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**Psychological Automatism:
Essay of Experimental Psychology
on the Lower Forms of Human Activity**

By

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To Dr Gibert

To Dr Powilewicz

Tribute of recognition and affection.

Preface from the third edition

This new edition reproduces without modification the work as it was published in 1889. No doubt new studies have completed and on a few points modified the opinions that I expressed ten years ago. But this new research are summaries in other works which I beg leave to refer the reader. The work that has been done at the Salpêtrière psychology laboratory has just been published in two volumes under the title *Neuroses and fixed ideas*. They expose many observations and experiments on the disorders of the will, the attention, the memory, on the obsessive ideas and their treatment. We can consider this research as verifications and additions to the doctrines that have been exposed in *Psychological Automatism*.

Paris, November 15, 1898.

Preface of the second edition

This work, which was presented at the Sorbonne as a doctoral thesis in philosophy, was published for the first time in July 1889. We believe having to leave it as it was and print again without serious changes. It should be modified and above all greatly increased to keep it informed of new research and discussions. The latter are, for the most part, studied in the other works that we have published since that time and which naturally complete our first work. On the other hand, some of the studies contained in “Psychological Automatism” would lose a little of their interest if we forgot the date on which they were published. Exhibited by us for the first time in 1886 and 1887, and having had the honor of being reproduced since by a large number of authors, they would today seem a bit trivial. We therefore want our work to keep its date, and that is why we have allowed ourselves in this second edition only insignificant modifications.

In this preface, we will limit ourselves to indicating briefly what are the points in our book which today seem to us to require modifications and additions. In general, we can notice that most of the descriptions contained in this work are very simple, while the phenomena that we usually observe seem very complex. This is just, and this defect which seems necessary to us has been largely desired and sought. Undoubtedly, it is always a little hypothetical to choose among innumerable details those which one believes interesting and to neglect the others, but without this hypothesis no exposure is intelligible. We did not describe all these details because some seemed useless and others still incomprehensible. For example, when studying movement disorders of the anesthetic limb in a patient, Léonie, we described the facts that we thought we could classify and interpret. We have passed over in silence other bizarre phenomena such as those of synkinesia or we have only made a brief allusion to it, it is that we had not observed enough of these facts to be able to interpret them. Since then, we have had the opportunity to study this phenomenon more fully in other works. The simplicity of our descriptions also results from the choice of subjects. In the midst of a large number of observations, we chose to expose those which were simple and somehow typical. It is easy today, and we have done it ourselves, to talk about complications and irregularities, but we would not have been able to make ourselves understood, if we had not first presented the most intelligible cases.

To explain the various modifications of consciousness during somnambulistic states, we have often recalled the psychological theories of Maine de Biran who, we said, was interested in the study of these phenomena. Here is an interesting text which proves our assertion and which we had neglected to quote. In a curious and little-known memoir “on the faculty of forecasting”, Deleuze gives the list of witnesses who signed the report of a somnambulistic session, and among these names is that of Maine de Biran ¹. We also regret not having cited more often the work of Dr. Gerdy, who repeatedly expresses ideas quite similar to those of Maine de Biran. To study these facts, he says, “you have to get used to understanding that there can be sensation without perception of the sensation” ². Indeed, to interpret cataleptic attitudes, we have been led, like these authors, to admit the existence of elementary phenomena as simple as

¹ Deleuze. *Mémoire sur la faculté de prévision*, with notes from Malle, p. 145.

² Gerdy. *Les sensations et l'intelligence*, 1846, 23 à 29.

possible. These phenomena were still to have the characteristic of psychological facts, but they were devoid of this reflected consciousness which consists above all in the assimilation of phenomena to the personality.

No doubt such phenomena are not absolutely simple, and one can decompose consciousness ad infinitum, no doubt one can, in a more or less theoretical way, find in these facts the essential elements that we attribute to consciousness “the will-to-live, the appetite, etc.”¹, but, on the one hand, we did not have to leave pure observation to seek to determine the essential nature of the facts of conscience; on the other hand, it was enough for us to show the relatively simple characteristic of such phenomena and the difference which separated them from the facts of consciousness usually known. Besides, we are quite ready to admit, with Mr. William James², that such facts must be very rudimentary to remain thus impersonal; as soon as they get a little complicated, they “tend to take on the form of the personality”, which happens in sleepwalking or in subconscious scriptures, whether suggested or natural. As we pointed out, words heard during catalepsy as simple sounds and which are not understood, can wake up as memories in a later, more intelligent state. They will then be understood by a person and will have their suggestive power. The tendency to synthesis and to personality remains the general characteristic of psychological phenomena.

Throughout the course of this work, we have insisted on the close relationship which seems to exist between psychological phenomena and physiological phenomena, in particular between thoughts and movements. We have tried to show that the sensations and the images were accompanied by movements of the limbs and that, on the other hand, the disappearances of the sensation or of the image provoked a parallel suppression in the movements, so that certain paralyzes could be considered as amnesias (p. 350, 362): “There is not, we said, two faculties, one that of thought, the other that of activity, there is at each as long as one and the same phenomenon always manifests itself in two different ways.” This dependence on the two phenomena is certainly true in general; we have since checked it often. Thus, we express the regret at not having at our disposal the description of a patient taking during his attacks the posture of the tables which he could see. We have since had the opportunity to observe the fact in an extremely clear manner³. But we also noticed that this general dependence was modified by a thousand particular influences. Some of these studies can be found in our work on movement disorders in hysterics and in the recent work of many authors on muscular sense and its relationships with movement.

A study on psychological automatism led us to study above all the phenomena of habit and the association of ideas in which images regularly follow one another, in a word, this activity which tends to preserve and repeat. But we have always sought to demonstrate that, for us, this category of phenomena and this form of activity did not exist alone in the human mind. “We were suggested by each other, we said, thoughts which previously were part of the same whole, of the same act of knowledge”. “Automation does not create new syntheses, it is only the manifestation of syntheses which have already been organized at a time when the mind was more powerful”. In a word, this automatism is only the consequence of another entirely different activity which formerly made it possible and which, moreover,

¹ Fouillée. *Psychologie des idées-forces*, 1893, II, 372.

² William James. *Principles of psychology*, 1890, I, 229.

³ *Conférence sur la suggestion chez les hystériques. Archives de Neurologie*, 1892, II, 448.

almost always accompanies it today. Not only these two activities, one which preserves the organizations of the past, the other which synthesizes, which organizes the phenomena of the present, depend on each other, but they are limited and regulated reciprocally and this doesn't is that the decrease in the current synthetic activity, weakening manifested by all kinds of symptoms, which allows the exaggerated development of the old automatism. The concept of these two activities, a hypothetical conception no doubt, but which allows us to summarize and classify a large number of facts, has already been often expressed by philosophers whom we have often cited, Leibniz, Maine de Biran, Hamilton, Taine, Ferri, Fouillée, Paulhan, etc.; it has also been exposed more or less clearly by the alienists. These had been led to this psychological theory by the study of certain patients who seem agitated, active at one point of view, and who however, by a striking contrast, are inert and immobile at another. We have often cited in this work Moreau (de Tours): we still seem to be one of those who have best interpreted this thought by philosophers medically. We regret that we did not also report other alienists who expressed similar ideas. "Dreams", said Macario, "have a great analogy with distractions, which are, so to speak, dreams of the waking state. Both arise from a series of ideas that arise, arise in a mechanical way, without the soul paying deliberate attention to it, hence the confusion and disorder that are found in these two passive states of mind." ¹ Delasiauve interprets in the same way the automatic impulses that appear during diseases characterized by stupor and intellectual inertia.

It is this opposition between the creative activity of the mind and the reproductive activity which really deserves the name of automatism and which we have tried to specify in our various works on the softened, on suggestion and on fixed ideas.

Our study on changes in memory seems to us very incomplete today. It describes only the memory alterations related to somnambulistic states and only the simplest of these alterations. Although the somnambulistic states described in this work already seem quite varied, it is easy to note that there are still others. Thus, we should insist more than we did on simply reciprocal sleepwalking; the subject in somnambulant state only remembers the previous somnambulisms, he links together all these abnormal periods to form a continuous existence, but he has no memory of the waking state. We should also study further those cases to which we have simply alluded in which the subject seems to have no memory during the somnambulistic state and forget an event as soon as it has occurred. Finally, we have just noted a case that is in some way intermediate to the previous two. A woman has spontaneous sleepwalking attacks that last for several days; in these attacks, she seems to have lost all memory not only of the day before, but even of the previous sleepwalking. However, she has a certain memory, very limited, it is true, that of the events of the present attack. On the third day of the attack, she remembers what happened the first; it seems, by a kind of re-education which has often been reported, to form a new personality. But the awakening occurs; these few new memories disappear completely and do not seem to resuscitate in the next attack. The training of this new personality hardly advances and always remains in its first beginnings. These forms of amnesia, which at first glance are very complicated, seem to us to be linked to a phenomenon that we have recently described under the name of continuous amnesia ². This continuous amnesia, which consists in an inability of the subject to become aware, to perceive memories of recent

¹ Macario. *Du sommeil et des rêves*, 1857, 292.

² *L'amnésie continue*. *Revue générale des sciences*, 1893, 167.

events, comes in all these cases to mingle *with* the periodic amnesia of somnambulism. These new descriptions complement those we have given in this work.

To interpret these amnesias, we also examined only the simplest and clearest cases; we have studied the modifications of memory in their relation to the modifications of sensitivity, amnesia in its relation to anesthesia. We still think that these explanations apply to a whole group of patients, that they account for the deepest amnesias and the best characterized sleepwalks; but we are ready to insist today on amnesias already reported quickly in which the psychological change is less profound ¹. Certain dreams, certain more or less subconscious fixed ideas become a center around which a large number of psychological facts are grouped and even a whole psychological existence which becomes subconscious like the fixed ideas themselves. In a word, somnambulisms are very varied, and the amnesia which characterizes them does not seem to us to be always as deep or to be explained by the same reasons.

In our study on suggestion, we sought to describe the phenomenon and its innumerable varieties, then we tried to show how psychological phenomena combined and modified to produce them. Today we would like to insist on an essential characteristic which seems insufficiently indicated to us. In our opinion, the word suggestion should not be applied to any psychological phenomena, thoughts, associations of ideas that exist in all men in a normal way. To avoid confusion of language, it must be reserved to designate a very real and very important, but abnormal fact, which occurs clearly only in sickly states. In a more recent work we have tried to highlight the pathological nature of true suggestion.

The suggestion itself seems to depend on an alteration of the mind that can be seen clinically. Moreau (de Tours) had already expressed the need for this primordial state of psychic weakness at least momentarily to explain the invasion of madness. We have tried in various works to analyze this mental weakness, to show in what consists this reduction of the phenomena of will and attention at the moment when the suggestion develops; we particularly compared this weakness to an exaggerated state of distraction. No doubt, as several authors point out, this is not an ordinary distraction; this only occurs when the mind is strongly attentive to some object. But we had just tried to show that this state has all the characteristics of distraction except one, it is that it is not produced, maintained by an attention strongly directed in another direction; it is a perpetual distraction without reason, without excuse, and it is precisely because of this that it is pathological.

In such a state, the mind can only synthesize a small number of phenomena at a time; he is forced to leave aside sensations, memories, motor images that he is unable to perceive. We have tried to express all of these phenomena by a term which has had some success, the narrowing of the field of consciousness. We are happy to see that this characteristic, in our opinion important, has since been observed by many authors in sick and suggestible individuals. Among the fairly numerous studies on this narrowing of consciousness, we will mention the work of Mr. Pick ². This author studies above all the influence of this narrowing on the movements of hysterics and he verifies what we had advanced: these patients can voluntarily make only very few simultaneous movements, as they can only consciously perceive that very

¹ *Stigmates mentaux de l'hystérie*, 120. *Accidents mentaux*, 213.

² A. Pick. *Ueber die sogenannte "conscience musculaire"* (Duchenne) *Zeitschrift für Psych. und Physiol. des Sinnesorgane*, t. IV, 1892.

small number of simultaneous sensations. Mr. Pick summarizes the facts he observed by saying that this is a narrowing of the motor impulse. We do not think that this expression differs appreciably from ours: voluntary movements depend on the images which are momentarily united in thought, and this reduction in simultaneous movements is in short only a reduction in the number of motor images that 'a person can synthesize with each movement. We are therefore pleased with this interesting verification that Mr. Pick added to our research.

There is no reason to insist on any particular form of suggestion that could easily be added to our summary list. But we are obliged to say that on a point relating to these suggestions we have been led to modify our opinions appreciably. We had said that the possibility of provoking real crimes by suggestion did not seem to us demonstrated. Indeed, theoretical discussions prove nothing and laboratory experiments cannot in this case be convincing; clinical observation is the only method here that can allow us to decide the question. However, by an unfortunate coincidence, we were led to note this year two criminal acts carried out by two different people, an adultery and an abortion which in both cases were actually determined by suggestions during sleepwalking. No doubt these two cases, if possible, should be discussed in detail. We do not pretend that the same acts in the same subjects could not have been determined otherwise. On the contrary, they are patients, seriously hysterical, of very weak will that one could have, without any doubt, brought to the same acts by simple persuasion during the day before. There has been no miraculous transformation carried out by suggestion; it is simply a known crime, the abuse of minors, the insane. However, in both cases, the acts were actually suggested during sleepwalking, and it was possible, by this means, to overcome the resistance of the patients more easily. The authors, who raised this crime question by suggestion, may have exaggerated the danger; but they seem to me to be right, if we consider the mentally stupid individuals who can be led to criminal acts by suggestion.

The narrowing of the field of consciousness brings with it a serious consequence, which is that all psychological phenomena are no longer synthesized in the same personal perception and that a certain number of them remain isolated and not perceived. This important remark led us to the study of subconscious phenomena and the division of the personality.

Such facts were already frequently reported by philosophers and doctors; we even find traces of it in purely literary works. In a novel by the famous Russian writer Dostoevsky, *Crime and Punishment*, there is a curious passage from this point of view, which Mr. J. Soury was kind enough to tell us about our first studies on subconscious acts. "I was going to your house, began Raskolnikov; but how is it that when I left the hay market, I took the perspective?... I never go through here, I always take a right when leaving the hay market; it is not the way to go home either. No sooner have I turned to this side than I see you, strange thing! -... But you have apparently slept all these days, replies Svidrigailov; I myself gave you the address of this trackis and it is not surprising that you came there straight. I told you the way to go and the hours when you can find me here, do you remember? I forgot it, said Raskolnikov in surprise. - I believe him; twice I have given you these indications; the address was automatically engraved in your memory and it guided you without your knowledge. Besides, while I was talking to you, I could see that your mind

was absent ¹.” We have also tried, in this work, to give a fairly complete history of the various studies on magnetism, spiritism, hypnotism, which have prepared knowledge of these subconscious phenomena.

Our two chapters on these questions, we ask permission to recall, were the reproduction of older studies published from 1886 to 1888 in the *Revue philosophique*. We had sought to determine as much as possible, by observations and experiments, the nature of these seemingly mysterious facts. Always following the same method, we thought we should first insist on the simplest and clearest cases. We have described acts and sensations that seemed entirely ignored by the subject, quite outside of his personal perception. These completely subconscious phenomena formed by their development and their combinations a second psychological existence, sometimes a second personality which appeared at the same time as the normal personality. But we did not confine ourselves to the study of these typical forms of the phenomenon, in the following chapter on “the various forms of psychological disintegration”, we tried to describe and classify the numerous varieties and combinations of these phenomena with each other. We have said and repeated many times that this second group of phenomena is extremely suggestible; that the name and even the personal form were determined by exercises and suggestions; that this personality, thus formed, educated itself, acquired habits; that in the experiments she collaborated unceasingly with the normal personality (p. 374, 426). Very often, phenomena determined in one of the layers of consciousness had an action, a remarkable backlash on the other system of phenomena. The whims, the preferences of the subconscious personality as well as of the conscious personality intervene at every moment to complicate the experiences.

We are happy to see that most of these facts have been observed again by many authors who have been good enough to repeat our experiments by placing themselves under the same conditions. We cannot report all these very numerous works in recent years; we will only recall a curious work by Mr. William James on automatic writing. Most of the details which seemed important to us in our observations, the anesthesia which accompanies an automatic act, the ignorance that the normal subject has such actions, the movements which persist subconsciously in apparently paralyzed limbs, the development of phenomena subconscious that tend to form a personality, all these facts are found in the observations of Mr. James ².

The interpretation of all these facts, their classification in fairly clear and comprehensive hypotheses are far from over. The assumptions we have presented are only summaries, abbreviated expressions of the facts that it was first important to verify. In our more recent work on hysterical anesthesia, we have reproduced these theories and diagrams perhaps with a little more precision.

On the contrary, the at least relative unity of the mind seems to us to be realized more or less completely in the phenomena of will and attention. We did not have to study here the nature of these phenomena which are the opposite of the facts of automatism. We have only sought to mark their main characters to somehow contrast. It is not a metaphysical study on the will, on its nature and its relationship to the essence of the human person; it is a much more specific psychological problem. What

¹ Dostoevsky, *Crime and Punishment*, II, 219.

² William James. *Notes on automatic writing. Proceed. of the American soc. of Psychol. research*, 1889, 542, *et Principles of psychology*, 1890, I, 208.

is the psychological characteristic of a voluntary act? We replied that voluntary action is an act determined by judgment: “The subject, we said, utters such words simply because it crosses his mind without thinking of anything else; we speak thus because we judge this to be true.” This remark still seems correct to us, but we believe that it can be clarified and that other characters briefly indicated must be added. Also, we have made a new effort to clarify the psychological definition of the will. In our various works on the drunk, we have shown how the novelty of the acts and the conscious, personal characteristic of the action, should be considered as essential elements of the will. These new studies seem to have supplemented the previous ones somewhat.

Our work on automatism was not only a study of psychology, it was also a medical study, because automatism is manifested in such a clear and exaggerated way only in pathological states. Our descriptions relate to several mental illnesses, toxic delusions, neurasthenic states, obsessions, impulses; but a particular mental illness was mainly the object of our studies, it is hysteria. It is in hysterics that we studied these cataleptic and somnambulistic states, these complete and abrupt modifications of memory and sensitivity, these subconscious acts, etc.

We have tried to show that sleepwalking was not an isolated accident, but that it had its roots in a pathological condition from the day before itself; that this state had the closest connection to convulsive and delirious attacks; that it would disappear when the sick momentarily returned to health. We have concluded that certain so-called nervous illnesses “deserve just as well to be called psychological illnesses”, and that the phenomena of successive or simultaneous division of the personality constitute precisely an essential symptom of these mental illnesses. These opinions have been the subject of much controversy, because several authors are still disposed to believe that suggestion, sleepwalking, subconscious acts, automatic writing are phenomena of normal life, compatible with physical and moral health the most perfect. This discussion is difficult to end because it deals with questions that are always insoluble, questions of limits. The automatic phenomena, the facts of the division of the personality are connected, like all pathological symptoms, by innumerable transitions to the phenomena of normal psychology, and one can discuss indefinitely on the limit between disease and health. In order to be able to agree, one must only consider the clearest cases and form an opinion according to them. If we do this, we still think that in all complete cases of sleepwalking and automatic writing, we will find a clinically indisputable hysteria. On the other hand, it will be easy to see that all hysterical phenomena are characterized precisely by this split personality which exists in the supreme degree in sleepwalking. “Sleepwalking, we said, is not only hysterical, because it coincides with symptoms of hysteria; in itself, it presents in the most complete manner the characteristic of all the phenomena of this disease.” In our work on the definitions of hysteria to which we refer, we have summarized the various opinions of the authors who have discussed this opinion and we have tried to strengthen it further ¹.

As for the medical details relating to the hysteria, we will only point out a few points which today we believe need to be changed. We have reported a patient R... as epileptic, expressing, it is true, some doubt; we would no longer have this hesitation now. Rereading the observation, we are convinced that it is a hysterical man and not an epileptic. Regarding the narrowing of the visual field, we wrote according to the authors that “the anesthesia extends irregularly over the retina, sometimes concentrically narrowing

¹ *Quelques définitions récentes de l'hystérie*. Archives de Neurologie, juin et juillet 1893.

the visual field, sometimes cutting it in half, sometimes forming irregular scotomas, it that is, spots of insensitivity in the middle of a retina that has remained normal". Out of more than one hundred and fifty patients whom we have often examined from this point of view, we have observed only the more or less concentric narrowing of the visual field and never the other modifications. We do not a priori deny that hemiopia cannot meet in hysteria (uncomplicated, of course, of brain lesions); but until precise observations have been studied on this point, we consider this symptom to be very doubtful. We will also add that we should insist more than we did in this work on the subconscious visual sensations and especially on the sensations provoked at the periphery of the visual field. Other modifications of sensations, unilateral amaurosis, monocular diplopia, allochiria have also been studied with more care in our book on the mental state of hysterics.

A passage from our study on the characteristic of hysterics probably lacked precision because it was not well understood. We have written that lying is not, as has long been believed, a natural and permanent stigma of hysteria. On the one hand, many individuals are extremely dishonest and lie without being hysterical and, on the other hand, a large number of hysterical people can present all the symptoms of the disease to the highest degree and yet remain very honest. But we must not conclude from this that we deny the existence of lies among hysterics; we believe that it is, on the contrary, very frequent, but as an accident, very particular delirium. We have indicated elsewhere several origins of this lie, the most frequent being the fixed idea which completely absorbs the mind of the patient and makes him incapable of understanding any other thought. The hysteric sacrifices everything to his idea of the present moment, because in reality she forgets everything and she thus becomes capable of lies and criminal actions. If one decides to frankly consider these patients as insane, one will be less astonished by these disorders of conduct which are not essential to the disease but which constitute very frequent accidents.

In this work we have only made rapid allusions to other mental illnesses. Our study on spiritualism was supplemented by a recent article "on contemporary spiritualism". We have briefly shown how the phenomena of obsession and impulse relate to mental disintegration; it is a job that we hope to resume later.

These descriptions of various mental illnesses have remained purely symptomatic and clinical. We have pointed out that the disintegration of the mind can have the same clinical characteristics, while depending on different causes: heredity, intoxication, auto-infections, etc., can produce this syndrome. It seems to us that it was not useless to analyze and understand it before trying to go back to its causes. Our work did not seek to penetrate either into the nature of the mind, or into the root cause of disease. We hope that the few observations it contains will not have been useless for the development of pathological psychology.

Paris, September 1893.

Introduction

It is almost always the highest forms of human activity, will, resolution, free will, that have been studied by philosophers. We were naturally interested in the manifestations of activity that it was most useful to know to understand the conduct of men, their responsibility and the moral value of their actions. But, although this way of approaching the question is perhaps the most natural, it is nevertheless the most difficult and the most dangerous: the highest and most important phenomena are far from being the simplest; on the contrary, they present many modifications, accessory developments which prevent a proper understanding of their true nature. The most elementary facts, as well in psychology as in the other sciences, are sought today preferably, because we know that their knowledge easier to acquire will clarify much of those of the more complex forms. It is *human activity in its simplest, most rudimentary forms*, which will be the subject of this study.

This elementary activity, either that it has been observed in animals, or that it has been studied in man even by alienist doctors, has been designated by a name that must be kept for him, that of *automatic activity*. This name, indeed, even from its etymological meaning (Greek word, even (Greek word) effort, to (in Greek) seek, strive, Littré) seems to apply quite well to the characters presented by these actions. One designates, in fact, under the name of automatic a movement which presents two characters. It must first have something spontaneous, at least in appearance, take its source from the very object which is moving and not come from an external impulse; a mechanical doll that works alone will be called an automaton, a pump that is moved outside cannot be one. Then, this movement must remain very regular, however, and be subjected to a rigorous determinism, without variations and without whims. Now, the first efforts of human activity have precisely these two characteristics: they are provoked and not created by external impulses; they go beyond the subject itself, and yet they are so regular that there can be no question about them of the free will demanded by the higher faculties. But we usually add to the word *automatic* another meaning which we do not accept as readily. An automatic activity is, for some authors, not only a regular and rigorously determined activity, but also a purely mechanical activity and absolutely without conscience. This interpretation has been the source of numerous confusions, and many philosophers refuse to recognize in the human mind an automatism, which is however real and without which many phenomena are inexplicable, because they imagine that admitting the automatism is to suppress consciousness and reduce man to a pure mechanism of extended and insensitive elements. We believe that we can simultaneously admit both automatism and consciousness, and thereby give satisfaction to those who observe in man a completely determined form of elementary activity, such as that of an automaton, and to those who want to preserve to man, even in his simplest actions, consciousness and sensitivity. In other words, it does not seem to us that, in a living being, the activity which manifests itself outside by movement can be separated from a certain form of intelligence and consciousness which accompanies it inside, and *our goal is to demonstrate not only that there is a human activity deserving of the name of automatic, but also that it is legitimate to call it a psychological automatism.*

The philosophers who considered activity as a psychological phenomenon, but who examined it only in its most perfect manifestations, very clearly separated it from other phenomena of the mind and considered it as a particular faculty distinct from intelligence and sensitivity. Undoubtedly, the complicated phenomena which have acquired, as a result of their development, a host of precise characters clearly separate from each other, and it is certain that it would not be legitimate to confuse abstract reasoning with practical resolution. But these faculties, so different when they are completed, do they not approach each other in their origin and do they not start from an inferior form of life and consciousness where activity, sensitivity and intelligence are absolutely merged? This is what we believe we can establish and *the study of the elementary forms of activity will be for us at the same time the study of the elementary forms of sensibility and consciousness.*

Another characteristic always attributed to higher activity is the characteristic of unity: voluntary power seems one and indivisible, like the person itself of which it is the manifestation. It is impossible to understand human actions if we want to represent all activities on this model. Unity and systematization seem to us to be the term and not the starting point of thought, and the automatism that we study often manifests itself through feelings and actions that are multiple and independent of each other, before giving way, at will one and personal. It is this remark that allows us to establish the general divisions of our work. *We will first study automatism in its simplest form when it is complete* and occupies the whole mind, that is to say when we find in the mind of a person only one thought and only one automatic action. But we must then admit that, in many cases, automatism can be partial and occupy only a part of the mind, when several elementary activities can develop simultaneously in the same thought.

Finally, human activity sometimes presents itself in abnormal forms, incoherent and convulsive movements, unconscious acts ignored by the very person who performs them, impulsive desires contrary to the will and which the subject cannot resist. These irregularities are inexplicable if we only know the theory of free will and one. Do they become more intelligible by examining the lower forms of activity? *The study of these abnormal activities* will allow us to complete and verify the solutions given to the previous problems.

The method that we have tried to use, without claiming to have succeeded in any way, is the method of the natural sciences. Without bringing any preconceived opinion on this problem in advance, we gathered by observation the facts, that is to say the simple actions that we wanted to study; we have formulated the necessary hypotheses only with regard to these well-established facts and, as much as possible, we have verified by experiments the consequences of these hypotheses. This kind of research cannot be done by personal observation of the facts happening in our own consciousness. Indeed, the phenomena it presents to us can only be the object of regular experimentation; they are then much too complicated and they take place in the midst of very numerous circumstances which are difficult to determine, finally and above all they are always incomplete. Consciousness does not make us know all the psychological phenomena that occur in us; it is an indisputable truth which we hope to confirm again today. This is where the most serious difficulties that psychologists encountered when they wanted to confine themselves to personal observation through consciousness come from. When we want to demonstrate that there are “between states of mind uniformities of succession”, in a word, when we want to make psychology a science analogous to other sciences, we are stopped by this difficulty: “is that in

the series of associations, at each instant we come up against unconscious representations ¹". As, for many authors, an unconscious phenomenon is only a physiological phenomenon, it is physiology and its laws that are constantly used to explain the phenomena of the mind. This often useful call sometimes seems premature to us, because, on the one hand, psychology gives up finding real laws of the spiritual phenomena and, on the other hand, physiology notes simply coincidences between such moral fact and such physical fact and n does not really explain the laws of consciousness. Stuart Mill, when he argues against Auguste Comte for the legitimacy of a scientific psychology², responds only in an embarrassed manner to this difficulty; it is in fact insoluble if we admit as phenomena of consciousness only the incomplete facts furnished by personal consciousness. To have simple, precise and complete phenomena, we must observe them in others and appeal to objective psychology. No doubt we know only indirectly the psychological phenomena in others and psychology could not begin with this study; but, according to acts, gestures, language, one can induce their existence, just as the chemist determines the elements of the stars according to the lines of the spectrum, and the certainty of one of the operations is also great than that of the other. Our study of automatism will therefore be an attempt at experimental and objective psychology.

One of the great advantages that the observation of others has over personal observation is that one can choose the subjects that one studies and take precisely those that present in the highest degree the phenomena that one wishes to examine. But the individuals who thus present to an exceptional degree a phenomenon or a characteristic which will be hardly apparent in a normal man, are necessarily sick. This has, I believe, no disadvantages. We must admit for morale this great principle universally accepted for the physical since Claude Bernard, it is that the laws of disease are the same as those of health and that there is in that only the exaggeration or decrease in certain phenomena that were already in it. If one knew mental illness well, it would not be difficult to study normal psychology. Besides, from another point of view, "man is only half known if he is observed only in the healthy state; the state of illness is as much a part of his moral existence as of his physical existence" ³. It is not bad for psychology to go into the details of the various moral disturbances a little, instead of always staying in generalities too abstract to be of any practical use. This is why an experimental psychology will necessarily be in many respects a morbid psychology.

All experimentation supposes that we vary the phenomena and the conditions in which they arise: illness does some of these modifications for us, but in too slow a manner and in imprecise conditions. One does not make real psychological experiences unless one artificially modifies the state of a person's consciousness in a manner determined and calculated in advance. Moreau (de Tours), one of the most philosophical among the alienists, claimed to arrive at this result by means of the intoxication procured by hashish. "It was", he said, "an excellent means of experimenting on the origin of madness ⁴." While sharing this desire for psychological experimentation that Moreau (de Tours) is one of the first to express, I hardly appreciate the process he used. Having witnessed, only once it is true, a drunkenness produced by hashish, I found that the physical disturbance caused by this substance was very serious and very dangerous for a rather meager psychological result. In addition, the moral modifications thus obtained are

¹ Lange. *Histoire du matérialisme*. Traduct, 1877, II, 427.

² Stuart Mill. *Logique*. Traduct., 1880, II, 433.

³ Broussais. *De l'irritation et de la folie*, 26.

⁴ Moreau (de Tours). *Du haschich et de l'aliénation mentale*, 30.

very little available to the experimenter and cannot be directed by him. So this method of psychological experimentation is in reality impractical.

On the contrary, there is a state easy to provoke and which is not dangerous, in which moral modifications are obtained very easily and which Moreau would have preferred to any other if he had known it well, it is the state of sleepwalking caused. Already Maine de Biran, one of the precursors of scientific psychology, in his new considerations on sleep, dreams and somnambulism, insists on the advantage that psychology could draw from the study of these phenomena: he was interested to the experiences of the magnetizers of his time, he followed their sessions and spoke of them frequently.

Later Mr. Taine also indicated the use of somnambulism in psychology ¹; we also know the work of Jouffroy, Maury and many other psychologists on this subject. The magnetizers insisted on the advantage that could be drawn from their processes: “By giving us the means to make the various cogs of thought function separately, to bring their exercise back to its elementary operations.... within us learning, moreover, *to draw from their latency* an entire class of ways of being faculties of the soul, braidism provides an experimental basis for psychology which consequently becomes positive science and takes its place in the wider framework of animal physiology ².” However, unjustifiable prejudices, the fear of this renown of charlatanism which remains attached to the operations of animal magnetism for a long time prevented them from following this advice: it took all the work and all the discoveries of contemporary scholars whose names are well known to put out doubt the existence of nervous sleep and the benefits that science could derive from its study. We will not discuss here the reality of sleepwalking or the danger of simulation, this discussion would be long and above all banal, because it is encountered everywhere very well; we also think with Dr. Despine who has studied sleepwalking a lot, that “easily considering things as fraudulent is a convenient opinion to dispense with studying what we do not understand ³”. It only takes a few precautions, which each experimenter must know how to take himself, depending on the circumstances, to warn against attempts at deception, rarer, in my opinion, than is generally believed. Also, without insisting on this point, we will only say under what conditions we used for our research of hypnotic sleep.

The subjects on which these studies were carried out were almost all, with exceptions that we will point out, women suffering from more or less serious nervous diseases, particularly this very variable disease which is designated by the name of hysteria. These neuroses, having as main characteristic a great mental instability, offer us, and by the natural accidents which they cause and by the predisposition to somnambulism which they generate, the field most favorable to the experimental studies of psychology and especially to the studies on automation. However, subjects of this kind present special difficulties in their study. They are extremely variable, and without even speaking of the deceitfulness attributed to them with some exaggeration, they are not always in the same physical and moral dispositions. It is necessary to follow them for a long time and with great attention, “to study them not for a moment but at all stages of their illness ⁴” to know exactly under what circumstances and under what conditions one is experiencing. Then, due to their very mobility, they very easily undergo all external influences and change very quickly depending on the books they are allowed to read or the words that are recklessly

¹ Taine. *De l'intelligence*, 1878, I, 5.

² Dr Philips (Durand de Gros). *Cours théorique et pratique de braidisme ou hypnotisme nerveux*, 1860, 169.

³ Dr Despine. *Du somnambulisme étudié au point de vue scientifique*, 1889, 57.

⁴ Despine. *Op. cit.*, 322.

spoken before them. Because of this characteristic, it is impossible to make an experiment with them of any value if one studies them only once, at random, without knowing exactly their disease state, their character, their previous ideas, etc. It is also impossible to see any natural fact, if one questions them in public, if one indicates to people present the experiments which one makes and the results which one awaits. You have to study them often and you should always experiment alone or with competent people, knowing the questions in advance and aware of the necessary precautions.

These are the conditions that we have tried to fulfill in the research that we are going to expose. They involved fourteen hysterical and hypnotizable women, five men suffering from the same disease, and eight other individuals suffering from insanity or epilepsy. The number of subjects could easily have been increased if we had not wanted above all to experiment only on well-known subjects whose physical and moral state could be entirely determined. Besides, it was not necessary to cite separately the experiences made on all these subjects: several, being identical to each other, teach us nothing new and their names as well as their characters would unnecessarily complicate our exposition. It seemed to us preferable, when possible, to repeat most of the experiments on a small number of subjects which, once well known, would be cited in preference to the others. That is why, except in special cases, most of the facts reported have been described according to four main subjects which we designate by first names rather than letters, Léonie, Lucie, Rose and Marie ¹. These four people, more than all the others, seemed to us to satisfy the conditions for a good psychological experience. Studied for a long time, they were perfectly known in all the details of their illness and their character; examined with care and only by competent persons, they have been modified as little as possible by examples or by reckless words.

None of these precautions could have been taken and even all these studies would have been completely impossible, if we had not been supported in this work by the people most capable of making it succeed. The studies of the moral man can hardly be done today by philosophers without the help of those who have devoted themselves to the study of the physical man. Without the doctor who shows him the subjects suffering from the particular illnesses he needs, who protects him against possible accidents and constantly lends him the help of his experience, the psychologist could not approach the experimental study of the phenomena of consciousness. Although this association, so to speak, of doctors and psychologists is today quite general, I cannot help but say how much I found in the doctors of Le Havre of encouragement and help. I especially wish to express all my gratitude and my affection to Mr. Dr. Gibert and Mr. Dr. Powilewicz who, without hesitation in front of the embarrassments and the troubles that such research could cause them, were kind enough to take part in all my work. If the observations reported in this book, more perhaps than the theories which are supported there, can have some value or some interest, it is to them that must fall the main merit.

Le Havre, December 1888.

¹ In order not to embarrass our psychological studies of accessory descriptions, we will gather in an appendix the few biographical and medical details which it are useful to know on the main subjects which we cite.

Part one. Total automation

Chapter I. Isolated psychological phenomena

When Condillac undertook to analyze the human mind, he invented an ingenious method for studying complex phenomena of consciousness. He imagined an animate statue capable of experiencing all emotions and capable of understanding all thoughts, but having none at first; and, into this absolutely empty mind of statue, he wanted to introduce each isolated sensation one after the other. It was an excellent scientific method. The multiplicity of phenomena that intersect in the universe prevents us from discerning their relationships, their dependencies; by a blow of a magic wand, let us suppress all these phenomena and let us reproduce only isolated single fact in this absolute emptiness. Then nothing will be easier than to see the role and the consequences of this phenomenon; they will develop before our eyes without confusion. This is the ideal method of science; Condillac tried to apply it for the study of the mind. Unfortunately this theoretically beautiful method was completely impractical, because the philosopher did not have the statue of which he spoke and he could not reduce a consciousness to its elementary phenomena. So he did his experiment in imagination, and instead of questioning nature and waiting for the answer, he made the questions and the answers himself, and instead of scientific analysis, he was engaged in the creation of inferences not confirmed by facts.

Well, the experience that Condillac dreamed of and that he could not try, we can today achieve it almost completely. We can have before our eyes real living statues whose mind is empty of thoughts and, in this consciousness, we can introduce in isolation the phenomenon whose psychological development we want to study. It is thanks to a sickly state known for a long time by the doctors, but little examined by the philosophers, that we will find this statue. It is the nervous disease designated most often under the name of *catalepsy* which will give us these abrupt and complete suppressions, then these gradual restorations of consciousness which we want to take advantage of for our experiences. “Catalepsy”, says Saint-Bourdin, one of the first authors to have made a precise study of this disease, “is an affection of the brain, intermittent, apyretic, characterized by the suspension of the understanding and the sensitivity and by the aptitude of the muscles to receive and keep all the degrees of contraction that they are given ¹.” This definition, without being perfect, gives a fairly correct general idea of a sickly state which occurs naturally, in some predisposed individuals, following a shock or an emotion and which is produced artificially in some subjects by various well known methods. There is no reason to be concerned, at least at the beginning of this work, with the origin of this state; we can say of catalepsy what M. Ballet said about speech disorders: “It will not matter to us whether this or that speech or writing disorder is produced by a tumor, a softening center, an agent toxic. The wheels of a watch”, said Buzzard, “can be stopped by a hair as well as by a grain of sand, and the disorder which then arises always remains the

¹ Saint-Bourdin. *Traité de la catalepsie*, 1841, 7.

same, whatever the cause which produced it ¹.” We can thus examine the psychological state produced by this disease, without worrying about its origin.

No doubt a person with catalepsy will not have the ideal simplicity of the Condillac statue: the condition will be more or less perfect, and its interpretation will always raise problems. But a real experience, even if it would present some obscurity, is worth a hundred times better than a simple, but imaginary theory. Let us therefore begin, according to our method, by describing this state and its most general characteristics; we will then review the various interpretations that are possible and the hypothesis that seems most likely to us. Finally, returning to experience, we will verify the consequences of this hypothesis by the details and the varieties that this sick state can present. Thus we will have described and interpreted a state where, as Condillac said, the phenomena of consciousness present themselves, we believe, in a state of isolation.

I. Description of the phenomena caused during the cataleptic state

It is unfortunate to begin our description of the states where psychological automatism is shown by the description of a state which is quite rare, and by experiences which cannot easily be repeated. However, this should not be surprising: we want to study very simple phenomena at the start, and nature always presents complex things. Nothing is more complicated than a normal mind, nothing is more complicated than madness or an attack of ordinary hysteria. We are forced to choose rare phenomena if we want them simple. Also, although we have observed for ourselves quite a large number of people suffering from these nervous diseases where the cataleptic state may arise, we have never witnessed an absolutely complete natural catalepsy attack ourselves; the ones we saw were only imperfect varieties. We have only collected the description of two natural crises, one observed in Paris at the Pitié hospital by my brother Jules Janet, the other which was produced by a thunderbolt on a subject that I knew, but that I couldn't see at the time. I was able to observe artificial catalepsies more frequently, but on only three subjects.

Lucie could sometimes cause catalepsy by suddenly showing her a bright light of magnesium, or by slightly compressing her eyes during sleepwalking. Catalepsy occurred naturally at certain times during the sleepwalking caused by Rose or Léonie. It was also produced, but only in the last one, when, during sleepwalking, they opened their eyes to the light. All the other people I studied had only varieties of the state called sleepwalking, or catalepsies so transient that we could, as has often happened, overlook them. It is therefore necessary to describe this state according to the few artificial catalepsies that we have been able to examine, but some quotes will show that they do not differ in their essential features from natural catalepsy.

Whatever the means employed to produce catalepsy, let us examine the aspect which the subject presents then, and let us choose as example the catalepsy of Léonie when it is well complete and comes

¹ Ballet, *Langage intérieur*, préface, XV.

closest to the classic description ¹. The first and most apparent characteristic is the absolute immobility of the subject. Never a normal person remains several minutes without any movement; a few movements of the hands, the eyelids, the lips, a few slight tremor of the skin always manifest the activity of thought and the feeling of external things. Léonie, on the contrary, in the state we are describing, invariably retains the attitude in which catalepsy surprised her, without the smallest tremor coming to reveal consciousness and thought. The eyes themselves, wide open, without any blinking, maintain the same direction with fixedness. In a word, the movements of organic life, pulse beats and breathing remain alone, and all movements which depend on relationship life and which express consciousness are suppressed. If one does not intervene and especially if one refrains from touching the subject, this state persists without any modification for a more or less long time: we have seen natural catalepsies last for days and artificial catalepsies are prolonged during many hours. In the subjects I have been able to study, this state never lasts long and does not last more than a quarter of an hour; it naturally changes and ceases to present this characteristic of absolute moral inertia.

As long as the subject remains cataleptic, we can have different experiences on it which lead us to note important characteristics. These characteristics, which are little more than the consequence of the inertia previously reported, can be reduced to four main ones which we will describe briefly because they are all well known.

1st. *Duration and sustainability of changes* which one can produce to the subject in a cataleptic state. – If you touch the limbs, you will see that they are extremely mobile and, so to speak, light, that they offer no resistance and that they can very easily be moved. If we abandon them in a new position, they do not fall back according to the laws of gravity, they remain absolutely immobile in the place where we left them. The subject's arms, legs, head, trunk can be put in any position, even the strangest; so we have quite naturally compared these subjects to painter's models that we bend in all directions. Even the face of Léonie is susceptible to being modified in this way: do you open your mouth, raise or lower your eyebrows, your face, like a wax mask, can be molded and retains its new expression; in others, the abdominal muscles themselves retain the imprint of the hand ². Various studies of great importance have been made on these cataleptic attitudes. We have been able to observe with precision devices how these postures remain invariable: instead of trembling, as always and very quickly does the extended arm of a normal individual, the members of these people remain in the air for a long time without moving; instead of producing an acceleration and a modification of the respiratory rate, as it always happens in the normal

¹ There are descriptions of catalepsy in a large number of books, I cite here only those that I could know and consult:

C.-E. Saint-Bourdin. *Traité de la catalepsie*, 1841.

P. Baragnon. *Étude du magnétisme animal sous le point de vue d'une exacte pratique*, 1853, 226.

Delasiauve. *Traité de l'épilepsie*, 1854, 263.

Despine. *Étude scientifique sur le somnambulisme*, 1880, 194.

Axenfeld. *Traité des névroses*, 2e édition, 1883, 908.

Bottey. *Magnétisme animal*, 1884, 29.

Paul Richer: *Hystéro-épilepsie*, 1885, 610, 668, 775.

Cullerre. *Magnétisme et hypnotisme*, 1886, 124.

Binet et Féré. *Magnétisme animal*, 1887, 114.

