeuf argued, of the contingency of hypnotic amnesia (*Magnétisme,* 344). But as he pointed out, both Bernheim and Liégeois – and, we may add, Janet[14] – claimed that the only subjects that remember are those that have not been truly or sufficiently hypnotised. "But this is pure question-begging," Delboeuf charged both Bernheim (*Magnétisme,* 327) and Liégeois (*Magnétisme,* 344). "It is exactly as though we argued that the only dreams that exist are those that cannot be remembered" (*Magnétisme,* 344).

As far as memory is concerned, Delboeuf argued, hypnosis is akin to sleep, delirium and certain illnesses that produce a partial disappearance of memory. In each

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[14] See the section "Janet on memory and somnambulism" in chapter 4.

of them sometimes the memory is revived, sometimes not. A blow to the head will produce amnesia in one case and nothing in another. Is there, therefore, any justification, he asked, for establishing a fundamental distinction between these two concussions on the basis of memory? (*Magnétisme,* 328) If not, there can hardly be, we may add, any justification in claiming that a subject is only hypnotised, or differently hypnotised (dissociated for instance), when he or she has no memory of the hypnotic state.

Delboeuf offered a decisive experiment that proved once and for all that amnesia was only an accidental trait of hypnosis (*Magnétisme,* 346-347). He hypnotised a young woman who had never before been or seen any one hypnotised. After having obtained catalepsy, analgesia, and somnambulism, he tried amnesia. He told her that she would be unable to remember her name. At first she would still weakly articulate her name, but on the next attempt the amnesia was complete. He then woke her and she remembered everything, including the suggestion that she would forget her own name. He repeated the experiment both with her and another subject. So instead of the usual case of spontaneous amnesia followed by recall by suggestion, Delboeuf demonstrated amnesia by suggestion followed by spontaneous recall.

> That is what I call a decisive proof. Of course, it could have happened that the subject forgot everything. Only, it would have been wrong to conclude forgetting to be the general rule, just as it would be wrong for me to claim remembering to be the general rule. But one legitimate and rigorous conclusion is that forgetting is not the rule (*Magnétisme,* 347).[15]

Both Bernheim and Liégeois – and, we may again add, Janet[16]– objected that Delboeuf unconsciously trained his subjects to remember, "which is only partly exact," he retorted.

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[15] And about 20 pages earlier, he similarly wrote:

> I do not maintain that remembering is the rule and forgetting the exception; I say that there is neither a rule nor an exception nor, especially, a characteristic sign. It is to go against rigorous scientific deduction to generalise, in this way, from what we observe and to maintain that we hold the truth when, from this presumed truth, there is nothing to be drawn, absolutely nothing (328).

[16] See chapter 4.

> I repeat, the subject can be trained to remember, just as he can be trained not to remember, and the training can occur in a conscious or unconscious manner. Thus, those who, like M. Bernheim or M. Liégeois, believe that amnesia upon waking is a trait of deep hypnosis, provoke the amnesia without realising it, if only, in the absence of a command, by their own belief (*Magnétisme,* 345 and before at 327-328).

He added that when he had visited Liébeault's and Bernheim's clinical practices, he had noticed that, from his perspective, they always attempted to provoke amnesia, which often did not occur (*Magnétisme,* 328 and 345). And in this respect, he admitted that his own first two subjects were amnesic upon waking from hypnosis.

> But I was myself then persuaded that amnesia was normal, and my experiments had no other goal – we need only reread them[17] – but to show the possibility and uncover the process of artificial recall. Thus, I am today convinced that, neglecting to watch myself, I had, without realising it, announced to them that they would forget what they were going to say or do (*Magnétisme,* 345).

He was afterwards careful not to train new subjects to be amnesic – and henceforth none of them was (*Magnétisme,* 345-346).

Unconscious simulation

Delboeuf's deepening study of hypnosis and memory put dissociation at even greater risk. As noted at the beginning of the previous chapter, dissociation is meaningless if the hypnotic subject can be made to remember what only a dissociated consciousness is supposed to know. For example, let us imagine Delboeuf giving one of his subjects the post-hypnotic suggestion to return to his house 13 days later. Awake, she remembers everything, and returns as instructed. There would obviously be no need to infer the existence of a second consciousness that kept track of time since the subject is herself conscious of the suggestion.

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[17] For instance, "Echéance," "Mémoire" and "Veille."

The dissociationist might nevertheless argue that dissociation is a legitimate inference in cases where amnesia is present, whether the amnesia results from unconscious training or not. Before addressing this argument and its implications, it would be useful to consider the phenomenon of unconscious training itself. Would this not indicate an unconscious process at work that is akin to dissociation?

Let us begin with a fascinating paper by Henri Bergson entitled "On Unconscious Simulation in the Hypnotic State," published in the *Revue Philosophique* in the second half of 1886.[18] In the spring of 1886, Bergson discovered a group of four boys 15 to 17 years of age who displayed the apparent ability to supply page numbers, words and sentences from a book that the hypnotist read while standing opposite them. They had been the hypnotised subjects of "mental suggestion" experiments conducted by a certain M. V in Bergson's home town of Clermont. Bergson set out to investigate this peculiar phenomenon with the help of his associate M. Robinet. He established that these hypnotised subjects presented "all the habitual cataleptic phenomena" of hyponotism, including "general insensibility."[19] The experiment typically consisted of placing the hypnotised subject in front of the hypnotist who, with his back to a window, read from a book held upright approximately 10 cm from his eyes. The book was held a little beneath the level of the hypnotist's eyes such that the subject could always see them.

> If I ask any one of these four subjects, once asleep, how he goes about guessing the page number or the word, he invariably answers: "I see it." – "Where do you see it?" – "There." And, passing his finger under the book, in such a way that he could touch the page I am looking at, he places it with surprising precision on the page number or title that he was required to reveal. I'm astonished that he should be able to read through the book and its cover, I add: "Show me then the cover of the book." – "Here it is." And while pronouncing these words he passes his hand under the book, places it before the page and indicates, not the actual position of the cover, but its symmetrical position in relation to the open page. In sum, the book would seem to be open before his eyes

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[18] Bergson, "De la simulation inconsciente." The paper was signed July 9, 1886. See also Carroy, "Le temps intersubjectif," in which Bergson's paper is set in the context of his later work on intersubjective consciousness.

[19] Bergson, "De la simulation inconsciente," 525.

> rather than mine; he imagines that he is reading the book, and naturally situates its cover behind the open page.[20]

This final clue led Bergson and his colleague to suspect that the subjects were reading the pages of the book from the reflection in the hypnotist's eyes. They noticed, for example, that all attempts at reading the book failed when the experimenter's eyes were kept hidden. They also found that the subject P...r sometimes read the numbers backwards, for instance, 312 as 213 and 57 as 75, as though he were reading from a mirror.[21] Further testing led them to determine that P...r was even able to discern on a microscopic slide details that were small enough to show that he could easily read the letters of the size they were estimated to be in the reflection of the cornea.[22]

They put forth various questions and traps with the aim of detecting any conscious deception on the part of their subjects. Never were they able to extract a confession and, in the end, felt sure that their subjects were not conscious of reading the reflection in the experimenter's corneas. "The hypnotised subject is thus not exactly a simulator," Bergson wrote, "and yet everything happens *as though* we were dealing with the most able of simulators. Could we not say that we have here a kind of "unconscious simulation"?"[23] Bergson concluded that when a subject receives a command that requires him to perform a

> tour de force like mind reading, he will conduct himself in very good faith as would the least scrupulous and most adept of charlatans, he will unconsciously exercise means whose existence we barely suspect, [...] and, unconsciously as well, we will ourselves suggest this recourse to illicit means by giving him a command that he is incapable of executing in another manner.[24]

Hence, if we assume that these subjects were acting in good faith, as I do for all the cases discussed in this dissertation, we must accept that they really believed they were somehow able to read the minds of their experimenters or through the cover of a

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[20] Bergson, "De la simulation inconsciente," 526-527.
[21] Bergson, "De la simulation inconsciente," 527.
[22] Bergson, "De la simulation inconsciente," 528.
[23] Bergson, "De la simulation inconsciente," 529; his emphasis.
[24] Bergson, "De la simulation inconsciente," 531.

book. They were pretending, as it were, without realising it, hence the term "unconscious simulation." Note that there is no reason, in this case, to infer the existence of any unconscious process. The subjects *consciously* saw the image in the experimenter's eye, and simply mistook the *source* of that image. The term "unconscious" is misleading to us because it did not then have the meaning that we have attributed to it since Janet and Freud. Bergson could just as accurately, though more awkwardly, have titled his paper "inadvertent" or "accidental simulation".

Pierre Janet, however, cited Bergson's paper as evidence for the existence of a dissociated consciousness:

> When the suggestion is connected to a reference point, it is the unconscious person who keeps the memory of the signal: "You told me to do such-and-such thing when the clock struck", Lucie writes automatically after waking from somnambulism. It is she also who recognises the signal with which the normal person does not concern herself. "There is a spot on the top left portion of the paper", writes Adrienne in the picture experiment. It is she who combines the processes in those most curious unconscious tricks reported by M. Bergson (*Automatisme*, 311; see also Anesthésie, 452-453).

But this is wishful thinking on Janet's part, for it is by no means given that, had they been questioned by Janet under hypnosis or through automatic writing, Bergson's subjects could have told him any more than they told Bergson.[25] Everything indicates that they simply did not realise what they were doing. And indeed, as Bergson suggested, this seems to be what had happened in the experiments reported by Janet in his very first publication.[26] Having mentioned Charles Richet's "very remarkable article on mental suggestion,"[27] Bergson wrote:

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[25] Janet used a similar argument in explaining the appearance, by post-hypnotic suggestion, of a red mark in the form of a star on the surface of a subject's skin. He argued that only a subconscious thought could explain the pattern because the nerves are not naturally arranged in the form of a star (*Automatisme*, 260). The problem of course is that assuming the existence of a secondary consciousness adds absolutely nothing to explaining how the star mark appears in the first place, for how does the subconscious produce it?

[26] Janet, "Note sur quelques phénomènes." As noted in chapter 2, this is the paper that was first read by his uncle Paul Janet at the *Société de psychologie physiologique* in December 1885.

[27] Charles Richet, "La suggestion mentale." As noted in chapter 2, this is the paper that introduced the statistical method of randomization in experimental science. See Hacking, "Telepathy: Origins of Randomization."

> While the operator holds a pack of cards and concentrates all his attention on the card at which he is looking, a subject in a state of hypnotism is required to guess the card. The experiment first succeeded 9 times in 14, then 8 in 27. Were all the necessary precautions taken to ensure that the subject could not see the image of the card on the operator's cornea? The same question applies for the picture experiments cited by M. Pierre Janet in his new and interesting paper of February (*Revue Philosophique*, 1886, p. 198). It is by no means necessary to look directly at a picture held in one's hand for the cornea, in certain positions, to reflect the image.[28]

Consider again the magic mirror experiment described above. Delboeuf's subject might also have believed that she was able to see what was going on behind her. She may not have realised that she was actually constructing the reflection by widening her peripheral vision and concentrating all her senses on the task. She was only, technically speaking, pretending to see into the "mirror". There is evidence of unconscious simulation but none, so far, of an unconscious simulating.

I experience this kind of unwitting pretending in my own daily life. If I meet someone who leaves a profound impression on me, someone I admire and would like to resemble, I frequently begin to mimic their mannerisms and style. I act as though I were this other person but I usually do not realise that I am doing so until I catch myself in the act; I pretend without realising it, as it were. The effect is quite strong after I have become engrossed in a movie: by imagining myself as one of the characters in the movie, from the moment I exit the theatre I often see the world as the movie character might have seen it. When, usually by chance, I catch myself behaving this way, I wonder at the fact that I might never have realised the source from which my thoughts and actions had patterned themselves. How many times do we pretend a form of reality without becoming aware of doing so?

We have seen how a subject could simulate a hypnotic phenomenon without realising it. But how might an experimenter such as Delboeuf communicate a wished-

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[28] Bergson, "De la simulation inconsciente," 531.

for result without realising it and without, therefore, our needing to infer the existence of a psychic unconscious in the subject?

A good example is provided in Delboeuf's 1886 article "On the Influence of Education and Imitation in Provoked Somnambulism."[29] The subject of the experiment is "B., a young and strong 15-year-old boy, very intelligent, a one-time Donato [an itinerant stage magnetist] subject and excellent somnambule, having participated in many public presentations" (Influence, 167). Delboeuf put him to sleep before his university class and gave him the post-hypnotic command to take a glass of water to a student named Eucher. B. knew none of the students and yet, upon receiving the signal and "*without the slightest hesitation*," he took the glass of water directly to the designated student (Influence, 167, Delboeuf's emphasis).

"We all stared at each other in stupefaction," Delboeuf wrote (Influence, 167). Another student was designated, but this time the experiment failed. Delboeuf put B. back into hypnosis and asked him to whom he had brought the first glass of water. "To M. Eucher. — Did you know him? — No. — How did you recognise him? — By his pose; he seemed to be trying to conceal himself" (Influence, 167).

"And that is how the mystery was cleared up," Delboeuf concluded. "We had unconsciously arranged the scene, and it was this arrangement that betrayed us" (Influence, 167). Therefore, the professor and classmates had unwittingly orchestrated the simulation of a parapsychological phenomenon. And in Bergson's case, we may similarly say that the experimenters, by the way they held the book in relation to their eyes and their eyes in relation to the light, unconsciously simulated telepathy to no less a degree than did their subjects. "Unconscious" here means "not alive to" or "not aware of". In short, there is no need to invoke a psychic unconscious to describe the state of someone who is simulating without realising it.

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[29] Delboeuf later reprinted (changing only a word or two) the example in his article, "L'hypnose et les suggestions criminelles," 236-37.

Dissociation and freedom

We must still consider an important argument in favour of the concept of dissociation. If a subject can and does remember his or her post-hypnotic suggestion, then there is no need to resort to dissociation. Granted. But what if the amnesia appears to be absolute? Janet maintained that there is a class of hypnotic suggestions in which the subject remains completely ignorant of receiving and performing the post-hypnotic suggestion. It would seem legitimate in such cases to assume the existence of a simultaneous second consciousness of which the subject is not aware. Or we could always fall back on Delboeuf's and Bernheim's explanation: it could be that subjects occasionally remind themselves of the suggestion and then immediately forget it. By 1890, Delboeuf believed that hypnotic amnesia consisted of either "a voluntary amnesia or an amnesia by inertia" (*Magnétisme,* 328).[30] In other words, the subject either chooses not to remember or simply does not try to remember. It is by no means inconceivable, then, that a subject could "honestly" claim never to have remembered the post-hypnotic suggestion while having in fact previously remembered it.