² Paul Richer. *Hystéro-épilepsie*, 292.

man, this tiring position of the arm does not in any way change the slow movement of the chest ¹. It is only after a fairly long time, an hour and more, according to some authors, twenty or twenty-five minutes, depending on the others, that the arm begins to descend because of fatigue or muscle wear, but this descent takes place very slowly and very regularly without the jolts and oscillations that can be seen in normal men. As Léonie's catalepsy did not last more than a quarter of an hour, I did not observe this descent which would probably have started a little later.

These “poses” are one of the best known and most characteristic phenomena of natural catalepsy, as evidenced by these few observations. Here is an extract from a description of Laënnec and Maisonneuve reported by Saint-Bourdin ²: “... He speaks to her, she doesn't hear; he touches her, she doesn't seem to feel it; he raises an arm to her, the arm stays in the position where he put it; they raised the patient upright, leaned the neck, lifted one leg, all kept the position given.” Here is another from Saint-Bourdin ³ – “She kept the same attitude she had at the time of the attack: if she was standing, she would stay there; if she went up the steps, she had a leg raised to go up and during all the time of catalepsy, she kept this same attitude. During this state, raising one of her arms, bending her head, putting her standing on one foot with outstretched arms, placed her in any position, as long as we put the body in balance, she kept perfectly the last attitude we gave her until the end.” It is true, however, that natural catalepsy does not always have this flexibility which is *almost constant* in artificial catalepsy. “In other patients, the body is in such a state of rigidity that, if they are pushed, they fall without changing their attitude ⁴.” We will have to come back to this difference; note only that the stiffness, the apparent contracture of the limbs still retains here a characteristic and properly cataleptic aspect. The contracture is not general, that is to say that it does not invade all the muscles at once in the same way and to the highest degree; because a special attitude always the same would occur, well described in the attack of tetanus or in certain epilepsy attacks: the body would be extended, bent back, the limbs in extension, the wrists along the body and bent inward, fists closed, etc. The muscles, on the contrary, are contracted to different degrees, so as to give the body an expressive attitude, as in this case from Saint-Bourdin cited above where the body stiffened in the attitude of prayer, the knees bent and the hands joined, could be overturned without changing posture. This detail is important to distinguish catalepsy from true general contracture.

Another modification that can be imposed on cataleptic limbs is movement. Instead of giving up the arm in a state of immobility, it is swung two or three times and is loose in the middle of movement: oscillation persists com everything up We can thus communicate to the arms, the legs, the head of this mannequin, a movement which will not stop before the end of the attack. The same characteristic is still found, although perhaps less often reported, in descriptions of natural catalepsy. “A five-year-old girl who was once deeply shocked that her sister had taken away a chosen piece of food that she herself wanted, suddenly became stiff. The hand she had extended to the dish with her spoon remained in this state; she looked at her sister askance with eyes of indignation; although she was called out loud and excited, she did not hear; it moved neither the mouth nor the lips, *she walked when pushed and led with the hand...* ⁵”

¹ Paul Richer. *Hystéro-épilepsie*, 614.

² Saint-Bourdin. *op.cit.* 46.

³ Id. *Ibid.*, 64. (Errors in the source! Must be – Saint-Bourdin. *Traité de la catalepsie*, 1841, 7).

⁴ Saint-Bourdin. *Op. cit.*, 53.

⁵ Observation de Tissot, rapportée par Saint-Bourdin. *Op. cit.*, 9.

In cataleptics one could also observe persistent sensations or even images; Léonie or Lucie remain indefinitely staring at a candle that has been shown to them; but it is very difficult to study these phenomena in cataleptics, we will give a thorough analysis below. The described phenomena are quite sufficient to confirm the first sign of catalepsy: the continuation, the persistence of all changes imposed on the subject.

2nd. *Imitation or repetition.* – Instead of touching the subject, let's face it in the direction of his gaze and make a movement ourselves instead of moving its members. Slowly Léonie will move and put her arm, then her whole body exactly in the position we have taken. This phenomenon has been called *specular or mirror imitation*, because the subject usually imitates with his left arm the movement we make with the right arm and resembles our own image in a mirror. The fact is not however absolutely general, because, if Léonie imitates in this way, Lucie, in these same imitations, does not reverse the attitudes; it is true that his catalepsy is much less complete. Instead of exerting an action on the subject's sight, one can impress his hearing, at least apparently. We will not study this phenomenon on Léonie which hardly presents it, would go on Rose, with whom it is completely complete. If I speak aloud next to her while she is in a cataleptic state, she repeats exactly my words with the same intonation. This fact received the name of echolalia or word in echo. He is very curious; the subject, changed so to speak into a phonograph, repeats all the sounds that strike his ear, without appearing in the least affected by the meaning of these words. Ordinarily the noises are repeated with the mouth, but in one case, Dr Powilewicz, then present, having clapped his hands, Rose repeated the noise by clapping his hands too: the echolalia mixed here with imitation.

3rd. *Generalization or expression of phenomena.* – Most often the modifications imposed on the subject remain partial and affect only one member; but sometimes, when the cataleptic state is complete, they show a tendency to generalize and affect the whole body. Jules Janet observed a natural cataleptic which always repeated with his left arm what was done with his right arm and vice versa. It is the phenomenon of *synkinesia* that I have observed only in Léonie and again for certain acts only. If I close his fist, the other closes likewise. If I raise a hand to him in front of the figure in the prayer position, the other hand takes the same position and comes to stand against the first. The acts which complement each other in this way are, as we can see, known and usual acts.

These same usual acts are likely to be generalized much more and to cause a modification in the whole body of the subject. This is one of the best known, most popular phenomena, so to speak, of catalepsy, because it always produces a completely extraordinary spectacle. We see the figure, the whole body come to life, harmonize with the attitude of one of the members and take a striking expression of reality. Has one of Léonie's fists been closed, the other also closes, the arms rise in the attack position, the body straightens, the figure changes; clenched lips, clenched fists and frowns only express anger. Did I put an extended hand near the lips, the other hand is also placed there and seems to send kisses, the figure suddenly changes and, instead of expressing fury, the lips and the eyes, everything smiles. We can change these attitudes indefinitely, these plastic poses and make the subject express love, prayer, terror, mockery, always with equal perfection. To move from one attitude to another, it suffices to slightly modify one of the body gestures; in Léonie, it is enough to touch the muscles of the face. MM. Charcot and Paul Richer

succeeded in modifying the attitude of a cataleptic by causing one of the muscles of the face to contract with the electric current ¹. In Léonie, the figure is cataleptic like the rest of the body; it is enough to raise his eyebrows so that they remain as they were put and that they bring throughout the body the attitude of terror; the expression is no less violent although provoked by such a futile cause.

4th. *Association of states with each other.* – Up to now, the subject has done nothing on his own, has never left the state in which he was placed; we must now note cases where the scene played is much more complete and more developed. I put Léonie's hands in the attitude of prayer and the figure takes on an ecstatic expression. I leave it in this state, because I intended to wait how long the expression would keep. I see her getting up from the seat where she is sitting and very slowly taking two steps forward. At that moment, she bends her knees, but always with singular slowness; she kneels, leans forward, her head bowed and her eyes raised to the sky in a wonderful ecstatic posture. Will it remain thus and, the attitude being completed, keep the cataleptic immobility? No, here she is getting up without me having touched her, she lowers her head more and puts her hands together before her mouth, she advances five or six steps more slowly than earlier. What is she doing then? Here she is now, making a respectful greeting, kneeling again, raising her head a little and, with half-closed eyes, half-opened her lips. What she does is understandable now, she will commune. Indeed, the communion made, she gets up, salutes again, and, her head completely bowed, returns to kneel in her primitive position. This whole scene, having lasted a quarter of an hour, is then interrupted by the end of the cataleptic state.

It is the most complicated act I have seen performed during catalepsy; we see that it is made up of successive phenomena which have provoked one another, instead of being only, as before, the continuation of the same modification. It is necessary to bring closer to this fact other acts provoked by the intermediary of such or such sense and which all have this characteristic to consist of successive actions and different from each other. If a gay music is heard before the subject, he laughs, then begins to dance; sad music makes him cry. If you put a piece of thread in Léonie's hand, she makes the gesture of threading a needle, then begins to sew. If we put a pencil in her hand, she makes the gesture of writing, but only makes bars indefinitely; if you put an umbrella in her hand, she opens it, puts it over her head, etc. "A natural cataleptic, studied by Forestier, *ate greedily (vorabat)* everything that was put in his mouth ²." Many of these complex and related acts are found in the books dealing with catalepsy. I only wanted to briefly recall these cataleptic phenomena which are all well known, but which seem to me of capital importance at the beginning of a study on automatism. As M. Charcot said ³: "In true catalepsy, there is absolute moral inertia...; it is by this, in good method, that the study of hypnotic suggestions must be started."

II. Mechanical or physical interpretation of these phenomena

¹ Paul Richer. *Op. cit.*, 669.

² Saint-Bourdin. *Op. cit.*, 30.

³ Charcot. *Maladies du système nerveux*, 1887, III, 337.

Can the phenomena that we have just described interest psychology? This is the first question to ask when considering cataleptics. Do these still women, like statues, without resistance of any kind and speechless, do they still think, do they still have some conscience that brings them closer to us? It is permissible to doubt this and to wonder if the organic life which seems to exist alone would not be enough to explain all the phenomena observed. This is the explanation that one would find in Haidenhain's works. He explains cataleptic movements by reflex actions of the lower centers of the brain, actions which do not reach the higher centers where consciousness develops. It is also to this opinion that the English alienist Maudsley would relate. Finally, it is the doctrine that we find expressed and defended in the most complete way in the works of Dr. Despine¹. This author refuses to recognize any kind of consciousness, not only during catalepsy, but even during sleepwalking. All the acts performed during these abnormal states seem to him purely "organic", analogous to those that the heart and the lungs do unceasingly without our knowledge. These are indeed automatic acts, but "automatic acts of the cord, of the bulb, of the hemispheres", because "one should not say unconscious and automatic activity of the mind, that is contradictory; it is necessary to say unconscious activity of such or such nervous center". "Carpenter is wrong, he adds, to call these sensorimotor, ideo-motor acts, because there is no sensation or idea there, there are no truly automatic acts of the spirit"; finally "to ask psychology for an explanation of sleepwalking would be wrong, physiology alone can give this explanation²". As our aim in this book, if we are not too ambitious, is precisely to demonstrate the contrary, we must insist on studying the opinions of Dr Despine who seem to stop our work from the start. If this thesis of absolute unconsciousness were applied to sleepwalkers, as the author himself does, it would be absolutely unbearable. To pretend that a person who speaks, resolves problems, spontaneously manifests sympathies and antipathies, acts as he pleases and often resists our orders, is no more aware than a mechanical doll, it is to go back well in back of the famous theory of animal machines of Descartes, Because the consciousness of a sleepwalker is much more obvious than the consciousness of a dog and nobody doubts today the con-science of a dog. But, applied to cataleptic states, this theory does not stop having some force, and, as it is always necessary to put the theories that we want to discuss in their best light, it is by placing ourselves at this last point of view that we will study Dr. Despine's thesis. We hope to show that, even in the latter case, its arguments are not sufficiently demonstrative and leave the field open to other assumptions.

The arguments of Dr. Despine, scattered in the midst of a large number of studies on sleepwalking, which are all, it is interesting to note, psychological studies, can be classified into two groups:

1st. *Most of the proofs are drawn from the fact of the forgetfulness* which characterizes the phenomena of somnambulism and especially those of catalepsy: "we designate by consciousness", says the author³, "knowledge, perception by the ego, by being who feels himself, what is going on in his personality, his own actions, himself; in this work there will only be question of this consciousness." From such a definition of consciousness it follows that if there are acts which the ego does not attribute to itself, which it does not admit having done, these acts should not have been conscious. "When it is a serious act, capable of impressing feelings in the highest degree, if the individual who performed it completely ignores this act, it would be unnatural to attribute this ignorance to forgetfulness. It can only

¹ Dr Despine. *Psychologie naturelle*, 1868, I, 490 et sq. *Étude scientifique sur le somnambulisme*, 1880.

² Despine. *Somnambulisme*, 80.

³ Id. *Ibid.*, 17.

be explained by the non-participation of the ego, of personal consciousness in this act, which is entirely due to the unconscious, that is to say automatic, psychic activity of the brain during a momentary suspension of the brain, conscious activity of this organ ¹.” Now there is no state after which this forgetfulness is more characteristic than after the cataleptic state. Sleepwalkers have sometimes been able to keep some of the memories of their actions; but the cataleptics wake up from their access convinced that nothing unusual has happened. What is more, if, instead of waking up completely, the cataleptic subject only goes into another abnormal state, apparently little different, like the somnambulistic state, he does not retain the memory of previous attitudes and movements. “This ignorance can only be explained by the non-participation of the ego in what the body has done, the cerebral activity which characterizes the ego, the conscious personality having been paralyzed ².”

This same characteristic is found in individuals who have been subjected to inhalations of ether or chloroform. Whatever words the patient said, “his self, his conscious being had not participated in all that had happened, because the patient, soon returned to himself, claimed to have felt nothing, to ignore completely that he had been operated on or thought, that he had uttered the words and that he had performed the acts; the violent reactions of which he was spoken, these various phenomena were therefore purely automatic.” As the state of a cataleptic or sleepwalker is very similar to the state of a chloroformed individual (the demonstration of this point forms one of the most interesting parts of Dr Despine’s work), we can conclude from the one to the other. Chloroform suppresses sensitivity and consciousness, and that is precisely why it is used; since sleepwalking presents the same characteristics and in particular the same forgetfulness, we must believe that it brings about the same unconsciousness.

It is enough to go through these discussions and others of the same kind where forgetting is always accepted as proof of unconsciousness, to be struck by the fragility of this demonstration. Is it therefore impossible that really conscious acts are forgotten? This oversight would be inexplicable, says Despine, when it comes to sleepwalkers. Either, it will be necessary to seek the reasons for this oversight, which perhaps will be very difficult to find; but, even if one could not always explain it, the forgetting of a thing which was really conscious is nonetheless a possible thing and very often real. If, as an English author says ³, a *Times* reader is suddenly killed after reading it, he will certainly have no memory, must we conclude that his entire reading will have been without conscience? We can never then admit the conscience of any man and not even our own; because nothing guarantees us that tomorrow an accident or an illness will not come to delete the memory.

But let us admit for a moment, what seems inadmissible, that forgetting is sufficient proof of absolute unconsciousness, is it really certain that there is no memory of cataleptic phenomena? It is true that, at least for the subjects that I have studied, there is never a memory when they return to the state which by convention is called waking state or normal state. But a certain memory manifests itself first in the following catalepsies by the habit that the subject quickly acquires to perform with more perfection the acts that are made him do more often. Then, and this is more important, there exist in these same individuals certain psychological states, certain somnambulisms, since it is still the agreed name, where the subject perfectly recovers the memory of catalepsy. “You put my hand like that”, said Léonie to me, “as if I were playing the flute, you closed my fists, etc.” It is true that this memory is found only in very

¹ Despine. *Somnambulisme*, 98.

² Id. *Ibid.*, 102.

³ Gurney. *The problems of hypnotism, Proceedings of the society for psychical research.* II, 282.

deep sleepwalking and sometimes so difficult to obtain that they have long been ignored. We will resume the study of these somnambulisms later¹; it was good to know right now that there is a memory of catalepsy. But this memory, Mr. Despine will say, exists only in another abnormal state which itself is a state of unconsciousness. “If his paralyzed conscious activity does not have the knowledge of the time spent during the access, because it did not receive fingerprints, the automatic activity which participated in these acts retained its imprint, and the memory can reappear in another access ².”

Thus the memory, if it reappears in the normal state, would be a good proof of consciousness; but, since it reappears in another state, it is only a proof of physical automatism. Does this not prove that memory is neither a proof of consciousness nor of unconsciousness and that it is necessary to look outside of memory for indications on the state of cataleptics.

2nd. *The second group of evidence* on which Dr. Despine relies to conclude that there is no consciousness during sleepwalking seems *to draw from the analogies that this state presents with certain phenomena of insensitivity*. Some rather complicated acts are performed under conditions such that they seem not to be felt by the person who performs them. Let us not insist on doubtful cases. “An apoplectic struck to death, without leaving the coma where he was plunged, took his watch at the bedside and made the hour strike with the air of deep attention ³.” This observation does not prove much, because on the one hand this individual, at the time when he performed this act, was not yet dead, and perhaps had (no one can prove the contrary) some remnant of consciousness and, on the other hand, as he died soon after, he could never tell whether or not he had felt what he was doing. In a very interesting chapter, the author lists all the acts performed by a decapitated frog, a newt cut in half, by the sections of the praying mantis, etc., and he constantly shows that these acts perfectly resemble those that the Conscious intelligence in other cases commands by the same devices, but they must be done without consciousness now, because the organ necessary for consciousness has been removed. “This intelligent power manifested by the lower section, cannot derive from a self, from a being feeling itself to be; otherwise there would be two separate beings in this animal: one for the upper section, which can act with intelligence, and the other for the lower section. However, this is not admissible in the current state of science ⁴.” We will answer: why then is this inadmissible? The absolute unity of the self is a metaphysical conclusion, perhaps true, but which must result from the facts and not impose itself on them. You have no other proof of the animal’s consciousness than the intelligent adaptation of its movements. We must see if this intelligent adaptation reveals to us one or two or three consciousnesses and only conclude later on in its unity or division.

I prefer the intelligent acts that the author borrows from the normal life of men when they have their intelligence and their speech intact and that they can assure us themselves that they have no feeling of these acts. The most interesting are the usual acts that Mr. Despine describes in a very curious way. He insists on the unconscious nature of the habit: it is not the intelligence which retains a piece of music and which performs it consciously; the artist must have his piece “in the fingers, in the mouth”. “When I’m looking for a pattern I can’t remember, one said, I let my fingers wander over the keyboard and they find

¹ Cf., même partie, eh. II, § 3, p. 86.

² Despine. *Ibid.*, 99.

³ Despine. *Ibid.*, 49.

⁴ Despine. *Ibid.*, 31.

it right away; they have better memories than me.” Moreover, if the artist consciously thinks about what he is doing, he will be less successful, “the mistakes committed more often come from the mind than from the automaton”. This same unconsciousness, already so remarkable in usual acts, is found in all the acts we perform; we are not aware of all the delicate work that the muscles have to do when we raise our arms or when we open our mouths; “the ego controls the movement and it is a power independent of it and completely organic which coordinates the muscular action necessary for the execution”. Finally, the purely organic acts, those of digestion, of respiration, etc., do they not constantly manifest the most marvelous intelligence which the ego not only does not know, but is not even always able to understand. These are a few examples of these very numerous acts which take place in us, without us, which are carried out without participation of the ego, consequently without any conscience, and which must be attached to the purely organic functioning of the marrow and the brain. The acts performed by cataleptics and somnambulists are nothing more marvelous; these are words, coordinated movements, which very much resemble those we do by distraction or habit, *without knowing it*. These acts must therefore have the same nature, and since the former are unconscious, the latter are also.

I will not dwell on the description of these unconscious acts borrowed from normal life: the author describes the details with real psychological talent, all the more curious since he refuses these facts to have any psychological characteristic.

But I will allow myself to make some reservations about the interpretation of these phenomena. Let us admit that the actions done in catalepsy (because that would be very inaccurate for the acts performed in somnambulism) resemble strongly, if not to the organic phenomena, but at least to the usual acts. Should we admit without hesitation the absolute unconsciousness of habit? The pianist Despina talks about can play his song by heart without *paying attention* to the movement of his fingers, but he can also and very easily give attention to each of these movements so as to have a distinct awareness of them ¹. Other facts, on the contrary, remain aware, even though habit has made them faster or easier. “Thus the phenomena of memory, the awakening of ideas under the influence of association are undoubtedly the results of habit; they are nevertheless accomplished with conscience ².” What is lacking in the usual phenomena to be perfectly known to us, is therefore much attention rather than consciousness, and, when we ignore them or believe that we absolutely ignore them, nothing proves that they did not a conscience of their own; the slightest effort of attention will make manifest to us an awareness of the usual acts which we have not created and which already existed previously. But, it will be said, there are acts of the body completely unconscious for us, like the acts of organic life. Either, although in reality the catalectic act of communion hardly resembles heartbeats or digestion. We would now have to prove that these acts which are unconscious *for us* are unconscious in themselves. “Excitation of the soft palate by the bolus or by a foreign body”, says M. Ch. Richet ³, “produces either swallowing or nausea; there seems to be some sort of vague discernment of the nature of the irritation. It is a rudimentary psychological characteristic, a sort of bone marrow discernment.” This is the case with all the reflexes which everywhere show a kind of sensitivity and discernment, although we are not aware of it. A large number of physiologists have recognized this role of elementary consciousness. Buffon attributed to the coordinated organic molecules in the animal body species of material sensations foreign to thought and to the ego. Ch. Bonnet attributes

¹ See, on this subject of unconsciousness of habit, a study by M. L. Dumont. *Revue philosophique*, 1876, I, 326.

² *Ibid.*, 328.

³ *Psychologie générale*, 69.

the faculty of smelling to all parts of the body and to the plants themselves. Pflüger, Auerbach, Lewes and many others attribute sensitivity and sometimes intelligence to all nerve centers. The discussion of all these theories, perhaps adventurous, would be pointless and would take us too far; but their statement is enough to make it understood that a habitual or even organic act is not necessarily unconscious because it is ignored by me. Also the assimilation of cataleptic acts to such phenomena, even though it would be indisputable, does not prove their absolute unconsciousness.

In reality, we never directly know that a single consciousness, it is ours at the moment when we feel it; all other consciousness is known only by an induction or a supposition. No one can ever demonstrate mathematically that the person speaking to me is not a mechanical doll with articulated language, and the Cartesians reasoned rigorously when saying of an injured dog: "It screams and smells nothing." In this question of the conscience of others, as in many others, we must stick to likelihood and probability. Now, we ordinarily assume the existence of consciousness from two signs, speech and intelligently coordinated actions. The first sign, the word, is considered the most decisive, and that is right; but it is but a more complex and perfect case of the second, a set of movements more complicated and more intelligently coordinated than the others, and if this first sign leads us to suppose consciousness, the second leads us to the same guess, perhaps with a little less probability. Cataleptics do not speak, this is true, and we will have to come back to this important fact later, but they act intelligently. If I put two kilograms of weight on the outstretched arm of a cataleptic, the muscles of the arm and the muscles of the whole body tighten so that the arm is supporting the weight without flexing. If I put a needle in her hands, the whole movement coordinates in a different way than if I put my hands in prayer. There is adaptation, unity of movement, in short, what is usually taken to be a sign of intelligence.

But, it will be said, coordination, intelligence and even sensitivity can exist without consciousness. "Several very complicated, intelligent acts, reaching a perfectly determined and varied goal according to the circumstances, acts resembling exactly those that the ego commands ... can be automatic ¹" (that is to say here unconscious). "Man, Maudsley said, in the same vein, would not be a worse intellectual machine without consciousness than with it ²." In short, consciousness is only an accessory, an epiphenomenon, the absence of which disturbs nothing. I do not know why this theory has been attributed to M. Ribot, who, however, with excellent arguments, protested against it ³. I will not try to discuss it, because, I must admit, I hardly understand it; it seems to me intelligible neither from the psychological point of view nor from the physiological point of view. What do we mean when we speak of "reasoning of the marrow and intelligence of the brain ⁴"? Nothing else except that there is a consciousness other than ours in the marrow or in the brain, because reasoning without consciousness makes absolutely no sense. On the other hand, if we admit that consciousness results from a set of physiological conditions leading to a certain act, we cannot admit that another time this exactly the same set again leading to the same act is given without consciousness. The same conditions would sometimes be causes of consciousness and sometimes not. The fact of consciousness seems to us on the contrary very important in the series of organic phenomena: its presence or its absence, as we will see more and more, considerably modifies things. When we know

¹ Despine. *Psychologie*, I, 491.

² Herzen. *Le cerveau et l'activité cérébrale*, 1887, 212.

³ Ribot. *Maladies de la personnalité*, 16.

⁴ Despine. *Somnambulisme*, 85.

that a complicated phenomenon, like the movements of anger or the gestures of prayer, can only exist in us with a set of conscious emotions and ideas, we have no right to assume that the exact same gestures occur during catalepsy without being directed and unified by any consciousness. So we will suppose, which is now legitimate at least as a hypothesis, that cataleptic phenomena are psychic phenomena whose nature it remains for us to determine. What is now only a hypothesis will be verified, we believe, more and more by other phenomena of the same kind.

III. Psychological interpretation. – The catalepsy equated with sleepwalking

The acts performed during catalepsy are dependent on psychological phenomena: this is a proposition which seems very simple, but which is susceptible of very different interpretations. Because psychological phenomena are extremely varied in nature and it is not unimportant to explain the facts that we have described by one or the other.

I will not speak of an easy interpretation, which was in fashion for a long time. It consisted in relating all the facts that one did not understand to a voluntary and perfectly conscious simulation. It is a completely false idea to believe that a psychological or even imaginary disease is always a simulated disease, and besides the catalepsy is of all the abnormal phenomena that which can least be simulated. But, without attaching catalepsy to a complete intelligence calculating his tricks, we can explain it by a half-intelligence understanding the operator's thoughts, realizing his actions, without having the strength to oppose them; in a word, we can compare catalepsy to somnambulism and explain all these acts by suggestion. "To put a limb in catalepsy, it is not necessary to open the subject's eyes, nor to subject him to a bright light or to a violent noise, as is done at the Salpêtrière; it suffices to lift this member, to leave it for some time in the air, if necessary to affirm that the member can no longer be lowered; he remains in *suggestive catalepsy*: the hypnotized, whose will or power of resistance is weakened passively retains the imprinted attitude ¹." All this is perfectly correct, and we will study, during somnambulism and during the vigil, what M. Bernheim calls suggestive catalepsy and even its different varieties; but it is a question here of a set of phenomena brought about by different procedures or better by the disease itself, and which, while being psychological, present quite different characters. Catalepsy and somnambulism are only degrees from each other, this is indisputable, and we will see many intermediaries between them; but a difference in degree is not a zero difference, especially when it comes to moral phenomena. Let us therefore try to specify the degree to which the consciousness of cataleptics stops.

1st. The immobility and inertia of the subject are much greater in this state than in any other: a normal person or a sleepwalker, especially when his eyes are open, moves much more spontaneously. This spontaneity is noted in the execution of acts, even ordered acts or suggestions. Not only can there be often very great resistance and independence, which never exists to any degree during catalepsy ², but still there is variety, changes in the execution of the same acts. A sleepwalker does not always perform the same act

¹ Bernheim. *De la suggestion*, 1886, 94. – Cf. Liébault. *Du sommeil*, 412.

² Cf. Paul Richer. *Op. cit.*, 689.

in the same way; sometimes it does it quickly, sometimes slowly, sometimes with good humor, sometimes by protesting, sometimes in one way, sometimes in another. On the contrary, nothing equals the regularity of cataleptics: no change of character, no external impressions that distract or modify them; their gestures, their steps are always mathematically the same. Léonie will always take the same number of steps opposite and to the right to go to communion, and she will collide with a wall without advancing rather than turning to the left. A sleepwalker who will always be able to adapt his actions to circumstances therefore shows a completely different intelligence.

2nd. The previous difference is probably a difference of degree, what it is easily appreciated; but behold, the difference of degree in intelligence brings about the presence or absence of an important characteristic. One of the most important signs of catalepsy, although it is negative, is this: *the subject cannot speak*. It is not a question of the articulated speech which it possesses when it repeats the sounds in echolalia, it is a question of language as a sign of thought. The cataleptic does not answer questions either by word or by any sign. Rose, in some deep sleep, had a more or less paralyzed mouth, but she answered me with a sign of the hand which meant “yes”, or another which meant “no”. When she has a moment of catalepsy during the hysterical crisis or during sleepwalking, she does not respond to me at all with any signs, although she is not paralyzed, whether she can speak in echo or repeat gestures. To take an example, I suppose that we take these two women, Rose and Marie, in a state where they are outwardly completely identical, stretched out, eyes closed, motionless, but one, Rose, is under attack cataleptic (because there are catalepsies with eyes closed), the other, Marie, in simple somnambulism; I approach each successively and I pronounce aloud, in the same tone, the same sentence: “Did you sleep well last night?” Rose, without moving, repeats in the same tone: “Did you sleep well last night?” Marie turns abruptly, smiles and says: “Not too bad, thank you, but I had a bad dream.” Am I wrong to conclude that these two women, perhaps identical in appearance, are not exactly in the same psychological state ¹?

If the cataleptic does not use speech, it is because it does not understand it. It is easily verified by trying to give orders to these subjects by speech. We can shout in all tones: “Raise your arm”, Léonie does not move, she seems not to hear; Rose keeps repeating, “Raise your arm”, but neither of them raise their arms. It is true that I find myself here in contradiction with M. Paul Richer; this author, although he has noticed that some cataleptics do not obey the oral suggestion ², however, writes: “While B is in cataleptic state, we catch his eye and, directing him on the ground, we tell him that she is in a garden full of flowers. As soon as the cataleptic state ceases, she makes a gesture of surprise, her physiognomy comes alive; “How beautiful they are”, she said, and bending down, she picked flowers, made a bouquet of them, attached one to her bodice, etc. ³...” For me, a subject behaving in this way is no longer in a cataleptic state. This, it will be said, is only a question of words and names; undoubtedly, the different states through which human intelligence can pass form a series so continuous that it is impossible to draw precise divisions in it, and such and such a subject will be found in intermediate states which one can indifferently call by one name or another. But if we attribute the name of cataleptic to a subject who understands verbal suggestions and who speaks, there is no longer any difference between catalepsy and somnambulism. Indeed, all the other symptoms either are found in all hypnotic states, or else, like the

¹ Cf. Binet et Féré. *Magnétisme animal*, 1887, 210, et Cullerre. *Magnétisme*, 162.

² Paul Richer. *Op. cit.*, 781.

³ *Id. Ibid.*, 697.

paralysis produced by friction of the tendons ¹, do not have enough generality, since I could not find them on any subject. It does not matter moreover that one designates the state which I have described under the name of first somnambulism or state of complete suggestibility; the only important thing is to understand the psychological changes of the subjects in this state, because there are absolutely only psychological differences to distinguish all the states. Well! consciousness, which exists here as everywhere, because it disappears, I believe, only with life, is, in this state, more rudimentary than in any other. This consciousness is capable of sensations, but incapable of ideas; able to hear, but unable to understand. It should not be concluded that one can speak at random in front of cataleptics without any danger for future experiences; they can hold back the words even without understanding them and if, as we will see later, this memory awakens in a more intelligent later state, then it will be understood and will have its suggestive power. But the only certain thing is that the words are not understood now, and that it is not an intelligent obedience that manifests itself in catalepsy.

It follows from this fact that, while appearing extremely inert and docile, the subject is in reality not very manageable and obeys much more his own inspirations than those of the operator. If I show Léonie playing the scene of the communion that I have described, you will think that she is obeying a command given by me. In reality, I had not ordered or even planned what she was going to do, and the first time I was very surprised. I now know from experience that by putting the hands of this subject in a certain position, then leaving it for a few minutes, I will bring the scene of this communion. But still now I do not direct this scene; if I wanted to change it in the least, make the subject go to the left, for example, or make him kiss a crucifix before communion, I would not succeed. If I speak to the subject, I am not understood, and if I touch his body, I simply stop the scene; I am therefore a simple spectator rather than an actor. It is from its own background that the subject draws his actions and his gestures, and, although he acts in a manner so determined that I can foresee his least gestures to a second, he acts spontaneously. It is therefore at this moment that the automatism of the subject is revealed better than ever, and that is why we began our study by describing a state which, while being conscious, does not however present normal consciousness and intelligence.

Before examining the nature of this rudimentary consciousness, one must take into account a possible objection. Now that it is fashionable to explain everything by suggestion, as in the past by simulation, one could say that all these psychological characters of catalepsy have been learned about the subject that has been trained in this sense. It would be dangerous to take this reasoning to the extreme, which would also quickly become a sort of “lazy argument”. But it is fair to take it into account; for, very often without doubt, in circles where the subjects are numerous and imitate each other, certain real states in one subject may have been artificial in the second. But, for the cases in question here, we will note that the subjects did not know each other in any way and that we should not however assume the operators naive enough to have suggested without knowing all these positive and negative characters catalepsy. Besides, an artificial state can always be recognized by some sign, and the following observation may perhaps demonstrate it. One day I did some experiments with Lucie and a foreign person was present: this last circumstance displeased me very much, because you should only keep with you the essential people accustomed to the attitude that you have to have during experiences Of this genre. This foreign person

¹ Paul Richer. *Op. cit.*, 612.

constantly asked me very embarrassing questions; because, according to my habit, I did not want to answer before the subject; however an unhappy word escaped me: “What is catalepsy? we asked.” – “It is a state where the subject remains motionless and leaves the limbs in the position in which they are placed.” No sooner had I said these words than I regretted it: “Now, I thought, it will be fair to say that she has suggestive catalepsy,” and I wanted to check immediately the effect of my recklessness. “Here, I say aloud, when I clap my hands, she will fall into catalepsy.” I knock and here is Lucie who remains completely still, her eyes wide open: I lift her arms, they stay in the air, I tilt her body, it remains tilted. Was she in catalepsy? It was easy for me to verify that no other sign of catalepsy, neither the expression of the physiognomy, nor the imitation, nor the echolalia could be observed, and above all the subject understood the speech so well that he to finish the affair is enough to say to him: “It’s over, you’re no longer in catalepsy.” Well! that we try to stop a real attack of catalepsy, as Lucie herself had had, but very rarely, by simply telling the subject that it is over, and we will see what difference there is between this state of docility suggestive, form of hypnotic little sleep, and the real cataleptic attack, during which the thought is brought back to a completely rudimentary state and which is one of the forms of the great hystero-epileptic attack.

I cannot therefore believe that the state which has just been described is completely artificial. Because it has been recognized that it is a conscious state, it should not be concluded that it is any psychological state. There are very important differences and varieties even between conscious phenomena..

IV. A rudimentary form of consciousness. – The isolated sensation and image

Some philosophers, like the Cartesians, have represented consciousness as something invariable and immutable without nuances and without degrees. For Descartes, thought existed complete with doubt, reflection, reasoning and language, or else did not exist at all and was replaced by pure and simple mechanism, by extension and movement. Leibniz, on the contrary, in this profound philosophy, to which all the physical and moral sciences today seem to lead us back, had a completely different conception of consciousness. He admitted an infinite number of degrees and some of these forms seemed to him so inferior to normal thought “that human spirits were like little gods to them ¹”. It is this last theory that we must now recall in its main features, in order to understand the possibility of lower and rudimentary consciousnesses. Let us take human consciousness in its ordinary and completed form and successively remove from it all the improvements it has acquired, but which are not essential to it. Everyone recognizes that scientific intelligence, this faculty, which exists in all men to a greater or lesser degree, must be separated from vulgar consciousness, to explain and understand things. This intelligence proper results in bringing together (*comprehendere*) a large number of facts of consciousness in syntheses or general ideas; it does this by discovering the relationships between particular facts, which, being able to remain the same between different terms, give unity to seemingly very distinct things. This is obviously the highest term that human thought reaches, but it is essential to note that it does not always reach it, perhaps even human thought arrives only rarely and less often than we are willing to believe. Indeed, when we examine the actions of other men, we are too inclined to lend them the ideas and reasoning that we ourselves do to interpret their conduct. Very often we believe that a man acted with intention, that he

¹ Leibniz. *Erdm.*, 125, a.

calculated the consequences of his actions, that he made his ideas a systematic whole linked by well understood reports, while in reality this individual has let his thoughts mechanically evoke each other without having grasped any systematic relationship between them. We must not confuse the law or the interpretation of the facts of conscience as our intelligence finds it, or thinks it finds it, with conscience itself. If the phenomena of consciousness presented by a man *seem to us* to be linked together by relationships of resemblance, difference or finality, we must not conclude that there was in the mind of this man the awareness of resemblance, difference or purpose ¹. English philosophers seem to fall into this error when they say that all consciousness is the perception of a difference. It is also an exaggeration of this kind that I would sometimes criticize for the interesting works of M. Paulhan, who seems to lend to elementary consciousness the notions of finality which he himself uses to interpret them ². Consciousness can exist without any judgment, that is to say without intelligence; man can feel and not understand his own feelings. To take an example in the subject at hand: if we are in the presence of the complicated acts that Léonie performs when I joined her hands, we will think that *we* are making communion and we will combine all these acts in this systematic idea which we designate by the word “communion”; but it is not at all proven that *she* had the idea of communion and that she united her actions under this general idea; it is much more likely that it has images that evoke each other, and nothing more. If later she finds the memory of these sensations, which is possible, as we said, she can examine them, relate them and understand them. “Here”, she said one day under a circumstance like this, “my hands were like this, I was up, then on my knees ... but so I was saying my prayer ... that I was so dumb.” She is *surprised now* at actions that did not surprise her just now, because she felt them without understanding them.

Below intelligent judgment, I would place the phenomenon known as *perception*. To know, when you open your eyes, that there is a tree of such color, such form, at such distance, is, as we have often demonstrated, a rather complicated psychological phenomenon. The already numerous current sensations must be combined with a large number of interpretative images which make it possible to appreciate the exteriority, the form, the dimension, the place of the object. These interpretative images which accompany the main sensation here are incidental; they can be modified, as we see in the errors of the senses; they may even disappear, while the sensation persists. Animals from which the brain has been removed appear to be in this case; they still seem to hear and see, but they no longer know how to interpret their sensations, that is, to add the notions of distance, fear, desire, etc. to themselves³. The element of consciousness that remains when we cut out the incidental facts therefore seems to be the sensation or the image here.

It seems to us, however, that in order to understand the facts that we have exposed and especially those that we will study later, we must go even further in this analysis of the elements of consciousness. We ordinarily define sensation “the simple phenomenon that happens in me when *I* see, when *I* hear, etc.” Perhaps this definition could not be replaced by a better one, because we define things only by explaining

¹ See about it, Rabier. *Cours de philosophie*, 1, 74 et I 254.

² Fr. Paulhan. *L'associationnisme et la synthèse psychique*. Revue philosophique, 1888, 1, 32, et la *Finalité comme propriété des éléments psychiques* id. 1888, II, 105.

³ Sourgy. *Les fonctions du cerveau*, 1186, 46 et sq. – Mosso. *La peur*, 1886, 38. – Sergi. *Psychologie physiologique*, 1888, 114.

them and mixing our interpretations with them; but it is obvious that it contains one word too many; it's the word *me*, the word *I*. "Certainly", said Reid ¹, "there is no man in the universe who can conceive or believe that odor exists in itself without a spirit or some subject who has the faculty of smelling." "Can it happen in the soul", said Garnier ², "some knowledge without his knowledge?" If we take a metaphysical point of view, like these authors, if we seek the origin, the cause of sensation, perhaps we will think, like them, that there is no sensation without a soul to produce and know it. But, if we take an exclusively psychological point of view, if we consider the self no longer as a being and a cause, but as a certain idea which accompanies most psychological phenomena, we will be forced to think that there has feelings without me, that there can be phenomena of vision, although however nobody says: "I see". The idea of the ego, in fact, is a very complicated psychological phenomenon which includes the memories of past actions, the notion of our situation, of our powers, of our body, of our very name, which, bringing together all these scattered ideas, plays a big role in the knowledge of the personality. If you consider a simple feeling, it does not contain any of this and alone is not enough to form such a complex idea. No doubt most of our sensations usually awaken these memories or simply the word *I*, which is their substitute, but we should not attribute to the isolated sensation what is the result of a complex combination. "Since the only fact", says Stuart-Mill ³, "which makes belief in a self necessary ... is memory ..., I see no reason to think that knowledge of the self precedes memory. I see no reason to believe with Hamilton and M. Mansel that the ego is an original presentation of consciousness, that the simple impression undergone by our senses implies or carries with it a consciousness of a self no more than of a non-self."

A great number of philosophers, belonging to all the schools, have expressed this truth very well, this independence from the sensation of any idea of personality. Cudwoth, Ch. Bonnet, Buffon when he grants to animals, without explaining themselves well, feeling without thought ⁴; Flourens when he gives animals an intelligence which does not know itself; Gerdy, distinguishing sensation and consciousness from sensation ⁵, admitted that one could feel without being aware of being a person who feels. Among the moderns, Lewes ⁶ and Herzen admit "that we feel without saying it, without knowing that it is we who feel, nor that we feel ⁷". Spitta characterizes deep sleep as the absence of self-awareness, with the persistence of consciousness itself; Radestock makes the same distinctions between self-awareness and simple awareness ⁸; Dumont, especially in his scientific theory of sensitivity, tried to distinguish this universal consciousness, which even belongs to "an atom of sensation", from intelligent knowledge of the self and the person ⁹, and all these recent studies would be very interesting to analyze ¹⁰. But it is better to

¹ Reid. *Œuvres*, Trad. Jouffroy, 1829, II, 53.

² Garnier. *Traité des facultés de l'âme*, 1872, I, 380.

³ Stuart Mill. *La philosophie de Hamilton*. Trad., 1869, 249.

⁴ Buffon. *Discours sur la nature des animaux*. Œuvres, 1839, III, 1.

⁵ *Physiologie philosophique des sensations*.

⁶ *Physiology of common life*, II.

⁷ Herzen. *Le cerveau et l'activité cérébrale*, 255 et sq.

⁸ Cf. Delbœuf *Le sommeil et les rêves*. *Revue philosophique*, 1879, II, 335-339.

⁹ L. Dumont. *Théorie scientifique de la sensibilité*, 1877, 103.

¹⁰ Cf. Fouillée. *L'homme automate*. *Revue des Deux Mondes*, August 1, 1886, 552, and elsewhere: "We will answer", he said, "that feeling does not at all imply me, I feel, that the immediate awareness of pain does not imply reflected awareness, that the cells can be moved in a painful way without the individual as individual feeling it..." *La conscience*: *Revue des Deux Mondes*, 15 octobre 1883, 902.

return to an older French philosopher who made this distinction the basis of his philosophy and who seems to genuinely anticipate the experiences we report today. Maine de Biran distinguishes three degrees in the development of intelligence and he calls them: animal life, human life and the life of the spirit. We do not have to deal here with the third existence or the life of the spirit, but we must point out the characteristic which distinguishes animal life from human life. “The vital functions, he says, result in internal effects called animal sensations, general modes of pleasure or pain which constitute the existence of the animal, which, in order to exist and thus to feel, in its proper title of animal, does not need to know that it exists or to perceive that it feels, that is to say to have the consciousness, *the idea of feeling*, to be a person, a constituted self one, simple, identical, remaining the same when the sensation passes and varies ¹,” and elsewhere: “Between complete consciousness and the Cartesian mechanism, there is room for beings who have sensation without consciousness, without me capable of perceiving it ².” He quite rightly suggests giving these phenomena a special name and, as we intend to keep the name and the meaning given to it by Maine de Biran, this very interesting passage should be quoted in its entirety ³. “*Affection* is what remains of a complete sensation when one separates from it personal individuality or the self and with it any form of time and space, to use the expression of the Kantians, any feeling of causality external or internal, or, in the language of Locke, when the idea of sensation is reduced to the simple sensation without idea of any kind, or finally, in the point of view of Condillac, when the statue becomes sensation without being nothing more... This simple emotional state is not a pure hypothesis; it is a positive and complete mode of its kind which originally formed our entire existence and which constitutes that of a multitude of living beings to *the state of which we approach whenever our intellectual thoughts weaken and degrades*, that thought slumbers, *that the will is null*, that the ego is as if absorbed in sensitive impressions, that the moral person no longer exists.” One should not be too surprised if these passages of Maine de Biran apply exactly to the cataleptic state. This philosopher did not disdain to go to sleepwalkers, and he speaks of them on several occasions: he deserves, more than is generally believed, to be considered a precursor of scientific and experimental psychology.