As we saw in chapter 3, Bernheim presented two subjects who admitted that they had remembered their post-hypnotic suggestions after claiming they had not. And, indeed, Janet believed that such a claim was impossible: "If we seriously examine the mind of a subject in all the moments that precede the execution of the [post-hypnotic] suggestion, we will not find a single instant in which he truly remembered it" (*Automatisme,* 252). Janet thus insisted on a special class of hypnotic subjects who never remembered their post-hypnotic suggestions.

A choice now presents itself. Either we accept the subject's testimony at face value and assume the existence of a second consciousness of which the subject is not aware or we indefinitely suspend our acceptance of dissociation in favour of the hypothesis of simulated amnesia. Given that we can never rule out the possibility of the

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[30] "Pour moi, c'est un oubli volontaire ou bien un oubli par inertie."

most subtle simulation, it would seem unwise to accept the concept of dissociation as true.

I hope to illustrate this point with a little-known debate over an unexpected consequence of certain post-hypnotic suggestions. It began with some remarks by Beaunis on hypnosis and free will:[31]

> "A feature of acts performed at some time after the suggestion is that the initiative for their execution, at the instant it appears to the mind, seems to the subject to come from his own initiative, when in fact, under the influence of the resolution we put in him, *he performs the task with the fatality of a falling rock* and not with that thoughtful and contained manner by which we carry out all our rational actions." These words of Dr. Liébault brilliantly characterise the state of the will in provoked somnambulism. I can say to a hypnotic subject during his sleep: "In ten days you will do such-and-such a thing at such-and-such a time," and write this command on a dated and sealed sheet of paper. Upon the fixed day and the set hour, the act is accomplished and the subject executes word for word everything that had been suggested to him; he executes it *convinced that he is free, that he is acting this way because he wishes it and that he could have acted otherwise.* And yet if I make him open the sealed envelope, in it he will find the act he has just executed foretold ten days in advance. *We may therefore believe ourselves free without actually being free.* Upon what basis then can we found the testimony of our own consciousness, and this testimony, are we not justified in impugning it since it can deceive us thus? And what becomes of the argument, in favour of free will, that draws upon the sentiment that we have of our freedom?[32]

With this extraordinary statement, Beaunis struck a deep chord in Delboeuf that sent him flying to the rescue of his beloved and uncompromising belief in freedom (Veille, 281-285). "I believe in freedom," he once wrote, "– and not only the freedom of man, but the freedom of all sensate beings."[33] To Delboeuf's mind, the long passage cited above contained a factual error and a sophism.[34]

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[31] H. Beaunis, "L'expérimentation en psychologie," 113-117. The article is reproduced in Beaunis, *Recherches expérimentales*.

[32] Beaunis, "L'expérimentation en psychologie," 113. Beaunis's quotation is taken from Liébeault, *Du sommeil et des états analogues*, 525-526. Beaunis's emphasis.

[33] Delboeuf, "Déterminisme et liberté," 624. The statement is followed by:

> My conviction is founded as much on the faculty of reasoning as on inner sentiment. Sensitivity implies intelligence and freedom. It is incomprehensible to think of the faculty of pleasure and pain as not connected to the power to pursue one and flee the other and, moreover, this pursuit and flight are only possible if the sensing being can untangle from whence these causes of pleasure and pain originate (624).

[34] Delboeuf's critique included a third error – a contradiction – which he had detected in a subsequent

The factual error: Delboeuf claimed that his subjects never felt free when under the command of a suggestion. Subject J., he wrote, "feels as though she was being punished, as though she were condemned to do forced work; it's as though she had to atone for a grave offence" (Veille, 283). "For M. the command takes on the character of a strict obligation, of an imperious duty, even when her instinct or her conscience call for rebellion" (Veille, 284). He noted, moreover, that his subjects disliked long term post-hypnotic suggestions the most. He was never successful in getting them to accept the suggestion that their post-hypnotic suggestions would be pleasurable. He found that they usually accepted what appeared to be more difficult and even painful suggestions long before they consented to performing a post-hypnotic suggestion. They told him that they experienced an "indefinable anxiety" many hours before its execution (Veille, 284).[35]

In his reply to Delboeuf, Beaunis continued to uphold his factual claim "that the somnambule *believes himself free* when he executes the suggested act."[36] But against this Delboeuf pointed out that even Beaunis's subjects, as described in his book, did not regard themselves as free when they performed their hypnotic acts:

> Examples: Miss A. E. steals a silver spoon by suggestion. A dialogue takes place between [Beaunis] and her: "What did you do earlier? – I stole a silver spoon. – Why? – *I don't know.* – Do you know that it is very bad? – I could not do otherwise, it isn't my fault, I was pushed to" (p. 82). Miss H. A., who witnessed this scene, defies the experimenter to force her to commit a similar theft. The challenge is accepted. The subject takes the spoon. Dialogue: "What did you do a moment ago? – I stole a silver spoon. – Why? I could not do otherwise (p. 83).[37] [...] Are these then subjects who are *convinced that they are free?*[38]

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passage that I do no reproduce. This third error is really only a derivative of the sophism and need not concern us here.

[35] Perhaps the same anxiety that might be felt if one did not wish to miss an important appointment, as noted by Delboeuf in "Sur les suggestions à date fixe," 514. See the very end of chapter 3.

[36] Beaunis "Lettre au directeur," 444. Signed March 7 1887.

[37] Delboeuf, "Lettre au directeur," 549-550. Delboeuf took his quotations from Beaunis's *Recherches expérimentales.*

[38] Delboeuf, "Lettre au directeur," 550; his emphasis.

Delboeuf never let up. In *Magnétisme animal* he described a hypnotic experiment in which he forbade a subject to remember her name and then the number 7. Unable to complete the sequence of numbers, her frustration mounted to the point where Delboeuf was forced to wake her. "She is angry *with herself,*" he wrote,

> because her will is paralysed; because, though she knows how to write 7 and wants to, she cannot. This powerlessness fills her with anguish.
>
> I take this opportunity to remark that the subject here did not believe herself free, and even rebelled against the imposed constraint. It is the opposite of what M. Beaunis maintains (*Magnétisme,* 268; his emphasis).

The sophism: Let us suppose for the sake of Beaunis's argument, Delboeuf continued, that hypnotised subjects believe themselves to be free acting without actually being free. "He concludes that belief in freedom does not prove free will and that consequently, it is possible, probable, certain even, that we are fatally guided without knowing it" (Veille, 284). This, Delboeuf charged, constitutes a sophism for the following reason: "On what may we base a distinction between believing oneself free and believing oneself free without being free, since both these terms are to us identical and both come down to believing oneself free without being free" (Veille, 284)? By sophism, Delboeuf seemed to mean an argument that is apparently valid but is in fact not. A somnambule who believes himself free without actually being free would undermine our sense of free will since we ourselves think we are free but could actually be exactly like the somnambule and not in reality be free. The error is in relying upon a difference between this type of somnambule and ourselves that enables us to observe the phenomenon in the somnambule in the first place. But if this type of somnambule only differs from us in thinking himself free without being free, this distinction is inadmissible because we ourselves could be such somnambules without knowing it. Beaunis's argument assumes a difference in freedom between ourselves and these somnambules and then claims that our own freedom is undermined by the fact that there

is no difference between ourselves and these somnambules, between thinking oneself free and thinking oneself free without being free.

Beaunis replied that he had not made as strong a claim against free will as Delboeuf would have his readers believe. After quoting the last three sentences of his long passage quoted above, Beaunis replied:

> Now here is what M. Delboeuf says about this passage. "[M. Beaunis] concludes that belief in freedom does not prove free will, and that, consequently, it is possible, *probable, certain even,* that we are fatally guided without knowing it." But the words *probable* and *certain,* that I have underlined and that would constitute the sophism, are two too many. I never said such a thing and I defy my contradictor to find, in the passage that he cites, the conclusions he has drawn. The sophism exists only in M. Delboeuf's sentence and imagination; he made it up to give himself the pleasure of combating it.[39]

"M. Beaunis here repeats his error," Delboeuf counter-replied:

> If on the question of freedom *we cannot rely upon the testimony of consciousness, and if we are entitled to impugn it, if the argument, in favour of free will, that draws upon the sense that we have of our freedom, should collapse,* it is not only *possible* or *probable* but – we may state it without fear – it is *certain* that we are fatally guided *without knowing it.* M. Beaunis defies me to find this conclusion in the cited passage; he accepts *possible*, but rejects with indignation *probable* and *certain.*
>
> [I] did not believe I was putting false words in his mouth. What he states means that or it means nothing at all. One cannot be a halfway determinist.[40]

Determined not to be misunderstood, Delboeuf reiterated his argument with augmented clarity two paragraphs later:

> "How, if we ourselves are not free while yet believing that we are, can we establish a distinction between the somnambules and us, and see this illusion as a characteristic sign of somnambulism?"
>
> To ask this question, was it to attribute to M. Beaunis an opinion that was not his own? From the moment he puts his own freedom in doubt, am I not entitled to ask him quite frankly, without any ill intention, I swear, what difference he can find – from this point of view, naturally – between a somnambule and him? I have no other crime on my conscience.[41]

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[39] H. Beaunis "Lettre au directeur," 444-445.
[40] Delboeuf, "Lettre au directeur," 550; his emphasis.
[41] Delboeuf, "Lettre au directeur," 550-51.

Let us now consider the consequences of Delboeuf's analysis for the concept of dissociation. Having a second simultaneous consciousness count 13 days without the main consciousness knowing it is identical to the condition of someone who believes himself free without actually being free. This is dissociation – believing oneself free without actually being free. The *sophism in dissociation* then is this: if we admit the possibility of dissociation, how do we know that we are not ourselves dissociated without knowing it? A dissociated person is someone who believes he is free without being free. But if this condition applies in one case, it applies in all cases, since there is no way of distinguishing between someone who thinks she is free and someone who thinks she is free without being free. There can be no dissociation without this distinction, however. Dissociation describes someone who has been hypnotised into performing actions that require the conscious exercise of judgment but of which he or she is not aware. Yet again, if this were true, how do we know that we are not ourselves so hypnotised? If we cannot establish a distinction between someone in a normal state and someone in a dissociated state, we cannot accept the concept of dissociation which depends upon this possibility of a logical difference between the non-dissociated hypnotist and the dissociated subject.

How was such a mistake possible? The mistake began with the uncritical acceptance of the problem of post-hypnotic suggestion as a real problem in itself. The problem and its solution – dissociation – are only valid if we assume that the subject is not simulating. But this is an impossible condition. In the case of post-hypnotic suggestion, there is no empirical way of ever ruling out the possiblity of simulation.

Incidentally, Delboeuf's critique does not apply to multiple personality, for people may behave like different people at different times without directing their attention to what they are doing. Having or behaving as though one has *alternating* personalities or consciousnesses does not imply the existence of *simultaneous* personalities or consciousnesses.

How did Pierre Janet react to Delboeuf's analysis? Part of the answer has already been given in chapter 4. In his first publication after the debate, Janet proposed his classification of three different types of post-hypnotic suggestion (Inconscients, 240-241).[42] The third type, upon which his whole theory depended, consisted of so-called unconscious acts that the subject performed while awake. It is here also that Janet criticised Delboeuf (without referring to him directly) and other authors for failing to notice the different ways in which post-hypnotic suggestions were carried out. "Later observers," he stated,

> "made generalisations based on a small number of subjects, hastily affirming that all suggestions were executed in the same manner. Some affirmed that once awake, the subject is in an absolutely normal state and that he executes the imposed act with full consciousness and deliberation. Remarks were even made on this matter regarding the illusion of free will" (Inconscients, 240).

This last dismissive remark shows that Janet had read the debate and had been unwilling to understand the implications of Delboeuf's analysis.[43] But he understood them enough to immediately present facts that appeared to contradict Delboeuf's conclusions. He desperately insisted, for instance, that Lucie performed suggestions of which she was completely unaware. "Not only does L. not recall the performed act," he stated, "but she ignores and denies performing it if she is questioned at the moment that she performs it" (Inconscients, 241). He moreover claimed to have replicated with two

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[42] The debate was published in 1887, in volume 23 of the *Revue Philosophique*. Janet's next article appeared in volume 25, in March 1888. The delay between submission and publication in the *Revue philosophiqe* tended to be no longer than five months.

[43] In a related vein, Pierre Janet confronted Bernheim on the subject of psychological determinism at the *Congrès international de l'hypnotisme expérimental et thérapeutique* in Paris, August 8-12, 1889. Janet wrote:

> I place myself solely in the perspective of psychology and I believe that even on this terrain, M. Bernheim has put forward dangerous views that would result in the suppression of any kind of causality. As for me, I do not hesitate to affirm that his interpretations are also anti-psychological, because psychology like physiology has laws that suggestion is incapable of bending.

This statement is from the discussion that followed Bernheim's presentation of "Valeur relative des divers procédés destinés à provoquer l'hypnose," 144-149, 148. For an overview of the highlights of the congress, including the above exchange, see Duyckaerts, "1889: Un congrès houleux sur l'hypnotisme."

other subjects, B. and N., just about every such type of experiment performed with Lucie, and to have obtained the same results (Inconscients, 242). And on and on he went, year after year, maintaining his theory.[44]

Janet simply did his best to ignore Delboeuf. I have covered only a fraction of Delboeuf's thought, but it should be clear by now that his work had very important consequences for Janet's own work. Yet of all the major writers that Janet cites, Delboeuf appears the least frequently; and of all the people he alluded to between the lines, Delboeuf haunts his pages the most.