But, before applying Maine de Biran’s ideas, we must also borrow from this philosopher some answers to the most serious objection that this conception of the *the emotional state* can raise. He tells us about the discussions he had with Ampère, Cuvier, Royer-Collard and the pain he had to make himself understood. “A sensation for them was nothing if it was not joined to the consciousness of the being who experiences it. This discussion made me see how far I was from making my point of view heard. Leibniz’s theory, which characterizes so well this state where the simply living monad is reduced to obscure perceptions, from which it rises to clear perceptions and to consciousness, would serve as an introduction to the exposition of my doctrine that “ it will be very difficult for me to make my voice heard ⁴.” However, he tries to answer elsewhere: “How to conceive a sensation that one does not feel! It is here above all that I observe the defectiveness of language and its natural and necessary forms which, all bearing the imprint of the self and the human person, no longer find application where the self is not. What is a feeling that you don’t feel? I ask in turn what does this *on* relate to? Man feels, he knows his sensation because he is an identical permanent person who is distinguished from his sensations... The animal does not feel, does not know his sensation because he is not a constituted person to know or to see

¹ Maine de Biran. *Anthropologie*, dans les *Œuvres inédites*, 1859, III, 362.

² Id., *Ibid.*, III, 405.

³ Maine de Biran. *Essai sur les fondements de la psychologie*. *Œuvres inédites*, II, 11 et 19.

⁴ Maine de Biran. *Journal intime*, 1877, 139.

inside his individual existence. He feels without knowing he is feeling, as he lives without knowing he is alive ¹.” In a word, we cannot understand a sensation without a self, because the idea of the self is the condition of knowledge and that we necessarily transport to consciousness the conditions required for knowledge, whenever we seek to study it, that is to say to know it.

The previous conclusions on the existence of a form of elementary consciousness to which philosophical reasoning has led us are confirmed by the study of the facts. The most curious and decisive are the facts that we observe after the fainting, and it is very right to recall them here, because there is happening, as we will see later, something analogous during nervous breakdowns and during hypnotic sleeps. “During the syncope”, says an author who was able to study this phenomenon on himself ², “it is psychic, absolute nothingness, the total absence of all consciousness, then we begin to have a vague, unlimited, infinite feeling, a feeling of existence in general without any delimitation of its own individuality, without the slightest trace of any distinction whatsoever between the ego and the non-ego; one is then an organic part of nature having consciousness of the fact of its existence, but having none of it because of its organic unity; in short, we have an impersonal consciousness.” “We have stupid sensations, if I can put it that way, that is to say sensations which, precisely because they remain isolated, cannot be known, but only felt ³.” The normal state may not present such clear examples to us, but it can be recognized, however, that the idea of the ego does not always join all the sensations we experience equally. Most, on the contrary, awaken the idea of the ego so little that we do not hesitate to attribute them to the outside; instead of saying that it is we who experience the sensation of the color green, we say that it is the tree that has it. Often we do not even make this distinction any more and, in front of a spectacle which impassions us, we only have in the conscience the feelings of this spectacle without looking back on ourselves, without distinguishing what is inside and what is outside. It is true that in ordinary life we can always pull ourselves together, get out of these *absorbing* sensations and recognize that it was we who had them. But we can conceive that some beings, like the lower animals, can never free their personality from these elementary sensations, and that other more complex beings are momentarily reduced to purely *affective* life without knowledge and without reflection.

V. The nature of consciousness during catalepsy

It is precisely a consciousness of this kind, purely affective, reduced to sensations and images, without any of these connections, of these ideas of relationship which constitute personality and judgments, which we believe is legitimate to suppose during catalepsy and analogous states. Neither the nothingness of consciousness and the pure mechanism, nor the knowledge capable of understanding and obeying seems to us probable here; on the contrary, it is a particular form of consciousness intermediate between these two extremes.

¹ Maine de Biran. *Anthropologie. Œuvres inédites*, III, 397.

² Herzen. *Le cerveau et l'activité cérébrale*, 1887, 236.

³ Id, *Ibid.*, 245.

Mr. Herzen has just described to us a particular state of thought which he has observed about himself, consciousness in the nascent state, so to speak, which manifests itself when the mind awakens after a complete fainting. If we have insisted on this very curious observation, it is because *the cataleptic state* seems to us to present great analogies with *this nascent state of thought* after a syncope. Several authors such as M. Pitres, MM. Binet and Féré¹ have already reported some sort of syncope during hypnotic sleep, but they consider them rare and accidental; on the contrary, I believe them to be very important and fairly frequent, although they are usually so rapid that the observer hardly notices them. In several of the subjects I have studied, the cataleptic state was preceded by another state entirely analogous to syncope. This is indeed how things happen at the start of Rose's hypnotic sleep and even in the middle of a sleepwalking session. Suddenly she stops responding and talking and stays completely still, eyes closed. If you raise your arms, they fall heavily; if we call it, if we shake it, it does not move. This is not the condition described by M. Charcot under the name of lethargic condition, because the pressure of the tendons, muscles or nerves does not cause any contracture. It is, it will be said, hysterical sleep which mixes with hypnotic sleep. No doubt, this state is found exactly the same in the hysteria crisis and it has, as we will see, the same consequences. But whatever, it is not less a real state, and besides there is not a single fact in the hypnotic sleep which does not find its analog in the crisis of hysteria. In this kind of hypnotic syncope, the organic functions are ordinarily performed in a regular manner, although there are sometimes, if this state is prolonged, disturbances of respiration; but the psychological functions seem totally suppressed, or at least I have never been able to find the slightest sign which indicated their existence to me; I therefore have no right to suppose conscience without reason. This state is prolonged more or less long, it sometimes lasts a quarter of an hour or more, it is sometimes so fast that it is necessary to know the subject well to note its existence. But after a while there was a change in the subject, although no external changes were visible. Because if I raise my arms or legs, instead of falling like earlier, they stay still in the position where I put them and continue the movement I give them. However if I speak, the subject does not react more. Let us wait a few more moments: if I speak now and if I say aloud: "Raise your arm," the mouth opens and repeats like an echo: "Raise your arm." A few moments after this period of echolalia, the subject no longer repeats the commandments, but he executes them, he actually raises his arm. One more moment and he answers me with increasing vivacity and a consciousness which seems more and more complete. The subject has therefore passed, in this time interval, from a state where consciousness was zero to another state where consciousness is developed enough for him to speak intelligently. Is it not natural to assume that he went through different increasing degrees of consciousness and, as the cataleptic, then echolalic state were the closest to hypnotic syncope, is it not legitimate to conclude that these states correspond to the most basic forms of thought, to the nascent state of impersonal consciousness. Almost all subjects, when they are susceptible to deep somnambulism, of a real second existence, thus present at the moment when they fall asleep a transition period well known by the old magnetizers, during which they show no reaction. We are well aware of the fainting which separates the two lives of Felida X...² and which Mr. Azam called a little death. We find the same phenomena with instructive variants in other subjects. One day, I found Lucie sick, half panicked in this state of aura which preceded her great hystero-epileptic crises. I wanted to avoid him this great crisis, which always lasted several hours, by putting him to sleep immediately, but as soon as I touched her that she suddenly fell into the most complete state of hypnotic syncope or hysterical sleep (little imports the name); she remained there ten minutes without any process being able to provoke the

¹ *Magnétisme animal*, 118.

² Azam. *Hypnotisme, double conscience....* 1887, 66.

least reaction. At that moment, I noticed a curious modification which had just formed; touching its limbs, I caused each time a small movement. I saw indeed that each pressed muscle, even slightly, contracted immediately and in isolation, then relaxed very quickly. It was possible to study on it the isolated action of all the muscles of the body. It was almost the lethargic state described by M. Charcot, with the difference that the muscular contraction did not persist in the form of contracture. A few moments later, the contraction could systematically extend to all the muscles of the arm at once, and the limbs now kept the positions where I put them. I opened the subject's eyes and they remained open, I stood in front of him and he got up to imitate all my movements. A few moments later, Lucie began to speak and entered into her ordinary sleepwalking. We will note here, in addition to the previously reported facts, that a state analogous to classic lethargy has been inserted between syncope and first catalepsy. This leads me to believe that this lethargy, although it is a real state, is not very aptly named: it is not a state analogous to death, a "death trance", and it is probably not the nothingness of all consciousness. Besides, natural lethargy sometimes presents general contractures, but ordinarily does not bring about this neuromuscular hyperexcitability ¹. Hypnotic lethargy seems to me to be rather an elementary degree of consciousness, a muscular sensation so rudimentary that it remains completely isolated and does not generalize enough to direct the movement of an entire arm ². A third example will be even clearer. A singular characteristic of Léonie is that any change of state whatsoever is always signaled by an abrupt sigh, a kind of small respiratory convulsion. The state of syncope is rare in her, quite accidental, and it always frightened me, because it is accompanied by respiratory disorders and choking. That it ceases spontaneously or that its conclusion is precipitated by putting hand on the subject's forehead, it always ends with an abrupt sigh, after which the subject is in a well-known state which is quite the classic hypnotic lethargy with all its characters ³. But we can notice in this lethargy, more clearly than in that of Lucie, the first return of consciousness. When a contracture has been produced by the shock of tendons or muscles, it is not necessary, as we have already noted, to strike exactly the opposing muscles to resolve it; it is enough to strike the muscles at random so that other muscular sensations replace the first. Much more, to undo a flexure of the arm contracture, I just need to gently pull the fingertips. Does it not seem that there is some consciousness capable of sensing the extension of the arm, as there is one in catalepsy which senses the position of the limbs? The lethargy ends with an abrupt sigh and the subject has made further progress. The members no longer contract when they are touched, they understand more quickly the changes that we want to print them, they keep with astonishing precision the position where we put them. But the movements communicated do not continue yet, the arms always remaining immobilized in the last situation. I had previously thought it useful to designate this state which was involved in lethargy and catalepsy by a particular name. But this nomenclature does not in reality have much advantage; we can establish as many degrees as we want in this gradual awakening of consciousness. In Léonie, these

¹ Gilles de la Tourette. *L'hypnotisme et les états analogues*, 1887, 223.

² Without wishing to discuss in this purely psychological work the controversial question of the three states of hypnotism, the importance of which has been greatly exaggerated, I can make a few comments on the preceding observations. Catalepsy and even the state improperly called lethargy with neuro-muscular hyperexcitability seem to me perfectly real states which arise naturally during a great crisis of hystero-epilepsy or even during the state of somnambulism caused in subjects who have already had crises of this kind. But it must be added that these states, especially the last one, are very rare, then that they are much more psychological modifications than physical modifications and that consciousness remains, although very altered, and even reduced in lethargy, finally that 'a very large number of subjects reproduce these states by simple automatism when they have heard of them or when they have been able to see them. See 1st part, ch. III.

³ I have already described this state of Léonie and the following ones in my article about *les Phases intermédiaires de l'hypnotisme*. *Revue scientifique*, 1886, I, 57.

degrees marked by sighs present some clarity, but in Rose the change is made in a continuous way, and when it is done slowly, one can note a considerable number of states between the syncope and the complete somnambulatory life. The only thing to remember is that catalepsy does not come in a single form with open eyes and the ability to present all the phenomena I have described simultaneously. In Léonie, there are three degrees of catalepsy with the eyes closed: first the limbs remain immobile without continuing the movements, then the limbs are able to continue the communicated movements and the figure takes an expression in harmony with these movements, finally the sensation of tact seems to be reborn and an object placed in the hands provokes certain usual movements. After this last degree, the eyes open on their own, and there are four forms of catalepsy with the eyes open. I do not insist on the differences of these states which are, I repeat, insignificant or at least very particular on this subject. It is first the sense of sight that wakes up and the subject is susceptible of imitations, then the sense of hearing in an echolalia which is never as perfect as that of Rose, then a beginning of intelligence, speech and the possibility of causing hallucinations, then incoherent words, a kind of delirium and finally sensible words in a complete sleepwalking life. When we approach this last point, the characters of catalepsy, imitation, the harmony of expression disappear. This example therefore proves, like the previous ones, that the cataleptic states correspond to a very rudimentary thought, to feelings completely isolated and incapable of reacting on each other.

VI. Nature of consciousness during states analogous to catalepsy

We have so far studied only artificially obtained phenomena, or rather occurring in the midst of more or less artificial states. It is interesting to examine from the same point of view the phenomena which arise naturally; for we must not forget that all these facts have their analogues in a natural state, although sickly, I mean in crises of hysteria.

Rose's great nervous crisis presents a development quite identical to that of her sleepwalking. After an initial discomfort of varying length, she suddenly falls out. The muscles are flaccid, the face pale, no gesture or movement shows consciousness. Very often this initial syncope, which lasts long enough in her, leads to deep and dangerous respiratory disorders. The breathing is sometimes fast and panting, sometimes stops for a whole minute, the lips turn blue and let out a little foam. But soon movements begin. These are first small tremulations in each muscle, without overall movements, then movements of the limbs, but completely uncoordinated. I pass quickly over the details of these convulsions which have been too well described by masters for me to allow myself to insist on them. I only point out the characters which seem to me to be able to clarify my subject. It seems to me that the movements, at first completely isolated and incoherent, are becoming more and more general and systematic. For example, at first, the arm muscles contract at random, one opposing the other, which simply produces a tremulation of the arm and various flexions of the fingers. Now the muscles agree well enough for the two arms to make great movements and come to punch on the same point of the chest. Now, I know that she has at this point, under the left breast, a continuous pain produced, I believe, by a permanent and painful contracture of the intercostal muscles; so I think these arm movements are now coordinated by this painful sensation. But, little by little, after this period of convulsions and contractures and mingling with it, because there is no sudden transition, all other movements begin. She sits on her bed (she does not get up because she has

both legs contracted even during this crisis), bows, waves with her hands, and smiles at the audience. She was a singer in a concert café and she probably thinks herself on stage, because she sings us very funny little tunes. Or else she probably thinks she is listening to her companions, because she has her hand near her mouth as if to ask for silence, seems to listen with delight and from time to time applauds the singer. Lucie presents in her great crises a much more regular phase of the same kind. After the convulsions of the beginning which last more or less long, the poor girl remains in the posture of terror, eyes wide open fixed on the curtains of her room. For almost an hour, she did not change her attitude and simply made a few movements of desperate defense, or uttered inarticulate cries.

For both, this period is followed by another in which the development of intelligence seems to be further increased. They no longer obey a fixed idea, they start chatting about things and others. Lucie even has the peculiar habit of going down to the kitchen and having a summary dinner which she eats with a good appetite, while she refuses to eat when she is awake. This last period of the crisis, which has been called hysterical delirium, corresponds completely, as we shall see, to somnambulism: it therefore does not interest us now. But the intermediate period, that which is designated by the name of the period of passionate attitudes, also occurs between a state of syncope where consciousness seems to be zero and another state where consciousness is almost complete; it therefore seems to be produced by a still rudimentary consciousness and to correspond to the cataleptic state. Besides, the symptoms are the same: immobility or indefinite continuation of the same movement, harmonious expressions of the whole body, absence of speech as a means of expression and repetition of the same sentence.

Finally, which seems decisive, one can quite easily pass from one state to another. While Lucie is in artificial catalepsy, I put her hands in the posture of terror; immediately she remains with her eyes fixed on the curtains and, if I do not hurry to intervene, the rest of the natural crisis will take place for several hours. On the other hand, if I surprise Rose or Lucie in the midst of their natural passionate attitudes, it is enough for me to make a few passes on the arms to put them in so-called artificial catalepsy; because now I can lift the limbs, they will stay in the new position where I place them. This transformation is complete in Lucie, who soon forgets her terrors and, little by little, enters into her provoked somnambulism; it is only partial in Rose, because there is always a part of the person who continues the crisis, while the other obeys me. We will come back to these complications later ¹. Other observations confirm these; Dr. Saint-Bourdin's natural catalepsy attacks very often turn into real sleepwalking like hysteria attacks ². Paul Richer describes the crises of a hysterical whose limbs we can move during the poses of passion and who keeps them as we put them ³. These observations suffice to show the analogy which exists between these various states.

The great difference that seems to exist between the states that we are comparing is that, during artificial catalepsy, the origin of the subject's movements and attitudes is always outside in the modifications that are communicated to him; during the hysteria attack, on the contrary, the origin of the passionate poses seems to be internal in the patient's memories. This difference should not be overstated: first of all, the subject's internal memories also play a large role in catalepsy. If I join Léonie's hands, I make her make her communion, but it is thanks to personal memories coming from herself and adding to the feeling of joined hands. Lucie, who is nothing less than religious, does not make her communion and

¹ Cf. Part II, ch. I, p. 235.

² Saint-Bourdin. *Op. cit.*, 96.

³ Paul Richer. *Op. cit.*, 279.

does not even kneel when you join her hands. On the other hand, it does not seem certain to me that external objects play no role in the poses of the hysterical crisis. I read somewhere, unfortunately I cannot find in what work, the description of a hysteric who took in his crisis the postures of the paintings that were in his room. The fact would not surprise me. Lucie always turns her eyes to her curtains, and I have often wondered if she would have the same crisis in a room without curtains. Marie dreams of a fire during her crisis, if it occurs during the night, and does not dream of the fire if the crisis occurs during the day. This is most likely because at night she sees a lighted lamp not far from her bed. But, it will be said, it is very difficult to transform the poses of a hysteric; she doesn't seem to feel and see you. We saw first that there are exceptions and that we can change the poses of some hysterics in crisis. Then this resistance is explained precisely by the state of consciousness which is so reduced, so small that it concentrates on a single sensation and is no longer able to feel another. This is why it will be easier to get in touch with the hysteric in the last phase of his crisis ¹ than during this first period.

The same fact occurs, moreover, in artificial catalepsy. Anyone can easily chat with Léonie when she is in sleepwalking, but it is only me who can modify these cataleptic attitudes. The arms are, when I touch them, extremely light, but they are stiff and contracted for another. We cannot fully explain here this phenomenon of electivity which is rare during catalepsy and to which we will have to return when we speak of systematized sensitivities ²; but it must be noted now, because it shows us that a subject, who is for his magnetizer in a state of artificial catalepsy, is for a stranger like a hysteric in crisis. It is probably for the same reason that natural catfish sometimes have such stiffness in the limbs when a stranger tries to move them. These differences that we have shown are therefore only differences of degree and allow the comparison that we have made to remain.

Many other states could be compared to catalepsy, I am only reporting them. It is first of all the delirium which sometimes occurs following an epileptic crisis ³. "We know", says Mr. Luys ⁴, "that there are a certain number of epileptics who, in each period of absence, repeat the same acts and utter the same cries or the same words..." An epileptic, he hospital at Le Havre had a singular habit of this kind: he stood near a column and made the gesture of ringing the bells at full speed; no one could disturb him from this occupation, which he continued seriously and in silence for almost half an hour until full awakening. This idea of ringing the bells had probably entered him when he lived in the countryside and, in this epileptic state where he was on waking from an epileptic coma, she woke up alone and reigned supreme. Many of the conditions described under the name of ecstasy are of the same kind; it is enough to see Léonie motionless, her hands clasped and her eyes raised to the sky to understand what the Middle Ages called an ecstatic. The Saint Thérèse, the Saint Hildegarde, the Marie Chantal, the Catherine Emmerich and many others simply had attacks of catalepsy, during which the dominant religious ideas or communicated sometimes at the very moment of their attack gave the whole body an attitude harmonious and expressive

¹ Cf. Gilles de la Tourette. *Op. cit.*, 242.

² Part II, ch. II.

³ Despine (*Somnambulisme*, 294) makes a very complete comparison of epileptic vertigo and somnambulism. We should cite almost all of his remarks. We only make reservations on the interpretation of the phenomena already mentioned in § 2 of this chapter.

⁴ Luys. *Maladies mentales*, 1881, 146.

¹. One takes the pose of the Immaculate Conception ²; the other takes successively all the attitudes represented in a way of the cross. The most curious study from this point of view is that of Louise Lateau whose description made by Dr. Lefèvre is summarized in the work of Dr. Despine ³. Suddenly she stops talking and her eyes become fixed and motionless, she remains motionless for several hours in the attitude of the deepest contemplation. “Around two o’clock, the ecstatic leans a little forward, lifts up with a certain slowness, and, as if by a movement of projection, it falls face down on the ground. In this position she lies on the ground, lying on her chest, her head resting on the left arm; the eyes are then closed, the mouth is ajar, the lower limbs are extended in a straight line. At three o’clock, it makes a sudden movement, the upper limbs extend crosswise, the two feet cross, the back of the right foot resting on the sole of the left foot. She stays in this situation until around five o’clock... The ecstasy ends with a frightening scene: the arms fall along the body, the head tilts on the chest, the eyes close. The face takes on a pallor of death, it covers itself with a cold sweat the hands are frozen, the pulse is imperceptible, it groans. This state lasts from ten to fifteen minutes; then life wakes up, the heat is revived, the pulse rises, the cheeks are colored; but for a few more minutes, it is the indefinable expression of ecstasy.” Isn’t that a very accurate description of a catalepsy that plays out the scene of Christ’s death, instead of simply acting out, like Leonie, the scene of communion?

Thus, in natural ecstasies, in hysterical crises, as in artificial catalepsy, we find the same initial fact, a sudden and complete stop of consciousness which lasts more or less long, which can “like a dazzling, have only an elusive duration ⁴”, but that still exists. It is at the time of awakening of consciousness, when this awakening is not too rapid, that ecstasies, passionate poses and catalepsy are placed. It is the emerging consciousness, “the stupid sensations” of which Herzen spoke, which give rise to the phenomena that we are studying.

VII. Interpretation of the particular phenomena of catalepsy

Guided by previous research on the general nature of consciousness during cataleptic states, let us take up the various phenomena of which we have described, that is to say the continuation of an attitude or movement, the repetition of movements that have been seen or sounds that have been heard, harmonious expressions of the whole body and associated movements. Let us seek by what simple hypotheses we can interpret each of these facts.

1. *Continuation of an attitude or a movement.* – It is here that we can clearly see the superiority of a real experience, however imperfect it is, over purely theoretical reasoning. Many philosophers, and Condillac in particular, have wondered what happens when an isolated sensation is introduced into a statue empty of thoughts. They assumed a host of more or less true things; they said that this sensation

¹ See, for the description of a large number of ecstatic attacks, Aubin Gauthier. *Histoire du somnambulisme chez tous les peuples*, 1842, II. – Luc Desages. *De l’extase*, 1866.

² Paul Richer, *Op. cit.*, 217, 220.

³ Despine. *Somnambulisme*, 376.

⁴ Azam. *Op. cit.*, 88.

produced attention, memory, pleasure, pain, etc., but they did not guess the main phenomenon that this sensation would produce; they did not tell us that with each new sensation the statue would move. The simplest experience immediately shows us this important phenomenon. Let, in an empty consciousness, arise any sensation produced by any process, and immediately there will be a movement. This is the law manifested, we believe, the simplest phenomena of catalepsy.

How to explain, in fact, that the arm of a cataleptic that I lift or that I put in movement retains its attitude or its movement? The physical forces of gravity would tend to make it fall: it takes, in fact, a delicately systematized contraction of all the muscles to maintain it. What can give these contractions their unity and their persistence? I see no other answer than this: it is a persistent sensation. When I raised the arm I caused a certain conscious muscular sensation, quite determined, that is to say corresponding exactly to such position of the arm, wrist, fingers, etc. This feeling being alone in the mind has encountered no antagonistic and reducing phenomenon, it has not disappeared with productive excitement, it has subsisted and it still lasts. But at the same time as it lasts, it maintains by its very persistence the position of the arm to which it is linked or rather from which it is inseparable.

Let us study the different points of this explanation separately. That the position of the arm moved by me can produce in the subject's mind a determined and different muscular sensation for each attitude, it is an almost indisputable proposition. *Kinesthetic* sensations, as Bastian says ¹, may be caused by the movement of muscles, the friction of the articular surfaces, the wrinkling of the skin or a thousand other modifications of the limbs; their origin is still obscure, but their existence and their precision are indisputable. In the present case, the subject must have felt the position of his arm in order to be able to maintain or reproduce it later, as we have seen that this sometimes happens. However, precautions had been taken so that the subject could not see the movement of his arm, it was by means of the kinesthetic sense that he had this feeling.

Can this kinesthetic sensation reproduce or, in the present case, maintain the attitude? This is what is most discussed. A great distinction is usually made between sensory and motor phenomena. The great discovery of the difference between the sensory nerves and the motor nerves brought about the less certain distinction (if I dare to have an opinion on this subject) of the sensory centers and the motor centers, and this inspired the desire to find in the psychological phenomena an analogous separation between the phenomena of sensitivity and the functions or phenomena of movement. In some cases, quite rare, it is true, we noticed in consciousness two distinct phenomena: I see an object approaching my eye and I feel the movement of my eyelid closing. But, in most of the other cases, only one or the other of the two phenomena was observed, the awareness of the sensation without awareness of the movement, the feeling of the movement without the notion of the preceding sensation². Various assumptions were then made: some like Wundt and M. Charcot, admit that there was always a sensation of movement coinciding with the emission of the nervous force and preceding any movement; the others, like Bastian, considering kinesthetic sensations as absolutely centripetal, coming exclusively from the outside, admire "the absolute unconsciousness of all centrifugal currents"³ or in general of all motor acts. Without prejudging all the difficulties that this question raises and that we may meet later, I believe that the cataleptic phenomenon

¹ Bastian. *Le cerveau organe de la pensée*, II, 165.

² See Ch. Richet. *Les réflexes psychiques*. Revue philosophique, 1888, I, 228.

³ Bastian. *Op. cit.*, II, 129.

of the conservation of attitudes offers us a simple “prerogative” case where this question of the relationships between sensitivity and movement is easier to study than any other.

Indeed, we have admitted a phenomenon of sensation following the displacement of the arm. Is there any reason to now suppose some other psychological phenomenon producing the movement necessary to maintain the attitude? For my part, I do not see any, and, moreover, this psychological phenomenon which one would suppose would be a determined motor image, corresponding exactly to the position of the arm which must be maintained. It would be exactly the same as the previous image already produced by the kinesthetic sensation. Why suppose two phenomena that merge? We must think of things here in the simplest way: the excitation E produces the kinesthetic sensation SK, which is enough to produce in its turn the movement M. There is no reason to suppose other intermediaries. In this simple case, there is no need to raise the difficulties of which Bastian spoke: we do not have to seek whether the motor phenomenon has, yes or no, a consciousness distinct from that of the sensitive phenomenon, since the two phenomena are one and the same.



Fig. 1.

As to the third point, the persistence of muscular sensation, it follows naturally from our previous remarks. If the assumption of a conscious image has been deemed necessary to explain the coordination of muscle movements and contractions, so long as this coordination persists, we are forced to assume the persistence of the psychological fact which explains it. Now, we know that the cataleptic attitude can persist for a very long time; So it is likely, as we said, that the kinesthetic image, not encountering any obstacle in this mind which is completely empty, continues until we have replaced it with another by moving the arm.

It is for these muscular sensations that it is fair to say, more perhaps than for any other phenomenon of the mind, that sensation and movement are only one and the same thing appearing in very different aspects, because it's known in very different ways ¹. Although, in our confused and complex mind, this primitive law is often modified, we can say that, regularly and in a simple being, there is no movement without a feeling of movement and no point of sensation or even of image of movement without movement.

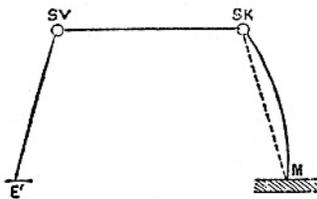


Fig. 2.

¹ See, on this subject, les théories de Lewes dans la *Psych. angl.* de Ribot, 401, and the works of Dumont.

2nd *Imitation and repetition*. – The acts produced by imitation and by repetition will take us a little further in the study of the same problem. Instead of raising the subject's arm, I show him my raised arm and he puts his own in an identical position. Here, the sensory phenomena (seeing a movement) and the motor phenomena (raising the arm) do not merge as before, and it seems natural to separate them. We can indeed explain things in this way: the visual excitation E 'produced by my movement would bring about the visual sensation SV, this one would awaken by association the image of the kinesthetic sensation SK, which was all there, directly awake hour, and this image, according to the preceding law, would bring the movement M to which it corresponds. This explanation would be quite simple and plausible: it would explain why, in certain cases, the movement by imitation is rather long to produce; it would not raise the difficulties relating to the consciousness of motor phenomena, because it always introduces only two phenomena of sensation, only one of which has the property of being inseparably linked, as we have shown, to a real movement. If we were to study only cataleptics, we would have no reason to reject this hypothesis; but, in anticipation of the difficulties which the study of anesthetics and paralysis will present later, we must remark that the phenomena can, in most cases, be explained also in another way.

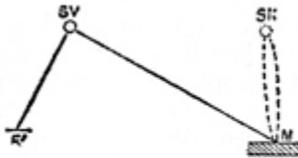


Fig. 3.

Could the visual sensation S V not directly produce the movement M without the intervention of any muscular image? These muscular sensations S K could moreover be awakened secondarily as a result of the movement carried out or not be awakened, contribute or not contribute to its improvement and to its precision. This hypothesis is first made plausible by certain fairly well-known experiments ¹. We know that any excitation of the senses, whatever it may be, brings about an increase in the general force and a disposition to movement which sometimes results in an effective movement. This movement is quite natural, it is the external appearance of visual and acoustic sensation, as the contraction of the muscles was, so to speak, the reverse of the muscular contraction. But if this movement remains general when the sensation is itself vague, should it not become precise when the sensation is itself more precise? M. Féré has shown that the sight of a moving object, the sight of a rotating disc, provoked a different motor reaction depending on the direction of the rotation ². Why, in certain cases, should the image of a specific movement not by itself cause another specific movement? This hypothesis is confirmed by research on hysterical anesthetics which we will discuss later. In my opinion, it is impossible to explain how these people can often retain all of their movements despite the absolute loss of sensations and even kinesthetic images, if one does not admit that movement can be produced directly by visual images or hearing. Finally, since the fine works of M. Charcot, this hypothesis has been universally accepted when it comes to movements of language. From the point of view of language, there are visuals, auditors, motors, that is to say individuals who, in order to represent words, use visual, auditory, joint motor or motor images, graphics. These representations play a large role in speech itself and there are individuals who speak with

¹ Féré. *Sensation et mouvement*, 1887.

² Féré. *Ibid.*, 83.

the auditory sense, that is to say in whom the auditory image of a word is sufficient to bring about its pronunciation. We can extend this famous theory to all movements and say that certain movements of the arm or leg can immediately accompany the visual image of that movement without an intermediate kinesthetic image.

This supposition, however, encounters a rather serious difficulty, on which M. Paulhan insisted a great deal ¹. The sight of an arm raising does not resemble the actual movement that it takes to actually raise the arm, nor does the sound of a word resemble the movement of the mouth that it takes to pronounce it: how can one thing bring the other and merge with it? Note first that there is a similar difference between the muscular sensation of a movement and the movement itself. It is the general difference which exists between the physical and the moral, and which prevents ever finding any analogy between a physical phenomenon and a psychological phenomenon, even when their real union is intimate. Then we do not experiment on individuals who have just been born and who have, in their mind and body, no association organized in advance. It is probable that in childhood we all begin by being “engines” acting and thinking by means of images of the muscular sense. Later only visual and auditory images first associated with motor images would become predominant and alone could produce movement. It would be an application of “this coordination, this psychic synthesis” of which M. Paulhan has shown the necessity, it would be “a pre-established systematization ²” of psychic phenomena and organic phenomena which would allow any image to play the role of an image motor.

A remark of the same kind will enable us to resolve another difficulty. It will be observed that, in the preceding explanations, we take no account of the phenomena of pleasure and pain to which certain psychologists give such a large role in the formation of movements. For Mr. Bain in particular, “there is at the beginning of any natural voluntary impulse some of the varied forms that take pleasure and suffering ³”. For him, “a pleasure or a suffering whatever is necessary to give the motor impulse ⁴”, and the sensations would play only an accessory role to direct, to specify the movement and to adapt it to the circumstances. On the contrary, we did not speak in any way about the phenomena of pleasure or of pain and, in fact, we did not find anything in our subjects in catalepsy which allowed us to suppose these phenomena. This contradiction can very easily be resolved if we consider that we are not studying exactly the same problem as Mr. Bain. This author in fact seeks the origin of the activity and its first manifestations in a being who has just been born; we are also studying elementary activity, but as it exists in an already formed mind. It may be that at the beginning of life movements are determined only by pleasure and pain, because then there are no other psychological phenomena than these general and vague sensations which are manifested by equally vague movements and indeterminate. But little *by* little the sensations became clearer and the movements with them. The child has learned to feel a movement by learning to do it and vice versa. The union which once existed between a vague pleasure and a vague movement exists today between a determined sensation and a determined movement, and it is enough that the sensation is brought back even without pleasure and without pain for the movement to take place.

We must therefore generalize our previous law and say of any sensation and any image what we have said of the kinesthetic sense. An image of movement in the consciousness always manifests itself,

¹ Paulhan. *Revue philosophique*, 1888, I, 45 et 59.

² Paulhan. *Revue philosophique*, 1888, I, 45.

³ A. Bain. *Emotions et volonté*. Trad., 1885, 345.

⁴ Id. *Ibid.*, 342.

outside, for a foreign witness, by a real movement, and on the other hand this image tends to last, to persevere in its being and therefore brings about the continuation of the movement, as long as it has not been replaced by some new image.

3rd and 4th. *Expressions of physiognomy and associated acts* – These phenomena seem more complicated than the previous ones, and it seems that a single persistent image can no longer be sufficient to explain them. With regard to the first sensation, that of a closed fist, of praying hands, etc., a large number of other images must arise simultaneously and successively which will each bring about, one a gesture, the other an expression of the face, this one the act of getting up, the other the act of greeting. How is it possible?

Here we see in its simplest form the phenomenon of the association of ideas which is one of the most important manifestations of psychological automatism. Undoubtedly, the images which once occurred at the same time as the sensation caused or as a result now reappear in the same way and in the same order, and it is this automatic succession of images which brings about the regular succession of gestures and movements.

But how should we understand this law of association? Can we not, in some way, bring it back to the previous law of the persistence of a psychological state? We believe it is. Hamilton had already understood in an interesting way the association of ideas when he said: “The thoughts that previously were part of the same whole, of the same act of knowledge, are suggested by each other ¹.” M. Taine likewise considers associations as partial rebirths of totalities which tend to reform themselves completely ². M. Paulhan, in articles which we have already quoted, also tries to relate association to the act of synthesis considered as a general function of the mind. These theories seem to us, at least in part, to be very exact and easily apply to the facts that we are studying. The sensation of the closed fist or of the joined hands, at the same time that it is by itself a whole, a complete sensation, was formerly united with a great number of other simultaneous or successive sensations, and has been part of a synthesis, of a whole which was the state of anger or the act of communion. It can be assumed with some probability that this set of very different sensations which the mind experienced during the act of communion formed a common feeling, a particular co-anesthesia which is not the same as in a state of anger or of gaiety.. By now provoking the sensation of clasped hands, I also awaken or rather I begin to awaken this general feeling which existed during the act of communion. This feeling then becomes a sensation like the others which tends to manifest itself and to last. But for this feeling to persist, it is not enough that the sensation of the joined hands remain alone in the mind, it would only be the beginning of the feeling. For it to last, it must be completed and the other constituent sensations reappear one after the other in the form of images and bring about the expressions and movements which correspond to them.

In order to fully understand this general explanation of associated acts and in order to be able to use it later, it is necessary to make a few more remarks. One is too disposed, it was a little to the fault of Hamilton and, if I am not mistaken, of Mr. Paulhan himself, to consider this general feeling, this coesthesia as an idea, a true knowledge, to assimilate it, to a judgment or to an abstract idea of finality.

¹ Cf. Ferri. *La Psychologie de l'association*, 1883, 231.

² Taine. *Intelligence*, I, 144.

True knowledge, judgment, general ideas should not be mixed up with these automatic phenomena of rudimentary thought; they bring with them means of emancipation and a relative freedom of which we see no sign here. This co-anesthesia seems to me much more like a sensitive, conscious, but not understood image, assimilated to a vague religious emotion rather than to an idea of prayer or of communion. Emotions are precisely this set of diverse sensations coming from all points of the body: “the special action of the muscles is not only the sign of passion, it is really an essential part of it; if, at the moment when the features express one passion, we try to give birth to another, we will not succeed ¹.” The emotions designated by language under the name of fear, anger, love, etc., are few and not very precise; but their varieties must in reality be innumerable and correspond in each individual to a determined set of images and movements. It is one of those very specific emotions that we create in cataleptics and that brings about their associated expressions and acts.

Another important remark is that during catalepsy we can only provoke old emotions already experienced by the subject and we cannot teach him to experience new ones. A subject who is not religious and who has not previously made this synthesis of movements which constitutes the emotion of prayer will not play the scene of prayer during catalepsy. The hands will remain against each other, but other acts will not follow. Automatism does not create new syntheses, it is only the manifestation of syntheses which have already been organized at a time when the mind was more powerful. We had previously noticed that the simple cataleptic acts did not explain to us the true origin of the activity, but only showed us the manifestation of a sensation already formed, so the more complex cataleptic acts only show us the manifestation of ‘an already organized emotion.

Finally, let us make a last remark which we will have to recall later: these emotions, these associations of ideas can exist, like the sensations themselves, in a rudimentary consciousness like the one we have described. Now, the characteristic of this consciousness, we said, is to be impersonal, not to provoke the idea of the self or of the personality. The association of ideas is therefore not necessarily linked with the formation of the personality, and one can develop without the other. We have seen so far only the simplest automatic association, which is sufficient to explain all the phenomena presented by the subjects in the states which we have just described.

Conclusion

In summary, in our normal thought, phenomena are always very numerous and very complex; they collide and change each other, so it is not easy to see their true nature and the laws that govern them. We have studied a sickly state in which the phenomena of thought appear, on the contrary, to be almost isolated. One of the best expressions which can characterize this state has been proposed by M. Ochorowicz ². Catalepsy was, he said, a state of *monoidism*. “Certain subjects, capable of presenting these two opposite phases of *aidia* (hypnotic syncope) and of *polyidia* (somnambulism), do not pass directly, or at least may not pass directly from one to the other; they stop more or less long in the *monoideal* phase... It is a brain which concentrates all its action on a single dominant idea, which is not counterbalanced by

¹ Maudsley. Cf. Bain. *Esprit et corps*, 7.

² *La suggestion mentale*, 1887, 112.

any other.” A well-known comparison can further explain these phenomena: “The brain can be compared to a room furnished with an immense number of gas lamps, but lit only by a relatively small and relatively constant number of lit lamps which are not always the same, on the contrary, which change every moment. As some go out, others come back on. They are never all on, from time to time they will all be off ¹.” And furthermore, we will add, there are times when only one is lit. Undoubtedly, the importance of this expression of monoidism should not be exaggerated; first of all, it is more about sensations than actual ideas; moreover, these sensations, except in the simplest experiment of the beginning, are not reduced to unity. But what is true is first that the initial sensation that brings the other images is unique, second that each image remains isolated without uniting with the others and without reacting on them. Each image or each emotion develops in isolation according to its laws.

Here are the three main laws to which these isolated phenomena have always seemed to us subject: 1st a large number of sensations and images (previous studies do not yet allow us to say all) are accompanied by a bodily movement and cannot exist without produce it; 2nd any sensation or image excited in the hard consciousness and persists as long as it has not been erased by another phenomenon; 3rd any sensation or emotion tends to develop, to complement itself, always manifesting itself through the movements and acts from which it is inseparable. Thus is verified by experimentation one of the most fruitful ideas of one of our philosophers. “Every idea is an image, an interior representation of the act. Now, the representation of an act, that is to say of a set of movements, is the first moment, the beginning, and is thus itself the action begun, the movement both nascent and repressed. The idea of a possible action is therefore a real tendency, that is, an already active power and not a purely abstract possibility ².”

¹ Herzen. *Op. cit.*, 216.

² Fouillée. *Liberté et déterminisme*, 1884, 3.

Chapter II. Forgetting and the various successive psychological existences

It is only in very rare and extraordinary circumstances that human actions are thus isolated and impersonal; they usually seem to be the manifestation of a character and to depend on a personality. In order to continue the study of automatic actions under more complex conditions approaching the normal state, we must look for psychological states susceptible of experimentation, but in which however character and personality begin to develop: the condition known as *sleepwalking* best fulfills these conditions.

We see, in fact, in somnambulists, the automatic life of the spirit growing and expanding, forming a particular memory, giving birth to a new character and personality. To discover the nature and the main characteristics of this new form of psychological life is to see the activity of the elements of our thought in a different light.

I. The different characteristics that have been proposed to recognize sleepwalking

This state is apparently very well known; sometimes, as we know, it occurs spontaneously in the middle of sleep, sometimes it forms an important part of a nervous crisis, sometimes it is artificially provoked by processes which have been too often described for me to insist. However, it is very difficult to find a sign which characterizes it in a general way, and most of the characters which have been thus designated seem to us insufficient; in reviewing them, we will see some incidental characteristics of this state, but it will remain for us to look for its distinctive sign.

Some of these characters were called physical, not because they were veritable visible modifications, but because they were observed by means of various experiments made on the subject's body.

Most of the ancient magnetizers considered the absolute insensitivity of the skin to be the constant rule and the unmistakable sign of sleepwalking. "For there to be sleepwalking", said de Lausanne ¹, "the external senses must not cause any distraction and feel nothing." "There is no magnetic sleep", writes Baragnon ², "without complete insensitivity of the body and the senses, so that we will help each other, for the observation of sleep, with anything that can convince us of this insensitivity." So magnetizers do not fail to try on their subject burns and pinpricks as soon as he begins to sleep ³. In the famous report presented to the Academy of Medicine in 1837, Mr. Dubois (of Amiens) complains that he was allowed to check for sleepwalking "with a simple tattoo with pins on the face and on the hands". He would have liked to do better. Well, M. Dubois' procedure would not have much result if it were applied to the somnambulists I have studied. Most of these people, almost all, were already anesthetizing a more or less

¹ De Lausanne. *Principes et procédés du magnétisme animal*, 1819, II, 54; de même dans Teste, *Magnétisme animal expliqué*, 1845, 285.

² Baragnon. *Etude pratique du magnétisme animal*, 1853, 33.

³ Lafontaine. *L'art de magnétiser*, 1860, 99.

considerable part of the body, before any hypnotic sleep, in their most normal state. In addition, they were far from being regular anesthetics in sleepwalking; on the contrary, I have been led, for some of them and in certain cases, to consider the return of sensitivity as a proof of the deepest somnambulism.

Another curious characteristic is pointed out by the same authors, although more rarely: it is the complete absence of swallowing during certain somnambulatory states ¹. This detail struck me because, in one person, in Léonie, it is absolutely constant. She has no swallowing during sleepwalking and I never managed to make her swallow a drop of water. In an article published recently, Mr. Dufay reports the same fact in one of his sleepwalkers ². But the phenomenon, far from being characteristic, is quite rare; most sleepwalkers eat and drink without any discomfort in their sleep. Lucie, in natural sleepwalking, went downstairs to cook a chop and ate it very well. Rose was never as happy as when she was sleeping sleepwalking. There are even dysphagic hysterics in the waking state, who eat quite easily when they are asleep, and this is a detail which is sometimes useful to know. My brother managed to feed a hysterical woman who, due to uncontrollable vomiting, was on the verge of starvation.