Paul Janet

Paul Janet's *Principles of Metaphysics and Psychology* contains a fairly long and careful critique of his nephew's dissertation.[45] In deference to his nephew he did not condemn dissociation outright, but he made it clear that he would to his dying day never accept it as true. When presented with the apparent fact of dissociation, he wrote, "must we abandon even here, that so solid doctrine of the unity of consciousness, without which everything vanishes into universal illusion?"[46] He did not develop this ambitious argument, however, but concentrated on using Occam's razor instead. Would it not be easier to accept, he argued, that the consciousnesses are only apparently simultaneous and are rather the work of a single unified consciousness? "In certain cases, the two selves overlap," he noted:

> "Do you hear me? – No. – But you do hear me, since you answer me. – That is true. – Who hears me? – Other than Lucie." We see that the subject is conscious of hearing at the very moment she believes that she does not hear. [...] At any rate, it will always be simpler to admit that it is the same consciousness that combines the two, than to admit the creation *ex nihilo* [out of nothing] of a new consciousness.[47]

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[44] Up until at least 1898, Janet continued to build upon the general psychological theory he advanced in the late 1880s. See especially, "Etude sur un cas d'aboulie et d'idées fixes;" "Quelques définitions récentes de l'hystérie;" "Histoire d'une idée fixe;" and *Névroses et idées fixes.*

[45] Paul Janet, *Principes de métaphysique et de psychologie,* 556-572. The critique entitled "L'automatisme psychologique. M. Pierre Janet" is included in an appendix entitled "Études critiques."

[46] Paul Janet, *Principes de métaphysique,* 570.

[47] Paul Janet, *Principes de métaphysique,* 571-572.

It is a "rather desperate solution," he wrote in the preceding paragraph,

> to conjure a consciousness from nothingness as soon as one is needed to explain the formation of a new self [*moi*]. Is this not to call upon the ultra-transcendent to account for natural facts? Would it not be wiser to simply attempt to get by with the original consciousness?[48]

One hundred years on, the historian and psychologist Allan Gauld came to much the same conclusion. In a detailed critique of dissociation, he demonstrated how the concept complicates theoretical matters much more than it simplifies them and urged that we be extremely cautious about accepting evidence for secondary streams of consciousness.[49] But while he criticised dissociation for its implausibility, he nevertheless admited that he "can see no reason for arguing that the concept of a secondary stream of consciousness, or second 'apperceptive centre', is incoherent or totally without instantiation."[50] Delboeuf's critique will provide us with a conclusive reason for arguing just that.

Traumatic memories

In chapter 2, I showed how the very idea of traumatic memory was derived from the concept of dissociation, which itself was first proposed as a solution to the problem of post-hypnotic suggestion. And though this idea of traumatic memory would not have been possible without the physio-psychological groundwork laid by Charcot, even Charcot's notions of traumatic paralysis and incubation were patterned after experiments in post-hypnotic suggestion. Having demonstrated the intrinsic absurdity of the concept of dissociation, we may at once dispense with the idea of dissociated, repressed or traumatic memories. The notion that there are memories of which we are not aware acting injuriously upon our well-being is as fallacious as the concept upon

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[48] Paul Janet, *Principes de métaphysique,* 571. See Janet, "Inconscients," 589.
[49] Gauld, *History of Hypnotism,* 591-595.
[50] Gauld, *History of Hypnotism,* 595.

which it was founded. It is this false doctrine that facilitated the recent epidemic of confabulated memories.[51] This is not to say that people do not suffer from traumatic experiences that haunt them. It is rather to categorically affirm, once and for all, that we are not haunted by memories we know nothing of.

Consider for example the following case, described by Delboeuf, of a woman tormented by the memory of her son's death:

> Here is a poor mother. Her room is contiguous with the room of her sick and condemned son. One day, around six in the morning, as she slept, she thought she heard his cry: Mother! [*Maman!*] Half awake, she supposes that she has been dreaming and falls back to sleep. One half-hour later, she enters, as usual, the room of her son and finds him sprawled on the ground, dead and bathing in his own coughed up blood. At this sight, her mind begins to stray, she is assailed with remorse, and since this day, a cry rings unceasingly in her ears: *Maman!* She ends up shouting it herself, at her home, among family and among strangers, in the street, in the train, at every moment the bloody image of her son appears before her and the cry *Maman!* bursts from her chest.
>
> She is brought to me. She is put to sleep [...] in a few moments. By my voice, the vision pales, fades, and dies away. I defy her to see it. I go so far as to retell the dramatic description of the scene. It is over, no more bloody phantom suddenly appearing without warning, no more scream; the patient can smile (*Magnétisme,* 309).[52]

This woman is without question traumatised by the death of her son – but not by the memory itself. And it hardly needs mentioning that she is tormented not by a memory which she cannot remember but one which she cannot help remembering.

Delboeuf may well to some degree have been influenced by Charcot's theory of traumatic paralysis,[53] but he does not subscribe to unconscious incubation and dissociation. As mentioned at the beginning of the second section of this chapter, Delboeuf believed that "each of us, caught at a certain moment of the day, between waking and sleeping, presents the highest degree of suggestibility" (*Magnétisme,* 332).

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[51] See Leys, "Traumatic Cures," for a psychoanalytically inspired critique of the work of Janet and of the trauma therapy movement.

[52] She did fall prey again to her obssessive thoughts. It required a few more sessions punctuated by intervals of several weeks before Delboeuf could claim a definite cure (*Magnétisme,* 309-310).

[53] See, for example, Borch-Jacobsen, *Souvenirs d'Anna O,* 64-65.

Magnetism, he said, is the knack of sustaining this state. "My observations carry me even further," he then added.

> They tend to make me believe that many nervous states or mental illnesses originate in a natural suggestion that acted at that special moment. Recall the mother whose sad story I narrated above. We may henceforth explain how the magnetist aids in producing a cure. He puts the subject back into the state in which the sickness manifested itself and combats, by verbal command, that same, though revived, sickness (*Magnétisme,* 332).

It may surprise some readers that Delboeuf should implicitly endorse hypnosis while arguing that subjects "are only pretending" to have negative hallucinations and the like (Sur l'explication, 202-203). This apparent inconsistency will untangle itself as we examine Delboeuf's final take on the nature of hypnosis. In the next chapter, where I discuss his position on whether or not a hypnotic subject can be made to perform a criminal act, I shall continue to explore the problem of simulation. The remainder of this chapter examines hypnosis from the point of view of therapy. It is essentially a summary of Delboeuf's last two major papers on hypnosis and its curative effects which are listed among the abbreviated works in the bibliography.

The art of hypnosis

Hypnosis, for Delboeuf, is the art of persuading subjects that they can do things they thought they could not or that they cannot do things they thought they could (Considérations, 202). This may seem odd in the case of simple commands like: "Hold your arm up in the air;" no one doubts this is something they can do. But the art of hypnosis lies in persuading subjects that they cannot lower their arms unless the hypnotist commands them to. Delboeuf held that this art could not be taught and that good hypnotists were very rare. "Upon what then does this faculty depend?" he wrote (Considérations, 210).

> Perhaps upon a particular form of sensibility. When I am in the presence of a patient, I feel his illness quite deeply; if he suffers, I share his suffering; if he cries, I cry with him. There is thus between him and me a kind of communion. From this sympathy, which produces the effect that when I speak to him I speak as it were to myself, does it not result that, when he hears me, he thinks he is hearing his own words? Is not compassion the secret of those who are successful in relieving the sufferings of their fellowmen?
>
> If this way of seeing things contains some truth, it would follow that the patient in a way also hypnotises the agent (Considérations, 210).

According to Delboeuf, hypnosis is in large part a relationship between experimenter and subject. If this were true, we could not hope, then, to ever define hypnosis by some physiological state of the subject. It would also mean that hypnotic sleep (or trance) is itself a secondary as opposed to a necessary component of hypnosis. Let us consider a few key examples that Delboeuf presented in favour of this point of view.

Example 1:

Delboeuf was consulted by a very high-ranking civil servant and his doctor. The administrator told him straight away that nothing could help, and that he had come merely to show his doctor that his case was hopeless. He had suffered from nervousness during the past twenty years. He could not sit still, he had fits of unwarranted impatience and anger, and he could now no longer sleep. He had been to all the experts and had taken all the nerve-calming drugs. He had tried various spas and sea baths. As a last resort, he had even tried hypnotism which had temporarily succeeded only in worsening his state. His doctor had told him that Delboeuf could help him where others could not, but he warned both men that, as far as his illness was concerned, he believed in neither Delboeuf nor hypnotism (Considérations, 202-203).

Delboeuf then did something that surprised the man: he pierced the arm of one of his subjects with a long needle, without her displaying "the least sign of pain or even sensibility" (Considérations, 203). How had they attempted to hypnotise him?

Delboeuf asked the man. By oxyhydric light and a shiny object [*brillant de Braid*] "I am not surprised," Delboeuf told him,

> "that they did not succeed with you. They did not realise that they were dealing with a man of high intelligence on whom such vulgar methods cannot take hold [...] With a man like you, of your position, of your education, accustomed to serious matters, it would have sufficed to call upon your will. It is clear that, when you want to, you have a will of steel, and I will prove it to you. You saw this young girl allow herself to be pierced through the arm without flinching. You are capable of doing as much and more. Give me your arm; look at me fixedly while showing me by your gaze that you wish to feel nothing, and you will feel nothing." He did so; I pierced his arm: he felt nothing or, which amounts to the same thing, felt no pain. He thought that his arm had not been pierced. He was stupefied to see that it was. He made me redo the experiment; it succeeded as the first one had. He could not get over his astonishment; he wanted to return with the needles to show them at home. And so I told him these simple words: "You have will when it comes to administration, your subordinates or your immediate circle, but you have none when it comes to yourself. I have just proven to you that you are capable, of not only overcoming, but of defeating pain to the point of not even feeling it. This will, of which today you have the proof, you will from this very moment apply to control your impatience, to dominate your agitation and to curb your anger. [...]"
>
> "That is what I shall do," was his answer (Considérations, 203).

He consulted Delboeuf six months later to quit smoking.

Notice that this man was not put into a hypnotic sleep or trance or into any state whatsoever. He was simply convinced that he would feel no pain and he felt no pain. "Is this hypnotism?" Delboeuf wrote. "Yes and no. Yes, if by hypnotism we mean suggestion or what we would have formerly called persuasion by exhortation. No, if we want to see something other than the normal exercise of the will on the passions" (Considérations, 204).

Example 2:

An 80-year-old man had suffered during the past 15 or 20 years from a terrible facial neuralgia. One could not so much as touch his bushy beard without causing him excruciating pain; a mere breeze was painful. He was unable to sleep or eat properly. Most of his teeth had been removed in unsuccessful attempts to extirpate the source of

the pain. Finally, one of his major facial nerves had been sectioned, to no avail, leaving half his face paralysed. He asked Delboeuf if he would hypnotise him. He knew nothing of hypnotism except stories of miraculous cures (Comme quoi, 131-132; Considérations, 204).

"See this man, doctor," Delboeuf said to his colleague, "all his pains will cease." Then looking straight at him, he grabbed hold of his beard and tugged violently while repeating to him that he would not feel any pain, then or ever after – and no pain was felt, then or ever after (Comme quoi, 132; Considérations, 204).

Delboeuf noted that it was the man himself who had suggested away the pain. It was an ability that he possessed but did not know he possessed, and believed that it was actually Delboeuf and not himself who had been responsible for removing the pain. "His faith in my mysterious power," Delboeuf wrote, "was an adjuvant[54] which I used and which I was right to use. With the high-ranking civil servant, I would have been mistaken if I had attempted to rely upon a faith that he did not have" (Considérations, 204).

"Here now is a man who cannot quit smoking, a child who bites his nails, and another who soils himself. It is clear," he continued,

> that they could correct themselves if they so willed; but they do not know how to will. I put them back to sleep or, more exactly, I make them believe that they are sleeping. I thus give them palpable proof of the power which they think I somehow naturally possess. Then I render them unable to smoke, to bite their nails, or soil themselves. Here again, I awakened, in all three, the will that had been up until then inactive; only, they are not conscious of willing; they imagine, not that I make them will, but that I will in their place. I began by seizing their imagination, and from then on, for them, everything that is in them comes from me, and there is nothing that I cannot put in them (Considérations, 204).

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[54] "Adjuvant" is a medical term of both French and English meaning "something that aids in the prevention and cure of disease, especially something added to the main ingredient of a medication or prescription."

Delboeuf wrote that there is absolutely nothing in hypnosis that goes beyond everyday psychology. His role, in another case not unlike those I describe above, "was one of support. And my strength was the confidence, the faith that the subject had in me" (Considérations, 209).

Having related such cases to Bernheim while passing through Nancy in May 1890, Delboeuf declared: "So do you see now that there is no hypnotism?" "Certainly," Bernheim answered, "there is no hypnotism, there are but varying degrees of suggestibility" (Comme quoi, 133). Bernheim's phrase, however, does not quite capture what Delboeuf means, for the suggestibility of which Bernheim spoke refers to the brains's ability to enter into a special state of "nervous concentration", in other words, an organically determined state of mind.[55] Delboeuf accepted Bernheim's statement, but with a small though important modification. "There is no hypnotism," Delboeuf repeated, "there are but varying degrees *and modes* of suggestibility" (Comme quoi, 135). There are different modes of suggestibility because there are different ways of persuading the subject of the efficacy of the suggestion. Hence the different forms of persuasion that Delboeuf used with the civil servant and the elderly man. For Delboeuf, the subject's heightened suggestibility is not the cause but the effect, as it were, of the hypnotist's power of persuasion.

Delboeuf spent a short time in Nancy observing Bernheim practise hypnosis at the university hospital. He wrote up his observations and reflections in a paper first published in January 1889 in the *Revue de Belgique* and again in 1890 as a long section titled "La clinique de Bernheim" in *Magnétisme animal* (277-338). His account showed Bernheim to be a master hypnotist who rapidly adjusted and tailored his approach to fit the peculiar ways by which each patient accepted his hypnotic suggestions. Delboeuf praised Bernheim's method but not his theory. As Borch-

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[55] Bernheim, "Souvenirs latents," 100-103.

Jacobsen points out, Bernheim's speculative theories were wrong but the way in which he practiced hypnosis was obviously not.[56]

Delboeuf disliked the term hypnotism because it connoted sleep which, as he showed, was hardly necessary for hypnotism to succeed. Subjects who are refractory to sleep, he noted, are misled by the term into believing that they are also refractory to hypnosis. He preferred the term "animal magnetism" because it had the benefit of being historical. "I see no advantage in changing," he wrote, "by pretext of scientific precision, the names established by history. Have we not conserved the words algebra, chemistry, electricity, optics, physiology, anatomy, etc., that, etymologically, have little relation to the sciences they describe?" (Considérations, 201) Though he did add, a few pages later, that "from the point of view of scientific exactness, the term psychotherapy, or, better still, psychodynamic, is much preferable" (Considérations, 209).