One of the modern writers who have best known somnambulists, M. Despina, believes he finds in their outward attitude a good distinctive characteristic. Popular belief generally represents sleepwalkers as people who speak with their eyes closed. This belief probably results from this idea, actually quite false, that sleepwalking is sleep: sleepwalkers are repeatedly told that they sleep, hence they conclude that they must have their eyes closed. But if sleepwalkers are allowed to act as they please, many, like Lucie, have their eyes open almost constantly. It was then that Mr. Despina claimed that their gaze always had a very particular and distinctive characteristic. "The eyes", he said, "are wide open...; the largely dilated pupils remain motionless to the action of the light: the insensible conjunctiva does not feel the need to be lubricated by tears, so the blinking of the eyelids is suppressed or very rare ³." The author is so convinced of the importance of this characteristic that he claims "by the inspection of the eyes to discover the frauds attempted by a false sleepwalker". I must admit that I would not have such boldness or such conviction.

Doubtless, this gaze sometimes exists, and M. Despina indicates very well under what circumstances, "when the retina is paralyzed"; then, in effect, "this amaurotic gaze bears enough resemblance to that of the individual who is short-sighted enough not to be able to distinguish any of the surrounding objects". Thus, during catalepsy, when the visual sense is not excited, the eye takes on this characteristic. If a hysteric woman's eyes are forcibly opened at the onset of sleepwalking, at a time when usually (as there may be exceptions) she cannot see clearly, her eyes will appear amaurotic. But, is it therefore accepted that a sleepwalker always has a paralyzed retina and is always blind? According to a rather old opinion, which Maine de Biran himself maintained, the somnambulist would always behave according to his dreams, according to hallucinations which represent to him objects as he knows them and not according to real visual sensations. This opinion seems to me to be completely incorrect. If sleepwalking is allowed to develop sufficiently, there are subjects who open their eyes on their own, or they can be made to open,

¹ Baragnon. *Magnétisme animal*, 108.

² *Revue scientifique*, 1888, II, 241.

³ Despina. *Somnambulisme*, 107.

checking when they see clearly. It is evidently recognized that a somnambulist is then heading according to the sight of real objects, as one can easily verify by taking him to a place which he does not know. The eyes then no longer have this bizarre aspect, they are quite normal and, even during catalepsy, if an object is fixed, in acts of imitation, for example, we see the eyes move and take a normal appearance. As regards this attitude of the somnambulists, I have had an experience several times which I believe to be decisive. I sent Lucie several times, in the middle of sleepwalking, to speak to strangers who had not been informed and she was always taken for a normal person. Marie can be left sleepwalking in a hospital ward, without other patients suspecting her condition. Without doubt, there are, for me who know them well, some characteristic features and I would not always need to question their sensitivity or their memory to know in what state they are: Marie is paler in somnambulism than in the standby state; Lucie, who has several tics on her face when she is awake, has a calm and regular face in the second state. But these are individual signs and of minimal importance which do not allow to base a scientific distinction.

Finally, to complete this enumeration of the physical signs which have been proposed, M. Charcot, then MM. Paul Richer, Binet, Féré, etc., saw in hysterics put into somnambulism a particular contracture which occurred in the muscles as a result of superficial friction or even a simple insufflation on the skin. Since, in this work, I mainly stick to the account of what I could see, I must say that I looked for this characteristic on a dozen people put in sleepwalking and all hysterical, and that I did not have it, found that on two topics. On the other hand, a hysteric, Rose, who never presents this characteristic in somnambulism, sometimes presents it in a waking state. This is enough so that, at least for my part, I do not consider this fact to be characteristic.

In reality, I am now convinced of it, there is no physical sign which makes it possible to recognize if a woman is in sleepwalking or if she is not there, and it is to advance a lot to pretend to recognize this state, at first glance. Mr. Despine argued that psychology does not have to deal with sleepwalking ¹ and that physiology alone can explain it. Well, far from being able to explain it, physiology cannot even recognize it. Many authors, such as Bertrand, Braid and more recently Gurney, Bernheim, have had the great merit of recognizing that sleepwalking is a psychological phenomenon and that it can only be observed by purely psychological characters. However, not all the mental phenomena which have been alleged are of equal importance.

Dr. Carpenter talks about the distracted state of the hypnotized subject. He compares his condition to the reverie of a poet in front of a beautiful landscape or to the distraction of a scholar absorbed in the search for a problem ². This is vague and inaccurate. There are sleepwalkers who are hardly distracted and who study a problem with the greatest attention. Moreover Stanley-Hall has been able to say on the contrary that hypnosis is a cramp of attention to an object. Gurney, who quotes this author, correctly remarks that the hypnotized person can have a series of attention cramps on different objects without waking up from one to another. I will add that sleepwalkers are not always attentive, nor are they always

¹ Despine. *Op. cit.*, 80.

² See Gurney. *Proceedings S. P. R.*, II 266.

distracted. Léonie, when attention is demanded of her for delicate experiences, occasionally asks for a little recreation to rest and have fun.

Bertrand, Braid and above all Bernheim looked for the characteristic of somnambulism in the state of activity or will and found that the sleepwalker has no personal will, no active spontaneity and that he obeys all orders.. Without studying at this moment the phenomenon of suggestion which is indeed one of the most important of this state, I will only observe that nothing is more variable than the state of the will in somnambulism as well as in waking. One of the most curious studies that I have been able to do, and to which I will return at length, is that of a young girl of sixteen, almost stupid and probably epileptic. She was, during the most normal vigil and throughout her life, more suggestible, more hallucinable than the most docile of sleepwalkers. Besides, Mr. Bernheim perfectly noted the suggestions in the waking state and only admitted that this phenomenon was more accentuated in somnambulism. But how then to explain these subjects who, like Rose, like Lucie and many others, become more and more independent as the somnambulism increases in depth, and arrive at a state where their will is perfectly normal, more spontaneous and more independent than in the waking state ¹. In reality, the will seems to me to be a secondary phenomenon depending on several other things, and it is in the more elementary facts that the distinctive signs of somnambulism must be sought, it is in the state of memory and sensation.

II. Essential characteristics of sleepwalking: forgetfulness upon awakening and alternating memory

The phenomena of memory are perhaps the most important in our psychological organization, and their slightest modifications have a considerable impact on our whole life. Now, in all mental pathology, there is no modification of memory more complex and at the same time more regular than that of the memory of the somnambulist. In fact, we regularly observe in the minds of individuals who, for one reason or another, have had periods of sleepwalking, three characteristics or three laws of memory which are specific to them: 1st complete forgetting during the state of normal wakefulness of everything that happened during the sleepwalking; 2nd complete recollection during a new somnambulism of everything that happened during the previous somnambulisms; 3rd complete memory during sleepwalking of everything that happened during the day before. The third law presents perhaps more exceptions and irregularities than the other two, so in this study, which aims above all to give a general idea of sleepwalking, we shall insist a little less on it. But the first two, despite the diversity that always present such complex phenomena, are so general and so important that they can be considered as the characteristic sign of the somnambulatory state.

The phenomenon of forgetting, upon awakening, of everything that happened during sleepwalking is so curious and so striking that it was observed from the first studies of this kind. “When he returns to his natural state”, says Deleuze ², “he loses the memory of all the sensations, of all the ideas which he had in

¹ See Ch. III of this part.

² Deleuze, *Histoire critique du magnétisme animal*, 1819, I, 187.

the state of somnambulism; so much so that these two states seem as foreign to each other as if the somnambulist and the awakened man were two different beings... This characteristic alone is constant and essentially distinguishes somnambulism.” “Forgetting everything that happened during magnetic sleep, Baragnon ¹ also writes, is an invariable effect without which there is no sleep.” Braid also characterizes sleepwalking as forgetting upon awakening and calls it a duplication of consciousness. It is useless to multiply these quotes which one could borrow from all the writers as well old as recent. It is better to give a few examples to make people understand the importance of the phenomenon. I am going to put Leonie to sleep one day around two in the afternoon, I had already been sleepwalking her for some time, when I received a letter from Dr. Gibert who, unable to come and join me, asked me to bring her to her. Leonie. Instead of waking the sleepwalker, I show her this letter and suggest that she come with me as she was. “I don’t mind, she replies, but you have to get dressed first, you don’t want me to go out like this.” She goes upstairs and gets dressed; then I take her by car, which makes her as happy as a child. She remained in sleepwalking throughout the evening, was very lively and very cheerful, lent herself to various experiments that we wanted to make and in the intervals told a host of things. It is only around midnight that I bring her home, and there, in the same place where I had fallen asleep at two o’clock, I wake her completely. After this hectic session, here she is waking up calm, quiet, convinced that she hasn’t moved all day and that she has barely fallen asleep. But, she remains stunned when she sees that she has changed her costume, and I have to put her back to sleep and make various suggestions to prevent her from worrying about this oddity. Another example: During sleepwalking, Lucie decides to get angry with me, I don’t know why. Believing in one of those fleeting sulks which are usual for her, we do not watch her enough and she takes the opportunity to escape through the streets in full sleepwalking. It was necessary to join her, and to force her to return, which was not easy. As the scene continued, I found it easier to wake her up. Immediately, as if by magic, here she is, sweet and amiable, without the slightest rest of a bad mood and without thinking of reproaching anyone for anything. At home, oblivion is so complete that she does not even remember, like Léonie, having slept for some time. If she is asleep in the middle of an act or a conversation, when she wakes up she almost always continues her action or her words as if there had been nothing abnormal: somnambulism, whatever it was, duration, seems not to have existed and the two moments of the day before seem to meet. Rose was sleepwalking for four and a half days (we wanted to try and cure a paralysis of the legs in this way which had resisted all the other procedures and moreover we succeeded perfectly); but, during these four days, she speaks to several people and even receives visitors. When she wakes up she has forgotten everything, is mistaken about the day of the week and thinks she is four days behind. This is the case for all the sleepwalkers that I have seen, whether their abnormal state is short or prolonged, whether the events are insignificant or serious, forgetting is always complete and absolute, it is a page entirely erased in their life.

The second phenomenon, that is, the return of memory to a new sleepwalking, is also easy to see. Leonie fell back asleep, the day after the day I have described, suddenly regained the excitement she had had the day before: “You didn’t want to let me walk home, she told me right away, you saw how well I walked and I was hardly tired.” Lucie, when I also put her back to sleep the next day, immediately resumes the scene that the awakening had interrupted. This time I managed to calm her down and luckily get a reconciliation. Another sleepwalker, N., whom I put to sleep twice, a year apart, found in the second sleepwalking the minute memory of everything she had done in the first and reminded me of the details I

¹ Baragnon. *Op. cit.*, 173.

had myself completely forgotten. All those who have put the same person to sleep several times have noticed this phenomenon, which is as common as it is singular.

The second state usually has in addition a complete memory of the acts and ideas of the normal vigil: the subject, during sleepwalking, can tell what he did or felt during the day and still knows the same people. Only once did I witness a sleepwalking of Rose, accidentally different from the others, during which she no longer recognized me and seemed to have forgotten most of the events that had happened since her stay in the hospital. But this case is very rare and I have not seen it happen again. However, this should be taken into account if we are trying to explain these memory changes.

To consider this state of memory as the essential characteristic of somnambulism is not to trust a sign that is easily simulated and difficult to ascertain. We will answer first that so far we do not have a better one, then that this criterion is more certain than one supposes. Contrary to general opinion, I consider psychological phenomena to be much more difficult to simulate than physical phenomena, and I believe that it would be easier to act out even an epileptic seizure than to feign insanity for several days in front of a alienist. For the subject at hand, a small amount of information and a little practice are sufficient to simulate a contracture; it would take a lot of intelligence, attention and memory to never confuse memories acquired during sleepwalking with memories acquired during the night before and never be caught out. One can make a more serious criticism of the way of asking the questions to check the state of the memory. It is indeed sometimes dangerous to question the subject directly. The question itself can, by a sort of suggestion, awaken a memory which would otherwise remain ignored. I do not believe, in general, this danger very great, for suggestions relating to memory are seldom so easy, and one does not awaken a subject's memories by asking him what he said or did while he was sleeping. The danger exists, however, and Mr. Gurney ¹, who has often pointed it out, also indicates a fairly good means of averting it: their memories must be verified by their very conversation, without appearing to question them directly. "Ask them a seemingly indifferent question that they will answer in a particular way if they have certain memories and another if they do not know what it is." This process is excellent and easier in practice than it appears to be. But for that, as I said, it is necessary to know very well the character and all the life of the subject and to resign oneself to spend a very long time with him. Psychological experiments require special care and cannot be done quickly. It is by this process that, at least whenever doubt was possible, we carefully checked the state of memory in the persons of whom we will speak; but we will not indicate here, for each one, the experiences and the conversations which were used to make these verifications: that would unnecessarily lengthen this work.

These disappearances and these memory returns exist in other states than in artificial sleepwalking. They are found first and foremost in natural somnambulism. A young man, quoted by Georget ², suddenly passed after an initial cry into a new state where he had another character than the normal state, while retaining his faculties. "He would come to himself, if we hugged him, astonished, he had forgotten everything; he found everything in the next access and nevertheless he believed himself in his usual state,

¹ Gurney. *The stages of hypnotic memory. Proceedings S. P. R.*, 1887, 517.

² Georget. *Maladies mentales....* 1827, 129.

so that it was like two different existences.” “I treated”, says Erasmus Darwin ¹, “a young and very spiritual young lady affected with a reverie which returned from day to day and lasted most of the day; as she retained during her attacks ideas of the same kind as those she had had the previous day and that she no longer remembered the next instant when there was no access, her parents imagined that she had two souls.” I have cited these two observations because they are less well known; but it is easy to collect a number of others. We know the patient of Dr. Mesnet who, one night, quietly puts money to infuse in a glass of water and writes that she wants to die. She locks her preparation in a cupboard where she hides the key and wakes up. The following night, access resumes and here she finds the key and runs to the cupboard to get her glass ². We also know the dreamer of Despinae who, every night, steals gold coins from himself and always hides them in the same place ³. As for the studies of Dr. Azam ⁴ on Félicité and on Albert X...; as for Dufay’s ⁵ description of the somnambulist, they are now quite classic.

The same fact is easily seen during the delirium that follows the seizure ⁶ and especially the hysteria crisis. Rose had the bad habit of regularly cursing a female servant at the hospital at the end of her seizures. She didn’t remember it after waking up, and couldn’t believe it when she was told. However, at the next crisis, she resumed her insults at the same point and insisted by shouting: “I was right to say this and that, it was very true”, and she repeated all the details of the previous delirium.

Certain authors have shown that memory has a similar characteristic during the most ordinary dreams, which would justify this word of Dupotet ⁷: “There is no sleep without somnambulism.” One would find in the work of Mr. Myers ⁸ good examples, too long to be reported here, where a dream is evidently the memory of another dream forgotten during the vein. What seems to me more curious to recall and more useful in clearing up these memory problems is that similar facts have been observed during the intoxication of opium ⁹ and the intoxication of alcohol. The facts are especially clear when it comes to alcohol; everyone knows that a drunken man forgets when he wakes up what he did during drunkenness. I have sometimes had the opportunity to do a little simple experiment: an individual is offered... too cheerful... a good way to prove that he has remained in his normal state, we give him a number and we ask him to keep the memory to repeat it the next day. In general, if the drunkenness were serious, he would be absolutely unable the next day, despite his efforts, to find the number he was told. But I did not verify the return of memory in a consecutive intoxication. Here is a very clear observation on this subject. A completely drunk negro steals surgical instruments from Dr Keulemans ¹⁰. The next day, he maintains that he did not touch them and searches for them in vain without being able to find them; two days later, we meet him drunk again and talk to him again about the loss of the instruments. He thinks this time, leaves immediately and despite the darkness goes straight to find them in a box where he had hidden them during his first drunkenness. These facts relating to drunkenness, interesting as they are, do not diminish

¹ Erasme Darwin. *Zoonomie*, trad., 1810, II, 163.

² Régnard. *Sorcellerie*, etc., 1887, 221. – Gilles de la Tourette. *Hypnotisme*, 236.

³ Despinae. *Somnambulisme*, 93.

⁴ Azam. *Hypnotisme, double conscience*, 1887, 129.

⁵ Dufay. *Revue scientifique*, 1^{er} décembre 1885, Gilles de la Tourette.

⁶ Voir Myers. *Automatic writing. Proceedings S. P. R.*, 1887, 230.

⁷ Dupotet. *Traité du magnétisme animal*, 4^e édit, 1883, 470.

⁸ Myers. *Op. cit.*, 226. Voir aussi Charma, *Du sommeil*, 1852, 36, et Maury, *Du sommeil et des rêves*, 94.

⁹ Myers. *Op. cit.*, 227.

¹⁰ Myers. *Op. cit.*, 228.

the value of the sign we have chosen to characterize sleepwalking. They only show us that certain disturbances of the mind should be compared with it, and we shall not be long in seeing that there are indeed other traits still which bring drunkenness to sleepwalking.

Do we not encounter a more serious difficulty in the existence of this fact often observed that some somnambulists retain, after their sleep, a certain quantity of memories? The fact is indisputable, it is a question of seeing under what circumstances it occurs and how it can be interpreted. Let us begin by setting aside all the facts of memory which relate to the suggestion: it is quite clear that if I command a sleepwalker to do such and such an action when she wakes up, she can only carry out my command if she keeps it in some way memory. This memory necessary for the execution of the suggestion is presented in the most varied forms, sometimes completely conscious, sometimes ignored by the subject, sometimes it invades the mind suddenly like an impulse of which he ignores the origin, sometimes it slowly develops. We will have to study later these different ways of carrying out a suggestion: it suffices to notice now that this is quite a superficial and momentary memory. First of all, this memory embraces only the commandments which must be carried out at this time. If we study G..., on which this memory is very clear, we give him two commandments during sleep: 1st walk around the room when he wakes up; 2nd come tomorrow at 4 o'clock in a designated room, and furthermore we make her talk about various other things. When she wakes up, she does not remember the conversation she had with us at all, nor does she remember the second commandment which she must carry out tomorrow; but she remembers that I told her to go around the room, which she does now. The memory of the second commandment reappears the next day at four o'clock, and, as for the memory of the conversation, it will not reappear until the next somnambulism. Second, this memory is momentary; M. Beaunis ¹ has completely demonstrated this fact which I have always observed. If a subject executes a suggestion with awareness and memory as he executes it, it is not long afterwards that he completely loses his memory not only of the command, but even of its execution. N... to whom I have ordered to go pick flowers after he wakes up, carries out my command. I approach her and ask her what she is doing, she tells me that she is picking flowers and that there is nothing wrong with that, etc. The next moment, she maintains that she did not get up from her chair and do not know where these flowers come from. We will find these same characteristics if, instead of suggesting an act, we suggest the memory of certain words pronounced in somnambulism ². Sleeping Léonie wanted to remember some information she had asked me for. I ordered him to remember them well. Indeed, when I woke up, it was easy to see that she remembered my words quite well; but the next day she herself asked me again, awake, for the same information: the memory had therefore not lasted. Perhaps it would be possible to make more lasting suggestions on this subject, but then we would modify the natural phenomena and create a completely artificial state.

However, there is naturally a certain persistent memory after very light hypnotic sleeps, which moreover are very similar to the day before. "A subject hypnotized for the first time", said Gurney ³,

¹ Beaunis. *Somnambulisme provoqué*, 1887, 122.

² Magnetizers cite many examples of memories kept on awakening by order of the one who falls asleep. *Journal du magnétisme*, 1855, 223, et Bertrand, *Somnambulisme*, 81.

³ Gurney. *Proceedings S. P. R.* II, 67.

“remembered everything, not only the actions he had taken, but also the feelings of surprise he had had while doing them. It seemed that there were two selves, one watching the other’s involuntary actions without thinking that it was useful to stop them.” Ch. Richet ¹ even quotes an individual who not only remembered his suggested actions during sleepwalking, but also always imagined that he had done them freely. I myself observed this persistence of memory in a young man whom I had hypnotized several times, but very slightly. His eyelids had remained closed in spite of himself and his arms could not, in spite of his efforts, leave the positions where I put them. Awake, he could easily remember everything. It is easy to notice that in these cases the only criterion of the somnambulant state has been the phenomenon of suggestion. However, we know that this phenomenon exists perfectly in the waking state. Why not say that in these people there were suggestive phenomena in the waking state, that they did not change state to have their arms or their eyelids paralyzed, that they simply presented a few unconscious phenomena and that the memory of others is preserved quite naturally?

A more interesting remark on the memory of somnambulists was made by M. Delbœuf. Having noticed that, under certain circumstances, the memory of dreams suggested during sleepwalking persisted after awakening, he was led to conclude that “the hypnotic dream is of the same nature as the ordinary dream and subject to the same laws, and that dreams hypnotics lend themselves to recall under the same conditions as ordinary dreams ²”. That in many cases, especially in the case of shallow sleepwalking, hypnotic sleep should be compared in many respects to normal sleep is quite indisputable, but that the identity is absolute and that the modifications of memory are not much more considerable in the case of hypnotic sleep, this is what the facts do not allow to admit ³. Here again we find these differences of degree so important in psychology. When the subject is suddenly awakened in the midst of performing a suggested act, he retains the memory of it as a dream. While sleepwalking, I make Lucie believe that her dress is burning and she squeezes the material to stop the flame. Abruptly awakened at this moment, she murmurs: “Here, I was stupid enough to believe that my dress was burning.” This memory also persists, as I have pointed out elsewhere ⁴, when it is a question, not of an act, of a movement, but of a simple hallucination. I tell Lucie that there is a green Bengal light in the room and she admires it, then, choosing a moment when she is quite still in her contemplation, I wake her abruptly. It was enough for me to clap my hands, it was an agreed signal, and, when she woke up, she looked everywhere in astonishment: “Why did you put out the green Bengal light... ah! it was a dream.” The same experiences work out in much the same way with Marie who, when suddenly awakened, retains not only the memory but even the weak and persistent hallucination of sleepwalking dreams. “Here”, she said then, “you have started a Bengal fire... only it’s a pity, it is gradually going out.” So it seems that in this experience waking up did not abolish the memory of sleepwalking and that there was no split in psychological life.

Let us note first of all that this experiment can only be repeated on subjects whose awakening can be sudden and rapid; Now, it is easy to notice that these subjects are those who are the least asleep or whose somnambulism is the least profound. Two things prove this to us: 1st When a subject is asleep for the first time, he is usually a light sleeper and can be awakened suddenly; when he is asleep often, he takes a deep

¹ Ch. Richet. *L’Homme et l’Intelligence*, 1884, 169.

² Delbœuf. *La mémoire chez les hypnotisés*. *Revue philosophique*, 1886, I, 441.

³ Cf., 1st part., Ch III and II part., Ch. IV.

⁴ *Les actes inconscients et le dédoublement de la personnalité*. *Revue philosophique*, 1886, II, 577.

sleep from which he can no longer be drawn easily. At the very beginning of my studies on Lucie, I could easily repeat the previous experience, after a while, I could not achieve it; because it took at least a minute to wake her, which completely interrupted the sleepwalking act and did not let the memory persist. 2nd I have been led, rightly or wrongly (we will see the proofs of this later), to consider somnambulism as profound when the psychological state of the subject, the various sensitivities, the character, the intelligence became very different from this that they were during the day before. Well, subjects who have a modification like this can't be easily woken up. Difficult awakening always accompanies deep sleepwalking. Rose and Léonie, who present all the phenomena of catalepsy, all the modifications of the senses, etc., need several minutes to be fully awakened and have never been able to find the slightest memory when waking up. This persistence of memory would therefore only accompany mild sleepwalking.

Even for these, we must make an important remark: the memory thus obtained by the sudden awakening is not of long duration: it exists at the very moment of the awakening and we can grasp it if we question the subject at that moment; but it gradually disappears and soon leaves no trace in the consciousness. Marie, who congratulates me, when I wake up, on the Bengal fire that I have lit, first notices with regret that the light is fading, then she retains only the memory and says: "The Bengal light looked nice earlier, but it's gone way too quickly." Finally, five minutes later, she maintains that she saw nothing and does not know what I mean when I speak of Bengal fire. It is true that if I go back to sleep, the memory will come back complete; but if I leave her awake, the oblivion is now final. To explain this to myself, I can only assume that she was awake poorly at first, and then gradually woke up. Moreover, for the experiment to be successful, the act started in somnambulism must continue a little after the moment of awakening, and for the act to continue thus, it is necessary that the sleepwalking does not suddenly disappear. In reality, the psychological states are continuous and the subject does not jump from one to the other. There is a post-hypnotic period which sometimes lasts quite a long time after awakening, and it is only natural that the memory of sleepwalking persists for some time during this period ¹.

If my explanation does not apply to all cases, it is because the complexity of psychological phenomena is extreme and that abnormal circumstances may constantly be encountered which modify the general law. In the Middle Ages, it seems, forgetting after sleepwalking was considered a sign of witchcraft: the unhappy sleepwalkers, for fear of the stake, says Bertrand, suggested to themselves the preservation of the memory and sometimes succeeded in doing so. Today, experiments are carried out in front of an audience specially brought in to observe the memory upon awakening, we let the subjects see each other while they sleepwalking, we train them to consider an experience as fun when they retain the memory and as boring in the contrary case, finally we sometimes revive the memories, by making them often tell their dreams and we create an artificial memory. It is not surprising that this post-hypnotic memory is encountered quite often in this way. If we change these defective conditions, this phenomenon of waking memory will be totally absent, we believe, after the deep sleepwalking, rare and of short duration after the others. We therefore retain the characteristic of forgetfulness on awakening as the most important sign of the sleepwalking state and persist in believing that, if it is completely lacking, there has been suggestibility in the waking state and no somnambulism.

¹ For more details on the posthypnotic period, cf. II Part, Ch. II.

III. Varieties and complications of alternating memory

These omissions and these recourse to memory so striking in somnambulism sometimes present themselves with a greater degree of complication which it is very useful to know. The same subject does not always enter the same somnambulatory state; he enters into various states which are all very similar to hypnotic sleep, but which are not identical with one another. It then happens that, depending on the state to which he was brought, he presents a different memory, remembers or does not remember such or such other state in which he was previously. In short, the disturbances which ordinary sleepwalking brings about in the memory of the subject when he has returned to the waking state, another somnambulism can also produce when the subject returns to the first state.

Here is a very curious observation published first in the library of magnetism, then studied again in Bertrand's ¹ treatise on somnambulism. A young girl of thirteen or fourteen fell into different nervous states distinct from the day before, into nervous crises, natural sleepwalking and artificial or magnetic sleepwalking. "Although the patient had the free exercise of her intelligence in all these different states, she remembered nothing in her ordinary state of what she had done or said in each of them; but what will appear astonishing is that, in the magnetic somnambulism which dominated, so to speak, over all the species of life that she enjoyed, she remembered all that had happened either in the somnambulism, or in the nervous crises, or in the standby state. In noctambulism, she lost the memory of magnetic sleep, and her memory extended only to the two lower states. In nervous crises she had less of a memory of noctambulism; finally in the waking state, as in the lowest degree, she lost the memory of all that had happened in her in the higher states." Doctor Herbert Mayo cites a case of fivefold memory: the subject's normal state was interrupted by four varieties of morbid states which he did not remember when he woke up, but each of these states presented a form of memory of its own ². I myself reported, in May 1887 ³, a phenomenon of this kind which I observed for the first time on Lucie; after ordinary sleepwalking she had a second sleepwalking in which she exhibited a complete memory of all her psychological states, even her fits of hysteria. When she woke up from this new state, she went into the first sleepwalking and then kept no memory of what had just happened: on the contrary, she found the memory of this second sleepwalking when I brought her back. M. de Rochas ⁴, the same year, remarks the same fact on his subject Benoist: "If we continue this application on Benoist the application of the magnet on a subject who has already gone through somnambulism and who is in lethargy), we determine a fifth state which resembles the somnambulatory state in that the subject regains possession of his intellectual faculties; his memory and most of his senses are even hyperaesthetized, except sight; when he wakes up he loses the memory of what happened in this state, but he finds it again when he is brought back there..." Finally, M. Gurney ⁵, in a very curious study, shows that certain subjects have "distinct memory stages that they go through during their hypnotic sleep." These states of memory are a little different from those I just mentioned; in fact, each state of consciousness only retains the memory of itself. Here is how the author

¹ Bertrand. *Traité du somnambulisme*, 1823, p. 318.

² *Appendix to the report on mesmerism. Proceedings S. P. R.*, 1882, 288.

³ *L'anesthésie systématisée et la dissociation des phénomènes psychologiques*. *Revue philosophique*, 1887, I, 449.

⁴ De Rochas. *Les forces non définies*, 1887, à l'Appendice.

⁵ Edm. Gurney. *Stages of hypnotic memory. Proceedings S. P. R.*, 1887, 515.

expresses these delicate phenomena: “After having brought about a particular state of sleep which we will call state A, we talk about something with the subject. He is then brought to a deeper state, state B, and if we want to continue the previous conversation with him, he is quite incapable of remembering it, and even of remembering that something has been said. A new question is then started with him, asking him to remember it, after which he is brought back to state A. He cannot remember what has just been said to him in state B, but continues the conversation started in the first state A, in which he finds himself. Led back to state B, he likewise remembers what was said to him in this state, but has forgotten what was imprinted in him in state A. Awake, he remembers nothing of this that was told to him ¹”. The author thus observed three states of memory ² during hypnotic sleep, which made, for this subject, taking into account the memory during the waking state, four different forms of memory.

Let us take up again on our subjects the curious study of these variations of memory. As these phenomena are extremely complex and very difficult to describe clearly, we ask permission to use conventional notation. Formerly, we designated the subject in each of these states by different first names and we said: state of Leonie, state of Leontine, etc., for the successive states of the same person. We have been rightly pointed out to the confusion which results from such a process. Following the example of Mr. Azam, we will now say state 1, state 2, state 3 of the same subject to designate the phases through which he passes, and to designate the subject 4 years these states we will say, as well as Mr. Jules Janet proposed it very well, the first name of the subject with a serial number corresponding to the state in which he is: thus, Lucie 1, it is the subject Lucie in the waking state; Lucie 2, it is the same subject in the second state which is here ordinary somnambulism. The rest of our work will show more and more how much the use of these notations is justified.

I began by simply putting Lucie to sleep in the usual way, and I noticed, in connection with this second state, the memory phenomena peculiar to all sleepwalkers. One day, about a suggestion that I wanted to make to her that was not successful, I tried to make her sleep more, hoping to increase the subject’s degree of suggestibility. So I started making passes on Lucie 2 again, as if she wasn’t already sleepwalking. The eyes that were open closed, the subject rolled over and seemed to fall asleep more and more. There was first a general contracture which was not long in dissipating, and the muscles remained flaccid as in lethargy, but without aptitude for the contractures provoked; no sign, no word could induce the slightest movement. This is the state of hypnotic syncope which I have already mentioned, I have seen it often since, and in certain subjects it seemed to me to form an inevitable transition between the various psychological states. After half an hour of this sleep, the subject straightened up on his own, and first wanted them closed, then opened, at my request, he began to speak spontaneously. The character who spoke to me then, Lucie 3 according to our convention, presented from all points of view a host of extremely curious phenomena ³. For the moment, I can only point out one, it is the state of memory. Lucie 3 remembered her normal life perfectly, she also remembered the sleepwalking caused previously and everything that Lucie 2 had said; moreover, she could tell me in detail her fits of hysteria, her terrors in front of men she saw hidden in the curtains, her natural sleepwalking during which she had been preparing dinner or cleaning her house, her nightmares, etc., all things that neither Lucie 1, nor Lucie 2

¹ Gurney. *Loc. cit.*, 515.

² *Id.*, 522.

³ See the following chapter for the changes in the will which occurred.

had ever presented the slightest memory. It was quite long and difficult to wake up this subject then: after a passage of a few minutes through the syncope already described he found himself in ordinary sleepwalking, but Lucie 2 could not tell me then what had just happened with Lucie 3; she claimed to have slept without saying anything. When I later and more easily brought back the same state, Lucie 3 immediately found these apparently disappeared memories.

This curious observation, which I then believed to be more unknown than it really was, inspired in me the desire to repeat the same experiment on another subject also very interesting, on Leonie. This person has a first somnambulism, state of Leonie 2, very easy to produce; Let us first wait until this state is quite complete and well developed, which does not take place until after two or three hours. So let's try to put Léonie 2 to sleep as if she were a normal person and use the same procedures to which she is accustomed, touching the thumb, passing, etc. Léonie 2 gradually stops speaking, falls asleep soundly and ends up falling into lethargy. Let's continue the passes despite the lethargy; the subject sighs and appears to wake up; but this singular awakening is very slow. The senses seem to wake up one after the other: the muscular sense first, because the subject now keeps the limbs in the position in which they are placed, the tact then when an object placed in the hand causes movement, the finally seen when the subject sees and imitates the movements made in front of him. These cataleptic phases, already described in the previous chapter, are indeed here, as we have seen, forms of consciousness in the nascent state. In fact, if we continue the passes especially on the head during the catalepsy itself, the condition of the subject changes and the catalepsy develops into a new somnambulism. The subject who was erect during the catalepsy has gradually overturned, he has gently closed his eyes and seems to be sleeping soundly.

Neither the pressure of the tendons as in lethargy, nor the friction of the skin as in somnambulism causes contractures, the arms still remain in the position where I put them if I insist a little. The face is pale, with sunken eyes and tight lips, with an expression of severity and sadness that is unusual for him. This state seems to approach catalepsy of which it is only the development; but there is a capital difference, which is that the subject can now understand speech and respond. He speaks, it is true, in a singular way, he begins by repeating my questions as in cataleptic echolalia, but then he answers. "Can you hear me, I told him. – Can-you-hear-me, yes-sir" she replies after a moment of silence. This word does not always exist, for there are, in this second somnambulism, as in the first, alternatives of wakefulness and sleep which, moreover, are distinguished from each other only by the presence or absence of speech. If we manage to maintain this same state for some time, an hour for example, which is difficult, intelligence seems to grow, the subject, which we can now call Leonie 3, repeats the questions less and answers them more. We can note, as for Lucie 3, interesting psychological facts to which we will return, but we must now study only the state of memory. 1st The subject in this state remembers everything he has done or heard in somnambulisms of the same kind; 2nd the subject easily remembers what was done during the waking state by Léonie 1; 3rd finally the subject in this state remembers the ordinary somnambulism and the actions of Léonie 2. I thought I had brought this state of Léonie 3 for the first time, but she told me that she had previously frequently been in this same state when she had been put to sleep by Dr. Alfred Perrier, who had found her like me while trying to deepen the sleep of Léonie 2. This resurrection of a sleepwalking character who had disappeared for twenty years was very curious and I naturally told him kept, when I speak to him, the name of Leonore which had been given to him by his first master. It is to avoid confusion that we will refer to her here under the name of Leonie 3.

The most important feature of this new sleepwalking is not seen until it is over. In fact, this state is brought to an end in different ways: the subject falls back into lethargy, then wakes up in ordinary sleepwalking, Léonie 2's state. The latter resumes the conversation at the point where it was interrupted with her in the same state and never has the slightest recollection of what happened in Leonie 3's state. This loss of memory is not caused by the intermediate lethargy, because Leonie 2 remembers her whole life, although she was cut off by many lethargy. In short, Leonie 2 does not remember Leonie 3 any more than Leonie 1, awake, does not remember sleepwalking. This state of Leonie 3 is therefore a new sleepwalking compared to the state of Leonie 2, as it was compared to the day before.

The description of these two subjects would be sufficient to make this memory phenomenon understood and we would not be talking about our studies on a third subject, Rose, if this person had not presented the same phenomena with a much greater degree of complication, and if it did not give us the opportunity to insist on an important point: the analogy of the natural phenomena of hysteria and of the various sleepwalking states. This woman, when hypnotized, can exhibit four distinct forms of sleepwalking. The memory in these different states seems to depend on very complex conditions and varies from one to another; the first two states are reciprocally ignored, although they both remember the day before; the third and the fourth are superimposed like the successive somnambulisms of Lucie and Léonie, the last state presenting the memory of all the others and of the whole of life. But, apart from somnambulism, the life of this person presents a large number of very varied hysterical accidents, convulsive fits, hysterical delusions which sometimes last for whole days and of which she retains no memory, in addition to amnesias, singular omissions that have already been often described. Sometimes he completely forgets, without knowing why, important parts of his life which had nevertheless seemed normal. So, one day, after a seizure, she loses the memory of the three weeks before. Well, the memory of one or the other of these forgotten states returns easily, when she returns to certain determined periods of her artificial sleepwalking. Thus the memory of the hysterical delirium is complete during the second somnambulism; but the memory of the periods of life affected by amnesia has not yet returned. It is only fully recovered in the fourth period, during which the subject's memory no longer shows any particular gaps. This return of memories allows us, I believe, to assimilate the states thus united by memory: Rose's second somnambulism would be a psychological state analogous to her hysterical delirium, and her fourth somnambulism would be a state analogous to these periods of life. which are suddenly forgotten. This is a hypothesis which, until now, is based only on one characteristic, that of memory, and which our studies will justify more and more.

The description of these alternating memories, although done in a superficial way without going into detail, can appear complicated and obscure. We are convinced, however, that psychology must leave abstract generalities a little and go into these details, if it is to one day become a useful and practical science. It is thanks to the knowledge of these various psychological states of the hysterics that one can cure their paralysis and their contractures, and it will be necessary to enter into much more arduous studies, if one day one seeks the true moral treatment of the madness which is much more complicated than hysteria. But, in this essay, it was enough for us to show that forgetting on awakening and alternating memory do not simply belong to ordinary sleepwalking, but that they are found with a lot of variations in many states and allow us to observe many varieties of sleepwalking.

IV. Study on a particular condition of memory and forgetting of images

Noting a phenomenon is not enough, we must still try to explain it. Where do these changes in psychological states come from? Why these oversights and these bizarre flashbacks of memory? All the possible hypotheses have been proposed and to review them all would be to go through the entire history of animal magnetism. Most of these theories having already been summarized in the works of Maury, Despine, and Ribot, it will suffice for us to cite the most famous and to show how little they take into account the real elements of the problem. Some claim that attention was too weak during sleepwalking and psychological phenomena too light ¹. The others say, on the contrary, that the concentration has been so strong and the phenomena so violent, that the mind has been exhausted and can no longer reproduce the same idea upon awakening ². These two hypotheses are refuted one by the other, do not take any account of the variety of somnambulatory phenomena which sometimes are very strong, sometimes very weak, finally will hardly explain the so perfect return of memory in a new somnambulism. M. Despine, as we have already seen, attributes this forgetting to the total disappearance of the ego and of the consciousness during the abnormal state: "It can only be explained by the non-participation of the ego and of the personal consciousness in this act, which is due to the unconscious, i.e. automatic psychic activity of the brain, during a momentary suspension of the conscious activity of that organ ³." There is perhaps something true in this theory of the disappearance of the ego; but to conclude that all consciousness is suppressed during sleepwalking, that seems really paradoxical and unacceptable to us. There is more to remember, I believe, from Maury's theories ⁴ on the role of associations of ideas in memory; but, as he himself observes, the forgetfulness of somnambulists cannot be entirely explained by the breaking of the chain of associations. If, immediately after awakening, they do not always have before their eyes an object or a movement associated with the preceding acts and which reminds them of them, it is nevertheless likely that, during the day, they will see objects or to perform acts identical to those performed while somnambulism. Why is the power of association not being exerted at this time to awaken memories. Sleepwalking Léonie has picked a bouquet of flowers, when she is awake, I give her this bouquet to take away: why doesn't she understand where it comes from? Why by association does she not remember picking it?

Some of the old magnetizers also express a very correct idea, which we will take advantage of when they talk about the changes in sensitivity that occur during sleepwalking. "In all sleep", says Bertrand ⁵, "there is a more or less complete deprivation of the sensitivity and the motility of the external organs ... Sensitivity flows back inside, the somnambulist experiencing new perceptions provided by the internal organs, their succession. will be a new life different from the one we usually enjoy." This is much the same idea that M. Ribot expressed when he admitted variations in coesthesia or general sensitivity during sleepwalking, variations which would become the center of new associations and new memory. These ideas seem generally true to us, but we will agree that they are still rather vague and can hardly be applied

¹ Dugald Stewart et A. Lemoine. *Du sommeil au point de vue physiologique et pathologique*.

² Maury. *Le sommeil et les rêves*, 188.

³ Despine. *Somnambulisme*, 98.

⁴ Maury. *Ibid.*, 206.

⁵ A. Bertrand. *Traité du somnambulisme*, 1843, 467.

in particular cases. This is why we will try to sketch in our turn an explanation of these bizarre phenomena of forgetfulness and memory. Our hypothesis will not be more definitive than the previous ones and it does not claim to be very general. It is simply intended to explain the facts that I have been able to observe, and it has this unique advantage over the previous ones of being based on some observations and some precise experiments, carried out under good conditions. To explain the facts presented by other sleepwalkers, we would probably have to broaden and transform our hypothesis, but the general direction would probably remain the same.

Any hypothesis, say the logicians, consists of three parts: a fortuitous observation, a series of ideas and reasoning intended to explain it, and experiments instituted to verify the consequences of this supposition. It is this order that we will follow in the exposition of our research.

One of the women I have studied the longest, Rose, had presented, before entering the hospital, just about all the accidents of the most serious hysteria; she had had, among other things, peculiar memory loss which occurred suddenly following a seizure or some kind of lethargy and which spanned one or more of the weeks preceding the accident. Very recently she had had an accident of this kind and, following a cataleptic or lethargic sleep which had been ill-determined, she had totally forgotten the previous three months. The lethargic attack having come pretty much suddenly towards the end of September after an interval where it seemed to be doing well, this person had awakened with no recollection of July, August and September. I had naturally been very interested in this natural amnesia and, on several occasions, by means of somnambulism or suggestion, I had tried to revive these memories; but, I must say, I had had no success. Much later, the habit of being asleep and the curious influence of the passes brought in this woman a great number of various somnambulatory states separated from each other, as I have said, by periods of syncope and catalepsy. In one of these new periods which had just occurred, she spontaneously told me one day: "You have often asked me what happened in August and September. Why couldn't I answer you, it was so simple; I know it well now..., I did this and that..., etc." The memory of the three forgotten months had completely returned, as I could verify. But as soon as this sleepwalking changed and the subject entered the waking state or other sleepwalking, those memories were completely gone again. What was there in particular in this somnambulatory state that had happened by chance, so that these memories reappeared at this moment and not at another? My attention was drawn to a particular phenomenon, important or not, but which constituted the only visible difference for me between this state and the others. In the waking state and in all other states, as I had known for a long time, Rose was completely anesthetic and her consciousness did not perceive any tactile or muscular sensations. In this particular somnambulism which brought the return of memories, Rose suddenly recovered the tactile and muscular sensitivity of the right side and became hemianesthetic. On the other hand, when I searched for information on the subject's condition during those three months of which the memory had been lost, I learned that she was doing quite well and then had tactile sensitivity at least on the side law. Indeed, she had received then a small wound caused by a stab in the right arm and had suffered a lot. Now, at this moment, when she is awake, she is so insensitive that she does not suffer from any injury, even when, in her fits, she makes real wounds to her limbs. So she wasn't anesthetic during those three months like she is now; at least she could smell on the right side. If we compare the state in which the memories were acquired and the state, which is now a particular sleepwalking, in which these

memories are restored, we see that these two states have a common point of their own, the existence tactile and muscle sensitivity on the right side.

This fortuitous observation naturally led me to suppose that there must be a relation between the state of sensitivity and the state of memory. The memories acquired by a certain sensitivity seemed to be able to be recalled or reproduced only if this sensitivity remained in the same state. In order to discuss the value of this hypothesis and to apply it to new cases, it seems to me necessary to distinguish two cases and to study separately two kinds of memories. There is first elementary or sensitive memory, that which consists simply in the recollection of such or such particular sensation considered in isolation, and then there is a complex or intellectual memory, which provides us with the memory of complicated ideas and which does not can hardly exist in man except through language. Let us first be concerned only with the first memory and seek under what conditions it is possible.

Memory contains a very important element, but, in reality, incidental: it is recognition and localization. These distinctions are, as M. Ribot says ¹, the contribution of intelligence to memory, nothing more; they do not constitute memory. The essential element of memory here is, as we know, the reproduction in image form of the sensation previously experienced. However, it is accepted today, since the researches of Galton, that the image is, with an ordinarily less complexity, identical to the sensation. In order for the image to be produced and therefore for memory to take place, it is therefore absolutely necessary that the faculty of feeling this sensation still exist at least in part. An individual, who would have completely lost a sense and who could no longer in any degree appreciate the sensations which this sense procured, would have lost at the same time all the images and consequently all the memories relating to these sensations. But, it will be said, a man who has suddenly become blind by an accident still retains, although he can no longer see anything, the memory of visual sensations. This is because this individual has lost only the eye, the external organ of vision, and not the psycho-physiological faculty of seeing. If he had lost the nerve centers of vision, the very faculty of appreciating visual sensations, he would no longer have the memory of having seen and, like a blind man from birth, he would no longer know what it is. what to see. There are such individuals; we can show that things take place thus in hysterical anesthetics.

In this disease, it is not the external organ which is affected, it is perfectly intact; these are the very centers which no longer function, or at least which function in an abnormal way, as we will see later ². Also, unlike a blind man by accident who retains dreams and hallucinations of sight after the loss of the eye, hysterics who have complete and deep anesthesia do not retain the hallucinations of the meaning they have lost. Let us examine this fact and then show what consequences it can have for the exercise of elementary memory.

Rose was, at one time, total anesthetic and at the same time dyschromatopsic of both eyes, that is to say that she did not feel the contact on any point of the body and that she could not distinguish any color nor by the right eye, neither by the left eye; she could see all the gray and white objects. At that moment, it was completely impossible for me to make him experience any colored visual hallucination or any

¹ Ribot. *Maladies de la mémoire*, 2.

² Cf., II, pan., ch. II.

tactile hallucination. If I suggested that she see flowers, costumes, etc., she always saw them gray and white; if I suggested a tickle, pain, abnormal temperature, she felt absolutely nothing. At the same time, you could awaken all auditory hallucinations with a word, which proves that she was very suggestible. I asked her about her dreams and she assured me that I saw the objects in dreams the same way as during the day before, gray and white, and never felt any contact. In this subject, the images had completely disappeared at the same time as the sensations ¹.

Conversely, when one arrives, which is sometimes possible, to induce a hallucination in spite of the subject's anesthesia, the normal sensitivity is brought back at the same time. It should also be noted that, in certain subjects whose anesthesia is shallow and of recent origin, the suggestions may awaken the sensitive images, especially through the intermediary of other images which have been preserved ². For example, Marie has been under total anesthetic for a few days: I suggest that a caterpillar run on her hand; she claims to feel nothing. I tell her to look and see the caterpillar: she sees it and at the same time feels it: the visual image has awakened the tactile image. But what is interesting to note is that at the same time the whole arm has become really sensitive and that Marie now feels all the bites and all the contacts. The sensitive image could not be evoked without bringing back the real sensation, and this observation shows in an inverse manner the dependence between the image and the sensation.

Let us now find out what consequences such a phenomenon can have on the state of memory: it is easy to understand and to verify by experience that this loss of images leads to the loss of all the memories which are attached to it. One of the first symptoms which prove to us, I believe, this loss of memories, is the well-known indifference of hysterics for everything that depends on their anesthesia ³. It seems to me that if I woke up one morning without any tactile or muscular sensation, that if I suddenly lost, like Rose, the sensation of colors and only saw black and white in the universe, I would be terrified and would immediately go and ask for help. These women, on the contrary, find their state so natural that they never complain about it. It was I who, after a few tries, pointed out to Rose that she could not distinguish any color, she did not know. When I showed Lucie that she did not feel any pain or any contact, she replied: "So much the better." When I brought her to realize that she never knew the position of her arms without seeing them and that she was losing her legs in bed, she replied: "But that's only natural, as long as I can't see them; everyone is like that." In short, they cannot compare an old sensation which they have completely lost the memory of and their present state, nor do they suffer from their insensitivity any more than we suffer from not hearing "the harmony of celestial spheres". When a hysterical woman, like Marie, complains of being insensitive, it is because she is not totally so; when the insensitivity is complete, the absence of memories is also complete.

It is easy enough to verify this point now by precise experiments: we could make these people feel a definite sensation when they are very sensitive, wait until the course of the disease makes them anesthetic and see if they have then retained the memory of the previous feeling. But the experience would be very long and very difficult to monitor. It is better, I believe, to make use of the artificial changes produced in

¹ This phenomenon does not occur quite in the same way and presents particular difficulties of interpretation when we experiment on hemi-anesthetics: we will talk about it further, 1st part, ch. III.

² Cf. Paul Richer. *Op. cit.*, 710.

³ Cf. Dr A. Pitres. *Des anesthésies hystériques*. Bordeaux, 1887, 26.

their sensibility by means of oesthesiogenic agents. After some trial and error, I recognized that one could temporarily restore to Rose the sensitivity of a part of her body by three methods: either by the prolonged application of a strong magnet, or by the application of plates, metallic tin or lead, or finally and more easily still by means of an electric current of medium intensity (20 or 30 elements found).

If I wanted to discuss this question, there would be an interesting study to be done here on the action of these processes. It seems to me that, in the present case, it is very difficult to explain their influence by “the expectant attention”, or by a phenomenon of suggestion, since it is precisely a subject on which the suggestion of the tactile hallucination had no hold and no longer possessed tactile images. Suggestion makes use of a psychological state, it does not create it. Here, under the influence of one of these three agents, tactile sensitivity reappeared in the right arm and then one could suggest tactile hallucinations of this limb, whereas this was not possible before.

Rose being thus in the waking state, I restore the tactile sensitivity of the right arm to her by an electric current and I make sure that she feels the bites and the touches. I then put a small object in her right hand that I beg her to recognize by touching it without looking at it: “It’s a little pencil,” she said to me. I then turn off the electric current and, for a few minutes, talk to her about something else. After a while I ask her: What did you have in your hand earlier? – A little pencil, she answers. I examine the right hand and I see that it is still sensitive, this examination can be done quickly without warning it. Coming back to her an hour later, I repeat the same question and she then answers: “You didn’t put anything in my hand, I don’t remember anything.” If I then quickly examine the right hand, I see that it is again completely anesthetic. But, it will be said, in an hour, she was able to forget something as insignificant as the contact of this small object. Okay, but let’s continue the experiment. The next day, I went back to see her and I noticed that she naturally had neither sensitivity in her right hand nor memory of my pencil. I still apply the same electric current to her hand; after two or three minutes, the arm is tender again and she starts to say spontaneously: “Ah, but it was a little pencil that you put in my hand yesterday.”

In this experiment, which has its interest and which I have often repeated, we see that the two moments when the memory was acquired and when it was reproduced are both moments of the day before during which the right hand was made sensitive by an electric current. What would happen if these moments belonged to two different states, one on the eve and the other on sleepwalking? We have seen that Rose presents various somnambulisms, at least four characterized by different memories; in two of these states, the third and the fourth, she is naturally sensitive on the right side, that is to say that under the influence of passes or prolonged sleep, there comes a time when Rose feels good about everything, right side and that, if we wake her from this state to enter, for example, the second, she no longer feels and she has forgotten what happened in the third somnambulism. Well, during this particular state in which she is sensitive, I put an object in her right hand: “It’s a penny”, she said without looking. I make her close her eyes and move her right hand myself. “You make me make the sign of the cross”, she said. That done, I wake her up, she goes through the lower somnambulisms, arrives on the eve and here she is, as always, total anesthetic. Without questioning directly, I see from her conversation that she has no memory of sleepwalking or of the object she had in hand for a very long time. Besides, I can even question her directly and urge her with questions, almost suggesting the answer, she remembers nothing. I then apply the electric current to my right hand, which becomes sensitive again and Rose spontaneously tells me: “It was a penny you put in my hand ... you made the sign of the cross to me while I was

sleeping, what a funny idea!” No need to insist any longer on this same person, the phenomenon is constant in her: bring back by any process, electricity, metal plates, somnambulism, etc., a particular state of sensitivity and you bring back all the elementary memories at the same time which have been acquired by this same sensitivity at some time.

It is more interesting to repeat the same experience on another subject and I tried to reproduce it with Marie. From the start of my research, I encountered a difficulty and the results of the experiment seemed to contradict the previous ones. Indeed, the memory in Marie persisted longer than the sensitivity. Should the experiences with Rose be considered false? No, a fact is never wrong, it is too often forgotten; but it can depend on complex circumstances and, if we do not verify it, it is because we place ourselves, without knowing it, in other conditions. With a little attention, this is what I thought I noticed: Marie is not anesthetic in the same way as Rose; while the latter has completely lost the images of the tactile sense and no suggestion, no word can revive them, Marie, on the contrary, can have tactile hallucinations provoked by the word. If I strongly tell her that a caterpillar walks on her neck, though she is unresponsive, she smells of caterpillar and even, weird thing we saw, this image of tactile sense revived the actual tactile sense for a moment. It is therefore the word that here introduces an element of confusion into the experience. It is necessary to avoid making it speak, because the memory of the word is preserved in the place of the memory of the tactile sensation and is even sufficient to bring it back to life.

We can operate as follows: I cut out of strong cardboard ten figures, all having about two centimeters in their largest dimension ¹ and irregularly shaped enough that they are difficult to identify by language. To name them, it would be necessary to say a scalene triangle, a trapezoid, etc., of which this brave country girl is absolutely incapable. I am going to make her touch one of these figures without asking him the name, then, to verify the memory, I will make him recognize by tact among the ten figures the one that she has already touched.

During the deep somnambulism, Marie also becomes sensitive, but of the whole body; I then make her touch a face, then I wake her up. At this time, she still retains a little of the sensitivity of sleepwalking, especially if she was suddenly awakened. If I put the faces in her hand, she feels them and hands me the one she has already touched: “I had that one in my hand earlier.” We see here that the memory persists after a sudden awakening, but this is because the somnambulatory sensitivity persisted ². Let’s repeat the experiment, leaving more time after waking up so that all sensitivity is erased. So I let her look or touch the figures, she doesn’t recognize them and says she doesn’t know what it is. Let us try to restore her sensitivity without putting her back to sleep: Marie is not sensitive to electric current, I don’t know why; We must use Burcq’s plates and, after a few tries, iron plates which act very strongly. The application of the iron plate makes the hand tremble, causes painful tingling, and then, when the jerking and tingling is absolutely gone, makes the arm completely tender. The hand then touches the figures and immediately hands me the real one that has been recognized. Here again disappearance of sensitivity, disappearance of memory; persistence or return of sensitivity, persistence or return of memory. “Sensory

¹ We could perhaps make figures of this kind with different dimensions and thus obtain real scales of tactile sensitivity similar to the letters of Wecker used to measure visual acuity.

² It is sometimes the same with Rose.

activity, one might say with Bastian, forms the basis of thought; when you turn it off, the thought disappears or falls asleep ¹.”

V. A condition of memory and forgetting for complex phenomena

After this much too rapid study of the recall conditions for elementary memory, let us move on to complex or intellectual memory, that is to say the complete memory of ideas and actions. Here, the task is singularly facilitated by the fine psychological work of M. Charcot on language and the different sensory types. We know, in fact, that actions and complex ideas are hardly understood and retained in memory except through language. To seek the conditions of the complex memory of ideas or of actions is in reality to seek the conditions of the memory of language.

Language is formed by a large number of images associated with our ideas and movements, and these images, as physicians have taught psychologists ², are not the same in all individuals. Some, perhaps the most numerous, think through these motor or kinesthetic images of which we have already spoken and which have a tendency, when they are isolated, to be translated externally by real movement or real speech. These people think by speaking aloud or whispered, but always by the images of the movement of the word. The others think by means of auditory or visual images, their thought is formed by a series of images of words heard and not spoken, or by a series of images of writing, or signs seen and not heard. How do these latter people speak and act? Will their visual and auditory images first awaken the more or less weak motor images that result in movement? We have discussed this question before and have concluded that maybe it was so at the beginning of life, but now things are more simply. The sound of a word must be reflected in the movements which express this word exactly like the motor image itself. The habit of speaking and even acting by means of auditory or visual images must be added to the habit of thinking by means of these images and help to further separate these different types from one another. As all thoughts and actions thus depend on a single species of images, it follows that memories end up all depending on the persistence of these same images.

We see very clearly, in M. Ballet's work, how the same lesion produces very different effects on intelligence and memory, depending on whether it strikes individuals who habitually use this or that category of images. The loss of visual images, for an individual whose memories are all crystallized around motor images, is of no great importance; it would suppress all memory and all speech in another subject who uses these visual images. In the latter, a more or less easy new education can now group ideas and actions around another category of images, those of the muscular sense for example or of the auditory sense, and this man, apparently cured, will be able to new thinking and acting. But he will live entirely on these new memories and will never be able to find the old ones ³, unless, by some miracle, the old visual images are ever returned to him. This restitution of lost images does not take place in the aphasic patients studied by M. Charcot, because a cerebral disease has completely destroyed them; but is

¹ Bastian. *Le cerveau et la pensée*, II, 123.

² Cf. Ballet. *Langage intérieur*.

³ On this subject, see a very complete observation by M. Charcot, reported by M. Ballet. *Langage intérieur*, 1886, 101.

it not possible that, in other subjects, these images are only momentarily suppressed and can be restored under different conditions? The previous study on elementary memory showed us precisely that this is how things work with hysterics and sleepwalkers.

Let us resume this study on a particular example which will serve as illustration and proof. Anyone who closely examines Lucy's waking behavior will readily recognize that she is an extremely sharp "visual type". She thinks, she speaks and she acts almost solely through the sense of sight. In the first place, the poor woman could hardly do otherwise, for all she had left almost intact was the sense of sight. She did not keep the tactile sensation on any point of the body; she has no muscular sensation; you can move her limbs, even tie them behind her, stop her spontaneous movements, all without her noticing it if she is not looking. This very deep anesthesia has completely removed all memory of tactile sensation from her, she claims, as we saw earlier, that everyone is like her. Besides this loss of tactile sense, Lucie has almost completely lost the sense of hearing: she only hears speak if the voice is loud and close enough, she does not perceive the ticking of my watch, even if I do apply against his ear. Sight, although very reduced (visual acuity, one third, visual field restricted to 20°), is still the best sense it possesses. So she uses it continuously; she does not make a movement, does not walk without constantly looking at her arms, legs, the ground, etc. It is in this way, moreover, that a large number of hysterics can retain the faculty of sewing, knitting, and writing, without having any sense of muscle. We have often been mistaken and this is why several authors declare muscular anesthesia rare in hysteria, while it is very frequent. Visual images can even, in some cases, make up for absent sensations and allow them to make movements with their eyes closed. This is not the case with Lucie: if they put a screen in front of her eyes, which makes her furious, she can no longer do anything, nor walk, nor move her arms, nor even move her hand, she wavers and would soon fall. If we closed her eyes completely, she wouldn't even be able to speak, and... she would sleep. We already have many examples of these subjects ¹ who fall asleep when one suppresses the only meaning that remains to them. This is why you should never touch the eyes of a hysterical woman when doing a study on her waking state. I have observed four such subjects who live only by the visual sense and who sleep as soon as you close your eyes. If we avoid this sleep and if we still question Lucie while she is awake, we see that, thinking of people, she always represents them according to their faces and their costumes. In a word, in the waking state, all his memories, whatever their origin, are recalled in the form of visual images.

Let us now put her to sleep deeply and, to have clear differences, let us go through the intermediaries, put her in her greatest sleepwalking, the state of Lucia 3, the one which only arrives after half an hour of passes.. Here she gets up and opens her eyes like I said: what person do we have in front of us? The senses which she already had in the waking state are not lost, on the contrary they have increased; but what is striking is that she has recovered completely and delicately all the tactile and muscular sense. She knows perfectly well where her limbs are, she can make out the smallest objects by touch, recognizes my hand by simple touch, walks and even writes without looking at either her feet or her hand. These new sensations do not surprise her, moreover, they still find them very natural. But we see that it no longer holds as much to the visual sense, it does not demand and does not appear changed if we close our eyes. Is it not natural to suppose that she does not now produce her movements and especially her words thanks

¹ Cf. Paul Richer. *Op. cit.*, 259.

to the same images as before, but that she now uses those of the muscular and tactile sense? In short, she is no longer a woman of the visual type, she is a woman of the motor type.

This assertion raises some difficulties. How, you will say. Does she change her sensory type so easily and can she talk as quickly with one category of images when she was talking with another just now? In order to effect such a change, M. Charcot's patients needed a long rehabilitation. I will answer: her education as a motor type has already been done for a long time, because she is hysterical, that is to say the type of psychological instability. For fifteen years that she has been ill, she has spent her time changing her senses and practicing speaking and acting sometimes with one and sometimes with the other. M. Charcot, in his classification of types of language, spoke of the indifferent type which, at the same time, makes use of one image or another. I ask for a small place for the alternative type, which successively uses one direction then another.

What proof do we have that Lucie was already previously a motor, as she appears to be in this state which is now artificial? We find a pretty good one in the state of his memories. Let us now question her in the state of Lucia 3: she will tell us about her childhood up to the age of nine that Lucia 1 has entirely forgotten; she is going to tell us about the great fear she had one day when men hid in the curtains and suddenly jumped on her, an emotion which will form the main scene of all hysterical crises. She is going to tell us about these very crises and the movements she made and her walks around the house at night in natural sleepwalking. Above all, she will tell us about this year, which was so painful for her, when for several months they wanted to keep her locked in a dark room, because her eyes were hurting, she couldn't see clearly and the doctor, believing having to deal with a trivial lesion kept it in the dark. Now, all these stories, Lucie, could not tell us just now and was absolutely ignorant of them. Can we not legitimately assume that, in these circumstances unknown to Lucy 1, but known to Lucia 3, memories for various reasons did not associate with visual images? Sometimes she was well in her childhood and thought, perhaps like everyone else in childhood, by muscular images, sometimes the muscular sense functioned alone as during the crises, sometimes the visual sense being suppressed as in its attack of ocular anesthesia, he had to think otherwise, and the memories had then gathered around other images. These images did not reappear in the waking state, under the law indicated in the previous paragraph, the memories did not reappear either. The passes, I don't really know why, acted like metal plates (gold plates for her) would have done, or like electrification by a static machine, and made her lost senses. The images all reappeared as we had established and with them all the memories. But the conversation we just had with Lucie 3 is associated in turn with this particular memory and increases the sum of muscle memories and not that of visual memories. So when we are going to wake her up, that is to say quite simply to remove the sensations added by a certain excitement, Lucie will find herself the same as at the beginning, will wander her eyes on all sides and start thinking with her visual images. It no longer has any muscular or tactile sense, so no images of these senses or no memories of everything related to it.

The same demonstration would be interminable if it had to be repeated on all subjects. We could easily demonstrate, we believe, that Leonie is visual in the waking state, auditory in ordinary somnambulism where she has hyperexcited hearing, and motor or tactile in state 3. But the study of Rose would be especially interesting; in the waking state, she presents with the following characteristics: she has completely lost the muscular or kinesthetic sense in both legs and in the left arm, but she has retained

it in the right arm; she has very weak eyesight and since she has complete dyschromatopsia she can only see black and white. But on the contrary, she has more or less normal hearing; she loves music, has been a singer in a concert café and gets irritated when she hears singing out of tune. This analysis of the senses shows us that it is auditory, which is quite rare in hysterics in the waking state, because they are almost always visual. But here is what results for his movements from this distribution of the senses. We speak well with the auditory sense, but we do not walk, because the movements of the legs are difficult to associate with images of hearing; also this unfortunate woman becomes paraplegic as soon as she loses the muscular sensitivity of the lower limbs. For a hysterical woman it is not good to be a musician. She has learned somehow to move her left arm through visual images and can only use it by looking at it; it has free movements only those of the right arm by the preserved muscular sense and those of language by the auditory sense.

When I started to put her to sleep, I encountered a singular difficulty which rarely arises, I could not make her sleepwalking. She understood me, however, did the movements I commanded, and appeared to hallucinate, but failed to speak as if she was hysterically silent. After several sessions of this kind, I was about to give up making her speak, when I was struck by a new fact: visual hallucinations led to speech. I ordered her to see roses; she seemed to experience hallucination, fidgeted, opened her eyes, seemed to inhale the scent and murmured: "Roses". In a few sessions, I managed to develop language in her, but always by means of visual images.

Besides, it was easy to verify that she was no longer dyschromatopsic and had almost normal visual sense. It seems, I dare not conclude with certainty, that, regaining the visual sense, she entered a state to which she was not accustomed and in which she did not know how to use language. As she did not know, as was done Lucie, moving her legs by means of visual images, I could not in this state either destroy her paraplegia. In another somnambulatory state, which I did not achieve until much later and with a thousand difficulties, she regained the tactile and muscular sense first on the right side, then on the left side, and then it only needed a slight effort to relax her legs and start moving them at my command. She had become motor, which she had probably been a large part of her life, as she spoke very easily by then, regained all memories apparently lost in the waking state, and no longer had any paralysis. When we woke Rose, she again lost all those added sensitivities, forgot everything and unfortunately could not walk anymore¹. All phenomena, both those of movement and those of memory, seemed to depend clearly on modifications in the state of sensibility.

In short, complex psychological phenomena, ideas, voluntary movements, language are constituted, in each individual and at each moment of life, by sensitive images of a specific species, and the memory of complex phenomena depends on the reproduction of these elementary images. If these images can no longer be reproduced, all the memories associated with them disappear, and although the individual can still think and speak with new images, he no longer remembers the previous thoughts and words. May the reproduction of the first images become possible again, and the memories will reappear whole. Now this reproduction takes place, as we have just seen, only if the state of the senses is found the same. The memory and forgetting of complex phenomena are therefore linked to this same fact, the persistence or variation of the state of sensitivity.

¹ The famous Estelle du Dr Despine (from Aix) must have had a sleepwalking similar to that of Rose; she was crippled and paralytic during the vigil, but could jump and run while sleepwalking. – Cf. Despine. *Somnambulisme*, 188, 277. – A. Gambier. *Hist.*, II, 373. – Pigeaire. *Electricité animale*, 271, etc.

VI. Interpretation of forgetfulness upon awakening after sleepwalking

The application of the preceding remarks to somnambulism seems, after all that has been said, so natural that it suffices to insist on a few details.

To understand the alternating memory of somnambulists, we have been led to suppose that it is due to *a periodic modification (whether spontaneous, or provoked) in the state of sensitivity* and, therefore, in the nature of the images. which are used to form complex psychological phenomena and in particular language. This modification is produced especially in more or less anesthetic subjects in their normal state, and it then consists in the *momentary restoration of a certain category of images* of which the subjects have ordinarily lost possession. This modification may be more or less complete, and in some subjects who are *distracted* rather than truly anesthetic, simply consist in the *momentary predominance of certain ordinarily neglected images*. Let us take up successively the examination of these various points.

1st We have already had the opportunity of showing in most of our subjects *these periodic variations of sensitivity and images*; we have seen that one is a visual type in its normal state, then momentarily a motor type during sleepwalking, that the other is an auditory type during waking, then a visual type during a certain abnormal state: it is useless to come back to it. Let us only remark that wherever, for one reason or another, analogous modifications of the sensibility are produced, we will be able to observe phenomena of memory analogous to those of somnambulism.

Who has not been struck by this fact that a hysteric, anesthetic in the waking state, is no longer anesthetic in catalepsy? Close the left fist of Léonie or Lucie during the night before, she will not notice it, and yet, if I close my fist in catalepsy, even without them being able to see it, I will suggest to them a feeling of anger. That we put a key in Leonie's left hand during the day before and she will not know what it is, put the same object in the left hand during the catalepsy and she will make the gesture of opening a door. There is therefore a tactile sensation during the catalepsy which did not exist during the day before. We should no longer be surprised then if these two women do not remember their catalepsy during the night before, but remember it in the second sleepwalking, when they regained the tactile sensation.

A hysteric, like Lucie or Léonie, remembers waking up from her dreams of the night, when they were *visual*, but does not remember when they were *motions* and she got up from her bed, which she cannot do in the 'darkness without the intervention of the motor sense'¹. Seizures are, as Moreau (de Tours) said, muscular delusions; it is not surprising that the memory reappears only in somnambulism where the muscular sense is complete. Finally we understand how, during normal wakefulness, singular memory losses can occur through sudden changes in the dominant sensitivity which constitutes the sensory type. "A woman who was anesthetic only remembered a small part of her life... In sleepwalking, she had no

¹ Cf. Gilles de la Tourette. *Op. cit.*, 185.

anesthesia and remembered her whole life”¹.

These modifications of the sensibility, effected by hypnotic sleep, or by the passes, may be obtained by other methods whatever they may be, provided that they momentarily restore to the subject sensitivities which he has lost. “There are somnambulists, Charpignon² was already saying, which can be put to sleep by the electric machine.” This is a great truth; we have seen the partial effects of a small electric current; we know the excellent effects of the electric bath on hysterics. The famous Louis V “recovers all his sensibilities by the electric bath...³ and when his brain is thus open he remembers all his life”⁴. I am convinced that electrical devices will soon be the real scientific instrument to produce at will and regularly all varieties of sleepwalking. But currently many other processes arrive at the same result: the magnet, Burcq metal plates, etc. Jules Janet has he not shown that, during the period of excitement of chloroform, a hysterical anesthetic regained her sensitivity and entered into a veritable somnambulism. The same observation is also found in Despine. I read, in a work by Dr Ball, a very curious observation on this subject: “Among the most paradoxical consequences of hypodermic use of morphine, we must cite the reestablishment of skin sensitivity in subjects who have lost it... A hysterical anesthetic, morphinated at a dose of 8 centigrams per day, saw her pain disappear and her normal sensitivity awakened... Abstinence brought back the hysterical symptoms”⁵. It is very unfortunate that the author does not give us more psychological information, does not tell us about the state of memory. It is very probable that morphine produced here a state analogous to somnambulism, for any modification of the senses brings about a modification of memory, and somnambulism is nothing else.

2nd This change is almost always in *a restoration of sensitivity and a group of images* usually lost by the subject. This explains to us the third characteristic of the memory of somnambulists on which we have insisted less, the memory during the abnormal state of everything that has happened during the vigil; it is easy to notice, however, that it must return to the preceding explanation. Sleepwalking has always added new senses and new images to the minds of our subjects, but it has not taken them away from them. For a sleeping subject to lose the memory of the day before, it would be necessary that he no longer possesses in somnambulism the images around which the memories of the day before are grouped, that being, for example, visual in the waking state, he no longer had, in somnambulism, the sense or the images of sight. However, we know that this does not happen, at least in the studies that I have been able to do; on the contrary, the images increase without decreasing. I find, in my notes taken from day to day on Leonie, a striking observation that I had made a long time ago without understanding it. In the waking state, she claims, when she thinks of me, she *sees* me, and this can even cause her visual hallucinations; in her first somnambulism, when she thinks of me, she *sees me and hears me talking to her*; in the second somnambulism, *she sees me, hears me and touches me*. I remember that I had explained this by his habits;

¹ Bourru et Burot. *Variations de la personnalité*, 1886, 139-143.

² Charpignon. *Physiologie magnétique*, 171.

³ Bourru et Burot. *Op. cit.*, 52.

⁴ Id., *ibid.*, 135.

⁵ Ball, *Morphinomanie*, 20-38.

she speaks little to me when awake, she talks a lot in the first somnambulism, and she always wants to hold my hand in the second. There is more: it should also be noted that at first it only has visual images and memories attached to them, that it then disposes of auditory images, but without losing the visual images, which it finally possesses the tactile images without forgetting the previous ones. Somnambulism is in hysterics an increase of the mind by any excitement and not a decrease ¹.

Maybe there are different sleepwalks. The hypnotization of healthy subjects already possessing all their senses and all the images can hardly, if it is possible, lessen them and suppress them various sensations. Sensitive subjects can, for example, become anesthetics. It would be curious to inquire whether, in subjects of this kind, the suppression does not sometimes relate to the images which they use most habitually in the waking state, and if somnambulism in this case does not lead to forgetting the phenomena of the day before. Perhaps the famous Mac-nish patient is just such a sleepwalker. I saw nothing which verified this supposition: it is true that I have hardly hypnotized other than the sick. I cannot therefore speak of an observation which I did not make; henceforth, in psychology, as in other sciences, one can only speak of what one has seen.

This hypothesis also seems to me to account for multiple somnambulisms and the different varieties of alternating memory. There is not, as we have seen, a single somnambulism, but several, each of which is characterized by a particular memory. This is because somnambulism does not depend on a mental modification, unique and always the same. It varies according to all the modifications which may be made in the state of the sensitivity. It is understandable that, in a strongly anesthetic subject in his normal state, we can produce, not just one, but several restorations, more or less complete of the sensitivity, which will lead to several alternating memories and several somnambulisms.

If one considered only one subject like Lucie, one might believe that this division of sleepwalking into two parts is of some importance, and that there are always thus three memories. It would be an error analogous to that which formerly made me designate by particular names all the degrees of Leonie's catalepsy. In reality, there are neither two nor three indispensable memories; there can be any number of them and indeterminate. Rose has at least four or five different sleepwalks, each with a different memory. There are subjects, like N.... who are so unstable that they do not resume the same somnambulism unless they are asleep by the same person and in the same way; otherwise, they enter a different sensory-sensory state, and do not recover the memories of the first sleepwalking. This important fact will explain to us later some difficulties relating to the suggestions. It is enough for us now to know that the somnambulatory state is not one, but that, depending on the modifications of the sensibility, it can, in the same person, take very varied forms, and bring about the most singular varieties of memory..

However, in this series of states of sensitivity and memory which can occur according to the same law, we can, as mathematicians do in their series, distinguish interesting points. Thus, we will determine the normal state of the subject in which he is naturally found at the time of study, and which also has a sensitivity and a memory of its own. We can distinguish the first somnambulatory state which occurs as soon

¹ This increase in the number of sensations and in the quantity of memories which can be recalled during sleepwalking does not prevent there from being, from other points of view, an intellectual decline during this abnormal state. We will show in the next chapter how, in some cases, sleepwalking is a condition bordering on childhood.

as the subject is modified by any process, that is to say the first sensitive modification significant enough to cause a loss of memory when the subject returns to the state of Eve. But above all, we will endeavor to distinguish as a capital the last somnambulism. I thus call the state in which the subject has found the absolute integrity of all the sensitivities which are natural to a healthy man, and consequently the absolute integrity of memory, in a word, the state in which the subject no longer has any anesthesia or amnesia. It is a very important condition anyway, especially from a therapeutic point of view which we are not dealing with now ¹. But it is sometimes very difficult to obtain, and the subjects achieve it more or less quickly, sometimes after a single intermediate somnambulism, like Lucie or Wittm... (in the study of Jules Janet), or even after several intermediaries, like Rose, or even do not reach it completely, like Leonie, who, in the last sleepwalking I can get with her, still has anesthesia. In this chapter devoted to the study of sleepwalking in general, we need not dwell more on this particular condition, it suffices to show how it relates to others and is only a more interesting point of a series continues.

3rd *This modification can be more or less complete, and visible.* In fact, we have cited in this work only three or four subjects in whom the characteristic phenomena of somnambulism manifested themselves in an almost crude manner. Everyone will notice, as I was struck from the first time, that Lucie uses the sense of sight when she is awake and the sense of tact when she is asleep: this is obvious. But, in other subjects, the modifications will be much less visible; in particular, and this is the objection that we will not fail to make, we can put to sleep subjects who do not present in the waking state any very characteristic anesthesia. I will reply that I have myself observed cases of this kind, although more rarely than one is inclined to believe, but that I have, in this chapter, neglected them in order to focus first on the most common phenomena, simple and most characteristic. I believe, in fact, that in these new and less clear cases the explanation must nevertheless be the same.

Indeed, subjects that can be set without sleepwalking they exhibit many obvious anesthesia awake, present a phenomenon quite analogous whose memory the same consequences, *the distraction*. Without doubt, if we draw their attention successively to each of their senses, we will see that they possess them all, or at least that they *can* possess them all. But, in practice, they do not use all their senses and all the images of that sense; they are not able to bring them all together and they neglect a great number to be satisfied with a few predominant and usual images. *Somnambulism changes these predominant images*, without giving precisely new sensibilities; it raises certain particular images from their erasure and turns them into a new center around which thought is oriented in a different way. Awakened, these subjects resume their usual thinking, inadvertently neglecting these images and consequently the memories linked to them; they can no longer find them, for they are incapable of the little effort it would take to modify a little the usual form of their thought.

A particular form of forgetfulness therefore results from distraction, as another results from anesthesia; but it is obviously much weaker. The slightest opportunity will draw attention to these images which are less lost than neglected. A young man H., who had such sleepwalking, had forgotten everything when he woke up, but little by little, during the course of the day, he found all the memories of sleepwalking one by one: the next day he could tell me everything.. These are the kinds of people who

¹ See a study on this state of perfect sleepwalking, produced on a hysteric with strong anesthetic in a normal state, Jules Janet, *L'hystérie et l'hypnotisme d'après la théorie de la double personnalité*. Revue scientifique, 1888, I, 616.

can be remembered by commanding them to be careful and directing their efforts a little. Just as, in certain subjects, anesthesia is only a slight distraction which can be changed by a word, forgetting is also, in these persons, only a consequence of a distraction and does not have more gravity. We cannot now insist more on this explanation, it would be necessary to examine the relations of anesthesia and distraction which will be the object of a particular study in this book ¹. It suffices for us to have shown that, by this remark, cases, apparently irregular, can enter into the general theory.

“Every time”, said Mr. Paulhan, “that there is a change in what one might call the general orientation of the mind, a sort of split in the memory occurs, the more marked as the change was stronger” ². “What produces the forgetfulness of dreams upon awakening is that the orientation of the mind suddenly changes” ³. “When the native conditions of memory reappear”, said another author, “the memory itself reappears” ⁴. I tried to clarify this general explanation of the phenomena of forgetting a little more and to adapt it more exactly to the facts that I had studied. Without doubt, the examples which I have given are insufficient to demonstrate that it is always thus, and we do not always have a very precise means and of course to appreciate the differences in the images which lead to the differences in the memories. It may be that, in certain cases and for certain light somnambulisms, the modification of the spirit is less strong. It may be that some subjects do not have absolutely new sensibilities in sleepwalking, but only a little different from those they have during the day before. The separation between the two groups of memories systematized around the sensations of the day before and those of somnambulism will still exist, but will be less strong. In short, we have only explained very clear and relatively simple cases: an explanation of sleepwalking would easily be more complete, but would remain, we believe, of the same kind.

VII. The various successive psychological existences spontaneous modifications of the personality

When a certain number of psychological phenomena are brought together, there usually occurs in the mind a very important new fact: their unity, noticed and understood, gives rise to a particular *judgment* which is called the idea of the ego. This is, we say, a judgment and not an association of ideas: the latter reproduces the phenomena one after the other, it automatically juxtaposes them and thereby provides us with the opportunity to notice their unity, to judge their resemblance; but it does not by itself constitute this relation of unity and resemblance. Judgment, on the contrary, synthesizes the different facts, notes their unity, and, with regard to the different psychological phenomena awakened by sensitive impressions or the automatic play of association, forms a new idea: that of personality. We do not have, in this study on the automatic part and not on the active part of the mind, to study this judgment of unity. Let us be satisfied with showing that the psychological phenomena which fill the mind can be, as we have just seen, very different, according to the various states; this judgment, this idea of the personality must undergo

¹ Part II, ch. II, p. 310.

² Paulhan. *Revue philosophique*, 1888, II, 126.

³ Id. *ibid.*, 1888, I, 56.

⁴ Joly. *L'imagination*, 1877, 48.

analogous modifications, and vary in the same subject according to the changes of sensations and memories.

“In the course of a long life”, said a moralist, “a man can be successively several people so dissimilar that, if each of the phases of this life could be embodied in distinct individuals and if these various individuals were brought together, they would form a very heterogeneous group, would oppose each other, despise each other and quickly separate without worrying about ever seeing each other again ¹.” How many times, reviewing the memories of our past life, do we say with astonishment: “Was it I who trembled at this imaginary peril? Was it me who could have loved this coquette? Am I the one who devoted myself to these beliefs? But it’s impossible and I don’t recognize myself.” It was real though; if we don’t recognize ourselves, we have changed. Fortunately, these changes took place little by little and in reality they only affected the complex and secondary phenomena of our mind, our beliefs, our ambitions, our desires. If these changes had focused on the elementary phenomena of our thought so as to modify all our memories, the differences would have been much more considerable and the continuity of our life would have been broken. We would have continued to say “I” at every moment of existence, that is to say to make the judgment of unity about the groups of phenomena currently united, but we would have ignored or *misunderstood* the larger one part of our life that would have been like another man’s for us.

Let us take a quick look at the personality changes that occur spontaneously: they are too well known for me to dwell on them; but they will prepare us to understand those produced during artificial somnambulism. The sane men almost always present in their dreams the first sign, the first sign of the much more serious changes which may occur in the personality of certain patients.

Every night we have a special mental life which is not the same as our conscious life the night before. Doubtless, dream ideas almost always seem borrowed from normal life, but they are presented and differently arranged. They come in the form of images which we use little in the waking state. If I can describe myself in these experimental studies, I believe I belong entirely to the “motor type”; when I am awake I think only by speaking out or writing, and my thought is always a half stopped gesture. At night, on the contrary, I keep, as I have often observed, the most absolute stillness, I am a simple spectator and no longer an actor; images and sounds forming pictures and scenes pass in front of me, I see myself acting or I hear myself speak, but rarely, and I always at the same time keep the vague feeling of my immobility and my helplessness. Moreover, precisely because of this great difference between my dreams and my waking thoughts, I have great difficulty in remembering my dreams.

There is formed there, during sleep, a group of psychological phenomena isolated from the great mass of ideas which form our life. These phenomena develop somewhat according to the law of isolated phenomena; but, as they are numerous enough to be in mutual opposition and since, on the other hand, they hardly contain any more than visual and acoustic images which do not serve us for moving, they seldom translate into movements. Moreover, they are grouped enough to form a very simple personality, for if the isolated phenomena of catalepsy do not present any idea of the personality, it is no longer so with those complex groups which exist in dreams. However, it is certain that in healthy men this tendency

¹ Forster, quoted by Herzen. *Le cerveau organe de la pensée*, 286.

to form a memory and a secondary personality in dreams remains rudimentary. Some memories of different dreams hardly manage to connect with each other, the rest is only a tumult of fragmentary images which do not manage to come together, to become systematic. The dream resembles rather the state of numbness exhibited by certain old men whose cerebral substance softens ¹. Attention is impossible, will and judgment are almost always absent; it is as much a thought in a state of disintegration as a personality in the process of formation.

Let us increase the activity of the dream a little, link these scattered images more closely, and we will have a psychological state which already has, its life more independent and more distinct from that of the day before, more comparable to the state of somnambulism ². “A friend of mine”, says Erasmus Darwin ³, “has noticed that his wife, who often speaks a lot and distinctly in sleep, can never recall her dreams when it happens to her; but on the contrary she remembers them very well when she has not spoken while sleeping.” I have observed the same fact about Léonie, who recounts in the waking state the dreams she had without speaking and can only relate in sleepwalking the dreams during which she stirred and spoke: those – thus already formed a secondary personality and had an independent life. Ether, chloroform or simply alcohol, when they act for the first time, simply disintegrate normal thought, prevent judgments of unity from being formed, and leave only scattered psychological elements in the delirium. But if these poisonings are repeated, these fragments of thought come together and form a new psychological synthesis, with its own memory, similar to a sleepwalking life ⁴.

The diseases which are called nervous diseases, and which, if I am not mistaken, deserve just as well to be called psychological diseases, show us still more clearly the development of this secondary group of phenomena and the formation of several forms of psychological existence. Let us not insist on these periods of convulsions which return at regular intervals in certain epileptics and which one could quite rightly call a muscular delirium ⁵; there is in post-epileptic or hysterical delusions a real mental life different from normal life, which often lasts several hours and which begins again regularly with a memory and a characteristic of its own ⁶.

The possessed of Morzine present a good example of this modification of character which frequently occurs under various influences during the delirium of the crisis of hysteria. During their access, they show a real fury against religion, insult the priests, the Blessed Virgin, etc., and never respond except by sprinkling their language with all the expletives they know; after the access, they wake up calm, polite and religious ⁷. These candid young girls utter revolting obscenities; “but, let us say it immediately”, writes a witness, “it is not they who express themselves thus, it is the devil who possesses them and who speaks in his own name: passive instrument, the Blaude girl calms down as if by magic, she knitted before, she knits afterwards, feels no fatigue, *remembers nothing* and does not want to believe the insults

¹ Maury. *Op. cit.*, 76.

² Teste. *Magnétisme animal*, 278.

³ Erasme Darwin. *Zoonomie*, I, 376.

⁴ See, on the analogies of chloroformic sleep and somnambulism: Baragnon, *Magnétisme animal*, 295; Despigne, *Somnambulisme*, 81 et 542; Maury, 253.

⁵ See Erasme Darwin. *Zoonomie*, IV, 8; and especially Moreau (de Tours).

⁶ Cf. Delasiauve. *Traité de l'épilepsie*, 148 and sq. and 487.

⁷ Mirville. *Des esprits*, 1863, II, 219.

she has told us ¹.” They have a diabolical character during the crisis, let us admit it, but we recognize that they do not always have it and that they thus have two forms of existence independent of each other. All the hysterical delusions offer us phenomena of the same kind in reduction: Rose insults the people who approach her during her delirium, while she is very polite in the waking state; Lucie only thinks of cooking and cleaning during the last two hours of her crisis and no longer takes care of it in the normal state.

The crises of this kind are, in general, of rather short duration: this is because the personality is not sufficiently complete, for the duration of a psychological state is ordinarily like that of a being because of its perfection. These isolated psychic elements, which, like the atoms of Epicurus, met to form a personality, failed to form a viable personality. Too many elements are missing; in one the visual sensations, in the other the motor sensations of the pharynx, in the latter the motor images of the legs, in the former the feeling of hunger or thirst are absolutely lacking. In addition, the group is not very coherent; at certain times it breaks up, and the simple convulsions, the elementary form of this new life, begin again.