Delboeuf thus offered strong evidence against the view that hypnosis was a special physiological state. But we must yet consider an important argument in favour of the state theory. Can hypnotic subjects be made to do things that offend their deepest sensibilities? Can they be hypnotised into committing criminal acts, for instance? If so, it would seem to indicate that the subject was being *controlled* like a machine rather than *persuaded* like a thinking being. To use a metaphor of the time, the hypnotic subject would be unable to resist performing a criminal suggestion through a similar neurological mechanism by which she is unable to resist performing the patellar knee reflex. The possibility of criminal suggestions under hypnosis was the subject of a lively debate between Delboeuf and his principal opponent, Jules Liégeois. My next chapter examines this debate and Delboeuf's participation in it.

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[56] Borch-Jacobsen, "L'effet Bernheim," 152.

CHAPTER SIX

Delboeuf on the Problem of Criminal Suggestions

The problem of criminal suggestions is intimately related to the problem of post-hypnotic suggestion. If the hypnotic subject is truly an automaton at the hypnotist's command, then the post-hypnotic suggestion of a criminal act is a dangerous possibility indeed.[1]

Jules Liégeois detonated the debate over the possibility of criminal suggestion in a presentation entitled "On hypnotic suggestion in its relations to civil and criminal law" to the *Académie des sciences morales et politiques* on 5 and 9 April 1884.[2] He presented hypnotic experiments in which subjects had obeyed criminal suggestions and urged that existing laws be revised to protect hypnotic subjects from being blamed for crimes engineered by unscrupulous hypnotists. It was none other than Paul Janet who recommended the paper to the *Académie*.[3] Janet nonetheless wrote a severe critique of Liégeois's paper which appeared alongside it in the *Académie*'s journal. This critique happened to be an early version of the very paper, published later that year in July and August in the *Revue politique et littéraire* that raised the problem of post-hypnotic suggestion.

But Liégeois's most formidable opponent was Delboeuf, whose detailed critique of his colleague's conclusions appeared in the final chapter of *Magnétisme* and,

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[1] Especially if, as in Janet's notion of a "dissociated state", Beaunis's "waking somnambulism" and Liégeois's "*condition prime*", the suggested act appears to the subject as an act of his or her own free will. "It makes one shudder," Delboeuf wrote in *L'hypnotisme et la liberté des représentations publiques*, "but – and it is my reasoned opinion – it is perhaps radically false." And referring to the experiments I discussed in chapters 3 and 5 he added, "they make it quite obvious that the subject knows he is obeying an external command, and if he forgets it upon waking, we need only prompt his memory to have him recall both the nature and the author of the command." Cited in Liégeois, *De la suggestion et du somnambulisme*, 628.

[2] Liégeois, "De la suggestion hypnotique dans ses rapports avec le droit civil et le droit criminel," followed by critiques by: Franck, Arthur Desjardins and Paul Janet. For secondary literature on this debate see Gauld, *History of Hypnotism*, 494-503; Laurence and Perry, *Hypnosis, Will and Memory*; and Plas, "Une chimère médico-légale."

[3] Liégeois, "De la suggestion," 175.

five years later, in similar form in an article which I abbreviate as "Criminelles".[4] I will thus present three of Liégeois's more famous examples and follow with Delboeuf's analysis.

Liégeois's examples

Example 1:

> ...I produced, in Mlle E. an automatism so absolute, a disappearance so complete of all sense of morality, of all freedom, that I made her fire, without batting an eyelid, a pistol at her mother at point blank range. The young criminal seemed as completely awake as the witnesses of this scene, but she was much less moved than they were. And, almost without transition, when her mother reproached her for what she had done and accused her of wanting to kill her, Mlle E. answered, smiling and with much good sense: "I did not kill you, since you are speaking to me!"
>
> Who would then believe that this was only play acting or simulation, and that a girl is playing at deceiving the audience by shooting her mother with a pistol *that she does not know is not loaded*?[5]

Example 2:

> M. N. is 25 years old. [...] He is one of the best "subjects" I have ever seen. He is tall, strong and not in the least bit hysterical. Without having even put him to sleep, I produced in him, by mere suggestion, the phenomena of catalepsy, anaesthesia, illusions of taste, positive and negative hallucinations, etc. [...]
>
> I present N. with a white powder whose nature is unknown to him. I tell him: "Listen very carefully to what I am about to tell you to do. This paper contains arsenic. You will, later on, go to [...] the house of your aunt, Mme M., who is here present. You will obtain a glass of water in which you will empty and carefully dissolve the arsenic. Then you will present the poisoned beverage to your aunt. – Yes, Sir. " That night, I received from Mme. M. the following note: "Mme M. has the honour of informing M. Liégeois that the experiment succeeded perfectly. Her nephew gave her the poison."
>
> As for the criminal, he remembered nothing, and we had much trouble persuading him that he had, in fact, tried to poison his aunt, for whom he has profound affection. The automatism had been complete.[6]

Example 3:

> I equipped myself with a revolver and a few shells. To remove the idea of a mere game from the mind of the hypnotic subject – whom I picked at random among the five or six somnambules that could be found that

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[4] First presented as a public talk to the *Royal Belgium Academy* on 15 December, 1894.
[5] Liégeois, "De la suggestion," 178. His emphasis.
[6] Liégeois, "De la suggestion," 178-179.

> day at M. Liébeault's – I loaded one of the shells and fired it into the garden. A few moments later, I entered and showed to the assistants a piece of cardboard that the bullet had perforated.
>
> In less than fifteen seconds, I suggested to Mme G. the idea of killing M. P. with the pistol. With absolute unconsciousness and perfect docility, Mme G. went to M. P. and fired the revolver.
>
> Interrogated immediately after by M. P., the chief superintendent [of Nancy], she admits her crime with total indifference. She killed M. P. because he did not please her. They may arrest her; she knows what to expect. If they take her life, she will go into the other world, like her victim, that she sees on the ground bathing in his blood. She is asked if it was not me who suggested to her the murder that she had just accomplished. She says no; she acted spontaneously; she alone is guilty; she is resigned to her fate; she will accept, without complaining, the consequences of the act she committed.[7]

Delboeuf on the (im)possibility of criminal suggestion

Delboeuf maintained from the beginning that hypnotic suggestions were only dangerous in cases of indecent assault and fraud, and that money, promises, drunkenness, persuasion, circumvention and confession had always been, and always would be, more effective methods of corruption than hypnosis (*Magnétisme,* 354-355; Criminelles, 229-230, 266).

He maintained that the somnambule is not so easily fooled by his or her dreams as is commonly believed – and neither are we in our own natural dreams, he added. We are rarely moved, he noted, by a shocking scene in our dreams: "There is something inside of us that tells us it is not real" (*Magnétisme,* 355). When Liégeois's subject enacts the murder of her mother, she is obviously not unconscious of playing out a scene. This is why she is not distressed. She is even less distressed, he continued, than if she had actually been dreaming (*Magnétisme,* 355-356; Criminelles, 234).

> The dreamer who would have dreamt of killing his mother would see her terrified and beseeching, imploring the pity of her son or the aid of indignant witnesses. He himself would feel moved by some motive, absurd or plausible, but imperious. In a word, the dream would be a kind of incoherent drama, composed, as always, of real elements and of memories, in which horror would not be banished. Or else, if he saw his victim smiling and speaking to him in the middle of a merely

[7] Liégeois, "De la suggestion," 179-180.

> attentive audience, he would himself doubt, in his own sleep, that what he sees and does is pure illusion (Criminelles, 235).

Delboeuf then supplied a dream of his own. At the beginning of January 1895, he dreamt he had bought a painting of the assumption of a saint that was one metre wide by five or six metres long – and had spent 6000 francs! On his way home he was overcome with regret:

> What have I done! Where will I display this religious subject? Even if I find a place, in the stairwell, for example, what effect will it have with its old black frame and its ungodly size! And the cost at just the moment when bills are pouring in! On these thoughts, I wake up. My heart was pounding; during the rest of the night, that is during several hours, I continued to be under the most painful impressions. Try as I would to feel awake, to reason and be excited of the joy of telling myself that it had been only a dream, the magnitude of my blunder continued to oppress me, and I remained apprehensive of the comments my family would make once they learned of the great bargain I had struck (Criminelles, 235).

Yet Liégeois insisted that Mlle E. did not know that the gun was not loaded. Nonsense! Delboeuf exclaimed. Why should we assume, he argued, that this woman who speaks with such good sense to her mother would not have the sense to know that the whole scene was arranged and that Liégeois would not, after all, give her a loaded gun to fire at her own mother (*Magnétisme*, 356; Criminelles, 236).

Delboeuf cited the case, described in the previous chapter, of the boy who was able to pick out a designated student by the way he held himself in contrast to the rest of the class. Delboeuf pointed out that this instance showed how hypnosis can "awaken one's intelligence rather than depress it" (Criminelles, 236-237).

He made similar remarks regarding the experiment where M. N. attempted to poison his aunt. The order to make his way to his aunt's house, to obtain a glass of water from someplace, to find his aunt and present her with the poisoned drink, contained the implicit order to circumvent the inevitable small obstacles that would obstruct the smooth execution of the suggestion. But if he preserved enough reason and freedom to carry out the suggestion to the end, would he not therefore have the

presence of mind to reflect on the situation and to realise that it was all just a game (Criminelles, 238, also 230 and 266)?

The same applies to the third example, Delboeuf continued:

> The more I now reflect on these experiments, the less they seem to establish what they are supposed to prove. The perfect tranquillity of Mme G., her generosity at not accusing M. Liégeois, the humorous motive with which she justified her act, her resignation to the fate that awaits her, patently show, I dare say, that she is not duped and that she could not for an instant have thought of killing M. P. She consciously plays a role that she improvises in part, that in part she makes up from bits learned by heart, and in which she intermingles features in her own way, juvenile features, such as the statement that her victim displeased her (Criminelles, 239).

Delboeuf put little stock, moreover, in the claim that she saw her victim bathing in blood. Her own serenity is proof that she is not fooled by her illusion, he remarked. And there are many more facts that prove hypnotic subjects are not so easily duped (Criminelles, 239). "When, in our dreams," he wrote in 1890, "we see a man-gun, or a dog-boat, we are not the dupes, but the complicit [*complaisants*] instruments of our own dupery" (*Magnétisme,* 356).

On this point, Delboeuf related the case of a very intelligent young woman – and excellent somnambule, he noted – who described her hypnotic hallucinations in a letter to a woman friend. The hallucinations consisted of a picture on the back of a blank card and of a bird or butterfly in the room. Here are some excerpts from the letter, which was at first written without Delboeuf's knowledge:

> We could be led to believe that this image, as firmly fixed as it is, gives me the perfect illusion of a photograph with which I could possibly confuse it. Wrong! *I am fully aware* that the sheet of paper that is presented to me *is and remains immaculate,* and that *I am merely obeying a command* by representing the suggested image to myself. I imagine little by little the features that I should see, and when the whole is sufficiently homogeneous to form a complete picture, I fix it, so to speak, upon the paper that I am given, and it is this same illusion that I find each time this sheet of paper appears before my eyes. The imagination and the mind fixes the image upon the white paper, and each of them finds it there.
>
> It is the same with those hallucinations in which the experimenter suggests the idea of representing some object, for example a pigeon or a butterfly in the room. Though I saw them distinctly, to the

> point of being able to follow their flight and their smallest movements, *I never for an instant doubted that the impression was purely imaginary,* though this hardly prevented me, upon waking, from remembering the tiniest perceived details, such as the colours that I had attributed to the designated bird or insect. In a word, if we dupe, in a certain sense, the subject by making him enter for a few moments into the realm of dreams and imagination, he is nonetheless perfectly conscious of the influence to which he is subjected...(*Magnétisme,* 356-357).[8]

This letter prompted Delboeuf to ask J., his prized subject and maid, how she saw him when he suggested to her that he had a full head of hair and a black beard. She said that she saw him as such, but that in a strange way, "behind the young head, I see a bald head and white beard, but sort of erased" (*Magnétisme,* 358). Delboeuf qualified her answer as typical. These examples seemed to confirm his theory "on the hypnagogic character of somnambulic dreams. The somnambule's illusions," he concluded,

> would be analogous to those which are produced at the beginning and at the end of sleep or, better still, in the sleep in which many people indulge themselves in the middle of the day. They hear almost everything, are in a certain sense aware of everything, but the dreams float in front of reality, in part masking and denaturing it (*Magnétisme,* 359).

They also seemed to confirm his view that hypnotic hallucinations rarely have the same force as dreams do. He wrote that he had never seen a somnambule bump into an object she was not supposed to see, but that if the somnambule were told to, he felt sure that he or she would then do so. "Would this be due to illusion or to a desire to please and cooperate [*complaisance*]? I lean in favour of *complaisance*" (*Magnétisme,* 359).

"And when I say *complaisance,* or play acting," he wrote ten pages later, "M. Liégeois and his readers will do me the honour of understanding that this consists in a *complaisance* of a special nature" (*Magnétisme,* 368). When a subject's arm is put into

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[8] I do not know if the emphasis is the subject's or Delboeuf's.

catalepsy and he is told to lower it, he does not make the appropriate movements. He instead pretends to be in catalepsy by exercising the antagonistic muscles.

> It is a simulated catalepsy, and he is the dupe of his own simulation. It is in this sense that I say he lends himself by *complaisance* to playing his catalepsy. This *complaisance* is unconscious; it is he who, without knowing it, wants what we command of him. Hypnotism enhances rather than annihilates the will (*Magnétisme,* 368).

We have thus come back to the idea of unconscious simulation discussed in the previous chapter. The subject does not know that she is simulating, but she *can* know if she becomes alive to what she is doing and reflects upon the situation.

Now here we may ask: "Would it not be possible for a subject to be sufficiently duped by the hypnotic situation to commit a crime?" Delboeuf did not want to deny this possibility. It would violate the principles of scientific reasoning to make such an *a priori* affirmation or denial (*Magnétisme,* 379). He conceded that a somnambulic father could kill his son by mistaking him for a wild beast that is attacking him or that a mother could dream that there is a fire and throw her baby from the window. But these are rare pathological cases, he affirmed, and cases of hypnotic subjects who could be deluded to the point of committing similar acts must be equally rare (*Magnétisme,* 363-364).

A problem of psychology

Having made this qualified concession, Delboeuf then pushed his argumentation to a further level of sophistication. He related an experiment conducted with his subject J., reminding his readers that she had been the subject of an extraordinary experiment on the hypnotic control of pain.[9] This experiment is worth

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[9] Delboeuf, "Expérience devant servir à l'explication de la vertu curative de l'hypnotisme." Delboeuf mentions J. in his debate with Beaunis over the consequences of post-hypnotic suggestion for the argument in favour of free will based upon our sense of feeling free. J. did not feel free, he pointed out, when under the injunction of a post-hypnotic suggestion. See the section on "Dissociation and Freedom" in chapter 5.

mentioning before proceeding with Delboeuf's argument as it is interesting in itself, and shows J. to be an exceptionally suitable subject.

A small burn was inflicted on each of her arms with an 8mm wide red-hot steel rod. Special care was taken to ensure that the burns were symmetrical and resulted from the same pressure and duration. She was told, immediately before cauterisation and without being put under hypnosis, that she would feel no pain in the right arm. She did not feel any pain in her right arm during or after the procedure. The wounds were dressed and examined the next day. The wound to the right arm was very slight: a small mark corresponding to the rod's diameter. The wound to the left arm was more severe: the inflammation covered an area 3cm in diameter. She had experienced a good deal of discomfort overnight and the wound increased in severity until the next day when Delboeuf suggested that the pain would disappear. The wound subsequently healed very rapidly. The experiment was repeated under the supervision of a surgeon and professor of medicine at the University of Liège.

This same subject was also very gifted at accommodating hypnotic hallucinations. Since Delboeuf could make her accept that her head was rolling before her on the floor, or that she was a sofa or whatnot, he believed that he could make her accept any illusion whatsoever. But he was mistaken (*Magnétisme,* 365). He once asked her to tell him, during a kind of telepathy experiment, what her sister was doing in her house in the countryside. She saw nothing. He then told her that her sister was presently mending her husband's trousers. J. answered that she never mended trousers. Delboeuf tried "every imaginable persuasive means" to get her to see her sister mending her husband's trousers but did not succeed. She remembered nothing once awake. He asked her about her sister's habits and discovered that she "always refused to sew because she could not do it very well" (*Magnétisme,* 366). "Now here is a fact, insignificant in appearance," he wrote,

> but one that by its singularity will certainly strike all those who wish to know what goes on in the minds of hypnotised subjects, or, what

> amounts to the same thing, in the minds of sleeping people. Here is a person who saw nothing unnatural in running after her head that is rolling away from her, who was made to believe that she was a boy, that she had a beard, that we had played her the trick of dressing her as a girl while she was sleeping and that she would do well to fetch her men's clothes – which she immediately set out to do – and who deems it impossible that her sister should be mending a pair of trousers (*Magnétisme,* 366)!

Delboeuf made the same observation regarding two young women who refused, under hypnosis, to believe that they were married. "And yet," Delboeuf remarked,

> one of them believes that a doll is her sick child, and the other sees no difference between her small room, almost entirely filled by her small bed, and a large room of more than thirty square meters, filled with books, engravings, statuettes, and a large bed half covered with things (*Magnétisme,* 379).

How to account for these apparently contradictory inclinations to believe some hallucinations and not others? Delboeuf explained that an illusion must have something to which it can attach itself in the subject's mind if it is to be accepted. It was easy for the subject to imagine herself in her room because she saw it every day. It was likewise easy for the other subject to accept the illusion of tending to her baby because she had no doubt played "mommy" countless times. But unless someone has already thought about marriage and "represented herself as married," the illusion of marriage will not take (*Magnétisme,* 380).

As we have seen in chapters three and five, Delboeuf presented an analogous explanation for why hypnotic subjects could not normally remember their hypnotic condition once awake – it is because of the apparent difficulty of establishing a link between the dissimilar hypnotic and waking worlds. This explanation accounts for one of the great myths of hypnosis: hypnotic amnesia. Another great myth is the notion that hypnotic subjects cannot resist their hypnotist's commands. Again, Delboeuf turns to dreams to account for why subjects obey some commands and not others, and

simultaneously dispels the myth that hypnotic subjects will carry out suggestions that offend their deepest sensibilities.

"The problem at hand is a very serious one. It is a problem of psychology" (Criminelles, 263).

> If I now wished to summarise my thought in a word and to conclude, I would say that, for each hypnotic subject, the key to the suggestions that he is capable of accepting is to be found in his dreams, that is to say we could have him perform the acts that, issuing from his character, his education and his habits, are likely to present themselves spontaneously during his sleep (*Magnétisme,* 380).

It would perhaps be safe to assume then that, under suitably persuasive hypnotic conditions, Delboeuf could be made to accept the suggestion to spend an exhorbitant amount of money on the purchase of an unusual piece of art. This would explain why he suffered his attack of anxiety after he dreamt of buying an eccentric and expensive painting: it is because he *knew* that he was capable of commiting such a folly. On the other hand, there are some things he felt certain that he would not do under hypnotic suggestion.

> I feel a great deal of human sympathy for animals, especially for disdained creatures, toads, snakes, slow-worms, salamanders. I am absolutely convinced that, were I magnetised, one would not succeed in having me do them the least harm (Magnétisme, 375).
>
> Could I be made to mistake a snake for a viper, a cricket for a scorpion? Perhaps I would then kill these animals, but not without a violent revolt of my sensibilities. But what a great distance exists between this vulgar and momentary illusion and the complicated system of logical and connected lies that would be needed to transform a somnambule into an *advantageous* intrument of crime (Criminelles, 263-264).

"Not all crimes are of the same sort," Delboeuf concluded,

> It is one thing to render a woman unfaithful, it is another to have her kill her husband. There are crimes of nature, if I may express myself this way: they are those that revolt the sentiments of pity and propriety upon which the existence of our society depends. There are also crimes which are, for lack of a better word, of definition. They are acts, in themselves natural and legitimate, which civil and religious law defines as criminal in certain cases, like the marriage between a brother and sister.
>
> It is clear that a somnambule will in general accept the latter, but not the former (*Magnétisme,* 380).

My next section describes one final point in Delboeuf's study of criminal suggestion that will serve to support the arguments advanced in the next chapter.

The inconclusiveness of laboratory crimes

Delboeuf wished to show that the somnambule is not as passive and does not lack as much freedom as we might at first think. He did not want to affirm, he cautioned, that it is impossible for a subject to divorce herself from reality and to lose her reason and freedom. He wished only to point out that we would need powerful proof to admit such subservience of someone's will to another's (*Magnétisme,* 366-367).

Delboeuf was extremely weary of Liégeois's experiments. "They have the irremediable fault," he wrote, "of being necessarily artificial." Liégeois had many times proposed that they conduct hypnotic experiments together, but Delboeuf had always refused. "Why? Because from the experiment, whether it succeeds or does not succeed, nothing can be concluded. If the subject does not stab, M. Liégeois will reject him as a bad somnambule; if he does stab, I will maintain that he is doing out of playful complicity [*complaisance*] an action he knows is not wrong" (*Magnétisme,* 367).

On the other hand, if the subject actually went through with a real crime, Delboeuf could argue that they were dealing with "a born criminal, a latent thief, or someone unselfconsciously licentious"(Criminelles, 232). "The problem is therefore unresolvable," Delboeuf concluded, because it cannot be settled on the terrain of experimentation (Criminelles, 264-265). "But the question can be breached in a non-experimental way," he advanced. "It can be approached by observation and by the attentive and scrupulous examination of the magnetised subjects's actions." (Criminelles, 266). "If ever reasoning by analogy has been legitimate," he continued further down the page,

> it is when it assures that [a hypnotised subject] who will not slap a person will not stab a person, that [a subject] who refuses a kiss will rebuff more serious advances, and that a wolf will never make a good pastor.
>
> From the facts furnished by observation we may therefore infer that a hypnotised person conserves a sufficient amount of intelligence, reason, and freedom – I emphasise the word – to defend himself from realising acts that are irreconcilable with his character and beliefs (Criminelles, 266).

The impossibility of ever experimentally resolving the question of criminal suggestion is related to the grand question of the existence of hypnosis. It should be clear by now – as it was to Delboeuf over a century ago – that there can be no empirical means of ever verifying whether hypnosis and all the explicitly diagnosed disorders to which we suppose it to be intimately related, like hysteria, multiple personality, dissociative fugue, post-traumatic stress disorder, and so on – are real or not. Writers like Mikkel Borch-Jacobsen should be commended for respecting the inconclusive reality of hypnosis and related phenomena. In his provocative paper, "The Bernheim Effect (fragments of a theory of the generalised artifact)", Borch-Jacobsen, drawing on Bernheim and especially Delboeuf, maintains that we cannot establish a "psychic reality" to hypnosis that might exist outside the experimental context. Citing the work of the psychologists Robert Rosenthal and Martin Orne, he reminds us that much experimental psychology is always unavoidably contaminated by *experimenter expectancy effects* (Rosenthal) or *demand characteristics* (Orne) that unintentionally elicit from its subjects the behaviour that is anticipated of them.[10] "We do not therefore experiment *on* the subject," he points out,

> we play *with* them the game of experimentation: tell me what you wish to establish, and I will help you to prove it. What Bernheim and Delboeuf observed in the widening mirror of hypnosis and hysteria, was a feedback effect found in any experimental or clinical situation, however "controlled" it may be.[11]

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[10] Borch-Jacobsen, "L'effet Bernheim," 165. He refers to Rosenthal, *Experimenter Effects;* and Orne, "On the social psychology of the psychology experiment." Jaqueline Carroy presented similar arguments in *Hypnose, suggestion et psychologie.*

[11] Borch-Jacobsen, "L'effet Bernheim," 166.

> Hypnosis is not "something" that subsists beneath the various theories that attempt to enclose it, it is rather an artifact or effect of these theories.[12]

If we take Borch-Jacobsen and Delboeuf seriously, we have to accept that subjects are in a certain sense always simulating or pretending hypnosis. This is the proposition that the next chapter sets out to establish.

[12] Borch-Jacobsen, "L'effet Bernheim," 167.

CHAPTER SEVEN

On Simulation and Hypnosis

In this chapter, I wish to introduce a theory that leans in favour of simulation without ruling out the hypothesis of non-simulation: I propose the paradoxical idea of hypnosis being at once simulated and real. I plan to show that one becomes hypnotised, or at least comes to believe that one is hypnotised, by first pretending to be hypnotised.

Feynman

Since I am now putting forth my own theory, and not describing or analysing one from the past, I shall exercise the right to cite a prerogative case of my own. It is taken from the autobiography of the Nobel prize-winning physicist, Richard Feynman:

> ...a week before the demonstration the man came to practice on us, to see if any of us would be good for hypnosis. I knew about the phenomenon, but I didn't know what it was like to be hypnotised.
>
> He started to work on me and soon I got into a position where he said, "You can't open your eyes."
>
> I said to myself, "I bet I *could* open my eyes, but I don't want to disturb the situation: Let's see how much further it goes." It was an interesting situation: You're only slightly fogged out, and although you've lost a little bit, you're pretty sure you could open your eyes. But of course, you're not opening your eyes, so in a sense you can't do it.
>
> He went through a lot of stuff and decided that I was pretty good.
>
> When the real demonstration came he had us walk on stage, and he hypnotised us in front of the whole Princeton Graduate College. This time the effect was stronger; I guess I had learned how to become hypnotised. The hypnotist made various demonstrations, having me do things that I couldn't normally do, and at the end he said that after I came out of hypnosis, instead of returning to my seat directly, which was the natural way to go, I would walk all the way around the room and go to my seat from the back.
>
> All through the demonstration I was vaguely aware of what was going on, and cooperating with the things the hypnotist said, but this time I decided, "Damn it, enough is enough! I'm gonna go straight to my seat."
>
> When it was time to get up and go off the stage, I started to walk straight to my seat. But then an annoying feeling came over me: I felt so

uncomfortable that I couldn't continue. I walked all the way around the hall.[1]

Before proceeding with more examples, I wish to emphasise three elements of Feynman's account:

1) the effect of being hypnotised increased with practice;

2) Feynman felt discomfort when he attempted to disobey the hypnotist;

3) he started by believing he was pretending to be hypnotised; he was simulating, or at least that is what he thought he was doing, up until the moment he tried to break the spell.

The very same thing happened in my next example. It is a case narrated by Bernheim in reply to the attack, described in chapter one, of Paul Janet against the credibility of his experiments:

> It was the case of a tall and handsome boy of outstanding intelligence and positive character, the first to be promoted in one of our large schools for superior scientific instruction. Wishing to be enlightened upon the question of hypnotism, he himself asked to be put to sleep, promising to submit in earnest, and without resistance. In less than two minutes his eyes were closed. Once awake, he said he had heard everything, but as he had promised himself to obey without resistance, he had obeyed. "Could you have resisted?" I asked. "When I lifted your arm in the air, could you have lowered it, in spite of my affirmation to the contrary?" – "I think so," he said, "but I am not certain. Once I began to lower my arm (which in fact had been noticeable) but on the way down, a feeling of remorse took hold of me. I raised it saying to myself, no, I should not lower it." Was this the result of a wish to be obliging [*complaisance*]?
>
> The young man did not himself know what to think. Half an hour later he begged me to hypnotise him again, as he was curious, and wished to be enlightened. In less than a minute, he was caught. I lifted his legs and arms. They remained up. Then I said to him, "Now, make the experiment; try to lower your arms and legs. If you can, if you have the will power, use it, but I warn you that you cannot do it." He tried in vain, and in spite of all his visible efforts, did not succeed in modifying the suggested attitude. I made him turn his arms one about the other. "Try to stop them; I say you cannot." In fact, he could not stop this rotary automatism. When he was awakened, he was convinced that there was not only *complaisance*, but also a material impossibility of resisting the suggested action.[2]

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[1] Feynman, *"Surely You're Joking Mr. Feynman!"* 67-68.

[2] Bernheim, "A M. Paul Janet," 554-555. The text is from a reproduction of the article in Bernheim, *Hypnosis and Suggestion in Psychotherapy*, 189-190. I have made a few modifications.

As with Feynman, this subject at first believed he might have been simulating hypnosis. When he attempted to disobey the hypnotist, he felt a feeling of remorse – akin to Feynman's feeling of discomfort? – and found that he could not break himself free from the hypnotist's control.