Also this unstable compound does not take long to break down and the more complete and older compound, which formed normal life, reappears in its turn. But suppose that, in some chance, the meeting of the intellectual atoms has formed a more complete and more stable compound, the new psychological life, which is formed little by little and which is abnormal for the subject, quite resembles what is normal life for another person. The elements almost as numerous as usual or even more numerous have gathered around another center, that is all. It is “an allotropic crystallization”, said Mr. Myers very well ², but it can form crystals as durable as the previous crystallization. The subject was ordinarily a visual, it is now a motor; this will undoubtedly have drawbacks later, for, if he returns to the first state, he will no longer remember the second, but now he looks like people who are usually motor and he is no worse off. This is what happens, we believe, with those people who have become famous in the history of science, Felida X, Louis V and many others. If we do not take up their history, it is because it has been so completely and so well studied that it seems sufficient to us to recall a memory present to all memories ³. I only wish to recall that Felida’s second state develops after sleep, a sort of sudden syncope ⁴, which annihilates the first personality and from which the second emerges little by little. It was the same with the hysterical young man described by Mr. Myers, and who for some time presented similar alternations of personality ⁵. This transition period is becoming shorter and shorter, as we see in artificial sleepwalkers who have been frequently asleep. I will also notice that if, in a daze, Félicité has a more complete memory, it is because she also has a more complete sensitivity and that by returning to the prime state she loses both certain memories and certain meaningful memories. Finally, Mr. Azam lets us understand that, during the second state, there sometimes happens a kind of crisis which clearly seems to be the beginning of a third state ⁶. Dufay’s sleepwalker ⁷, when she falls into a second state, is no longer myopic as in a first state, she speaks childishly and speaks negro: “I’m not stupid now”, she said. It was probably a new language

¹ Mirville. *Des esprits*, 1863, II, 237.

² Myers. *Automatic writing. Proceedings of the S. P. R.*, 1887, 235.

³ Azam. *Hypnotisme, double conscience*, 1887. – Bourru et Burot. *Variations de la personnalité*, 1888.

⁴ Azam. *Op. cit.*, 65.

⁵ Myers. *Automatic writing. Proceedings S. P. R.*, 1887-230.

⁶ Azam. *Op. cit.*, 102.

⁷ Id., *ibid.*, 189.

that was formed through other images. Another patient naturally has two lives: one during which she is silent, but can eat and drink, the other during which she can speak and can no longer drink ¹. In this patient, probably, speech and swallowing depended on two different kinds of images which did not coexist in the same psychological existence. The famous Louis V, finally, presents the most remarkable example of changes in personality and memory linked to sensory and motor changes; one cannot modify these by any stimulant without changing the others. Sometimes it unrolls its states itself during the development of a major crisis, sometimes it stays more or less long in one of its states where the operator artificially places it. “Each page of his life is independent of the others ².”

All these characters, as we also know, change in character and behavior at the same time as they change in meaning and language. Félicité, who is sad and who thinks about suicide in her prime, is cheerful and courageous in her second state; she is selfish and cold in the first existence, she has more affection and devotion in the second. Louis V is sometimes gentle, obedient and timid, sometimes angry, insubordinate and arrogant, sometimes a child and fearful, sometimes a fiery young man: from no point of view he remains the same.

The transition is easy between these natural personality changes and those that take place during induced sleepwalking. As a general rule, although the fact has not always been observed, it is possible, by means of hypnotism, to reduce the subject to one or other of his various abnormal personalities and to restore his character and the memories he had in that state. This has been very often verified for the states of Louis V and in general for all hysterical delusions.

What is more curious is the easy transition from a natural delirium to artificial somnambulism, a transition analogous to the change from hysterical poses to catalepsy. I happened to find Marie in a great hysterical crisis writhing on a mattress and screaming for two hours. I just have to touch her and say: “Well, what are you doing here? do you want to stand a little better.” While continuing the convulsions, she shakes my hand and answers: “Oh! if you only knew how bad my side is.” – “First get up and go to bed properly and we’ll heal it for you.” She then gets up, eyes closed, and gets into bed. I calm her down a bit and she says to me: “Glad you came, I saw horrible things, blood, fires and was in great pain.” This is a somnambulism which is a very slight transformation of her hysterical delirium, since she retains the memory of it and, moreover, with a word, I can make it start again. Another hysterical, G., of whom I do not speak because she is too similar to the previous ones, was one day more curious still. She was convulsing and held by two maids when I approached her. Before I touched her, she said to me: “Here! So here you are...” and the convulsions immediately stopped. This is how things happen with people who have often been put into artificial sleepwalking: this state ends up absorbing all other abnormal existences. But, in other subjects, the reverse phenomenon occurs, artificial somnambulism degenerates into a crisis of hysteria or is only the reproduction of the crisis. Nothing is more decisive from this point of view than the observation of M. Grasset who shows us the artificial sleep of a patient quite identical to her spontaneous crises ³. Jules Janet showed me a young girl of the same kind at the Pitié hospital. Jos... spontaneously had sleep attacks during which she stood still with her eyes closed, but spoke all the time.

¹ Bourru et Burot. *Op. cit.*, 187.

² Gilles de la Tourette, *L'hypnotisme et les états analogues*, 1887, 220.

³ Grasset *Histoire d'une hystérique hypnotisable*. Arch. de Neurologie, octobre 1887.

Her dream revolved around two or three ideas that were always the same, funny stories that made her laugh, or insults against the doctors and interns whom she called “butchers, pig’s heads, etc.” Do we try to hypnotize her during the day by some process, she takes exactly the same attitude and continues her same dream of “those nasty doctors who took a poor woman away again to cut her up”. The old magnetizers were not wrong when they said that nervous crises were just imperfect sleepwalking.

VIII. The various successive psychological existences. – Personality changes in artificial somnambulisms.

We have discussed how changes in memory can easily be explained by changes in the nature or quality of the images that are part of consciousness at a given time, and how these changes in memory lead to changes in personality or of the whole psychological existence. It is now possible to get a general idea of artificial sleepwalking, of the state of magnetized people, which has too long seemed supernatural and inexplicable. The somnambulatory state, as we showed at the beginning of this chapter, does not present its own characteristics, which are in some way specific. Given a person who can only be examined at one point in their life, it is impossible to determine what state they are in ¹. The somnambulatory state has only relative characters, and can only be determined in relation to another moment in the subject’s life, the normal state or the waking state. “When we have had the opportunity to observe them (the somnambulists), say the old magnetizers who knew about them, we remain convinced that there are two very distinct lives or at least two ways of being in the lives of sleepwalkers” ². This is quite correct, somnambulism is a *second* existence which has no other characteristic than being the second.

Thus is explained this truth so often repeated that there is not a single phenomenon observed during sleepwalking, anesthesia or sensory excitement, paralysis, contractures, emotions or intellectual weakness ³, etc., which is not found frequently in another person during their ordinary life. Only, in this one, this characteristic is constant and normal during all the life, in that one, it is accidental and exists only during the second life, but in reality, it is the same characteristic. A subject who is foolish, or blind, or intelligent in sleepwalking, is no different from one who is stupid, blind or intelligent during his normal life, only he is not so all his life. Rose, in one of her profound somnambulisms, becomes left hemi-anesthetic; she is currently in a completely normal state, because for the seven months that I have seen her every day, she has always been a total anesthetic. This state does not last, because if I wake her up or even if I leave her alone without excitement, she gradually loses this sensitivity on the right side and returns to her normal life during which she feels nothing. But this state, which we call sleepwalking in Rose, is Mary’s normal life at the moment. who has been on the left hemi-anesthetic for a month, and the characteristics of this state are exactly the same with her. Moreover, Rose herself, some time ago, spent three months, as we have seen, in left hemi-anesthesia. She was therefore naturally during these three months in the state which is now sleepwalking. But if you wake her up, she’ll forget everything. No doubt, but she also forgot everything when, after these three months of poor health, she *woke up with* total anesthetic. It is the change of sensory state, it is not the awakening that makes you forget. And if I found a way to suddenly

¹ Bourru et Burot. *Op. cit.*, 123.

² Pigeaire. *Electricité animale*. 1839. 44.

³ See Gurney. *Proc. S. P. R.*, 1882, 285.

give my neighbor, who is a painter and a visual artist, my own state of consciousness, who is a driving force, he would no longer remember his past life, which nevertheless seemed perfectly normal.

This conception of somnambulism also explains to us the infinite diversity of somnambulists, which is as great as that of the men who surround us: they can in fact take all the possible psychological characteristics, provided that they are not exactly those of their normal state. There are quite intelligent people who sleepwalking on a type of existence usually belonging to idiots. R... a boy with epilepsy ¹ that I fell asleep easily, presents an insignificant sleepwalking life. He then has a little muscular sense, because he leaves his arms in the position where I put them; he has a little hearing, for he responds with a growl to all my words. But that's all, he doesn't understand anything and therefore doesn't obey suggestions; he does not speak and his education would be more difficult to do than that of the famous Laura Bridgman. It is useless to undertake it; all you have to do is wake it up and give it back its first life which, without being very remarkable, is still superior to the second. Lem is afflicted during sleepwalking with a deplorable infirmity: he has no memory; similar to the sleepwalker Dr Philips ² talks about, who forgot a syllable as she spelled another, he immediately forgets what I have just told him. At a pinch, he can execute simple commands at the very moment they are given, he cannot carry them out later, for he has always forgotten them; his education would be very difficult. N... on the contrary, is endowed during sleepwalking with an astonishing memory ³; she remembers, as I said, the smallest details of her previous sleepwalking, even from a year away. All the other sleepwalkers of whom I have spoken have, in their second life, an ordinary, sometimes remarkable intelligence, the sensations and the ideas that a person of their situation might have.

When, during the second life, the subjects thus have senses, memory and intelligence, they are not long in presenting a very curious and yet explainable phenomenon. They acquire, during this new existence, an education, knowledge, a character as they acquired during their first existence.

We can then predict what will happen when the somnambulisms are repeated very often and are very prolonged. First, the newly born second personality will be influenced by the ideas and ways of its magnetizer as a child is influenced by its parents. She will take on habits, manners, beliefs which have been inspired in her almost without anyone knowing it or wanting to. Such a magnetizer, such a somnambulist, one might say. Show me a sleepwalker, and I'll quickly find out who put her to sleep and what her chief master's opinions, scientific and other beliefs are. Why is Léonie a practicing Catholic in the waking state and a Protestant convinced of sleepwalking? It is quite simply because its first magnetizer was Protestant, one should not seek there other mystery there. Why do some sleepwalkers constantly have a dramatic attitude? It is because they were exhibited on boards like curious animals and they learned to play a role and to simulate even though they were really sleepwalking ⁴. This education of the somnambulist by the one who puts him to sleep is the great danger of these experiences; it exposes us

¹ Or hystero-epileptic: the accepted diagnosis of epilepsy seems to me all the more dubious as hypnotism is very rare in true epileptics.

² Dr Philips (Durand de Gros). *Cours de braidisme*, 1860, 155.

³ See surprising memory examples in sleepwalking Bertrand, 99 et sq.

⁴ Richet. *L'homme et l'intelligence*, 167.

to find that our sleepwalkers always check our own ideas ¹. We have indicated, in our introduction, the few precautions which we have sought to take; but we understand that only the verifications by other experimenters can give a general scope to our studies.

Whatever the influence of education on a subject, however, it brings into this new life, like children in their normal existence, special predispositions and faculties. Mr. Beaunis tells us that he has never encountered any lies from a sleepwalker ². It is because he was very happy: there are somnambulists who lie like Lucie, or who are honest even like Léonie, just as, in normal life, there are bad and good people ³. We must also take into account, not only the influence of the magnetizer, but the influence of all the other people who speak to the subject in his new state and help to develop it. To show it, it suffices to describe one of our subjects, Léonie, on whom all these influences exerted a most curious influence. This woman, whose existence is quite an unlikely though real novel, has had fits of natural sleepwalking since the age of three. She has been put to sleep constantly by all kinds of people since she was sixteen and is now forty-five. While his normal life developed in a way in his rural and poor environment, his second life was spent in salons or study rooms and naturally took a completely different direction. Today this poor peasant woman is, in her normal state, a serious woman and a little sad, calm and slow, very gentle with everyone and extremely shy: one would not suspect, on seeing her, the character she contains in her. Barely asleep, after the transition period, comes “the awakening to another existence” ⁴, here she is metamorphosed; the face is no longer the same, the eyes remain closed, but the acuity of the other senses compensates for the loss of sight. She is cheerful, rowdy and restless, in a way that is sometimes unbearable; she remains good, but she has acquired a singular tendency to irony and biting jokes. Nothing is more curious than chatting with her at the end of a session when she has received a visit from some new people who wanted to see her asleep. She paints me their portrait, mimics their manners, claims to know their little ridiculous, their little passions, and invents a novel about each of them.

To this new character must be added an enormous quantity of new memories which she does not even suspect during the day before, for oblivion has always been complete upon awakening. Recently a doctor from Le Havre, who had seen this woman frequently during her sleepwalking and who was one of her friends (because she then has her preferences), met her wide awake outside the city; forgetting under what circumstances he had seen her, he went to meet her to say hello. The poor woman was stunned, not recognizing at all who was talking to her. There is thus a host of things that she only knows when she sleepwalks. It would not be in accordance with the very laws of elementary psychology for this collection of sensations, memories, habits and characters to synthesize, a system identical to that which forms the normal personality. It is also a completely different person than in the waking state, and who knows one cannot get any idea of the other.

¹ We will have to come back to this *plasticity* of certain somnambulists when we talk about suggestion in the next chapter: we only mention here to explain the formation of successive personalities.

² Beaunis. *Somnambulisme*, 216.

³ See Gurney. *Proceedings*, 1887, 527.

⁴ Baragnon. *Magnétisme animal*, 154.

We know that sleepwalkers in their second state retain the memory of their first existence and that they can, therefore, make this comparison of the two personalities themselves. It is interesting to know what they think of this change.

Most often, especially in the first somnambulisms, when the subject has many memories of his first state and very few of the second, he simply feels *changed*. Most express this difference by saying that they are asleep ¹, and nothing is more curious than those people who, with their eyes open, chatting easily, repeat from time to time: “It’s true that I sleep, oh! I sleep well.” I think that is a ready-made sentence that makes no sense. Sleepwalkers say they sleep because they have been told they were put to sleep and that, in popular thought, to magnetize means to fall asleep. It is even bad to repeat this too much to the sleepwalker, because he ends up believing himself obliged to really sleep and takes on a stupid expression which is not essential. The smarter people, like N... would say to me: “But no yet I am not sleeping, it is absurd to say that; only I am changed, I am funny: what the hell have you done to me?” We now suspect what has been done to them, we know that we have taken advantage of their psychological instability to change the state of their senses by paralyzing or more often by exciting one of them. This modification which the subject accuses is sometimes manifested crudely and in an objective manner. One was deaf in the waking state and now hears ². The other didn’t feel or see anything, and now has exquisite tact and sees even in the dark ³. All the subjects we have cited had such sensory changes, often even corresponding motor changes; as they retained the memory of their former state and could compare, they naturally found it “very funny”. Sometimes sleepwalkers stop there and never change their expression; the difference between sleepwalking and waking is not strong enough for them to realize the split in personality. Lucie, in her first sleepwalking, even after a large number of sessions, always remained the same and always said: “It’s me Lucie, but you have changed me”. Sometimes the changes can be considerable, but gradually take place in such numerous and insensible degrees that the subject, accustomed in some way to the change, retains his identity. This is the case with Rose who, in her three or four somnambulistic states, continues to say, if asked on this point: “It is always me... but not quite the same thing.”

Often, too, things turn out differently and, either little by little by the progress of the second existence, or suddenly following a too strong change, the subject refuses to recognize himself, makes fun of his former personality and claims to be a new person.

This singular custom of somnambulists to double themselves in this way is very frequent and has been pointed out from the first studies on this subject. “Sleepwalkers speak of themselves in the third person”, says Deleuze ⁴, “as if their individual in the waking state and their individual in the state of sleepwalking were two different people ... Miss Adélaïde never suited the identity. Adélaïde with Petite, name she received and gave to herself during her mania (sleepwalking), etc.” “Their waking spirit and that of sleepwalking”, says Aubin Gauthier ⁵, “are two different things.” All the writers of animal magnetism have described this fact, which is as frequent as it is curious.

¹ Richet. *L’homme et l’intelligence*, 177.

² Aubin Gauthier. *Hist. du somnamb.*, II, 358.

³ Liébault. *Le sommeil et les états analogues*, 1866, 80 et sq.

⁴ Deleuze. *Histoire critique*, I, 188.

⁵ Aubin Gauthier. *Histoire*, II, 304. Cf. Ricard. *Magnét.*, 434.

N... who was at first changed, soon pretended that she was different. “Who are you then?” I asked him. – “I don’t know... I think I’m sick.” Not insisting on this singular answer which is perhaps not absurd, I asked her by what name to call her, she wanted to take the name of “Nichette” (translation from French: “little nest”). This little name should not make you smile: no detail is insignificant in these delicate phenomena. This was the nickname by which this person was designated in his early childhood and she used it in somnambulism. The fact is not uncommon: we have just seen a sleepwalker by Deleuze called “Petite” (translation from French: “little one”). Dr. Gibert told me that a thirty-year-old woman, asleep for the first time, spoke of herself under the name of little Lillie. Why this return to childhood? Is it because the hysterics, usually visual in the waking state, resume their muscular sense in these deep somnambulisms and that this sense was probably used the most in childhood? We will also have to come back to this return of the somnambulist to the state of childhood which is one of the great factors of suggestion. Lucie, who remained the same, she said, during the first somnambulism, completely changes her mind when you put her in the second. The change is probably getting too strong, because she no longer recognizes herself; she then spontaneously takes another name, that of Adrienne (Lucie 3) which she chooses in circumstances to which we will come back later.

Finally, it can happen that any change of state is accentuated enough to produce the illusion of a split personality. Léonie, from the first somnambulism that we have described, refuses her ordinary name and takes that of Léontine to which her first magnetizers had accustomed her. “This good woman is not me”, she said, “she is too stupid”; she adds “it’s the other, all true, all true”; but this is a habit he has been given; as for her, she believes herself to be as true as “the other”. This new character, Léonie 2, attributes to himself all the sensations and all the actions, in a word, all the psychological phenomena which were conscious during the somnambulism, and they bring them together to form the history of her already very long life; on the contrary, it attributes to Leonie 1, that is to say to the normal person during waking, all the phenomena which were conscious during waking. I had first been struck by an important exception to this rule and was inclined to think that there was a little arbitrariness in this distribution of memories. Léonie, in the normal state, has a husband and children, Léonie 2, during sleepwalking, attributes the husband to the other, but attributes the children to her. This choice was perhaps explicable, but it did not seem regular. I ended up learning that the ancient magnetisers, just as daring as some of today’s hypnotists, had caused sleepwalking at the time of the first childbirth, and that the second state had returned of itself at the time of the last ¹. Léonie 2 was not wrong to attribute the children to herself, for it was indeed she who had had them; the rule thus remained intact and the first somnambulism brought about a doubling of existence in her. But, curiously, it is the same with the second. When, after lethargy and catalepsy, it arrives in the state which I have described under this name it is no longer the same. Serious and serious instead of being a restless child, she speaks slowly and moves little. She then differs from Léonie 1 in the waking state; “She’s a good, stupid woman”, she said, “but it’s not me.” And she is also different from Léonie 2: “How can you believe I look like this crazy girl ²? Fortunately, I am nothing to her at all.” This separation of the same being into three successive people, who reciprocally despise each other when they can know each other, forms a most curious spectacle and gives rise to many incidents that I could not report without lengthening my book indefinitely. Leonie falls asleep on the train

¹ This is exactly the reverse of what happened with Felida, in whom “the eleven childbirth occurred during the normal state.” Azam. *Op. cit.*, 91.

² “What do you want me to tell him? she’s a madwoman”, said of herself a sleepwalker quoted by Charpignon. *Physiologie du magnétisme*. 388.

and goes into state 2; after a while Léonie 2 wants to come back down to pick up poor Léonie 1 at the previous station “who, she says, stayed there and should be warned.” If I show Léonie 2, a portrait of Léonie 1: “Why did she take my beanie? she cried, it’s someone who dressed like me.” When she comes to Le Havre, I have to say hello successively to the three characters who successively repeat the same emotion in a very funny way. It is useless to dwell on these anecdotes, one can guess the singular situations which must result from such a subdivision.

But, it will be said, these second states are not true existences, for they are not prolonged; subjects should always be awakened after a few hours. Doubtless *certain* subjects cannot remain indefinitely in *certain* somnambulatory states. Léonie being unable to eat absolutely anything in the state of Léonie 2, will not be able to stay there for more than a day, but it is not because the state is second that it cannot last, it is because it does not contain certain elements necessary for life. It is dangerous, write some authors, to leave a subject sleepwalking for more than twenty-four hours, because then he begins to cool down. Certainly, if you leave a subject still, unable to move and eat, they must cool down fairly quickly. But if, on the contrary, one chooses a complete somnambulatory state which undoubtedly forms a second life, but a regular second life, analogous, as we have said, to the normal life of such and such another person, there is no there is no reason why the subject does not stay there very long.

Also, without speaking of second natural existences which can be prolonged like that of Felida, one often pointed out artificial somnambulisms which were prolonged a long time. Famous Abbot Faria claims that some of his subjects stayed asleep for years and when they woke up they forgot everything that had happened during that long period ¹. A magnetizer named Chardel put two young girls to sleep during the winter and did not wake them up until several months later in the middle of spring; they were very surprised when they woke up to see leaves and flowers on the trees that they remembered having seen covered in snow before falling asleep ². “Often”, says another author, “I left my sleepwalkers asleep all day long, with their eyes open, in order to walk with them to observe them without arousing public curiosity. I happened to prolong for fourteen or fifteen days the sleepwalking of a young girl who was in my service. In this state, she continued her work as if she had been in her ordinary state... When she woke up, she was disoriented in the house, not at all aware of what had happened” ³. These accounts must not be deceptive, as the verification is quite easy to do: I myself kept Rose sleepwalking for four and a half days without any difficulty, as she was doing very well during this time, eating and sleeping much better than in its normal state. Jules Janet, who has especially studied the interesting period of these somnambulisms during which a hysteric, abnormal in the waking state, finds all her sensibilities and looks like a healthy person, prolonged this state much longer. Could we leave subjects indefinitely in this second state? that would be a very easy way to completely cure hysteria. Unfortunately the thing seems very difficult to me. This state seemed, at least to my subjects, to be fatigue and to exhaust them quickly. Some, like Léonie and Lucie, need to sleep frequently for a few minutes to rest, and hysterics in general only maintain this state of sensory integrity by means of renewed excitations from time to time, passes, running, electric, and. It is probable that little by little the hysterics would resume their defects, their usual anesthetics and would return to their normal state, forgetting everything that had happened during their

¹ D’après Gilles de la Tourette. *Op. cit.*, 23.

² Aubin Gauthier. *Histoire du somnambulisme*, 1842, II, 363.

³ Delatour, dans *l’Hermès (journal magnet.)*, août 1826, 116.

more complete existence. However, my observations on this point are completely incomplete and I cannot conclude with precision.

There remains one last question to be asked about these new forms of psychological existence. Are they lower or higher than the waking state? Is it a decadence or a progress for a subject to move from one to the other? Many authors are in favor of the second solution. "This last phenomenon, forgetting when waking up, lets us believe that the state of magnetic sleepwalking is the perfect state"¹. M. Myers, in his curious studies of automatic writing, wonders whether the somnambulatory state, instead of being a "regressive" state, cannot sometimes be an "evolving" state². Here, as everywhere else, one cannot give a general answer because of the many varieties of sleepwalking. There is an infinite number of forms of psychological existences, from that which contains only one rudimentary isolated fact without judgment and even without personality, to the thought of the superior monad of which Leibniz speaks and which would represent in short all the 'universe. We have seen that hypnosis can bring subjects to the first state which we have called catalepsy, this is proof that it can give them a very inferior form of existence. Can it also bring them closer to a higher form of thought? It depends, I believe, on the nature of their thinking in the normal state: when we speak to hysterics whose thinking, feeling, memory are diminished, reduced below the normal limit, the slightest excitement of the nervous system, and the passes like the electric current are a very strong one, give them back the faculties they have lost and give them a higher form of existence. It is obvious that Lucie 3, Rose 4 or Léonie 3 are much superior to Lucie 1, Rose 1, Léonie 1. But these are hysterical women, and this superior existence that is given to them is simply a normal existence, that which they should enjoy continually, if they were not sick. This state is so little superior to real life that, even in these women, it is identical to the moments of more or less perfect health that they have gone through. Is it possible to go beyond? Can we overcome these somnambulatory states in these subjects, or give to other healthy subjects, who are already naturally in possession of this form of existence, another form of higher existence? This is what almost all of the ancient magnetizers thought when they studied new senses or supernatural faculties on their subjects. This is what Mr. Myers thinks when he speaks of new readjustments of our personality in relation to new needs. This is a study that we cannot enter; it is enough for us to have shown how it touches our subject and how it is possible.

Conclusion

By studying isolated psychological phenomena in the previous chapter, we saw that the movements of the limbs and the sensations on the one hand, the expressions of the physiognomy, the successive gestures and the emotions on the other, formed units, syntheses whose elements were coherent and inseparable. Part of a feeling or emotion being given, the others necessarily existed and came to complete the group which tended to complete and subsist. We have studied, in this chapter, a more complex group but of the same kind: that formed by sensations and memories, and we have found, in this new study, a law of the same kind. When a more special sense or even a more special sensitivity has disappeared, the images and

¹ Baragnon. *Magn. an.*, 1853, 172.

² Myers. *Proceed.* S. P. R., 1887, 514.

therefore the memories of the phenomena which were once provided by that sense also disappeared. When a sense remains intact, the images of past sensations, their memories also persist. “No sense, no ideas”, said Lamettrie, in his *Homme-machine*¹; “the less sense we have, the less ideas we have.” Let’s say at least: “No meaning, no memories; the less meaning we have, the less memories we have.” The memories that persist are therefore united, aggregated, around a main sensation which serves to express them and evoke them, and when they are numerous around it, they form a system of which all the parts are held together and belong to the same memory. A perfectly healthy individual from the psychological point of view would never have more than one memory of this kind, and, as all the phenomena of his thought would be attached to images always the same and always present, he could recall them all easily and at any moment. But no man is so perfect: a thousand circumstances, the state of passion, the state of sleep, drunkenness or illness diminish or destroy certain images, revive others and all change “the orientation of thoughts.” Then, under the same laws as before, secondary groups are formed around certain images which are abnormal in this mind: these new images may never reappear; but if they reproduce periodically or are brought back artificially, they bring back with them all the memories linked to them and the different memories become alternating memories.

A group of images thus condensed can give rise to a particular judgment which recognizes and notes its unity, and the alternating memories lead to different and successive personalities. Somnambulisms are existences of this kind, having their particular memory and personality: their essential character is to be an abnormal psychological state which does not form the entire life of the individual, and to alternate with other states and other memories that cannot remember them. Often imperfect and rudimentary, sleepwalking can form a new existence that is more complete than the normal existence of the individual. It suffices for this that the circumstances favor the automatic development of the elements which enter the second life and make their grouping more coherent and more stable. The systems of psychological elements thus seem to have their own life, like each element in particular, and it is this life of a psychological system which constitutes the different personalities and the various somnambulisms.

¹ D’après Lange, *Histoire du matérialisme*, trad. I, 349.

Chapter III. Suggestion and the narrowing of the field of consciousness

Every personality once constituted thinks and acts: in what way will the various personalities that we have seen forming and growing almost before our eyes think and act? We can reduce this question to the study of a particular fact more important than all the others and which we designate under the name of obedience to suggestions, for the presence or absence of this docility is the essential feature of their thoughts and actions.

All men interact with each other, and social relationships consist of little more than reciprocal actions and reactions. But this influence usually takes place or seems to take place by means of an intermediary which is the voluntary consent: if you act in this way, it is undoubtedly because you follow my advice, but it is also and especially because you want to follow them. It is not a question here of seeking whether this consent is freely granted or not: very often, no doubt, one consents to an act because one cannot do otherwise, but it does not matter; it suffices to note now that most often there is more or less resigned acceptance and awareness of acceptance. Well, it has been found that, in quite a number of cases, this intermediary of voluntary consent was quite unnecessary and even disappeared entirely: individuals were subject to foreign influence, obeyed punctually without having consented to obey and without knowing that they were obeying.. The name of suggestion has been given to that influence of one man over another which is exercised without the intermediary of voluntary consent.

The phenomena of suggestion were first noticed by magnetizers during certain states of artificial somnambulism: also the knowledge of these facts had been carried away by that current of silly contempt which has been affected for so long for these studies. But, in recent years, they have been withdrawn from this unjust oblivion, and by reaction they have been accorded a perhaps a little exaggerated importance. So they are now so well known that it is very difficult to go back on their description. After a rapid and necessarily incomplete historical review, the aim of which is above all to show how old the study of suggestion is, we will content ourselves with recalling the most important facts by a few examples. We are studying in this chapter only one form of suggestions, the simplest of all, those which are carried out by the subject shortly after he has received them, meanwhile without having changed psychological state, and those which the subject understands and performs with full awareness. We relate to another study the analysis of the suggestions executed by the subject after an awakening or a change of state and those which appear with the appearance of unconscious acts. After the description of the facts, the study of the more or less probable hypotheses which explain them and the verification of these hypotheses must naturally be placed. Following the advice given by Mr. Paul Janet ¹, in the articles he devoted to this question, we will try to confirm our assumptions by examining the natural acts which present the same characteristics as the suggested acts. But, in order to examine things that are comparable and produced under the same circumstances, we will choose our examples of natural actions from among those performed by those same people who have been shown to be suggestible.

¹ Paul Janet. *Les suggestions hypnotiques*. Rev. litt, 1884, II, 101.

I. Historical summary of suggestion theory

The authors who, in our day, have drawn attention to the phenomena of suggestion are all well known today and some are justly famous: it is useless to recall the works of Liébault, Ch. Richet, de Bernheim, de Binet, de Feré and many others who have attached their name to this study. To make the history of suggestion in our time would be to make the complete history of hypnotism, which we cannot intend to undertake. But we will be forgiven, if we take a look back, unfortunately too fast, on the old magnetizers who, ignored and despised as they are, had nevertheless discovered and studied almost all these phenomena whose description has today made the glory of many authors. We are convinced, which we do not hope to share, that there were among them real scientists all the more devoted to their science as they could not obtain from it neither glory nor advantage of any kind. They have dedicated their lives to work that we can hardly suspect, to studying extremely long and delicate phenomena of which today's little hypnotism gives no idea, and they brought into this study patience, tenacity and sometimes an intelligence which should have deserved them more happiness. Many charlatans have covered themselves and still try to put on the name of magnetizers, but this is no reason to cast general contempt on all those who were the true precursors of experimental psychology.

The magnetizers of the past knew perfectly well the phenomena of suggestion. The 1784 report on Mesmer's experiments is already clear on this point. "All were subject to him who magnetized them; they might be dozing off, his voice, a look, a sign drew them from it... One cannot help recognizing in these constant effects a great power which agitates the sick, controls them and of which he who magnetizes appears to be the custodian." Puységur, one of the first who noticed artificial sleepwalking, immediately noticed this phenomenon: "When I judged his ideas to affect him in a disagreeable way, I stopped them and I tried to inspire him with more cheerful ones.; I didn't have to make great efforts to do that – so I saw him happy, imagining himself shooting for a prize, dancing at a party, etc. I fed these ideas in him and by doing so I forced him to give himself a lot of movement in his chair, etc." ¹. Deleuze, one of the first masters of all magnetizers, indicates as an essential character of a sleepwalker "that he is completely subject to the influence of the one who magnetizes..." ². He even describes very well a few pages later the post-hypnosis suggestion, the one that takes place after waking up and which we will not talk about in this chapter ³. At the same time, Father Faria implemented the suggestion "in a scientific way" ⁴, and his influence was such that all later works still relate a large number of experiences imitated from his. All the authors who have written on magnetism describe actions, hallucinations, dreams imposed on somnambulists by the words of the magnetizer.

Braid only studied more exclusively and produced in another way a phenomenon which all magnetizers could have taught him, and even so he allows himself to be deceived in his experiences of phreno-hypnotism when he claims to excite the various passions of his subjects by squeezing the various

¹ *Lettre de Puységur* du 8 mai 1784 à la Société de l'harmonie présidée par Mesmer, reproduite dans Aubin Gauthier. *Hist. du somn.*, II, 251.

² Deleuze. *Instruction pratique sur le magnét. anim.*, 1853, p. 85 (la 1er éd. est de 1825).

³ Id. *Ibid.*, 118.

⁴ See on *l'abbé Faria*. Gilles de la Tourette. *Hypnotisme*, 22.

bumps in their skulls. Charpignon, a real magnetizer, relates these phenomena very well to their origin which is the suggestion ¹, and Dupotet knows much better how to excite these same feelings of anger or affection without touching the head and simply by speaking to the subject ². It should not be forgotten that in 1854, Hébert de Garnay gave a public course entitled “Suggestion orale” (translation: “Oral suggestion”) ³, and that all those who have been concerned with magnetism have known these lessons. So it is not surprising to find in the works of all the later magnetizers experiences and discussions relating to these phenomena. Nothing would be easier, for all the facts without exception which have been pointed out in works of modern hypnotism, than to borrow examples from works published from 1850 to 1870.

But, it will be said, if the magnetizers knew these phenomena, they explained them poorly and unnecessarily brought in a mysterious fluid. Magnetizers, I believe, almost all distinguished, as Dr. Philips (Durand de Gros) does so clearly, the state of suggestibility in which the subject was currently immersed (hypotaxic state) and the suggestion itself made in this state (ideoplastic phenomena). Their theories of fanciful physiology hardly applied except to the first fact, that is to say to the procedures to be employed to bring the subject to the state of suggestibility, and as to suggestion itself, they did so, explained by purely psychic laws. I admit, moreover, that this way of separating things does not seem so ridiculous to me and that I am not disposed to believe that suggestion can explain everything, and in particular that it can explain itself.

If one prefers exaggerated theories in which one relates to the moral influence of the magnetizer or to “the force of the imagination”, as one said then, all the possible phenomena, it is easy to find many examples. Bertrand thus explains the singular beliefs of somnambulists; the so-called sight of fluid, the prediction of disease, and even the action of metals. “It is always, he says, the ideas of the magnetizers which have an influence on the sensations of the somnambulists ... metals, when the magnetizers want it, must have no influence over the magnetized persons, it is the idea that makes them harmful.” ⁴. Later, in 1850, Dr. Ordinaire maintained a very curious discussion against the fluidist theories of his time ⁵. The great argument he constantly invokes is suggestion in the waking state. “I have obtained, he says, *without prior magnetization*, insensitivity.... paralysis, drunkenness, delirium, and that without needing to put the subject to sleep, simply by saying “I want”... It was enough for me to say: “I want you to sleep” to fall asleep”. Has anything stronger been done and is the suggestion a discovery today?

Not only the moral phenomena, but the most curious physiological phenomena were studied and related to the force of the imagination. The most daring experiments of blistering by suggestion, the most clearly psychological explanations of the stigmata, of the convulsionaries are completely exposed in the works of Charpignon ⁶.

¹ Charpignon. *Physiologie du magnétisme*, 374.

² Dupotet. *Journal du magnétisme*, 1849, 396.

³ *Journal du magnétisme*, 1855, 541.

⁴ Bertrand. *Traité du somnambulisme*, 1823, 323.

⁵ *Journal du magnétisme*, 1850, 120, 207. – See a similar discussion under this title: *Opinion de M. Delatour sur l'action magnétique et sur celle de l'imagination, dans l'Hermès*, 1826, p. 265.

⁶ Charpignon. *Physiologie du magnétisme*, 1848, 361, 366 et *Journal du magnétisme*, 1849, 550.

But all these works, rich no doubt in exact observations and ingenious insights, but often incomplete and obscure, were almost completely forgotten. It was not until around 1875, when Barrett ¹ in England and Ch. Richet ² in France had demonstrated to the scientific public the existence of insurmountable suggestions and illusions imposed by speech, that the attention of psychologists and physiologists decidedly focused on these studies as original as they were fruitful. We must not forget too much that all these works were indicated and started by the old French magnetizers.

II. Description of some psychological phenomena produced by suggestion

It is difficult to summarize all the psychological phenomena that can be produced by suggestion; for on the one hand they are innumerable and extremely varied, and on the other hand they do not present any clear cut differences between them, as we have found in cataleptic phenomena. The best way to classify positive suggestions, the only ones considered in this chapter, is, we believe, to rank them in order of increasing complexity.

1st Phenomena of cataleptic appearance. – If one raises the arm of a suggestible individual, during sleepwalking or during waking, and especially if one keeps it in the air for some time, the arm will almost always remain in the position in which it was put. This is a phenomenon quite analogous to that which has been observed during catalepsy, and it sometimes presents itself with identical characters. Indeed, if we have taken the precaution of choosing a subject whose arm is previously completely anesthetic, we will see this member stay in the air for a very long time, slowly descend without jerking, without the breathing undergoing any modification during this time. We know, in fact, that this absence of oscillations and respiratory disorders simply proves the muscular anesthesia of the arm and not the existence of a cataleptic state.

We can also observe other phenomena of the same kind: a pencil placed in the subject's hand gives N... the desire to draw and she indefinitely makes lines or small houses on paper. The sight of a gesture sometimes provokes imitation and repetition: Blanche, an extremely suggestible young girl in the waking state, exactly imitates all my movements when she looks at me. Leonie, at the beginning of a certain sleepwalking state, repeats my words before answering them, and Rose, in a similar state, sometimes answers the questions, sometimes repeats them. "A young lady sleepwalking, we read in the *Journal of Magnetism* ³, put in touch with any person, immediately becomes his double. It reflects the gestures, the attitude, the voice and even the words of its interlocutors. We sing, we laugh, we walk, it immediately does the same thing, and the imitation is so perfect and so quick that we can be wrong about the origin of the action. The identification is such that foreigners, Russians, Poles, Germans, whose idioms are very difficult to pronounce, gave her speeches which she reproduced perfectly. One of them, who had made him sing a fragment of the national anthem, expressed his satisfaction in French with a very pronounced

¹ Cf. *Proceed.* S. P. R., 1882, 338.

² Cf. Richet. *Du somnambulisme provoqué.* Journal d'anatomie et de physiologie de Robin, 1875, 348.

³ *Journal du magnétisme*, 1849, 66.

Germanic accent; she greeted him, repeating the compliment in the same tone, and the whole assembly burst out laughing.”

Why consider these phenomena as distinct from those of catalepsy? Because the psychological circumstances surrounding them are not the same. The cataleptic individual does not speak, does not understand what he is doing, seems to have no idea of his personality, nor of the acts he performs; he has, as Maine de Biran said, the sensation and not the idea of his sensation. The subjects we are talking about now are quite different: they speak and understand the word, they have a personality, they realize what they are doing. “I think my arm is in the air”, Blanche will say when asked what she is thinking about. “I want to do little drawings”, says N... when she is holding a pencil. “Why do I want to be like you?” another will say, watching me raise my hand. The physical phenomenon may be the same, but the psychological phenomenon does not seem identical to me.

2nd Acts and hallucinations determined by speech. – The real interest of suggestion lies in the commandments that can be given by speaking. Indeed, the words which one addresses to these subjects, instead of being repeated without intelligence as by the cataleptics, *are understood*, and by their direction always determine, *without the consent* of the person, acts and hallucinations. Do we say to one of these individuals: “Get up, sit down, move your arm”, or more simply still: “Here is your arm moving”, he understands very well what we mean, but, without consenting, he actually gets up, moves his arm, or sits down. As soon as the meaning of the words is understood, the act is performed.

We can provoke by this means a new phenomenon which undoubtedly already existed, but could not be easily noticed during catalepsy, it is the phenomenon of hallucination. The subject, who can now speak, informs us about what he feels, and, by his words as well as by his attitudes, shows us that he experiences all kinds of false sensations about our words. He is thus made to hear the sound of bells, songs, fanfares, he is made to see flowers, birds, smell smells, appreciate tastes, lift imaginary burdens, etc. In short, one causes in one’s consciousness all the phenomena which usually correspond to real impressions made on the different senses.

These hallucinations are usually violent and as vivid as any real sensation would be. I make a woman drink so-called magnetized water, and I warn her that this water gives the stomach a gentle heat: she begins by feeling this sensation and is well with it. I then make the gesture of magnetizing the glass more: she takes it, brings it to her lips, then throws it violently on the ground, uttering loud cries. This excessively magnetized water had, she said, burned her mouth terribly. Leonie is able to hallucinate entire pages of a book she once read, and she can see the image so clearly that she still notices special features, such as page numbers and sheet numbers at the bottom of certain pages: hallucination is identical, in these cases, to a sensation.

Sometimes, on the contrary, the hallucination will be weak, analogous to a distant and vague image, and then one can distinguish two particular cases. Or the subject, distinguishing badly, moves away, so to speak, his hallucination in space: Marie, who has no clear hallucination of hearing, always claims that the music is in the courtyard or at the most in the next room, but does not admit that it is close: “Oh no”, she said, “we would hear better if the music was here.” In the other case, the subject seems to move away his hallucination in time and make a memory of it. Mi... always whispered when I tried to suggest to him a

present hallucination: “That’s right, you’re right, I heard it, I saw it ... but how long ago ... It must have been a long time ago.” It is true that I only met this one subject who spoke thus; however, this must be taken into account. Perhaps it would be possible to explain by these weak hallucinations, these illusions of memory of which Mr. Taine spoke: “In somnambulism and hypnotism, he says, the patient, who has become very sensitive to suggestion, is subject to similar illusions of memory: he is told that he has committed a certain crime and his face expresses the horror and dread”¹. I dare not, having observed only one such subject, to fully argue that “retroactive hallucinations”² are always just weak hallucinations: they are sometimes a more complex phenomenon.

We have grouped together the suggested actions and hallucinations in the same category, although these two phenomena appear to be very different from each other. This is because in reality they have the most intimate relationships; not only do they occur in the same subjects and under the same conditions, but also they are inseparable and never exist one without the other. There are no acts without an image in the mind which, although it is linked to a movement, is no less strong. A subject to whom I told to raise his arm, has in his mind an image (muscular or visual depending on the case) which is very clear and perfectly comparable to a hallucination. Here is the proof: I order Marie to raise her arm, but immediately I seize her hand in passing and prevent her from moving; as she has no muscular sensitivity on this side, she does not feel this stop. A few moments later I ask her where her arm is, and she replies that it is in the air, that she sees him. To Rose, who is paraplegic, I order to move her leg, she seems to be making an effort, but her leg does not move. As I insist, she gets angry and says, “But she’s already lifted my leg, so you can’t see her.” One way or the other, we removed the act that obscured the image and left it isolated; we then see that it existed completely and even here in the form of a hallucination.

On the other hand, it is easy to show that there is always movement at the same time as the suggested hallucination. The fact can sometimes be verified directly: to a visual subject, that is to say who, at this moment, performs his movements by means of visual images, it is impossible to give the *visual* hallucination of the movement of his arm without that the arm does not actually move. I order Léonie, after having blindfolded her, to see her left arm which is raised and which is agitated. After a few moments she said: “Yes, I see it, the fingers are moving apart”; but, at the same time, her left arm makes exactly what she says she sees. There are a few remarks to make about this very simple and very important little fact:

1st This movement takes place without the subject’s knowledge when it takes place in an anesthetic limb; but we should not conclude from this that it is an unconscious movement like those which we will study later. The origin of the movement, or rather its psychological aspect, is well in the mind of the subject, it is the visual image which has been suggested. All that’s missing is the *muscle sensation in return*³, which usually warns the healthy subject of the execution of the movement;

¹ Taine. *Intelligence*, 3e édition, 1878, II, 222.

² Bernheim. *De la suggestion*, 183.

³ Cf. ch. I de la présente partie, fig. 3, p. 59.