Bernheim pointed out, furthermore, that this case was not exceptional:

> I have repeated this experiment with a great number of subjects. Charles Richet has described this *singular psychical state* well in analogous examples. Many imagine that they have not been influenced, because they have heard everything. They believe in good faith that they have been pretending. It is sometimes difficult to show them that they were not free to not pretend.[3]

In *Magnétisme*, Delboeuf described Liébeault's attempts to hypnotise a refractory 18 year old woman who had never before been hypnotised. Liébeault began by telling her that she could hear only him and no one else, but she continued to hear the people around her. He commanded her to rotate her hands. She did not know how. He then took hold of her hands and set them turning himself. This worked for a while, but when he told her that she would now be unable to stop, she stopped. Delboeuf later discussed the case with Liébeault, and the Nancy doctor maintained that she had been influenced, adding that to pretend to be hypnotised (as when she rotated her hands for a while on her own) was itself a sign of hypnosis. Liébeault did not mean to say that hypnosis was really a form of pretending, as I am arguing, but rather that she would not pretend unless she were hypnotised. In referring to the subject's sentiment of pretending as a "singular psychic state", the feeling that one is not really hypnotised while apparently hypnotised, Bernheim presumably viewed this feeling of pretending as a form of hypnosis rather than the other way around. Whether we adopt Liébeault's and Bernheim's interpretation or mine, we may at least grant that it is not uncommon to

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[3] Bernheim, "A M. Paul Janet," 555, and *Hypnosis and Suggestion*, 190. My emphasis.

believe oneself to be pretending to be hypnotised while performing hypnotic phenomena.

An objection to my position would be to say that these examples are not true of *all* cases of hypnosis, that very many subjects, do not, at any rate consciously, pretend to be hypnotised. This point merits special attention. I do not wish to say that all hypnotised subjects are deliberately pretending. That is clearly inadmissible. But simulation can be accidental, as we saw in chapter 5, and the above case offers the advantage of confirming the ever-present hypothesis of simulation without, at the same time, denying the mysterious effects of hypnosis. If hypnosis is truly, as Delboeuf says, a question of persuasion, it follows that subjects are not hypnotised in the sense of being in some special externally-altered brain state, but rather that they *believe*, in most cases, that they are hypnotised. To take Delboeuf seriously is to claim that everyone who is hypnotised is, in a sense, *necessarily acting as though* they are hypnotised since there is nothing happening at the physiological level.

What matters in hypnosis, according to Delboeuf, is that both subject and the hypnotist be persuaded that the suggestions will work. As we have seen, the subject's own awareness of the fact that he or she is insensible to pain or partly asleep serves to persuade him or her that hypnosis is real and that the suggestions will really take effect. Similarly, the implicit awareness that there is no discernible difference between pretending to be hypnotised and actually being hypnotised may also serve, if only in an intuitive way, to persuade the subject that hypnosis may very well be real. Say, for example, that you wished to be hypnotised, out of curiosity, and that you went along with everything the hypnotist told you to do in order to obtain the desired effect. You might say to yourself, as Bernheim's subject or Feynman did, that you were only pretending to be hypnotised. And yet at the same time, if you reflected further upon the situation, you would have to admit that by acting as though you were hypnotised you would be behaving no differently from someone who really had been hypnotised. The

grounds for believing that one is pretending to be hypnotised and for believing that one has genuinely been hypnotised are the same.

The sociocognitivist perspective

The theory I have so far outlined shares many elements with the sociocognitive perspective. Here is its champion, the late Nicholas P. Spanos:

> According to this perspective, hypnotic responding is context dependent; it is determined by the willingness of subjects to adopt the hypnotic role, by their understandings of what is expected of them in that role, by their understanding of how role requirements change as the situation unfolds, by how they interpret the complex and sometimes ambiguous communications that constitute hypnotic suggestions, by their willingness and ability to use their imaginal and other cognitive skills to create the subjective experiences called for by suggestions, and by how feedback from the hypnotist and from their own responding influences the definitions they hold of themselves as hypnotic subjects and the interpretations they apply to their hypnotic experiences [...]. Taken together, these ideas constitute a sociocognitive perspective toward hypnotic phenomena that challenges the traditional ideas that hypnosis is a special state and that hypnotic responding involves special processes.[4]

I will briefly consider the role-playing component espoused by the sociocognitivists and take up the cognitive component in the final chapter. The role-playing analogy essentially highlights how the subject is not really hypnotised but only playing the part of someone who is hypnotised, sometimes to the point of becoming so absorbed in the role that he or she is no longer conscious of playing it. In common with this perspective, I have argued, both in this chapter and those leading up to it, that pretending is not only apparent in well-documented cases of hypnosis but that it is perhaps part of the very fabric of hypnosis by virtue of the fact that it can *never* be ruled out. I have also maintained, especially in chapter 5, that a subject can simulate hypnosis without being aware of doing so. But the examples I have presented in this chapter do not permit me to fully endorse the role-playing theory of the sociocognitivists, for it

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[4] Spanos, *Multiple Identities & False Memories*, 19-20.

cannot account for subjects like Feynman who are aware of playing the role of the hypnotised subject but cannot stop playing it even when they try.[5]

It is my feeling that part of the reason subjects cannot resist certain suggestions is because they do not wish to disappoint the hypnotist or the audience. If Feynman had gone directly to his seat rather than walking all the way around the hall as the hypnotist had commanded, would he not have had let both the hypnotist and the audience down? The effect was stronger, Feynman said, when he was hypnotised before an audience. He attributed this to repeated practice, but could it not also be attributed to the implicit pressure of audience expectation? Consider these other examples: Bernheim's subject started to lower his arm, but he raised it again because of a feeling of remorse. When under the spell of a post-hypnotic suggestion, Delboeuf's subject J. felt "like she was being punished, condemned to do forced labour; it's as though she had to atone for a terrible misdeed" (Veille, 283). For Delboeuf's subject M., post-hypnotic suggestions took the form of a "strict obligation, an imperious duty" (Veille, 284). She felt "at fault" when she wished to resist performing them. Delboeuf suggested to another one of his subjects, S., that her hand was glued to the wall. When a third person removed her hand by force she fell into a fit and cried out: "I am being prevented from performing a duty." In an almost identical experiment, subject M. became worried and said: "M. Delboeuf had wished it; what will he say" (*Magnétisme,* 265)? I should add that a power relationship existed between Delboeuf and his subjects J. and M. since they were also his servants. It is then less surprising that they felt obliged to perform the hypnotic tasks as they would a duty, because under the circumstances it *was* a duty, though an elective one. But as far as household chores went, it must have been one of the best, for if we are to believe Delboeuf, the hypnotic scenes they performed together

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[5]Borch-Jacobsen writes that "neither Bernheim, nor even Delboeuf are quite ready to dilute the suggestion scene to a pure game of role-playing (as is done by contemporary experimental psychologists like Sarbin or Spanos.) in "L'effet Bernheim," 158. He refers to Sarbin, "Contributions to Role-Taking Theory: I. Hypnotic Behavior;" and Spanos, "More on the Social Psychology of Hypnotic Responding."

frequently had all of them doubled over in laughter and J. and M. would beg him to dream up more scenarios. They had fun, and they were doubtless bonded by a sense of affection and loyalty.

In chapter 5, I mentioned how Delboeuf believed that one of the secrets to hypnosis was compassion, the ability to feel the suffering of another human being and to enter into a kind of communion. "From this sympathy," he wrote, "which produces the effect that when I speak to him, I speak as it were to myself, does it not result that, when he hears me, he thinks he is hearing his own words?" But perhaps more fundamental than what the subject hears is what the subject *feels*. If the subject feels that Delboeuf believes the suggestion will work, he or she, according to Delboeuf's logic, is likely also to believe that it will work. Once again, we come round to the idea of belief, to the art of persuading subjects that they will be able to do things they thought they could not or to be unable to do things they thought they could. But belief is a very different thing from cognition, it is something we feel rather than know – "*The heart has its reasons of which reason knows nothing*," Pascal famously observed. Drawing upon Pascal's *Pensées*, my two final chapters explore the nature of belief by drawing an analogy between hypnosis and religion.

Montreal

By way of introduction, I will now describe a ritual in which I recently participated that has parallels to hypnosis. In the summer of 1998 I spent an evening with a friend who was about to leave Montreal after having spent three years there. It was his last night in Montreal and I was happy to be with him before he left a city I dearly love. He was someone I did not know very well at the time. Our relationship had been impersonal until then as I had always been intimidated by his intelligence and tended to shy away from him. But I had just returned from a 16 month stay in France where I had been forced to do some growing up and, having now more confidence in

myself, I sought out his friendship. He is about 10 years older than me. He is also an aboriginal Canadian.

Near the beginning of the evening he described a place on the McGill University campus where there stands a 10m high and 200m wide rock wall that had been cut out of Mount Royal, in the centre of the city, to make room for a water reservoir. It is one of the points on the mountain through which its water drains into the St. Lawrence river. In the winter, portions of the wall are covered by great sheets of ice; in the summer, the vegetation at the foot of the cliff is tall and lush. He told me that when the French explorer Jacques Cartier first arrived in Hochelaga (Montreal) in 1535, he found a large village of Iroquois who, at the time, subsisted on crops that they planted in the fertile land through which the water passed in its course to the river. He mentioned something about making an offering of sweet grass, gave me a bundle of tightly woven strands of dried sweet grass and, later that night, we made our way to the foot of the cliff, talking non-stop about everything and anything.

Once there he paused for a moment and, without ceremony, began to speak in a casual but reverent manner toward "someone" in the general area of the wall above us. He spoke of all the good times he had had, of the many things he had learned, of how he had grown during his stay, of his imminent departure for his new life in Vancouver and of how he would miss Montreal and all the things that gave it its special personality. But, he added, he would still like to leave a bit of sweet grass (as a token of thanks) and he tossed his bundle into the foliage that stood between us and the wall. This took less than a minute. Then without altering his respectful stance he turned slightly towards me and gave me a look which I will never forget. When he first began to speak to the indifferent wall I wished him to know that he should not feel embarrassed of talking in front of me to something that we both presumably knew was not there. I wanted him to feel reassured that it was OK with me and that I was ready to participate though I believed none of it. And indeed, he looked over to me in an almost

pleading way that seemed to say: "Don't leave me hanging here like a fool André. Say something and toss the sweet grass. It's no big deal." But by this time I had reached a point well beyond my initial apologetic embarrassment. By this time I actually believed that there were three of us and that this third being was indescribably big and powerful. I was awestruck and, in fact, a little afraid.

Now I went from non-belief to belief in a manner of seconds, but since I did not perform any physical action, the event would seem to argue against the idea that one becomes hypnotised by first pretending to be hypnotised or that one comes to believe in something supernatural by first pretending to believe. However I did pretend to believe in spite of my apparent inaction. When my friend began the ritual, I was intensely concerned about how he might be feeling and what he might be thinking. Putting myself in his shoes, I imagined what he must have felt and thought while performing the ritual with me there. Paraphrasing Delboeuf, from the compassion I felt for my friend which produced the effect that when he spoke to the spirit, he spoke as it were for me, does it not result that when I heard him speaking, I thought I was hearing my words and watching my own performance? Had I not imagined myself as him as I imagine myself as an appealing character in a movie? I had pretended I was him pretending to talk to the spirit of Montreal, and I came to believe I was in the presence of this spirit.

When it came my turn to speak I hesitated for a moment because I was afraid of offending the spirit by saying or doing the wrong thing. And my friend had been so eloquent that I felt somewhat speechless. So I simply said: "I would just like to say that I know how you feel and that if I was leaving Montreal tomorrow I would feel exactly the same way." And I tossed my sweet grass as he had done. Then we continued on our way and resumed our conversation as if nothing had happened.

He returned to Montreal for a few days about six months later and stayed at my home. When he left he had not had a chance to make an offering so he left me some

sweet grass and asked me if I would do it for him. I now always make an offering when I leave a city or arrive in one, and I sometimes do it for friends and strangers. I have never again experienced anything like the awesome presence of that first night, but I always feel sort of good after making an offering, like having fulfilled a responsibility to a friend, and things seem to work our better afterwards. I suppose it might be something like a post-hypnotic suggestion for which one feels inexplicably obliged to carry through.

CHAPTER EIGHT

"Discourse Concerning the Machine"

The wager

"God is, or God is not. But toward which side shall we lean?" In his famous wager exposition, commonly referred to as "The wager" or "Infinity-nothing", Pascal urges an imaginary interlocutor to bet on the existence of God.[1] Near the beginning, he states that even if God existed, it would be impossible for us to know, let alone conceive, of this existence.

> If there is a God, he is infinitely beyond our comprehension, since, having neither parts nor limits, he bears no relation to ourselves. We are therefore incapable of knowing either what he is, or if he is. That being so, who will dare to undertake a resolution of this question? It cannot be us, who bear no relationship to him (Se 680, La 418, Br 233).

We must wager then, in favour of one possibility or the other. And we must choose, since to choose not to wager is in itself to wager against the existence of God.

> So do not accuse those who have made a choice of being wrong, for you know nothing about it! "No, but I would blame them not for having made this choice, but for having made any choice. For, though the one who chooses heads and the other one are equally wrong, they are both wrong. The right thing is not to wager at all. Yes, but you have to wager. It is not up to you, you are already committed. Which then will you choose (Se 680, La 418, Br 233)?

Pascal continues a little further on: "Let us weigh up the gain and the loss by calling heads that God exists. Let us assess the two cases: if you win, you win everything; if you lose, you lose nothing. Wager that he exists then, without hesitating (Se 680, La 418, Br 233)!" To this the interlocutor responds that though it seems

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[1] All citations are from Honor Levi's translation of Phillipe Sellier's edition of Pascal's *Pensées*, first published in 1976 and improved in 1991, to which I make the occasional modification. I have included references to the two most important editions of the *Pensées*, thus the Brunschvicg and Lafuma editions established in 1904-1914 and 1951, respectively. The three editions are abbreviated as follows: Se, Br, and La.

sensible for him to wager on God, he protests that he is being forced to bet and that he is simply unable to believe.

> Yes, but my hands are tied and I cannot speak a word. I am being forced to wager and I am not free, they will not let me go. ... And I am made in such a way that I cannot believe. What would you have me do (Se 680, La 418, Br 233)?

Pascal's answer: Behave as though you believe.

> Learn from those who have been bound like you, and who now wager all they have. ... Follow the way by which they began: by behaving just as if they believed, taking holy water, having masses said, etc. This will quite naturally make you believe and will submit your reason to your body's animal will (Se 680, La 418, Br 233).[2]

Thus as we have seen in some cases of hypnosis, the participants begin by pretending that they are hypnotised and subsequently find that they cannot stop pretending, so that what started out as being simulated becomes pragmatically real. By the same token, faced with the empirical ambiguity of hypnosis, the subject has nothing to lose and something to gain by giving it a try.

Pascal is emphatic in drawing our attention to the fact that habitual behaviour affects practically every form of belief:

> Custom is our nature. Anyone who becomes accustomed to faith believes it, and can no longer not fear hell, and believes in nothing else. Anyone who becomes accustomed to believing that the king is to be feared, etc. Who can then doubt that our soul, being accustomed to seeing number, space, movement, believes in this and nothing else (Se 680, La 418, Br 233)?

The idea of creating a belief by repeatedly exposing oneself to customs that manifest that belief is elucidated in another fragment:

> The custom of seeing kings accompanied by guards, drums, officers, and all the paraphernalia which bend the machine toward respect and terror creates the effect that, when kings are occasionally alone and without trappings, their appearance imparts respect and terror into their subjects because their persons are not separated in our minds from all

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[2] This last sentence in the original: "*Naturellement même cela vous fera croire et vous abêtira.*" Levi translates as: "This will make you believe quite naturally, and according to your animal reactions."

> that normally accompanies them. And people who do not know that this effect follows from this custom believe that it is the result of a natural force. From this comes the words: *The character of divinity is imprinted on his face,* etc. (Se 59, La 24, Br 308).[3]

The habitual association of respect and terror with seeing the king conditions us to feel terrified and respectful of the king even when he is naked and alone. By the same token, Pascal adds, when we enter the world, we become accustomed to seeing "number, space, movement", and believe that this physical existence is all that there is to the world. Indeed this statement is almost the same one with which Pascal begins "The wager":

> Our soul is thrust into the body, where it finds number, time, dimension. It ponders them and calls them nature, necessity, and can believe nothing else.

Therefore, just as it is a matter of course and habit that we start our lives as materialists, so it is by new habits that we can later become spiritualists or, indeed, comply with the demands of hypnosis. Pascal's primordial purpose is to present and defend the idea that it is by behaving as though we believe that we come to believe. Pascal's interlocutor states that he is *not made in such a way that he can believe.* Pascal answers that he must therefore behave as though he believes, in order for a machine-like process to turn him into something that can and does believe. Pascal's intentions have far broader purposes than the merely mathematical. "The wager" is principally concerned with the transformative power of pretending, and it can hardly be coincidental that Pascal filed the text in a bundle labeled: "XLV. DISCOURSE CONCERNING THE MACHINE".[4]

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[3] Levi translates "*coutume*" by "experience" and the phrase "*toutes choses qui ploient la machine vers le respect et la terreur font que*" by "all the paraphernalia which make the machine yield to respect and terror means that". Though more elegant, this non-literal translation distorts Pascal's intended meaning.
[4] This label was brought to public attention only in 1976, with Sellier's more definitive version of the *Pensées.*

The machine

Pascal almost certainly takes the concept of the machine, of the body governed by the mind, from Descartes. But his conception of body and mind is only superficially dualistic for he sees in the body mind-like qualities, such as the capacity to influence the mind itself. This power of machine over mind occupied a pre-eminent place in Pascal's thought.

Pascal organised the papers that formed the corpus of the *Pensées* into 61 bundles, each tied together by string threaded through perforations. Bundle "II" is labeled "Order" and contains ten fragments of paper of which three refer specifically to the idea of the machine as the instrument of faith:

> *Order.* A letter of exhortation to a friend to encourage him to seek. And he will answer: 'But what use will it be to me to seek? There seems to be nothing.' And as answer to him: 'Do not despair.' And he would answer that he would be happy to find some enlightenment, but that according to this religion itself, even if he did believe, it would be of no use to him and he is therefore quite happy not to seek. To that, the answer is: 'The machine' (Se 39, La 5, Br 247).

> Letter to show the usefulness of proofs. By the machine.
> Faith is different from proof. One is human, the other is a gift of God. *Justus ex fide vivit.* [The upright man finds life through faith (Rom. I:17).] It is this faith which God places in man's heart, and the proof is often the instrument. *Fides es auditu.* [Faith comes from what is preached (Rom. 10:17).] But this faith is in the heart and obliges one to say not *Scio* [I know] but *Credo* [I believe] (Se 41, La 7, Br 248).

> *Order.* After the letter about the necessity of seeking God, put the letter about removing the obstacles, which is the argument of the machine, of preparing the machine to seek God through reason (Se 45, La 11, Br 246).

But this is not all. Three more of the "Order" fragments refer to themes related to the idea of the machine: Fragment 38 (La 2, Br 227) begins: "What shall I do? I see everywhere nothing but darkness," and later mentions that it is pointless to seek proofs of the existence of God (La 3, Br 244); fragment 46 (La 12, Br 187) talks of the importance of showing that religion is not contrary to conscious reason; and, fragment

43 (La 9, Br 291) refers to how custom is additionally responsible for the injustices of society, which I will discuss presently.

Let us now examine the work Pascal developed around the idea of the machine and determine how it bears upon our understanding of hypnosis and the mental illnesses to which it has been intimately related.

> For we must not misunderstand ourselves: we are as much automaton as mind. And therefore the way we are persuaded is not simply by demonstration. How few things can be demonstrated! Proofs only convince the mind; custom provides us with our strongest and most direct proofs: it inclines the automaton, which pulls the mind along without its having to think.[5] Who has proved that tomorrow will dawn, or that we will die? And what is more widely believed? So it is custom which persuades us, it is that which makes so many Christians, that which makes Turks, pagans, tradesmen, soldiers, etc. (There is greater faith received at baptism by Christians than by pagans.) In the end, we have to resort to custom once the mind has seen where the truth lies, to immerse and ingrain ourselves in this belief, which constantly eludes us. For to have the proofs always before us is too much trouble. We must acquire an easier belief, one of habit, which without violence, without art and without argument makes us believe something and inclines our faculties to this belief so that our soul falls naturally into it. When we believe only through the strength of our convictions and the automaton is inclined to believe the opposite, it is not enough. We must therefore make both sides of us believe: the mind by reasons, which only have to be seen once in a lifetime, and the automaton by custom, and by not allowing it to be disposed to the contrary (Se 661, La 821, Br 252).[6]

It is interesting to see how Pascal's ideas and the view I am advancing complement recent work by the philosopher Ian Hacking and the anthropologist Allan Young. These authors detail the ways in which culture conditions and gives rise to perceived psychiatric illnesses like dissociative identity disorder (formerly multiple

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[5] This sentence is my own translation of: "Les preuves ne convainquent que l'esprit; la coutume fait nos preuves les plus fortes et les plus crues: elle incline l'automate, qui entraîne l'esprit sans qu'il y pense."

[6] The fragment continues:

> *Inclina cor meum, Deus...* [Turn my heart, O God... (Ps. 119:36).]
>
> Reason works slowly, looking so frequently at so many principles, which must always be present, that it is constantly dozing or wandering off because all its principles are not present. Feeling does not work like that: it acts instantly and is always ready to act. So we must put our faith in feeling, otherwise it will always waver.

personality disorder), pathological fugue, hysteria and post-traumatic stress disorder (PTSD).

In his study, *The Harmony of Illusions: Inventing Post-Traumatic Stress Disorder,* Young writes about how PTSD "is glued together by the practices, technologies, and narratives with which it is diagnosed, studied, treated, and represented and by the various interests, institutions, and moral arguments that mobilized these efforts and resources."[7] "My job as an ethnographer of PTSD," he continues further on in the same paragraph, "is not to deny its reality but to explain how it and its traumatic memory have been *made* real, to describe the mechanisms through which these phenomena penetrate people's life worlds, acquire facticity, and shape the self-knowledge of patients, clinicians, and researchers."[8]

Ian Hacking, in *Mad Travellers: Reflections on the Reality of Transient Mental Illnesses,* proposes the metaphor of the "ecological niche" to describe how certain cultural conditions create spaces in which transient illnesses like fugue, hysteria, and multiple personality can thrive or die.[9] *Mad Travellers* is a continuation of Hacking's explorations into the ways in which scientific knowledge and practice influence how we see ourselves and how we behave. *Rewriting the Soul: Multiple Personality and the Sciences of Memory,* for example, describes a "looping effect" between the producers of knowledge and the people being known about whereby scientific knowledge provokes changes in people which, in turn, determine what new knowledge is to be and how it will be sought.[10] Hacking's analysis of the process is particularly helpful: all intentional human action is action under a description. He contends that new descriptions allow for new ways of acting and, ultimately, of being. Multiple personality disorder provides perhaps the most striking example of what Hacking calls "making up people". Before the term "multiple personality" was coined in the third

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[7] Young, *The Harmony of Illusions,* 5.
[8] Young, *The Harmony of Illusions,* 5-6; his emphasis.
[9] Hacking, *Mad Travellers.*
[10] Hacking, *Rewriting the Soul.*

quarter of the nineteenth century, for example, doctors only diagnosed and treated cases of double personality or double consciousness. But once the new multiple condition was introduced, "[l]ate in the afternoon of the 27th of July, 1885," such cases were no longer so limited and shortly thereafter began to present more than two personalities.[11]

Pascal might have said that it is mainly through our modern scientific customs that we realise the concepts and behaviours involved in child abuse, multiple personality disorder, fugue, PTSD, homosexuality, heterosexuality, and so on and so forth. Pascal's discourse concerning the machine adds a psychological dimension to these demonstrations of the shaping and moulding of human kinds, namely, the mechanism by which individuals construct themselves: making up people is of a piece with making believe.

Yet there is an important difference between Pascal and authors like Hacking and Young who are influenced by Michel Foucault. Their work is characterised by the implicit assumption that human self-knowledge and action cannot escape the context of the period in which they find themselves. If this is the case, there is, in a sense, no such thing as an underlying "human nature" since none can exist beyond the cultures that define and condition what it is to be human. Depending on the temporal and spatial distances between them, human groups can be said to inhabit incommensurable worlds.

Pascal defers to the constant of variance in human history. He writes, for instance:

> What are our natural principles if not those we are used to? And for children, are they not those taught by their fathers, as the instinct for the hunt is in animals?
>
> Different customs give rise to other natural principles. That can be seen from experience. If there are some principles that cannot be eradicated by custom, there are also other customary principles contrary to nature and ineradicable from nature and from new customs. It depends on the disposition of the individual (Se 158, La 125, Br 92).
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> Fathers fear in case the natural love of their children is wiped out. So what is this nature capable of being wiped out?

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[11] See Hacking, chapter 12, "The Very First Multiple Personality," 171- 182, 171.

> Custom is a second nature which destroys the first.
> But what is nature? Why is custom not natural?
> I am very much afraid that nature is itself only a first custom, just as custom is a second nature (Se 159, La 126, Br 93).

Though Pascal clearly leans in favour of the idea that we are born with certain instinctive principles, he admits that since custom can influence them, it therefore constitutes a second nature on a par with the first. Hence his worry that there may be no way of distinguishing between the principles that we attribute to human nature and those arising from custom and habit.

However, Pascal stops one step short of absolute relativism. For him, there is the possibility of a knowledge that is not subject to the currents of history and culture:

> We know the truth not only with the use of reason but still more with the heart. It is through the heart that we know the first principles, and reason which has no part in this knowledge vainly tries to contest them. The Pyrrhonists who have only reason as their object work at it to no effect. We know that we are not dreaming, however powerless we are to prove it by reason. This powerlessness proves only the weakness of our reason, not the uncertainty of all our knowledge as they claim (Se 142, La 110, Br 282).[12]

We may be historically constituted subjects, but only in a superficial sense as far as the heart is concerned. For though Pascal asserts that we are conditioned by context-dependent actions, these actions *can* be conscious and voluntary. And this leads him to maintain, with extraordinary confidence, that even religious belief can be generated by way of deliberate and self-conscious acts of make-believe.

Curious people

I have discussed the above analogy with dozens of people on an individual basis. These have included atheists, Muslims, Jews, Catholics, Anglicans, one Wesleyan and one aboriginal Canadian. I have presented the analogy before five audiences in the past year, including one made up chiefly of religious people. Contrary

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[12] I have made some modifications to Levi's translation.

to what we might be inclined to expect, the religious are not scandalised by what I say. They do sometimes express certain reservations but on the whole they are in agreement with the idea that one must perform acts of belief in order to attain and maintain belief. I have not found one who is not ready to admit that God may not exist. They simply know that when they act as though God exists, like kneeling and speaking as though God were listening, they experience the indescribable feeling that they are being heard. And after, though they may be aware that what they felt may be a mere product of their imagination, they also know that the feeling is attainable only through prayer and ritual. I know someone who climbs in levels of spirituality by deliberately performing acts of belief that exceed her current level of belief. When she went to confession for the first time in her life, she did not actually think that she believed in God enough to go through with it. Yet she had learned, by her religious experience thus far, that if she did go through with the ritual, that is, if she behaved as though God was hearing her confession and forgiving her sins, she would then raise her belief to the level of belief that is represented by her action. Indeed, she almost confessed that she did not really believe in God which is, paradoxically, another way of saying that she did believe. She explained to me that a new higher *act of belief* always precedes the *belief* that it symbolises, so that one must always necessarily pretend a higher level of belief in order to first obtain it.

And to paraphrase Delboeuf, when I say pretending, my readers will have the grace to recognise that I do not mean trickery or deception. There is nothing more human – nor more sophisticated – than to play. A striking illustration of this is the following story told to me by my friend and anthropologist, Mônica Nunes. The principal ritual of the Candomble religion in South America invokes spirit possession and is practised mainly by women. Sometimes children at play will pretend that they are possessed like their mothers. They are told not to play at being possessed because this could please the spirits who would then inhabit them. These children grow up knowing

that if someone wanted to be possessed by a spirit but was not sure how to go about it, he or she need only start by pretending.

Perhaps religious and hypnotic belief are driven in part by the basic trait of curiosity or, as it is often known, the scientific spirit. It was curiosity that drove Feynman to attempt hypnosis and that moved me to get to know my Montreal friend better and to want to see the world through his eyes.

I once sat at a table drinking beer and philosophising on life and death with two friends.[13] One affirmed that he would live forever if given the choice. I answered on impulse that I would rather choose to die since without death life would have no meaning. Then she asked us: "Would you not choose to die simply out of curiosity?"