2nd This experiment succeeds only if one provokes the hallucination of the particular image, which, in this subject and at this moment, is used for movement. Léonie is left hemianesthetic and, as happens in this case, uses visual images to perform the movements of the left arm; but, singularly, she continues to use muscular images (kinesthetic): to perform the movements of the right arm. As a result, the visual hallucination of the moving arm causes movement to the left, but does not cause it to the right. To bring about the movement of the right arm, we need the kinesthetic hallucination of the movement of the arm, hallucination which is moreover ineffective or even impossible for the left arm. We shall find these details again when we speak of paralysis in their relation to anesthetics. It is enough for us to recall here how much these new experiences made by oral suggestion confirm the hypotheses which we have made concerning the imitation of movements in catalepsy and show us the intimate union between even visual images and movements.

Are these now different and more complex hallucinations which do not consist only in the image of a moving limb, there are still certain expressive movements, gestures or words, which always accompany the hallucination. At the beginning of my research on sleepwalking. Not being only half convinced of the power of these commands, I committed the serious thoughtlessness of making a sleepwalker see a tiger entering the room. Her convulsive movements of terror and the terrible cries she uttered taught me that I had to be more careful, and since then I have only shown the imagination of these people to beautiful flowers and small birds. But, if they no longer make great gestures of terror, they nonetheless make other movements adapted to these gentler shows: some, like Marie, gently caress the little birds; others, like Lucie, seize them quickly with both hands to kiss them, others, like Léonie, who remembers her campaign, throw grain at them on the fly; no woman can hallucinate a flower without bringing it to her nose, then putting it on her blouse.

Even if expressive movements of this kind would be absolutely lacking, which is very rare, there would always be simpler movements which we can call adaptation movements. According to the observations of M. Féré, “the state of the pupil varies with the presumed distance of the hallucination ¹.” This very constant phenomenon, moreover, is not very visible, but the movements of the eyebrows, the eyelids, the eyeball, the movements of the head during auditory hallucinations, the beating of the nostrils during hallucinations of smell, the movements of the fingers when the subject feels the contact of an imaginary object, are always very strong and very easy to observe. M. Ribot had foreseen what observation came to confirm when he said: “If, when we see an object, movement is an essential element, shouldn’t it play the same role when we see the object ideally ²?” In a word, there is just as much movement in connection with the suggestion of hallucination, as there is hallucination in connection with the suggestion of movement; the two cannot be separated.

3rd *Acts or hallucinations, connected with agreed signals.* – The place to order the immediate execution of an act, it may be away somehow and connect to an agreed signal. We do not now deal with the post-hypnosis suggestions and we assume that the command and signal of execution still take place while the subject remains in the same psychological state. For example, I say to Marie: “When I clap my hands, you will get up and walk around the room.” She heard and remembers my command, but does not

¹ Paul Richer. *Op. cit.*, 705.

² Ribot. *Le rôle des mouvements*. Revue philosophique, 1879, II, 380, et *Psych. de l’attention*, pass.

carry it out immediately: I clap my hands and here she is getting up to walk around the room. It is the same for hallucinations, we can relate them to a certain signal which will be any auditory or visual sensation. If I tell Marie that she will see a butterfly cross the room when the hour strikes, or that she will see a bird on the window sill, the phenomenon is the same: she sees the butterfly only when the hour strikes and sees the bird only on the window sill and not elsewhere.

The last fact is the most interesting, because the hallucination, being linked to a lasting sensation, always possible and susceptible of modification, takes on exactly the same characteristic, persists, disappears, and changes like the landmark itself. At any time during sleepwalking, if Marie looks out the window, she will see her bird again, and this connection can persist indefinitely; hence a quantity of experiments, of which the following is the best known: A sleepwalker is shown an imaginary portrait on an apparently all white card and then this card is confused with several others; the subject almost always finds the portrait on the same card that has been shown to him and in the same position, this is because he undoubtedly recognizes the paper by a few small characteristic signs. If now Marie can no longer see the window sill, she will no longer see the bird: all she has to do is look away to no longer see it. Finally, if the landmark varies in any way, grows, shrinks, doubles, etc., the hallucination will have exactly the same fate. This is the phenomenon which has been so well studied by MM. Binet and Féré in their original experiments with the lorgnette, the mirror, the prism. I repeated their experiences with several subjects, especially Lucie, and my observations always agreed with theirs. If she has been shown, for example, a snake wrapped around the lamp, she sees in the mirror a second snake as well as a second lamp. In short, the suggested act or hallucination can be linked to a certain sensation which serves as a signal or a point of reference and is then absolutely dependent on it.

The importance of this landmark suggestion cannot be overstated, for it provides the explanation of a very large number of other phenomena. Let us quote a few examples of this kind: we saw in the previous chapter that the subjects who have a total anesthesia of a sense could no longer have a hallucination of this sense, but it is not the same for those who do not 'have only partial anesthesia. So Marie is blind in the left eye, but she sees well with the right eye, so she can have visual hallucinations. When she dreams, like everyone else, she sees colored objects both on the left and on the right, and if we suggest to her without specifying a hallucination of the sight, leaving her both eyes closed, she will see it colored. This can be easily explained, as M. Binet very recently showed, if we consider "that the field of representation, larger than the field of sensation, is formed by a synthesis of visual fields ¹." The patient's imagination completes the visual field and reconstitutes the integral representation of the object. But then how to understand the following fact? If we specify the place where the object must be by saying that it is on the left, or if we close the subject's right eye while leaving the left eye open, we can no longer produce in Marie any visual hallucination. Mr. Paul Richer pointed out this fact as one of the first: "Bar... he said, is in the achromatopsic state of wakefulness of the right eye. With the left eye closed, we show her (by suggestion) Harlequin, she depicts him all covered in small gray, white and black squares, Polichinelle is also dressed in white and gray: "It's original, she adds, but it's not pretty." We open our right eye and immediately the notion of colors reappears and Arlequin and Polichinelle appear to him variegated as we

¹ Binet. *Sur les rapports entre l'hémianopsie et la mémoire visuelle*, Revue philosophique, 1888, II 486.

are accustomed to represent them ¹.” Since then, many authors have reported identical facts. I have observed a fact of this kind for the sense of tact. Rose, insensitive to the rest of the body, had recovered the sensitivity to the lips; hallucinations of contact, tickling, heat, etc., were felt only on the lips and not on the rest of the body. These apparently singular phenomena simply depend on the presence or absence of the landmarks which the subject uses to locate a hallucination. If, after having hallucinated Marie when she has both eyes open, I close her right eye, she no longer sees clearly and no longer distinguishes the landmarks to which her hallucination was attached; she then completely lost sight of the bird or the flower that I was showing her. If, on the contrary, she is hallucinated when her eyes are closed, this image is not linked to any landmark and may persist despite closing her eyes. The other experiences, and the modifications which hallucinations undergo after partial modifications of the senses, are explained in the same way.

I will also relate to this theory of hallucination with a point of reference a singular fact which always presents one of the somnambulists I have studied and that I cannot explain myself otherwise. The suggested hallucination only occurs in Leonie if she is touched on an uncovered part of her body by the person who suggested the hallucination. Although I have ordered her to see flowers, Leonie stops seeing them as soon as I no longer touch her hand or her face; other people may touch her or hold her hand, but the hallucination does not reappear; if I touch her again, even lightly and without warning her, Leonie gives a cry of joy and is delighted to see her bouquet of flowers again. It is probable that the hallucination is associated here with the sensation of the touch of my hand which is like a landmark. But, in this experience, as in several of the preceding ones, the psychological phenomena are seldom all conscious and we cannot now dwell on their details.

For my part, I am very disposed to explain in the same way, to consider as simple hallucinations with a point of reference, the interesting phenomena which have been pointed out by various authors, such as MM. Dumontpallier, Magnan, Bérillon ², etc., under the name of “bilateral hallucinations of a different characteristic depending on the affected side”. It is possible, say these authors, to make the same subject experience two different hallucinations simultaneously, one on the right and the other on the left; thus, “we will make him feel the taste of rum on the right side of his tongue and the taste of syrup on the left side, we will make him see with one eye a horrible scene and the other a laughing country picture ³.” These authors therefore draw conclusions which seem to me very serious about the functional independence of the two cerebral hemispheres. Without prejudging the theory in itself, I believe that we should give up using this particular fact as a means of demonstration. Simultaneous hallucinations of a different nature are easy to reproduce for the senses which are spread over a fairly large area and which can provide the subject with several simultaneous landmarks. It is not necessary to take into account the bilateral division of the body or the brain to obtain them, and all these experiences can be easily repeated on one side of the body. At my command, Marie has simultaneously the sensation of heat on the thumb of her right hand and cold on the little finger of the same hand, she sees on the same side and through the

¹ Paul Richer. *Op. cit.*, 707.

² Bérillon. *La dualité cérébrale*, 1884, 109 et sq.

³ Bérillon. *La dualité cérébrale*, 1884, 179.

same eye a cheerful picture next to a sad picture; finally she also feels two hallucinations of taste on her tongue, but instead of feeling them, one on the right and the other on the left, she has jam at the end of her tongue and salt at the bottom, she even finds that it is very bad and very unpleasant. In a nutshell, I am willing to believe that the different points of the body and the different objects served simply as landmarks in these bilateral hallucinations.

The same consideration would be opposed to many theories which are very complicated and do not take into account such a simple fact. We can get the subject used to doing such and such an act, to contracting or falling asleep when touched with such metal, to waking up when pressing such area of his body, etc. The object that one always lets him recognize in some way, the pressure felt from a point of the body serves as a sign and brings about the act or the hallucination. The subject does not deceive, as one might believe, because he does not consent to this suggestion any more than to others, it is the operator who deceives himself by not taking sufficient account of psychological laws when he is 'deals with phenomena that are psychological. The opposite danger is to explain everything by suggestions of this kind; it takes a very delicate criticism to keep the balance even and no one can boast of having achieved it.

4th Acts and hallucinations complex or with automatic development. – In place of order one after another every move or every hallucination, you only with certain subjects, they indicate an initial idea, with apparent spontaneity, develops in their minds anyway and is manifested by a long series of acts and various hallucinations. "You will write a letter, ... you will sing a tune," I say to Lucie or Rose, and they'll get ready to write, compose a letter, or sing all kinds of songs endlessly. If I tell Léonie that there is a sheep in front of her, she sees it, but immediately, without me adding anything, she hears it bleat and imitates her cry, then she caresses it and feels its fleece under her hand. A real gold coin produces in this subject a general contracture if it is applied to the forehead; an imaginary gold coin which one puts in his hand and which he applies himself to the forehead produces the same result. The thumb nail is hyperesthesia; if struck, the subject has small convulsions and contractures; the hallucination of a bird on her hand reminds her of an imaginary peck given by the bird on her nail and she has a little convulsive fit. One would find in all the works many examples of these hallucinations which are complicated and supplemented spontaneously. This is what makes these mimed dreams so fun when you're dealing with a vivid and fairly intelligent subject. The hallucination "of a journey", as she said, became with Lucie a veritable comedy with a thousand unexpected twists and turns. Not only did she experience seasickness on boats, like the subject M. Richet speaks of, but she imagined falling into the water, swimming on the floor, and getting up on a desert island, shivering. Naturally, I made him make the most beautiful expeditions to the moon, to the center of the earth, etc.: it was enough for me to give him a theme on which his imagination embroidered the most extravagant complications. I cannot insist on these comic spectacles; they are still surprising to see, but they are now too well known to be described.

Should we link to an association of the same kind between images which spontaneously evoke one another, these phenomena which have been designated under the name of transfer of attitudes and

hallucinations by the magnet? If we cause a phenomenon on the right on a subject, a pose or a movement of the arm, a hallucination placed on the right, we can make it pass to the other side in an exactly symmetrical position by bringing a strong magnet to the left arm or on the left side of the head. The fact, in itself, is almost indisputable, and, if it is far from being found in all subjects, at least it does exist in some, but its interpretation seems to me very delicate.

Without claiming to give here more than elsewhere a general conclusion, which is impossible today, I will only note the results of my own observations. First, the transfer is a rather rare phenomenon; I only noticed it on two subjects, Léonie and N...; the other subjects either do not change, or else react quite differently after the application of the magnet. Then, even on these two subjects, the transfer can be produced by all kinds of things other than the magnet, by the approach of my hand, or by inert objects. One day I had fun making the most wonderful and complicated transfers by bringing an orange peel held at the end of a long stick to Léonie's head. To resolve my doubts about the action of the magnet, I experimented, as we always should have done, with an electromagnet. M. Rousseaux, professor of physics, to whose kindness I have so often had recourse, was in an adjoining room; it opened or closed the current without making the least noise and without warning me: as for me, I approached the magnet of the subject without knowing if the current was passing or not and I noted the results. I must say that the phenomena occurred quite awry without any relation to the actual opening or closing of the current.

Finally, it is good to know that a phenomenon quite analogous to the transference can occur by virtue of purely psychological laws, without there being any precise suggestion on this subject. Mr. Paulhan ¹ recently studied, in the *Scientific Review*, the law of contrast which automatically brings into the mind completely opposite phenomena one after the other: we say yes, instead of saying no; we want to laugh when we should cry, etc. Physicians are well aware of this singular fact which emotion sometimes produces in patients; they suddenly turn onto their stomachs when they are told to lie on their backs. I myself saw with Jules Janet, at the Hôtel-Dieu hospital, a hysterical woman who had a very strange habit; she always did and in spite of herself with her left arm everything that she was told to do with her right arm, and vice versa. The phenomena of allochiria in which a person locates in his left hand what is done with his right hand are well known; I noted one that I point out as a curiosity, because I hardly understand it. Léonie being somnambulist, I prick her with a pin on the right side (sensitive side), she gives a cry and here she is angry with her left hand; she begins a singular delirium in which she maintains that her hand is no longer hers, that it has been changed to her. In fact, the left hand which was anesthetic became tender. There may therefore be a psychological automatism, not well known it is true, which connects the images relating to the two sides of the body and awakens or modifies one about the other ².

On the other hand, it seems to me that the magnet, like metal plates, like electricity, has a real action on these weakened nervous systems. Lucie, who has never been in a hospital, who knows nothing of these questions, who had until then been subjected to all the experiments without any emotion, fell stiff, contracted from the jaws to the feet, for having touched a magnet. Rose regains, thanks to the magnet, a tactile sensitivity that suggestion cannot restore to her. Many other facts, into the study of which I cannot enter, lead me to believe in this action ³. Here then, with all reservations, the opinion which seems

¹ Paulhan. *L'Association par contraste. Rev. scient.*, 1888, 263.

² See similar reflections on psychic polarization in a work by MM. Bianchi and Sommer. *Revue philosophique*, 1887, I, 148.

³ Cf. *Proceed. S. P. R.* 1882, 236.

probable to me: The action of the magnet must be a vague excitation, analogous to that which is produced by the electric current, the Burq plates, or even the passes, and the particular form in which this excitation is manifested, return of sensitivity, contractures or transfers, would depend on laws rather psychological than physical. It is moreover roughly to this conclusion that M. Féré had arrived by quite other studies: “The first effect of the magnet or of the specific metal for the subject, he says, is to determine a dynamogeny, regardless of the side on which it is applied; the transfer does not come until after. Any kind of sensory excitation produces the transfer by the same mechanism ¹”.

I will not speak of the experiences of MM. Binet and Féré on the polarization of sensations and feelings, because I have never observed anything like it; I will only point out the complementary hallucinations which I have studied little to show how the association of ideas can sometimes play an important role. The hallucination of a color, when it continued, was followed, it was said, by the hallucination of the complementary color. Perhaps I did the experiments poorly, perhaps I did not meet subjects presenting strong enough visual hallucinations; Still, the colors shown by the subjects following a colored hallucination did not seem to me to present any clear law.

Leonie, after the hallucination of red, declares to see white, after green of red, after blue of white, after red of green, after yellow of blue, after violet of white, after orange of green, after the green of the blue; although some of these colored hallucinations coincide with those indicated by the theory of complementary colors, there is no very regular law here. I was not happier with other subjects, Lucie and Marie indicated to me the colors which they claimed to see completely at random.

Perhaps another experiment will show us how this apparently complementary image is formed. I suggest to Léonie a hallucination of taste and, after a few moments, I make it suddenly disappear: often she no longer feels anything, but sometimes she shows, as after the visual hallucination, another consecutive sensation. Thus the taste of sugar has been followed by the taste of pepper, the taste of vinegar by the taste of salt, the taste of chicory is followed by the taste of coffee, and finally the taste of coffee brings in its wake the taste of cognac. These successions of tastes, especially the last two, are perhaps very logical, but I do not believe that they manifest a very new physical law. These observations do not in any way destroy the law of complementary hallucinations, for a negative fact does not suppress a positive fact; they only show that this law is not of very general application and depends on very complex conditions.

This automatic development of ideas in the subject’s mind forms, like the preceding phenomenon, one of the great difficulties of experimental psychology: it is all the more dangerous that, having occurred once in one direction, it will be repeated indefinitely in the same way. The experimenter is constantly exposed to mistaking an association of ideas from his subject for a general law of psychology.

5th *General hallucinations or modification of the whole personality by suggestion.* – This last phenomenon, very interesting and which sums up all the preceding ones, can be presented in two forms. The first has been very well described in the work of MM. Bourru and Burot on personality variations. If

¹ Féré. *Sensation et mouvement*, 75.

we affirm to the subject that he is starting over a past period of his life, that he is only at a certain age, or simply if we give him an attitude, a contracture, a state of particular sensitivity that he had at such a or a certain age, we see him assume at the same time all the physical and moral characteristics he had at that time and relive, so to speak, completely a period which has elapsed of his existence. The subject feels, thinks and speaks as he was doing at the time; he thinks he sees and hears what existed then, he has no other memories than those he could have at that time. “When we return to a hysterical woman the sick state that she once had (paralysis on the left side and cutaneous hyperesthesia on the left), she thinks she is at the Salpêtrière in Mr. Charcot’s department ¹.” “It is not the contracture which brings about this childish mode of intelligence and expression, this contracture brings this patient back to his childhood because it was in his childhood that she existed. ²” Nothing is easier and more interesting than the verification of this phenomenon: one can thus make the subject act out all the scenes of his own life and observe, as if referring to that period, details that he believed he had completely forgotten and could not relate. Leonie remained two hours transformed into a little ten-year-old girl and she was again living her own existence with a very strange liveliness and joy, screaming, running, calling her doll speaking to people she no longer remembered, as if the poor woman was truly returned at the age of ten. Although at the moment she was still anesthetizing on the left side, she was regaining her full sensitivity to play this role.

These modifications of the sensibility and of nervous phenomena by a suggestion of this kind sometimes give rise to singular phenomena. Here is an observation that sounds like a joke, yet is accurate and actually quite easy to explain. I suggest to Rose that we are no longer in 1888, but in 1886 in April, just to see what changes in sensitivity might occur. But here is a very strange accident; she moans, complains of being tired and not being able to walk. “Well, what’s the matter with you? – Oh nothing, but in my situation... – What situation?” She answers me with a gesture, her belly had suddenly swelled and strained by a sudden attack of hysterical tympanitis: I had, without knowing it, brought her back to a period of her life when she was pregnant. The suggestion had to be deleted to put an end to this bad joke. More interesting studies were made by this means on Mary: I have been able, by bringing her back successively to different periods of her existence, to observe all the various states of sensitivity through which she has passed and the causes of all the modifications. So she is now completely blind in her left eye; and claims to be so since birth. If we bring it back to the age of seven, we find that it is still anesthetic in the left eye; but if we suggest that she be only six years old, we see that she can see well with both eyes, and we can determine the period and the very curious circumstances in which she lost the sensitivity of the left eye. The memory automatically achieved a state of health which the subject believed to have retained no memory.

In the second form of this phenomenon, the same general changes of the whole personality can still be achieved without appealing to memory, but simply by the imagination of the subject. This fact is fairly anciently known and one meets here and there in old works with very curious descriptions. In Dupotet’s experiments with so-called “magnetic magic”, these transformations were frequent and the famous master describes them in that high-sounding style that we know “But let us try in a virile subject to give birth to

¹ Bourru et Burot. *Variations de la personnalité*, 145.

² Id. *Ibid.*, 130.

the decrepitude that old age seizes the lively and petulant young man, let her present herself with her indelible character, so that one cannot be mistaken. The years must mark with their seal that which nature has placed a quarter of the way of life; that without transition it becomes a hundred years old. Here it is: to *my voice*, her spine bends, her limbs falter, her speech is weak, she has lost her Argentinian tone: the features become wrinkled, the eye loses its liveliness. He leans on the cane I gave him. He is no longer a robust young man. The years have wreaked havoc. He has nothing of the flower of the years, his language is that of the perky old man. Her mouth is gaping, a stubborn tear hangs over her nose. It spits out a mucus. He smiles mischievously, takes his hold and walks with measured steps: it is aged nature, the man near the tomb. But, what am I saying? he thinks he's young: he casts a murderous glance at young ladies, and his eyes seem to say: I am still capable! Vain and boastful old man, I cannot leave you thus in your innocent madness. Come back, come back quickly to your spring; what entertains the assembly saddens my heart too much. Living image of the decline of life, you give too much to think about, and the moments that I delight from you, young man, would weigh on me like a crime ¹". I quoted the whole piece, because it gives an idea of Dupotet's manner; I abbreviate other quotations that one could extract in large number from other works. "I said to Miss N...: "You are a preacher." As soon as his hands came together, his knees flexed slightly; then, with her head tilted forward and her eyes turned towards the sky with an expression of fervent piety, she pronounced slowly and in a very touched tone a few words of exhortation ²." We know that M. Ch. Richet, in articles first published in the *Revue philosophique* ³ and then gathered in his work *L'homme et l'intelligence* ⁴, resuscitated these then-forgotten experiences and, under the name *Objectivation of types*, gave descriptions of personality change by suggestion which, for the past five years, have been cited in all works of psychology.

The phenomenon is indeed very curious and very easy to reproduce: most of my sleepwalkers have undergone changes of this kind, but they have not all been so interesting. Lucie, changed into an army general, into a little girl, into a sailor, into an archbishop, was the one who played these comedies with the most perfection. Her character was also reflected in these changes and, as she is very irreligious, she played an archbishop confessing penitents in such an unorthodox way that it is impossible for me to relate the description. Léonie was remarkable only in certain scenes: changed to an army general, she gets up, draws a saber and cries: "Forward! courage! ... get me out of the ranks – this one, he does not stand well ... where is the colonel of these men? ... come on, put yourself in better order than that ... oh! the machine gun, like that thunders ... these enemies are numerous, but they are not organized like us, they are not in their business, ah! But..." She feels her chest "but yes... I was decorated on the battlefield for the good behavior of my regiment." We see that there is little imagination in this scene; it is the same if I change her into an old woman of ninety years; she hardly knows more than coughing and moaning: "Here, she says, showing her limbs, there is nothing left ... I am very tired, I will leave you soon." On the contrary, there is one of those hallucinations that succeeds perfectly well on her, it is when you transform her into a great lady or a princess. She majestically spreads her dress on a sofa, moves an imaginary fan and talks with a smirk about the court, its lands and the insolent marquises. I was astonished at the perfection of this comedy, when I learned, while chatting with her in this state, that it was not provoked for the first time and that formerly, twenty years ago, its first magnetizer was already changing her into a princess.

¹ *Journal du magnétisme*, 1849, 591.

² Dr Philips (Durand de Gros). *Cours de braidisme*, 1860, 116.

³ 1883, I, 225.

⁴ *L'homme et l'intelligence*, 1883, 233.

She remembered having had a beautiful velvet dress “just like that” and having received M. le Dr Perrier in her large living room. This doctor was one of those who often magnetized her in the past, around 1865. This would, if necessary, be further proof of the knowledge which magnetizers had of all these phenomena of suggestion.

We are obliged, in connection with these personality changes, by suggestion, to return to a question already studied in the previous chapter. Are the changes in memory and personality that we have seen in different sleepwalking the same as these complex hallucinations produced by suggestion? Without being able to affirm anything definitive, because all these psychological states have a lot of analogy with one another, we will content ourselves with presenting a few reasons which prevent us from fully assimilating these two phenomena. The state of memory, which until now has seemed so important to us, is not the same. During one of these personality changes obtained by suggestion during the first somnambulism, the subject has no memory of the other changes. So, he plays the part of a great princess, he does not know what I mean when I tell him about the general costume he had the previous moment. He does not remember the waking state; being a princess, he does not know what Léonie is and does not even want to believe that it is a poor peasant woman living on his land; he does not remember either the state of ordinary somnambulism and the character of Leonie 2; Needless to add that he does not remember the second somnambulism and the character of Leonie 3 either. This person has absolutely forgotten what she knew in these states: for example, she no longer knows my name; if she speaks to me, she incorporates me into her dream and gives me a fancy name; when she is a princess, she calls me “marquis de Lauzun” and talks to me with a smirk; when she is a general, she takes me for a colonel and offers me... an absinthe. In one of these states of hallucination, she only keeps the absolutely general memories, speech, habits, notions of the world, which, in this subject moreover, are a fund common to all the states. She also retains, in one of these changes, the memory of exactly the same change which took place in the past. Is she a princess again, she said to me: “Here, Monsieur le Marquis de Lauzun, I saw you some time ago, we talked about a peasant woman in whom you were interested and whom I do not know at all.” She even remembers the people she saw twenty years ago, when M. Perrier, already having this experience, also changed her into a princess. But the important fact to note is that she only remembers the same dream, everything else is absolutely lost on her.

When the hallucination is over, when she ceases to be a princess, Leonie returns to her usual somnambulism without going through any intermediary, neither lethargy nor catalepsy. More often than not, although this is not constant, Leonie 2 back retains the memory of the change in personality: “What a singular dream I had! ... I had a velvet dress and I was chatting in a beautiful living room with a marquis ... you were not there.” If sometimes this memory is completely lacking in Leonie 2’s somnambulism, we are sure to find it in the second sleepwalking. Léonie 3, who remembers all the rest of her life, also remembers these hallucinations: “Is she stupid enough, poor Leonie? she says; she thought she was a princess, you are making her believe that.”

It is easy to see now that the state of memory is quite different during the second sleepwalking that we have studied. Instead of being restricted to the state itself, remembering is about the whole of life and about all changes whatever. Upon awakening, the memory of this sleepwalking is not found in any other state. These are the precisely opposite characters, and the state of memory is so important in these

phenomena that I believe I can make use of this difference to separate these two changes in the notion of personality without ignoring their analogies. These two modifications are due to that law of the mind according to which a set of complex phenomena develops automatically as a result of a first simple fact: but, in one case, sleepwalking has its point of departure in a modification real state of sensitivity and memory; in the other, the change of personality depends primarily on an idea and a hallucination and produces the modifications of sensibility and memory only secondarily and in an incomplete manner.

Despite these restrictions, it is understood that it is possible to construct by suggestion in suggestible individuals states which will be quite similar to sleepwalking. If I recall before a subject of this kind the characteristics which he had during a previous somnambulism, he will fall asleep again, because the suggestion will make him begin that series of psychological phenomena which constituted his second state. It may even be possible to lull people who are not used to sleepwalking in this way; but, in this case, the hypnotic state will be, we believe, less frank and less clear, and will leave memories, just as the simple change of personality of our subjects leaves them with the memory of a dream. True somnambulism takes its point of departure in a modification of the sensory-sensory state; somnambulism by suggestion is only a more or less exact reproduction.

All the preceding suggestions, although more and more complicated, were nevertheless easily understood; we must now point out facts that are much more curious and which, in the current state of the psychological sciences, are much more difficult to explain: they must at least be noted ¹. I mean those suggestions which seem to act not on the sleepwalker's thought, but on his body. All magnetizers and even all physicians have given examples of this influence of a thought on the body; it would take a volume of quotes to recall the miraculous healings of saints and apostles ² and cures with bread crumb pills baptized with beautiful names ³. We will only insist on one point that we have seen for ourselves. "A magnetizer can do, Charpignon ⁴ already wrote, that a fictitious pain produces a trace of injury or that an ideal sinapism reddens the skin." "At the will of the magnetizer the blood of a bleeding stopped flowing or began to spill again ⁵." We know in a more recent period the decisive experiments of M. Focachon in Nancy, of MM. Bouru and Burot in Rochefort. I repeated a few of these experiments, for example the suggestion burn on Leonie and on Rose. It produced on the first a strong redness and swelling of the skin, and on the other a real burn with white bubble and hardened crust the following days. But the phenomenon that particularly interested me and which is easier to reproduce, is simply sinapism by suggestion. It occurs slowly with Léonie, but more rapidly with Rose, almost under the eyes; in a few hours the skin reddens sharply in the designated area, swells and gives the appearance of a real strongly marked sinapism, the trace of which persists even much longer than usual.

This swelling of the skin is closely related to the thought of the somnambulist; first it occurs at the place that has been designated and not at another; then it affects the form that the subject gives it. I told

¹ See a more complete study of the *Production du somnambulisme par suggestion*, Part II, ch. IV.

² *Journal magnétique*, 1849, 524. – Grellety. *Du merveilleux, des miracles et des pèlerinages au point de vue médical*, 1876, 38.

³ Ellis. *Aliénation mentale*, 1840, 155.

⁴ Charpignon. *Physiologie magnétique*, 364.

⁵ *Journal. magnét.* 1852, 446.

Rose one day, who was suffering from hysterical contractures in her stomach, that I was placing a sinapism on the diseased region to cure her. A few hours later I noticed a swollen mark of a dark red having the shape of an elongated rectangle, but, singular detail, of which no angle was marked, because they seemed cut clearly. I remarked that her sinapism had a strange shape: "So you don't know, she told me, that we always cut the angles of Rigollot papers so that the corners don't hurt." The preconceived idea of the shape of the sinapism had determined the size and shape of the blush. I then tried another day (sinapisms of this kind very easily removed his contractures and painful points), to suggest to him that I cut out a sinapism in the shape of a six-pointed star; the red mark had exactly the shape I said. I ordered Leonie a sinapism on the chest on the left side in the shape of an S to remove her nervous asthma. My suggestion cured the disease perfectly and marked a very neat large S on the chest. We cannot now point out other examples of this action of thought on the body; that would be to depart from the limits which we have assigned to this chapter, for we are speaking here only of suggestions which have been carried out consciously during the duration of the same psychological state.

The other phenomena which occur by suggestion, the therapeutic actions, the contractures and those phenomena which one could call negative, the anesthetics, the amnesias, the paralyzes, seem to us to require a particular discussion and to have to be examined separately. The phenomena which we have just described, although very different from each other, nevertheless form a group having common characteristics and can be explained in the same way.

III. Various psychological theories on suggestion

The ancient magnetizers explained the submission of the somnambulist to the one who had put her to sleep by the mixture of nervous fluids; some doctors and even some philosophers today do not hesitate to explain in all its details the physiology of the nervous centers during hypnosis. I admire this courage, because I do not feel able to imitate it and I will stick to the only psychological studies which have been made on this curious phenomenon.

All these psychological assumptions present a very clear characteristic, they are very little different and obviously converge one towards the other. This is a proof of their truth, and, without claiming to change them completely, we will only try to limit some exaggerations and to clarify doctrines which belong to all. A scientific explanation can never be complete; it is simply to relate one phenomenon to another and to change the terms of a problem. On what other phenomenon does docility to suggestions depend? this is all we have to look for, and we have to do this research by ordinary methods, observing the psychological facts which accompany the phenomenon of suggestion, which disappear with it and which always remain proportional to the power of the suggestion itself..

1st *The suggestion considered as a normal psychological fact.* – Several authors have tried to assimilate the phenomena produced by suggestion to those which normally occur in healthy men. M. Bernheim accumulates, in a very curious chapter, all the automatic actions which take place during normal life, in order to lead us as if by an insensible gradation to the phenomena of suggestion. Mr. Paul

Janet recommends a method of this kind and compares the acts suggested to giggles, to the yawning which is communicated from one to the other, and to other identical facts, in order to reduce them, he says, wonderful characteristic.

There is, without a doubt, in these comparisons a great truth to which we have already alluded, and that is that no fact can be absolutely and completely abnormal and that, in some ways, it is always only the development of a regular fact. But this is a proposition which must not be exaggerated, unless one runs the risk of confusing any kind of disease with the most perfect health. Without speaking of some accessory differences which seem to me to exist and to make normal automatic phenomena less conscious than those produced by suggestion, I see, between the two groups of facts, a difference so enormous in importance and in complexity as to does not seem to me to be able to be erased. Authors who carefully research these facts in normal life always cite the marching, the blush of the timid, the giggles of young girls, and the contagious yawn: but there is an abyss between these facts, however they may be real, and complex hallucinations or personality changes by suggestion. In short, if I quietly tell my neighbor to go get me a bouquet that doesn't exist at the back of the room, he will laugh at me. If I tell Marie, she runs to get it, brings it back and still finds it smells good. What is the psychological difference between these two people? This is the problem with suggestion.

This doctrine, which assimilates the phenomenon of suggestion too much to normal automatism, presents another rather serious drawback. It disposes us to consider suggestion as a primitive fact existing naturally, independent of any other phenomenon and capable on the contrary of explaining all the others. Anesthesia, amnesia, personality change, sleepwalking, etc., everything becomes a result of suggestion. As for the suggestion itself which explains everything, we do not seek its origin, for it is a given natural fact.

Without specifying the authors to whom this doctrine is attributed and whose opinions, I believe, have been exaggerated, I cannot share or understand this view. In fact, a normal person is not suggestible or he is very little suggestible for two or three insignificant acts, to say that we are going to put him to sleep by suggestion and then take advantage of his suggested sleep to make all the possible suggestions, that is to say that we will by suggestion make a man who is not suggestible: it is something that I cannot admit. Suggestion can neither create nor destroy itself: any more than it is logical to believe that one can suggest to an individual to be suggestible when he is not, one cannot say that we are going to suggest to a patient not to be suggestible anymore when he is. It is by automatic obedience that he will pretend to disobey you; he will not have regained voluntary consent, any more than the former will have lost it. Suggestion is like education, it makes use of previous dispositions, it does not create them; just as there are animals and even men rebellious to education and who cannot be transformed by it, so there are men, and fortunately the majority, who are rebellious to suggestion and who do not undergo it only after an accidental and foreign modification of their psychological organism. "This claim to explain everything by suggestion", said Durand (de Gros), taking up ideas that he had expressed very well in his *Cours de braidisme*, "is obviously excessive; in fact, in order to suggest someone, it is not necessary to have made him suggestible, that is to say to have arranged him, either by means of mesmeric passes, or by means of Braid's aspective process to be subjected the influence of the suggested idea. There is therefore before suggestion and above it, something which is not it, it is the magnetic or braidic operation which must

create in the individual the prior state of suggestibility ¹.” Although there are reservations to be made to this opinion, which seems to relate only suggestion to somnambulism, it seems to us to be correct in its generality: it is necessary to seek what is the state, the abnormal characteristic on which the phenomena depend, that we have listed.

2nd *The suggestion explained by the somnambolic state.* – The passage from Durand (de Gros) that we have just quoted shows us the most widespread hypothesis according to which the phenomena of suggestion depend on the somnambolic state. On the one hand, this state would be defined only by the ability to receive suggestions, on the other hand, the suggestion would have all the more power as the somnambulism would be deeper. The problem of suggestion should therefore be reduced to the problem of sleepwalking, and the explanation of the latter should also apply to the former. “The main fact of somnambulism”, said Mr. Richet, “is automatism which takes different forms according to the person and the process... Automatism or bulimia characterize somnambulism from the psychic point of view as from the somatic point of view ².” “Sleepwalking, Despine said, is characterized by the automatic activity of the brain alone during the paralysis of its conscious activity which manifests the ego.” “In sleepwalking, Beaunis said, automatism is absolute and the subject retains spontaneity and will only what his hypnotist wants to leave him. He realizes in the strict sense the famous ideal, he is like the stick in the hand of the traveler. ³” Finally M. Bernheim, whose thought I would not like to force, for he is one of those who most insisted on the importance of suggestion apart from somnambulism, also seems to incline towards this opinion when he writes repeatedly that “the hypnotic state exaggerates the normal suggestibility ⁴”, that “in somnambulism the suggestion reaches its maximum effect ⁵.” Doubtless there is in this hypothesis which connects suggestion to the state of somnambulism a certain degree of truth which should not be denied: suggestibility is frequently encountered during hypnotic sleep, especially at the beginning, and this it is even during this state that it has been observed and studied for the first time. From a practical point of view, it is sometimes useful to hypnotize a person to make suggestions. But, from a theoretical point of view, this assimilation between the two phenomena seems to me to present drawbacks and lead to an inaccurate interpretation of somnambulism. We explained this state in the previous chapter without worrying about the phenomena of suggestion, we must now show that they are really independent of them: suggestibility can be very complete apart from artificial somnambulism; it may be completely absent in a state of complete sleepwalking; in a word, it does not vary at the same time and in the same direction as this state itself.

Natural somnambulism already presents some differences which separate it from hypnotic somnambulism; however, extremely clear phenomena of suggestion have been observed in this state. The most decisive observations from this point of view are those of Dr Mesnet. By placing various objects in the hands of an individual during his attacks of natural sleepwalking, he suggested the idea of fighting

¹ Durand de Gros (Dr Philips). *Revue hypnotique*, I, 351.

² Ch. Richet. *L'homme et l'intelligence*, 530.

³ Beaunis. *Revue philosophique*, 1885, II, 116.

⁴ Bernheim. *De la suggestion*, 1886, 166.

⁵ Id. *Ibid.*, 227.

with guns, writing a letter or singing in a café concert ¹. In another observation, he relates that he could speak to a woman during an attack of natural sleepwalking and that he told her to walk around the garden twenty times; she answered mechanically “Yes” and left as if launched by a spring ²... We also know the effects of suggestion on the dreams of sleeping people, and the curious experiments of M. Maury ³. But these states are usually considered to be quite the same as hypnotic sleep, and the existence of the suggestions during dreaming does not appear to be anything new. This is not absolutely correct, for there are very noticeable differences between dreaming and sleepwalking, and I really cannot understand this habit of several authors of equating the state of a hypnotized subject with actual sleep.. If we pretend that Lucie is sleeping when she is making all her noise, we might as well say that we sleep all the time, because we are never awake again. But it is easy to see suggestibility in quite different states.

We will meet her in particular in drunkenness and in her last result, alcoholic delirium. Here is an individual, P., who entered the hospital in a state of subacute alcoholic delirium; he screamed all night when he saw filthy animals running around on his bed and witnessed a massacre scene where everyone in the hospital was covered in necks. This morning he is calm, sees the room as it is, recognizes people and speaks fairly sensibly. Well, all you have to do is say abruptly: “Here, is it possible? a rat on your bed! chase it, catch it.” Here he jumps up, shakes his blankets, gets up and runs after the imaginary rat. “Here is a key; go open this cupboard and bring me a towel”; he grabs the imaginary key, runs to a wall where there is no cupboard, then comes back, holding out his empty hands, and says to us: “Here is the napkin.” I show him flowers in a vase, I paralyze him, make him blind, all with a single word. Is this individual sleepwalking? Not at all, he always remains in his normal state, keeps a complete memory of everything he has said (although the memory of the suggested acts quickly fades) ⁴. The suggestion is happening here without anyone ever trying to hypnotize it.

It is the same in the intoxication of hashish: I will not report my own observations, because I could observe this intoxication only once and under bad conditions; moreover, the descriptions of Moreau (of Tours) are too beautiful and too precise for me not to quote them: “Left to itself, hashish will be influenced by whatever strikes its eyes, its ears: a word, a gesture, a sound, the slightest noise will give his illusions a determined stamp; a few words turn from joy to sadness and all previously so joyful ideas become dismal ⁵...” A young man who has taken hashish is convinced that he is dying, he is shown a bolster hung on the wall: “It is you, they say to him, who is hanged like this... – I knew it well”, he said, “it’s terrible to die so young ⁶.” This is a very clear example of a suggestion; but this only happens when the delirium is very strong; otherwise the ideas only cross the mind and do not attach themselves to it.

It is useless to dwell on other pathological states, such as certain attacks of hysteria or catalepsy, in which the subjects repeat the words they hear, take the poses they see on the paintings and imitate each other.. We have already described some of these phenomena. It is better to stress the suggestibility, which sometimes presents itself very clearly during apparently quite regular and normal states.

¹ Mesnet. *Automatisme*, 1874, 16.

² Mesnet. D’après Gilles de la Tourette, *Hypnotisme*, 239. – Cf. Taine. *Intelligence*, II, 18.

³ Maury. *Le sommeil et les rêves*, 124, 128, 394. – Joly. *Imagination*, 58, 120.

⁴ Cf. Part II, ch. I.

⁵ Moreau (de Tours). *Le haschich*, 156.

⁶ Id. *Ibid.*, 93.

We know that some people are suggestible in the waking state without having undergone any modification of their consciousness; this fact, already noticed by certain magnetizers, has been the object of recent studies by M. Richet, M. Bernheim, and several others. Its importance cannot be overstated. Here is a person, Marie, who is twenty years old, who is intelligent, and seems to have, like everyone else, this freedom of which we are so proud. Without touching her, nor letting her sleep, I approach her, saying in a calm and clear voice: "There is a big bouquet of roses in the left corner of the room, Marie, go get it for me." Here she is, running to the end of the room, bending down, seeming to bring back a bulky object with both hands and tilting her face from time to time to feel it; she approaches me. "So this beautiful bouquet is yours", she said, "I pay you my compliments, because it smells very good." I then answer: "I brought a good peach for you, here it is on the table, offer half to X... and eat your piece." "Oh! how fat it is! I'm not going to eat it all." She takes a knife, cuts through the air, offers a quarter to X... who remains stunned, and eats with the air of the greatest contentment. These experiments have the same result on Rose, on M... and on many others, with a little less liveliness perhaps. They do not give quite the same results with Lucie, Léonie or N... who, as we will see, carry out these kinds of suggestions unconsciously. But, it will be said, Marie is a person who has often been hypnotized by me, and that is why she remains subject to suggestion.

Either, I can cite three other observations which seemed to me extraordinary: one, of a thirty-year-old woman, Be, who was hypnotized ten years ago and who has not been since; the other of a young woman of twenty-two who has never been put to sleep by anyone, and the third of a young girl of sixteen whom I have already mentioned under the name of Blanche, and who no more. All three are real conscious automatons in the waking state. All you have to do is get the idea of an act into their heads in any way and it will be immediately performed. They keep the limbs indefinitely in the positions in which they are placed, imitate the movements made in front of them, immediately experience any kind of hallucination. Be sees me come out of the room and come back through the window; she thinks she hears me talking to her through the wall, while I stay beside her. Blanche, to whom I told that an elephant was entering the room, moves away to make room for him and amuses himself by handing him bread so that he can take it with his trunk. In short, they are more suggestible than the most docile of sleepwalkers. And, I repeat, they are absolutely not sleepwalking. This state is a second existence interrupting normal life and leaving no memory: these women do not change their existence, always remain in the same state, do not lose a memory. Two hours later, Be is still wondering how I managed to get in through the window without breaking anything.

I am disposed to believe that this suggestibility in the waking state, in the interval between somnambulisms or even without there being any somnambulism, is frequent enough especially in neuropaths, to designate them by a generic name. I have observed it on about twenty people and, if one seriously sought this characteristic, it would be found in almost all patients. This is what allows me to understand the production of sleep by simple verbal affirmation which has been talked about a lot in recent work. Since these individuals, without any special preparation, do whatever they are told, it is easy to understand that when they hear about sleeping, they put themselves in the position of a sleeping individual, keep the attitude and sometimes actually fall asleep. As we have said, this is not true sleepwalking; there are usually, unless special education, neither the variations of the sensibility nor the characteristic memory disturbances. It is always the same individual that we have in front of us; only he keeps his eyes closed and takes on an idiotic air because he is playing the scene of sleep, just as he was playing the scene of laughter or tears earlier. He is neither more nor less suggestible than earlier, he will

dream of whatever one wants, but previously he saw many elephants. He will wake up with a word, that is, he will change his attitude, just as he raises his arm if told to do so.