[13] Zachary Polsky and Anne-Céline Auché.

CHAPTER NINE

On Hypnosis, Religion and Superstition

> The exterior must be joined to the interior to obtain from God; that is one must kneel, pray with the lips, etc., so that arrogant man, who did not want to submit himself to God, now submits himself to the creature. To expect help from this exterior is superstition, to not want to join it to the interior is arrogance [*être superbe*] (Se 767, La 944, Br 250).[1]
>
> It is superstitious to put one's hopes in formalities, but arrogant not to want to submit to them (Se 396, La 364, Br 249).

We recognise at the beginning of the first quotation the idea of using symbolic bodily action – the machine – to bend the mind toward religious belief. I have shown how this idea is complemented by Pascal's discussions on the cultural conditioning of human action and thought. His idea of the machine may also serve as a starting point for another series of reflections on the differences between religion and superstition, which I will now discuss in relation to hypnosis.

The key to understanding Pascal's thoughts on piety and superstition is to acknowledge that there is no earthly way of knowing whether or not God exists. A belief that emerges from the practice of a symbolic action cannot be taken as proof of the existence of God and it must always be born in mind that any sentiment of belief may be pure delusion. Such presence of mind, it follows, must be maintained in the manner in which religious rituals no less than hypnotic suggestions are both performed and understood.

Let us consider, for example, the rain-making ritual of rain-kings in central Africa and Sir James Frazer's understanding of this type of ritual at the turn of the century. In *The Golden Bough*, Frazer interpreted such practices within an evolutionary scheme that began with magic and moved forward to religion and finally to science.[2]

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[1] My translation.

[2] See Tambiah, *Magic, Science and Religion*, 51-54; and Frazer, *Golden Bough*, chapter 3 on "Sympathetic Magic," 11-48 and chapter 4 on "Magic and Religion," 48-60.

He viewed the apparent use of magic by various peoples as a misapplication of the principles of association: the attempt to magically control the weather seemed to indicate, for example, that such peoples were deeply unscientific in thinking that their actions might have a relationship to the rain or sun. For Frazer, such practices were simply superstitious.

However, upon reading Frazer in the 1930s and 1940s, the philosopher Ludwig Wittgenstein noted that a central African rain-making ritual mentioned by Frazer was only ever performed during the rainy season and never during the dry season when rain was most needed.[3] These Africans cannot therefore be said to believe in the ritual in a superstitious way. I should therefore like to submit that their feeling of a spiritual influence on the weather is tempered by the knowledge that there *might be no connection whatsoever*. They know the difference between the physical and the symbolic just as Delboeuf's subjects know the difference between what is real and what is make-believe. As Wittgenstein wrote in another passage:

> The same savage, who apparently in order to kill his enemy, sticks his knife through a picture of him, really does build his hut out of wood and cuts his arrows with skill and not in effigy.[4]

Frazer's systematic portrayal of "primitive" peoples as scientifically backward and superstitious prompted the following remark from Wittgenstein:

> Frazer is much more savage than most of his savages, for these savages would not be so far from any understanding of spiritual matters as an Englishman of the twentieth century. His explanations of the primitive observances are much cruder than the sense of the observances themselves.[5]

Pascal had expressed a similar criticism nearly 300 years before:

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[3] Wittgenstein, *Remarks on Frazer*, 12; Frazer, *Golden Bough*, 107.

[4] Wittgenstein, *Remarks on Frazer*, 4; Wittgenstein might have been refering to the following passage in the *Golden Bough:*

> Perhaps the most familiar application of the principle that like produces like is the attempt which has been made by many peoples in many ages to injure or destroy an enemy by injuring or destroying an image of him, in the belief that, just as the image suffers, so does the man, and that when it perishes he must die (12-13).

[5] Wittgenstein, *Remarks on Frazer*, 8.

> And on this basis they take the opportunity to blaspheme the Christian religion because they know it so badly. They suppose that it consists simply in worshipping a God considered to be great, powerful, and eternal: this is properly speaking deism, almost as far removed from the Christian religion as atheism, which is its complete opposite(Se 690, La 449, Br 556).

And in another fragment:

> Piety is different from superstition.
> To uphold piety to the point of superstition is to destroy it.
> Heretics reproach us for this superstitious submission. That is to do what they reproach us for (Se 212, La 181, Br 255).

Pascal's criticism can be put in this way: the atheist assumes that God does not exist and, by extension, that the inner sentiment that theists have of God's existence is a delusion; deists, on the other hand, assume that God does exist and that their inner sentiment of God's existence is itself proof that God exists.[6] From a Pascalian point of view, both violate the basic and fundamental principle that the existence of God cannot even be conceived of, let alone known. If God exists, God would not be in the world, but rather the world would be in God. But to claim that God can be known either to exist or not to exist is to commit the parallel errors of deifying or objectifying God as a thing in the world.

In the case of hypnotism, Delboeuf exhibits the analogous mistakes which can be observed in the opposite positions adopted by the socio-cognitivists and the state theorists. Like the atheist, the socio-cognitivist tends to advocate an over-rational point of view in attempting to explain hypnosis solely in sociopsychological terms of role-playing and cognitive strategising. They are probably not far wrong. I have argued that pretending – playing the role of a hypnotised subject – is an integral part of hypnosis. I have also taken the view that the problem of post-hypnotic suggestion is best explained by assuming, along with Bernheim and Delboeuf in chapter 3, that the subject

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[6] I will used the term "theist" to refer to the position between atheism and deism that Pascal wishes to defend.

occasionally remembers the task to be performed and immediately forgets it – the cognitive strategy. Consider now Spanos's account of hypnotic analgesia.

> [Sociocognitivists] view the subject as an active agent who can deliberately initiate cognitive activity in order to cope more effectively with noxious events... A large number of studies on this tradition have demonstrated that treatments designed to encourage the use of strategies such as imagery, self-distraction, and coping verbalization (e.g. "this isn't so bad") are effective in raising pain thresholds and pain tolerance and in reducing ratings of pain intensity.[7]

But what about the analgesia of the elderly man and the civil servant that Delboeuf treated? Delboeuf barely gave them time to realise what was happening let alone to think up a coping strategy for dealing with the pain. Moreover, the civil servant did not even realise that the needle had penetrated his arm until he looked down to see. As I mentioned at the end of chapter 7, the process at work here is not cognition but belief. "But this faith is in the heart," Pascal wrote, "and obliges one to say not *Scio* [I know] but *Credo* [I believe]" (Se 41, La 7, Br 248). Delboeuf never hypnotised the elderly man, but this man clearly *believed* that he had been hypnotised. He was thus able to believe, in turn, that he would not feel pain the instant Delboeuf said he would not. The civil servant, on the other hand, did not initially believe in hypnosis, but a demonstration of analgesia in Delboeuf's maid convinced him immediately. The socio-cognitive interpretation is simply unable to explain, moreover, how it is that pretending hypnosis produces the inner sentiment of there being something real about it. Nor can it explain why Feynman could not stop playing the role of a hypnotised subject even when he tried to. The role-playing theory leaves insufficient room for the role of the unknowable in hypnosis. It is the same for religion:

> If we submit everything to reason, our religion will contain nothing mysterious or supernatural. If we shock the principles of reason, our religion will be absurd and ridiculous (Se 204, La 173, Br 273).

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[7] Spanos, *Hypnotic Behavior*, 457; cited in Gauld, *History of Hypnotism*, 597. See also Spanos, "A social psyghological approach to hypnotic behavior."

We saw, in chapter 5, how dissociation violates the principles of logic and leads to absurd consequences if accepted. Although dissociation and other state theories of hypnosis are ostensibly psychological, they are nevertheless grounded in a purely physical conception of the mind. For them, hypnosis is basically a physiological condition, found throughout the animal kingdom, with subordinate psychological correlates. Like Pascal's deist, these theories reduce hypnosis to the level of a physical phenomenon and in doing so evade the psychological explanation they purportedly seek. Similarly, the rational explanation favoured by the sociocognitivists is (paradoxically) also a physicalist conception of hypnosis, for in assuming that it does not actually exist they imagine that only physical things exist. The opposite poles at which these psychological theories position themselves mirror the opposing attitudes of deist and atheist.

> Two excesses. Excluding reason, allowing only reason (Se 214, La 183, Br 253).
>
> Submission and use of reason, of which true Christianity consists (Se bundle label XIV, La 167, Br 269).

This balance between submitting one's reason to religious ritual and exercising reason in performing religious ritual is reflected in the participants of the religion.

> Other religions, like those of the pagans, are more popular because of their external trappings, but they are not for educated people. A purely intellectual religion would be better suited to them, but it would not do for the people. Only the Christian religion suits everyone as it combines the external and the internal. It lifts up the people inwardly, and humbles the proud outwardly. Without both it is not perfect, for the people must understand the spirit of the letter, and the educated must submit their spirit to the letter (Se 252, La 219, Br 251).

Precisely the same methodological (or ritual) flexibility was manifest in Delboeuf's hypnotic technique. Take, for instance, the different approaches he used with the elderly man and the high-ranking civil servant. Delboeuf drew upon the former's willingness to believe in the magical powers of hypnosis – an external

approach – whereas the latter's willingness to give hypnosis a chance was appealed to once he was presented with proof of its efficacy – an internal approach.

Incidentally, Delboeuf usually captured the confidence of his subjects through a surprise demonstration of their insensibility to pain. This one single event gave them striking proof of the possible reality of hypnosis – enough to enlist their earnest co-operation. The same principle seems to be operative in religion: "We must therefore make both sides of us believe" Pascal wrote, "the mind by reasons, *which only have to be seen once in a lifetime*, and the automaton by custom, and by not allowing it to be disposed to the contrary" (Sc 661, La 821, Br 252).[8] This corroborates my own experience in making my first offering to the Spirit of Montreal. The sense of its overwhelming presence never reappeared, but once was enough to persuade me of its possible reality so that I continue to behave as though it was real.

Retaking the thread of the previous paragraph, a similar split in attitudes toward hypnosis was apparent in Liébeault's clinic. Delboeuf reported that among Liébeault's patients,

> some see magnetism as a new invention in which they put little more confidence than the rest; others, as something mysterious and sovereign that will make their problems instantly disappear. Both make for rather awkward clients. The first start by giving themselves the autosuggestion that "it will not work," and the second soon say to themselves that "it has not worked" (*Magnétisme,* 287).

And in chapter 6, I mentioned Delboeuf's disapproval of Bernheim's theory: it was too intellectual in that it attempted to attribute hypnosis to a neurological process of heightened suggestibility. On the other hand, Delboeuf found Liébeault's method to lack an adequate intellectual basis.[9] Liébeault used much the same approach with all his patients: he put his hand on their foreheads, told them that they would sleep, that they would be unable to lower their arms, or stop turning them, and then delivered a litany

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[8] Previously cited in Chapter 8. My emphasis.
[9] That is, to be more specific, he disapproved of Bernheim's *theory* and of Liébeault's *method.* (*Magnétisme* 341).

of suggestions for every illness from which the patient could possibly be suffering (*Magnétisme*, 287-288). Indeed, Liébeault's method had a touch of superstition about it: a laying on of hands followed by a magical incantation.

Pascal urges us to believe in the existence of the supernatural *while* recognising that our inner sentiment of its existence is as likely as not an illusion. This is the ideal attitude that Pascal defends and promotes. Few people, he says, succeed in striking the balance:

> There are few true Christians. Even as far as faith goes. There are many who believe, but through superstition. There are many who do not believe, but through licentiousness. There are few in between (Se 210, La 179, Br 256).
>
> People not infrequently have to be cautioned against being too docile. It is a natural vice, like incredulity, and just as pernicious. Superstition (Se 219, La 187, Br 254).

For Pascal, there must be a compromise between the two extremes of superstition and incredulity. There are two errors, he wrote: "1. To take everything literally; 2. To take everything spiritually" (Se 284; La 252; Br. 648). Our interpretation of religious ritual must not be too literal lest we forget that we may only be pretending to believe in a God that may not exist; nor too intellectual lest we forget that God may exist after all. It is likewise for hypnosis. A theory of hypnosis must not be so literal that we affirm the physical reality of hypnosis and ignore that we cannot rule out simulation; nor so rational that we dispense with the reality of hypnosis and fail to recognise that pretending alone cannot account for all its mysteries.

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Abbreviations

Joseph Delboeuf:

Echéance = "Les suggestions à échéance," [Long term suggestions](December 1885).

Mémoire = "La mémoire chez les hypnotisés," [Memory in hypnotised subjects] (May 1886).

Influence = "De l'influence de l'éducation et de l'imitation dans le somnambulisme provoqué," [On the influence of education and imitation in provoked somnambulism] (August 1886).

Veille = "De la prétendue veille somnambulique," [On so-called waking somnambulism] (1887).

Sur l'explication = "Sur l'explication fournie par M. le Dr. Bernheim," [On M. Bernheim's explanation of suggested negative hallucinations] (January 1889).

Magnétisme = Le magnétisme animal: à propose d'une visite à l'école de Nancy, [Animal magnetism: about a visit to the Nancy school] (1890).

Comme quoi = "Comme quoi il n'y a pas d'hypnotisme," [As though there is no such thing as hypnotism] (November 1891).

Considérations = "Quelques considérations sur la psychologie de l'hypnotisme: à propos d'un cas de manie homicide guérie par suggestion," [Some reflections on the psychology of hypnotism: concerning a case of homicidal mania cured by suggestion] (1892).

Criminelles = "L'hypnose et les suggestions criminelles," [Hypnosis and criminal suggestion] (February 1895).

Pierre Janet:

Dédoublement = "Les actes inconscients et le dédoublement de la personnalité pendant le somnambulisme provoqué," [Unconscious acts and doubling of personality during provoked somnambulism] (December 1886).

Anesthésie = "L'anesthésie systématisée et la dissociation des phénomènes psychologiques," [Systematic anaesthesia and the dissociation of psychological phenomena] (May 1887).

Inconscients = "Les actes inconscients et la mémoire pendant le somnambulisme provoqué," [Unconscious acts and memory during provoked somnambulism](March 1888).

Automatisme = *L'Automatisme Psychologique: Essai de psychologie expérimentale sur les formes inférieures de l'activité humaine [Psychological Automatism: Essay on the experimental psychology of the inferior forms of human activity]* 1889.

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