We are often mistaken, and we believe we have put an individual in a state of somnambulism, although we have not modified him in the slightest. We simply observe a docility, a passivity that we attribute to the alleged sleepwalking, because we did not investigate whether they did not exist exactly alike before sleep. This is how things are with Blanche – instead of suggesting that she walk or say her prayer, I tell her to sleep, and she falls back looking like a sound sleeper. On the surface, this phenomenon seems to prove two things: the production of sleepwalking by mere suggestion, since it can speak and act as a sleepwalker, and secondly, the identity of sleepwalking and ordinary sleep. In reality, Blanche is neither in a sleepwalking nor even in a state of true sleep. Its existence is not interrupted by a new life and its thought is not suppressed: it has remained identically in the same state. I don't know if she would be susceptible to real sleepwalking, but to verify this she would have to be subjected to other procedures capable of producing a more real modification in her consciousness.

Let us now consider the problem in another way and ask ourselves whether sleepwalking, when it exists and can be verified by other characteristics, is always accompanied by a high degree of suggestibility. If suggestion often acts outside of sleepwalking, is it at least always all-powerful on sleepwalkers? It must be recognized that there are very suggestible individuals during their hypnotic sleep, especially at the beginning. If we put them to sleep quickly at long intervals, if we wake them up shortly after entering sleepwalking, in short, if we do not give the second existence time to develop and complete, we will not see than those beginnings of somnambulism in which suggestion is all-powerful. But if we resign ourselves to devoting more time to the study of sleepwalking, we will do well, at least that's what seemed useful to me, not to rush or push the subjects too much and to keep them sleepwalking for a long time, we will then see very interesting modifications. Most of the authors ¹ insist on the inertia of the subjects, incapable of making a spontaneous movement and who by themselves think of nothing. This is because they did not go beyond in their studies this first period of somnambulism, this almost cataleptic state in which certain subjects remain long enough. When the second existence is complete, the subject is far from being inert, he moves, wants to get up and walk, thinks of doing a thousand follies, and is often, like Léonie or Lucie, very difficult to maintain.

At this point, the suggestions are far from all-powerful and can provoke any kind of resistance. "The awakening of ideas", says Mr. Charcot ², "is far from being as partial as in catalepsy; there is a tendency to reconstitute the ego and there may be resistance on the part of the subject." Certainly a self is reconstituted; it is more or less different from that of the day before, but it exists; "he has caprices which it is sometimes impossible to disturb him ³"; he discusses the ideas that we are trying to impose on him ⁴ and sometimes he eludes by ingenious means ⁵, sometimes he resolutely rejects the orders that one wants to give him. This resistance is variable according to the acts which one commands; it hardly exists if the

¹ Cf. Paul Richer. *Op. cit.*, 711.

² Charcot. *Maladie du système nerveux*, III, 339.

³ Demarquay et Giraud-Teulon. *Recherches sur l'hypnotisme*, 1860, 21.

⁴ Cf. Fontan et Ségard. *Médecine suggestive*, 29, 192. – Ribot, *Maladie de la volonté*, 137.

⁵ Fontan et Ségard, *ibid.*, 178. – Cullerre. *Magnétisme*, 268.

act is insignificant; it is very large if the act is painful or simply unpleasant for the subject. I was never able, by conscious suggestion, to make Leonie kneel during the somnambulism; I have never succeeded in getting Lucie up from her bed when she is lying down. "This resistance also depends on the moral strength of each individual which is not equal in all men ¹," nor among sleepwalkers, it should be added. So I am not very frightened by the great social danger which has been claimed to be found in hypnotic suggestion. I completely share the opinion expressed on this subject by Mr. Gilles de la Tourette, after a very complete study on this resistance of sleepwalkers. "All these suggested crimes only appear simple in a laboratory where the daggers are made of cardboard and where the pistols only go into the subject's imagination ²." As soon as the act becomes a little serious, as soon as the subject no longer has absolute confidence in his magnetizer, he resists, refuses to perform the act, and, if he can't do better, a big seizure begins, which nervous women always do when embarrassed.

If sleepwalking subjects are thus capable of resistance, they are also capable of voluntary consent. Very often the somnambulist does as he is told out of a kind of complacency which is inspired by various reasons: first, she almost always has some sympathy for her magnetizer and does not like to argue with him, then she is very lazy and does not want to try unnecessary resistance, finally she herself enjoys experiments and often takes to heart to make them succeed. In general, therefore, sleepwalkers put too much goodwill into doing what is asked of them. But an act carried out following a voluntary consent, out of complacency, is not a suggestion: so it has often been taken for suggestions what was not or what was only 'in part only. As soon as sleepwalking is a little developed, we therefore see resistance and voluntary consent to modify the acts performed by suggestion.

But a much more important remark is furnished to us by the study of certain subjects in certain particular somnambulisms which one can reproduce at will. There are perfect somnambulisms, indisputable from all points of view, in which all kind of suggestibility has completely disappeared, and this even in subjects who are in the waking state extremely suggestible. Several authors have already noticed that some somnambulists, in some states, have great freedom. Puységur already noted the relative independence of his somnambulist ³. Liébault remarks that you have to choose your moment to make suggestions, and he adds that, if they are inappropriately hurt when the sleepwalker is not concentrated, that he talks to everyone, we usually fail ⁴. Doctor Philips ⁵, who likes to forge words, clearly distinguishes a first somnambulism with allonomie (obedience to others) and a second somnambulism with autonomy (spontaneity and independence): he calls, I don't know why, this second hyperphysiological somnambulism, while, in my opinion, it is the one that is the most physiological or normal. M. Bernheim, who has shown very well that the somnambulist was not a pure physical automaton ⁶, also remark, with regard to the thesis of Dr Chambard, that the degree of suggestibility is not always related to the apparent depth of sleepwalking ⁷. Finally, Mr. Azam expressed the same truth in a complete

¹ Binet et Féré. *Magnétisme animal*, 73 and 214.

² Gilles de la Tourette. *Hypnotisme*, 375.

³ Cf. Gilles de la Tourette, 144.

⁴ Liébault. *Le sommeil et les états analogues*, 350.

⁵ Dr Philips. *Cours sur le braidisme*, 97.

⁶ Bernheim. *De la suggestion*, 149.

⁷ Id. *Ibid.*, 10, Cf. 71.

manner and at a time when documents on this subject were not abundant, when he said about Felida: “She is a total sleepwalker ¹”. “There are more and more complete degrees of sleepwalking”, in which the notion of the outside world and independence can be perfect; but these observations have remained isolated, have not been reproduced voluntarily, and do not seem to have altered the authors’ opinion on the relationship between sleepwalking and suggestion.

We believe that one can observe and even reproduce at will, very identical sleepwalking to Felida’s. We have in fact described, from several subjects, a series of increasingly profound somnambulisms, which it is sometimes very long and very difficult to produce, but in which the subject gradually recovers all the sensitivities and all the memories he seemed to have lost. In the last of these states, the subject, however ill and weakened as he is in the waking state, becomes, from the point of view of the senses and of memory, absolutely identical to the person in the best health and the more normal. When I first observed this state in Lucie, I wanted to repeat the ordinary experiences of suggestion that we have with sleepwalkers; Lucie seemed surprised, did not move and ended up bursting: “But you think me very stupid to imagine that I am going to see a bird in my room and run after it.” It should be noted that she had just done this previously during her first sleepwalking, but now all suggestibility was gone. The same is true, perhaps a little less clearly, for Léonie: very suggestible at first somnambulism, she is less and less so as she sinks into the second. The phenomenon is especially curious in Marie and in Rose, first of all because the passage from one state to another does not happen, as in Lucie, by a twenty minute sleep and a sudden awakening, but is accomplished slowly and by degrees, then because they are entirely suggestible in the waking state. We see these women so hallucinating, so passive when awake, resume, as they enter this so-called slumber, not only all of their senses and all of their memories, but all of their spontaneity and independence. The very catalepsy of the limbs, their immobility in the position in which they are placed, which always exists as soon as the individual is very slightly suggestible, also absolutely disappears. This characteristic, it is true, and all the suggestibility reappeared when this particular somnambulism was destroyed to bring the subjects back to their waking state.

Jules Janet tried to reproduce these experiments relating to superior sleepwalking on a famous subject, Witt; he, as I had been led to do, prolonged the passes after the first sleepwalking and even after the subject’s lethargy and he obtained exactly the same results, which he had not expected ². This woman, whose somnambulism had served to study the whole theory of suggestions, had an easily produced and absolutely ignored somnambulism, during which it was impossible to make any suggestion.

These last phenomena seem important to me: they show us that, if somnambulism is a second existence, it is not necessarily a weak existence, without spontaneity and without will. The reasons which make a personality weak and which subject it to all suggestive influences may or may not be found during the state of somnambulism. It is therefore neither in the definition of somnambulism nor in the causes which provoke it, that we must seek the explanation of suggestion and its singular power.

¹ Azam. *Double conscience*, 133, 135.

² Jules Janet. *Hystérie et somnambulisme d’après la théorie de la double personnalité*. Revue scientifique, 1888, I, 616.

2nd *Psychic hyperexcitability*. – Another interesting hypothesis and admitted more or less clearly by many authors has been proposed, but only a few lines in the book by MM. Binet and Féré: “We believe, they say, that we must seek in a second phenomenon, psychic hyperexcitability, the cause of the capacity for suggestions. In our opinion, if the suggested idea exercises absolute power over the intelligence, senses and movements of the hypnotic, it is above all by its intensity ¹.” M. Binet returns to this supposition in more detail in an article, more curious than convincing, on the intensity of mental images ². It seems to me that the facts pointed out in this study can be admitted, but interpreted otherwise.

First of all, I will have some reservations to make which one will perhaps find quite abstract and so to speak metaphysical on this expression – “the intensity of psychological phenomena.” In a very remarkable discussion about psychophysics, an anonymous mathematician, who is at the same time a philosopher ³, pointed out that the sensations can neither equalize nor add up; that in short, two sensations, even though they were both *minima*, were not comparable as mathematical units. No doubt the external causes of our sensations, sound, temperature, etc., and even the effects of our sensations in the external world, movements, muscle contractions, etc., are measurable and may have different intensities, but the sensations themselves, considered from their internal side and really only real, have corresponding quantities? This does not seem obvious to me. The temperature goes from 0° to 15° and from 15° to 30°, and my feeling goes from cold to warm and from warm to hot. Can we say that my feeling of hot is a multiple of my feeling of cold? It is a difference in quality which undoubtedly corresponds, according to our way of scientifically representing the outside world, to differences in quantity, but which in itself is not. Before arguing that one image is more intense or less intense than another, it would be good to prove to us that the two images have remained identical in nature and that a difference in quality is not taken for a difference in quantity.

This is precisely what happens, in my opinion, in most of the examples cited by M. Binet. A subject, he tells us, can have in his mind ideas which do not appear to him to be hallucinations or which do not result in actions: he can think of a dog without seeing it, hear about an action without execute it; but if you insist, if you order longer, the idea becomes hallucination and action. It is that at the beginning she must have been weak and she is now stronger ⁴. I think, on the contrary, that this difference in the results is due to the fact that the idea is now quite different. Psychological theories which correctly equate image and sensation are only true for simple phenomena: the image of the color blue (when it is not a simple word) is identical in nature to the sensation of blue. But we must not conclude from this that the idea of a dog is the same thing as the sight of a dog and that there is only a difference of degree between the two. These are two sets that differ enormously in the quality and complexity of the images that are part of them. The idea of a dog may be only an abstract relation between various images or various characters; it can be a simple word of a different nature depending on the person, or it can be only a very vague image of uniform color, in a word something very simple. The real sensation or hallucination of a dog is a set of visual, tactile, even auditory images that are very varied. To go from one to the other, it is necessary, not to reinforce, but to complete the image. It would be very clumsy, in front of a subject who has difficulty

¹ Binet et Féré. *Magnétisme animal*, 130.

² Binet. *L'intensité des images mentales*. *Revue philosophique*, 1887, I, 473.

³ Cf. *Revue scientifique*, 1875, I, 876.

⁴ Binet. *Op. cit.*, 475.

seeing hallucinations, to repeat, even while shouting very loudly: “You see a dog, you see a dog” one would achieve nothing. You must specify and complete the image “You see his ears, you see his tail, you see his long yellow hairs, you hear him barking”, or, if we are dealing with a subject who is capable, he must be given time to develop his own image. If, in a quick conversation, I tell Léonie that there are sheep in the meadow, by the river, etc., with each word I awaken an incomplete and vague image that will not be a hallucination -, but if after having said: “There is a sheep in front of you”, I stop abruptly and no longer speak to him; her idea develops little by little, she sees new details, smells of the fleece, hears the cry and ends up saying – “This is a real sheep,” meaning a complete sheep and not a stronger image of a sheep. The complexity of the image gave birth to its objectivity ¹. It would be the same for the acts which will be carried out or will not be carried out, according to whether the motor image will have or will not have the opportunity to complete itself sufficiently.

M. Binet also seeks evidence of his theory of mental image intensity in the study of post-hypnosis suggestions, which we cannot now examine. He remarks, which is very true, that the mere idea of an act indicated to the subject during the vigil is not sufficient to perform it; it is also necessary that the act was actually suggested to him during sleepwalking and that this suggestion not been erased by a fit or some other incident, and he concludes from this that the idea suggested during sleepwalking is more intense than if it was only indicated during sleepwalking and forgotten after waking up and the memory of which persists: one could just as well argue the opposite. In reality, the idea suggested during sleepwalking is not represented in the same way, nor by the same images, is not associated with the same memories, is not part of the same consciousness as the idea indicated during the eve.. She is quite different and not stronger.

Finally, M. Binet quotes and interprets an observation that I myself made in the past ². Having noticed that Lucie only obeyed me and wanting to explain this electivity to me, I had asked another person, MM... to make a suggestion to Lucie on my behalf during the day: “Mr. Janet, he had said, wants both of your arms to go up in the air.” The command had been executed immediately, whereas when MM spoke in his own name absolutely nothing was done. M. Binet, in relating this little fact, says that the command given in my name was more intense. I was very surprised when I read this explanation, for M. Binet seemed to me to forget one of the most ingenious and true theories that he himself had helped to establish, that of suggestions with a point of reference. When a subject has been told that there is a portrait on a piece of paper, why does he see it on that paper and not on another? Is it because the image of this particular paper is more intense? No, the author had told us very well that the portrait was associated with a certain aspect of a paper and that the image was only awakened by this aspect. Why not say in the same way that, by habit and training, Lucie’s suggestibility has been, so to speak, contained and her obedience linked to a reference point always the same which is my name and my person. It is by its quality and not by its intensity that my name brought about the act. Lucie, in obeying a stranger who commanded her in my name, was mistaken (unconsciously it is true, but we will see that it matters little), like a sleepwalker who would see the portrait on another paper than on the designated card. Moreover, in the sleepwalking that followed this experience, she was furious at her automatic error and promised herself not to be caught in it again. She kept her word and this experience never succeeded again. Errors of this kind are not rare among somnambulists; I had ordered N... to fall asleep when I raised my arm. She falls asleep when

¹ Cf. Souriau. *Sensations et perceptions*. Revue philosophique, 1883. II, 75

² Binet. *op. cit.*, 476.

somebody lifts their arm, this is unconscious stupidity of which Lucie and Leonie are quite incapable. Is the image of a stranger's arm rising more intense for N... than for Lucie? On the contrary, it is less clear since this arm is confused with mine.

I do not insist on the paralyzes and anesthetics which M. Binet explains by a reduction of the images and which seem to me to be linked to a completely different cause^{*}; but I wish to dwell on a particular expression of this author. Suggestible individuals, he says, have *psychic hyperexcitability* that gives rise to hallucinations and impulses. The expression has its importance, because it is found in different authors; it is already the same idea which is found in the morbid psychology of Moreau (de Tours), when he attributes the origin of impulses to a *psychic excitation*. This word, completely inaccurate, as we are going to show, contributed greatly to engage the author in his famous paradox on genius and madness, "so easily do we let ourselves be sucked in by words." Without talking about these consequences, let's examine the expression itself. Can we say that suggestible individuals are, from a psychological point of view, hyperexcited? But these are people overwhelmed with anesthesia, amnesia, paralysis of all kinds, which has never been a proof of excitement. Lucie is a total anesthetic, Rose anesthetic and paraplegic, Marie semi-anesthetic, blind in one eye and deaf in one ear, Blanche has all her senses reduced to a minimum, etc. How can we say that, if Lucie obeys my voice, it is because the psychological phenomenon, here the auditory image, is more intense in a hyperexcited consciousness? So she hears my voice like a cannon shot; but no, she's half deaf and she barely hears me. Can we say that Marie imitates my movements, because this visual phenomenon is more intense in her than in another? but she is almost blind and reads only the largest letters in the painting: singular manifestations of hyperexcitability. This excitement is not in the senses, one would say, it is in the whole of the mind. Yes, but what then to think of the example of Blanche, the most suggestible of all those I have seen, who is almost an idiot, remaining inert all day and only resting at mealtimes.

In a nutshell, actually consider suggestible people and you will find them weak, hypo-excited, so to speak, and not hyper-aroused. But now let's do a reverse check: let's really excite these individuals by the agents who fulfill this role. I have often used passes for this purpose, not because I give them special importance, but because, in practice, it was an excellent process for arousing the sensibilities of the hysterics. But if this method displeases, let us employ another. The best would undoubtedly be the electric bath by the static machine, but psychologists do not yet have well-set up laboratories at their disposal. Let us be satisfied to pass in the arms, the legs, the trunk of an anesthetic subject, like Rose, currents of medium intensity, or more simply put around his forehead a certain number of plates of lead or tin which act on her – after a certain time, sometimes quite long, and if no accident has occurred, she will recover all her sensibilities. It is now that she has psychological hyperexcitability, she feels the slightest impressions and finds all the memories of her existence. Well, as we have already noticed, it is absolutely no longer suggestible. His hearing, which is hyperexcited since it captures the slightest sounds, no longer induces hallucinations or impulses; his sight, which has become very keen, provokes no imitation. The subject has become normal from the point of view of will, as well as from the point of view of sensitivity and memories. This fact is verified with Lucie and with Marie; it allows us to affirm that suggestibility is more a proof of the weakness than of the strength of psychological phenomena.

^{*} Cf. Part II, ch. II.

IV. Amnesia and distraction

It is the theory already expressed on several occasions by M. Richet which seems to us to have the most probability and to which our own experiences lead us to join. When he exposed a few examples of these curious changes of personality by suggestion, M. Richet said that there were two essential phenomena here: first an amnesia of all the notions which constituted the old personality, then the formation of a new idea of the personality: “they first lost the notion of their former existence, since they live, speak, think absolutely like the type presented to them ¹.” Later, taking up the same question in a more general way, he said that suggestibility or the abolition of personal will would no doubt be explained by a kind of amnesia. “To stop a thought, you need another which puts an obstacle to it; to hinder one feeling, another stronger one must arise. We can assume *that it is the simultaneous memory of two feelings or two thoughts that is lacking* ².” The assumption seems to me still remain true despite all the new observations.

It is in fact easy to notice that when the subjects give in to a suggestion, they have forgotten everything and cannot recall any memory opposed to the idea that invades their consciousness. When Be... sees me come in through the window, she forgets that the window is closed, that the curtains are drawn, that they cannot be opened from outside, etc. When Blanche sees the elephant I tell her about, she forgets that we are in a study, that the front door is small, that there is a staircase, a corridor through which the elephants hardly pass, etc.. When Rose climbs with me to the top of the Eiffel Tower, she forgets that the tower is not finished, which she just said the previous moment. Conversely, when the subjects are no longer suggestible, they present, as their first character, a striking return of these antagonistic memories. We remember this word from Lucie that I quoted when, in her second somnambulism, she laughed at the suggestions: “So you think me very stupid to imagine that I’m going to see a bird *in my room*.” So she remembers that she is in her room, the birds do not enter, etc. Finally we can artificially make a final check: by supplying ourselves to the subject these memories that he has lost, we will stop a suggestion which, without this precaution, would be realized. Blanche, on my order, sticks out her tongue; I point out to her that she is in front of her father, she immediately stops this movement. She thumbs her nose at me, I tell her it’s not right, and here’s the hand that drops. But these antagonistic images must sometimes be provided in a fairly large number and above all from the start of the suggestion in order to be able to stop it. These different observations clearly prove that *considerable amnesia always accompanies acts performed by suggestion*.

Thus amnesia would be the main cause of suggestion, as it is the essential reason for somnambulism, so memory plays a big role in our psychic life. Only amnesia, like memory itself, cannot be a primitive phenomenon; we have already noticed this in connection with the variations of memory during the various somnambulant states, which we have yet to come back to now. Just as memory depends on sensation, amnesia depends on anesthesia, and it is because a person is no longer able to feel a certain

¹ Ch. Richet. *L’homme et l’intelligence*, 236.

² Ch. Richet. *L’homme et l’intelligence*, 529.

sensation that he no longer finds the image of it. If our subjects have memory loss when executing a suggestion, they should have corresponding anesthesia.

For some of them, the fact seems quite easy to verify, since they constantly present with considerable and well-known anesthetics. So I don't think I'm going very far, anyway, I summarize my own observations by saying that people who are clearly suggestible, at least in the way we're studying now, mostly have serious anesthetics. Alcoholics have most of the skin surface insensitive; M. Mesnet's natural somnambulists had lost several senses; the hysterics I studied had serious deficiencies in their sensitivity. On the other hand, the cure of their disease is mainly characterized by the return of the lost sensations, and, from this first point of view, one could quite easily say that the *suggestion is connected with the anesthesia* which takes away from the subject not only particular sensations, but still all the memories which are expressed by images of the same kind.

However, the demonstration thus made would be quite insufficient: on the one hand, in fact, there are very suggestible people who hardly have or even have absolutely no hysterical anesthesia. Be... would be an excellent example of this category; suggestible to the degree I have indicated, when we examine them, she has all the sensibilities intact. On the other hand, constant hysterical anesthesia does not explain well the kind of amnesia that accompanies and produces suggestibility. The loss of the tactile sense or the sense of colors brings about the constant forgetting of a certain general category of memories related to tactile or colored sensations, but does not explain the particular and momentary loss of such particular memory which can be expressed by various images. So when I tell Leonie that she is a princess, she first forgets that she is a peasant: this is the necessary condition for the hallucination to develop. It is indisputable; but Léonie's anesthesia does not explain why she is now forgetting her quality of peasant woman which she remembered a moment ago, when her insensitivity was the same.

We must recognize, here again, the existence of a second species of anesthesia less known, but of very great psychological importance. An individual who has normal sensitivity is able not only to exercise all of his senses successively, but also to some extent to enjoy various sensations simultaneously. Placed in a meeting of several people, he can follow a particular conversation, and yet hear a question put to him behind him, see a new person entering and turn around in due course. These are very simple things that suggestible people are completely incapable of. If they look at a person and talk to him, they no longer hear and even no longer see others. Lucie had, in this regard, a very strange behavior: as soon as she no longer spoke directly to a person, she ceased to be able to hear him. We could get behind her, call her out, shout insults in her ears *, without her turning around; you could stand before her eyes, show her objects, touch her, etc., without her noticing. Whether Léonie knits or writes, it is always with the same apparent tension of mind; you can open the door, touch her arms or face, talk to her without her noticing. More singularly, it has under the breasts and on the nail of the thumb hyperesthesia and hysterogenic points whose simple brushing causes cries of pain and even convulsions. When she is thus occupied with a job or a simple conversation, I can knock on her breast or on her thumb without her saying a word. Such anesthesia has often been reported during sleepwalking. Such a sleepwalker hears only the voice of his magnetizer and does not hear the voices of other people; another sees only the light he turns on and not the light that others may have turned on. We will have to come back, if not to the explanation, at least to

* We always reserve for the second part everything that has to do with latent or subconscious action and hearing.

the description of these facts **; let us content ourselves with noting now that this anesthesia is not peculiar to elective somnambulism, it exists to a high degree in all individuals who are suggestible. It is an exaggerated state of *distraction*, which is not momentary and does not result from voluntary attention directed only in one direction; it is *a state of natural and perpetual distraction which prevents these people from appreciating any other sensation apart from the one which is currently occupying their mind*. Note, finally, that when these individuals, in various circumstances now known, cease to be suggestible, this distraction disappears and we can say that it plays a large role in all the phenomena that we study.

Indeed, this distracted anesthesia brings with it a particular amnesia which is precisely what we need to understand the suggestion. Here is an instructive example: Lucia, who stops hearing and seeing people as soon as she no longer speaks to them, also forgets their presence, as can be seen by various features of her behavior. She figures people out as soon as she stops talking to them, and when you force her to pay attention to them again, she says, "Hey, have you come home?" What is more striking is that she no longer takes their presence into account, says her secrets aloud without being held back by the thought of the presence of these people. Leonie is the same, during her sleepwalking at least, because she is not, like Lucie, consciously suggestible in the waking state. She begins by telling me that she only wants to talk to me and that she will not leave me. I make her talk to another person and I stop talking to her, then she forgets me completely and, when that person goes out, she wants to follow her as if there was only her in the world. It is no more difficult to understand now why Leonie, when I speak to her about a princess, has forgotten her situation as a peasant; she is so distracted that at that moment she ceases to have the sensation of her dress, her apron, her bonnet, the only things that can currently remind her of her previous life. The same distraction explains why Marie, no longer seeing the room, the walls, the parquet, forgets that we are in a hospital room and that no one has brought a bouquet. Just as general tactile anesthesia removes all memories linked to the tactile sense, so this anesthesia, variable and momentary for certain objects caused by distraction, momentarily removes all memories linked to the sensation of these objects.

Since, in the phenomena studied so far, this anesthesia and this amnesia caused by distraction relate only to the images opposed to the suggested act, they allow the consciousness of this act itself to remain isolated and consequently more developed.. We know the foolish things we can commit in a moment of distraction; well, taking into account the conditions of its production, a suggested act performed by the subject is the ideal distraction.

V. The narrowing of the field of consciousness

Until now in our studies we have only taken into account the quality of the phenomena which occupied consciousness; but it is probable that psychological existences may present other differences than those which result from the nature of auditory, visual and tactile images. Without speaking of the intensity specific to each image, which appears to us to be unclear, is it not possible, on the one hand, that there are also differences in the quantity, in the number of phenomena psychological which fill these various consciousnesses; on the other hand, that all men are not from this point of view as rich one as the other and have in a given time a very different number of ideas. This is a supposition which seems to us

** Cf. Part II, ch. II, the passage on elective sensitivity.

very suitable for explaining the characteristics of the anesthetics which we have mentioned. Let us first try to expose it in itself and to show that it is intelligible and probable, then we will see how it can explain the phenomena that we are studying.

“The phenomena which are the subject of physiology”, wrote Herbert Spencer ¹, “come in the form of an immense number of series brought together. Those which are the subject of psychology come only in the form of a simple series.” It is, in fact, a fairly widespread opinion that the consciousness of a man contains at the same time only one phenomenon, and that, consequently, the psychological life is constituted by a succession of phenomena following from each other, forming a long series which continues throughout the life of the individual, but each remaining isolated without being accompanied by other simultaneous facts. Without doubt, we have the idea of coexistence and even the notion of objects disseminated in space; but this notion, far from being primitive, would be derived from the notion of succession and from the idea of time. We know how Spencer claims to form the relation of coexistence by the union of two relations of sequence, and how, since Stuart Mill, the English school has endeavored to demonstrate that “time is the father of space”. If we adopt this opinion entirely, as M. Taine seems to do, who regards consciousness as an unextended center, a sort of mathematical point, we will perhaps find it singular to speak again of the number of psychological phenomena in the consciousness of one, given moment; since, at all times, this quantity must be unity. We could, however, still make reservations: as the fine work of Wundt and his pupils on the duration of psychic phenomena has shown, these phenomena do not always follow one another with the same rapidity, and two individuals could still, in one given time, present a very different amount of mental images.

But we do not believe that one can adopt the hypothesis of Stuart Mill and Spencer without restrictions and thus reduce the extent of consciousness. It hardly seems possible to us, despite the curious demonstrations given by English psychologists, to bring out the notion of space from the notion of time and the relation of coexistence from the relation of succession. The idea of space, which is an original idea, actually derives from the sensation of expanse which the real coexistence of a large number of simultaneous sensations of the sense of sight or of the tactile sense gives us ². On the other hand, observation of ourselves does not show us the consciousness thus reduced to unity. As I write this page and think about the different opinions of philosophers on the extent of consciousness, I see my paper, my light, my room and at the same time I hear the thud of a concert in the room, neighboring house, which leaves me with an unpleasant impression. It all exists in my mind at the same time; I’m not saying that my work is better for it, no, it would probably be better to think only of him; but still, such as it is, it advances however in spite of the hum of feelings and images which collide at this moment in my conscience. Besides, is it possible that it is otherwise? A single act, that of writing, doesn’t it require several conscious phenomena, the sight of paper, the pen, black lines, the sound or muscular image of words, the spoken expression of ideas, etc.. If I had only one image in mind, I would undoubtedly express it perfectly, because it would be translated by my whole body, but I would not move any more, I would not think any more, I would become a statue, like the cataleptics that we studied.

¹ H. Spencer. *Principes de psychologie*. Trad. I, 419. – Voir Ribot. *Psychologie anglaise*, 207.

² Voir Rabier. *Leçons de philosophie*, I, 227.

It is, in fact, in catalepsy that the almost absolute unity of consciousness exists, that is to say at the very beginning of the return of consciousness, at the exit of a kind of annihilation, when the almost exhausted mind is incapable of conceiving several sensations at the same time. Only one sensation remains: she lives of her own life and gives the subjects this appearance of a human automaton. Perhaps also, at the other end of intellectual development, when the life of quite perfect intelligence will allow a mind to embrace in a vast synthesis all the images, to unite in a single idea those of a very general report, all the sensations which he experiences or which the memory reminds him of the memory, perhaps then, if this state is possible, we would find the intellectual unity realized for a moment by great geniuses in a high thought. But the ordinary life of thought does not fall so low and does not rise so high: it is maintained at an average height at which the images presented to the mind are numerous and where their systematization is far from complete. This is what Mr. Dumont ¹ understood very well when he wrote: “There is in us at every moment a group of many coexisting sensations... The ego is both series and group; he is a series of groups”, and more recently a very psychologist magnetizer ², when he tells us: “In the waking state, despite the apparent monoidism which has attracted many psychologists, our thinking is always very complicated; we simultaneously have a host of sensations that struggle with each other and a host of memories that seek to get rid of the pressure of dominant ideas”.

This is, moreover, it must be admitted, the opinion to which Mr. Spencer himself attaches himself, in practice, whenever it comes to explaining a real phenomenon. “The consciousness of the dream is like that of the old man or the indolent man, the elements are less coherent and *less abundant*... The narrowing of *the area of consciousness* is betrayed by the absence of these *innumerable collateral thoughts* that the successive scenes usually provoke...” ³. And elsewhere: “Although the phenomena of consciousness form a series, there are *simultaneous changes*: the visual field is not absolutely reduced to one point, there is vague consciousness of the surrounding points... In the web of consciousness, there are several threads; the external ones are loose and badly adherent, but inside there is a series of changes, the tissue of which is tight and which forms what we can call proper consciousness” ⁴. This last restriction is very fair; this small group of phenomena better known than the others is the part of attention, of apperception, as Wundt would say after Leibniz, which does not extend as far as consciousness itself; but the author nonetheless recognizes that human consciousness, clear or not, usually extends quite far over a large number of collateral and coexisting images.

Spencer even provides us with an excellent, very precise, and very useful term that we will keep: the area or field of consciousness. We know, in fact, what we call the visual field: “it is the entire extent of space from which we can receive a luminous impression, the eye remaining motionless and the gaze fixed” ⁵. Could we not call the same *field of consciousness* or maximum extent of consciousness, the largest number of simple or relatively simple phenomena that can occur at the same time in the same consciousness, by reserving, as Wundt proposes? ⁶, the term “point of internal gaze” for that part of the phenomena of consciousness towards which attention is directed? It would be, I believe, of the utmost importance for experimental psychology to be able to determine, even roughly, the field of consciousness,

¹ L. Dumont. *Théorie scientifique de la sensibilité*, 85, 87.

² L. Ochorowicz. *Suggestion mentale*, 502.

³ H. Spencer. *Principes de psychologie*, I, 645.

⁴ Id. *Ibid.*, I, 426.

⁵ Dr Chauvel. *Précis théorique et pratique de l'examen de l'œil et de la vision*, 1883, 69.

⁶ Wundt. *Eléments de psychologie physiologique*. Trad. 1886, II, 231.

as one measures the visual field with a campimeter or a perimeter. Wundt is the only one, we believe, who has attempted an experimental determination of this kind ¹. Unfortunately, he uses procedures and reasoning which do not appear to us to be very clear, nor very certain, and he passes very quickly on this difficult question. His conclusion is that “we will be allowed to consider twelve simple representations as the maximum extent of consciousness.” At first glance, and perhaps wrongly, I think this figure must be far too low. The binocular visual field, which is however only a small part of the total field of consciousness, obviously contains many more than twelve simultaneous visual phenomena; consciousness, which also contains the other sensations and their images, must contain much more. But there are a host of questions to be raised here on the very meaning of words, on the idea that we have of a simple representation, which make this problem one of the most delicate in experimental psychology, although it remains in my opinion one of the most important.

Despite these difficulties and despite the impossibility in which we are here, to our great regret, to take precise measurements, it nevertheless seems to us that there is a point that is fairly easy to establish. Both the field of consciousness and the visual field can vary; it is not the same in all individuals, nor at all times of life in the same man. Between a cataleptic individual having, as we have shown, only one image at a time and a conductor simultaneously hearing all the instruments, seeing the actors, and following, by memory or by reading, the score of the opera, there are all possible degrees. The lower degrees interest us the most at this time, because it is easy to show that suggestible individuals have a very narrow field of consciousness and that this character plays a big role in the modifications of their will.

The narrowing of the field of consciousness, as long as we cannot measure it directly, must manifest itself in a somewhat indirect way perhaps, but very certain by anesthesia. Consider at a given instant two individuals who have different fields of consciousness; when one feels ten phenomena, the other feels only five; should we not conclude that there are five phenomena which the second cannot feel, at least at this moment, and that to some extent it is momentarily anesthetic? Also when a person like Lucie can only hear one person at a time, I naturally assume that the field of his consciousness is small, that it is like a vessel already full of liquid, into which we can no longer penetrate just one drop. This is only a guess, but it captures the facts.

But, it will be said, anesthesia is not a proof of the narrowing of the field of consciousness, because the images provided by the remaining senses can alone be very numerous and compensate for the loss of the other senses. In fact, it sometimes happens like this: in people who are born blind, for example, the senses which subsist are sharpened and perfected and can sometimes fill the void left by visual sensations; a man who pays attention to an object may no longer see the others, but he will have more vivid and numerous sensations about this object which will prevent his field of consciousness from being really narrowed. All of this is correct, but it is not so in hysterical anesthesia. The loss of one sense does not lead to an increase in the acuity of the other senses, quite the contrary; the concentration of consciousness on an object does not make the sensations relating to that object more numerous, as in attention. A hysteric thinks little, but the little that she thinks, she does not know better for that, because the senses which remain to her are diminished anyway and she has only very confused notions of the very objects

¹ *Id. Ibid.*, II, 241.

that she does look. The anesthesia in her, even when it is momentary and due to distraction, is a loss without compensation.

Another proof of this narrowing of the field of consciousness in suggestibles must be drawn from the phenomena produced in these persons when the only senses which remain to them are closed. All the authors have pointed out the stupefaction, the obliteration of intelligence and memory which suddenly occurs in a hysterical anesthetic when one closes her eyes or puts cotton in her ears ¹. It seems that the visual or auditory images that might remain are no longer sufficient to form a psychological life: the small light that still existed seems to be extinguished and all consciousness disappears in complete sleep. It is true that there is a great difference here between the hysteric and the idiot or even the epileptic. While the latter, if their weak means of thinking were removed from them, would remain stupid as I have observed in R.... this one quickly takes its side, and, since it destroys its psychological existence ordinary, it starts a second. This is perhaps the whole secret of the so easy hypnotization of hysterics by occlusion of the eyelids. Let us leave aside the second existence which can be identical or superior to the first, this sleep, this destruction of the ordinary life which comes suddenly by the closing of the eyes does it not show that the field of consciousness was very small and consisted of almost only of those phenomena that are taken away from them.

Who are the people who satisfy this condition, who have such a consciousness and who will therefore be suggestible? This question should be answered with facts and statistics which I cannot establish; I will only indicate what seems likely to me. The individuals whose field of consciousness is abnormally restricted seem to me to form two groups: they are sick or children. In some, it seems that a kind of fatigue or weakness restricts the quantity of phenomena which can enter into the same consciousness, for, in most debilitating diseases, we find these psychological symptoms: distraction, absorption on a point of all thought, the forgetfulness of the assistants, the suggestibility which is so evident especially in certain forms of typhoid fever. In others, consciousness seems to be underdeveloped in all senses, it is as restricted in its extent as in its nature and variety; the impetuous acts of children, their naive beliefs, their anger and their momentary tears, all easily prove it.

But it should not be concluded, at least I believe it, that children are hypnotizable, it is not the same thing. Suggestion thoughtfully puts into use a mechanism of consciousness which already exists and which acts on its own and at random throughout the day; hypnotism, to bring about the somnambulist state, must disturb the present orientation of thought to substitute for it another. However, children, fortunately, do not usually have the mental instability and anesthesia that allow this upheaval. A true somnambulism, which is easily produced in a child, would appear to me to be the mark of a hereditary defect and of a beginning neurosis. So we should not say, as has been repeated too often, that “the mother is the first of hypnotists”, which would be very unfortunate, but that the mother is the first to direct the beliefs and actions of the child, which is quite natural, because she has judgment and willpower for him who has none.

Why now do individuals put into somnambulism sometimes, in this new existence, have a very narrow field of consciousness and a strong suggestibility? Because this second existence often resembles

¹ Binet et Féré. *Archives de physiologie*, 1887, II, 373.

that of the sick and that of children. Sleepwalking subjects sometimes lose sensitivity at least initially; they present, says M. Richet, a hyperexcitability of the muscles which makes them analogous to hysterics¹. As all my subjects were already so strongly hysterical and sick in the waking state that they could hardly become more so, I was especially struck by the second feature, the *analogy of somnambulism and childhood*. The fact has long been noticed; “The beginning of the mensambulance (somnambulism), remarks a magnetizer, the Count de Rédern, is a kind of childhood which requires a real education”². Among the moderns, MM. Fontan and Ségard have rightly insisted on this feature³. Nothing is more curious in fact than to see women of thirty, serious and cold in the waking state, assume, once they are sleepwalking, baby airs, gesticulate, play incessantly, laugh about everything, talk in a lisp, claiming little names like Nichette or Lili, and in reality take on all the paces of very young children. Perhaps, as I have noticed, the return of the muscular sense which predominates in childhood has something to do with this character; but the main thing seems to me to be the formation of a new form of existence without many memories or experiences of its own. The somnambulist can have, if he is asked for them, the memories of the day before, but he rarely evokes them spontaneously; they are for him like memories expressed in a foreign language which he understands only with a little effort. Or, if he remembers these memories, he takes little account of them, like the experience of others. “That would annoy the other a lot”, said Leonie 2, “but I don’t care.” These connections are perhaps hypothetical, but there is a certain fact: it is that true sleepwalking begins with a stop of normal consciousness, the small death of Felida, as Mr. Azam said, after which consciousness is reborn little by little; it begins in the form of catalepsy, which is an almost complete “monoidism”; it then presents itself naturally with a fairly restricted field, until, in its perfect development, it extends very far and there is no longer any suggestibility. It is not in so far as somnambulism that this state is favorable to suggestion, it is inasmuch as the second existence resembles in its narrowness the weak existences of the sick or of children.

Consciousness can therefore, at each moment of life, extend over a more or less extended field; Whenever we see in a person *obedience to suggestions*, or better still the oversights and distractions to which this disposition has been reduced, we observe at the same time in him *a noticeable narrowing of the field of consciousness* and a manifest decrease in the number of simultaneous phenomena which can fill the mind at any moment.

VI. Interpretation of the phenomena of suggestion. The reign of perceptions.

An eighteenth century doctor, a forerunner in certain points of view of Maine de Biran, Rey Régis, already said that the movement of the limbs can be determined by three things: by will, by *thought*, by passion. “This doctrine of an immediate determination of the motor faculty by thought without the intermediary of the will is one of those by which Rey Régis is distinguished from Maine de Biran and will join English psychology today”⁴, “To think, Bain⁵ said, in effect is to refrain from speaking and acting”.

¹ Richet. *L’homme et l’intelligence*. 512.

² Quoted by Perrier. *Journal du magnétisme*, 1854, 69.

³ Fontan et Ségard. *Médecine suggestive*, 1887, 55.

⁴ Paul Janet. *Un précurseur de Maine de Biran*. Revue philosophique, 1882, I, 374.

⁵ Bain. *Les sens et l’intelligence*. Trad. 1874, 298.

This is just for us who can hold back, but, for the individuals we describe, to think is to speak and to act. Never can we study this action of thought on movement more easily than by watching, sometimes under a suggestive influence, sometimes by themselves, these individuals whose consciousness is restricted and who consequently have numerous anesthetics and consecutive amnesias.

When the field of consciousness is as small as possible and contains only one phenomenon at a time, this fact presents itself in the form of a sensation or an image, and, by studying the actions of cataleptic individuals, we could not see that the automatism of the images. But as soon as the field of consciousness is a little wider, each sensation no longer remains isolated, it is accompanied by numerous accessory and interpretative images which allow the formation of the idea of the ego, of the idea of the outside world and of the language; in a word, the phenomena are presented in the form of *perception*, and, by watching individuals of this kind act, we can realize *the automatism of perceptions*.

A perception, like an emotion, but with a much greater degree of complexity, is a synthesis, a meeting of a very large number of images. These systems were organized long ago when each of us *understood*, for the first time, the location of an object, the usefulness of an instrument, or the meaning of a word. We already know from our studies of emotions and memories that such systems are durable and tend to last as long as possible. Here, as before, one of the terms of the given group evokes all the others. Also, without going back to previous studies, it suffices to show: 1st how this automatism of perceptions resembles the mechanism of sensations and emotions, and 2nd” by what features, thanks to its greater complexity, it differs from it.

1st This new automatism is, on certain points, identical to the first and simply more complicated. When a mind of this kind hears this sentence: “Take a tour of the room”, he is able to understand it, that is to say that he will have in this regard in his consciousness images (muscular or visual as the case may be) of the movement of his legs, visual images of the aspect of the room when he leaves, then other motor images and ‘other visual images of a new aspect of the room, and thus a long series of varied representations until one last which will reproduce the first aspect of the room. But it stops there, the field of consciousness is too small to receive other images; the subject will not hear the mockery as they pass, will not see the people present, and therefore will not remember the reasons which make their act ridiculous or unnecessary. He will not make judgments which require the comparison of several perceptions, or at least will only make very simple ones between the two or three perceptions, of its members, of the aspects of the room that it may have simultaneously, and not will be able to speak only to say: “I walk around the room.” But we have admitted that images presenting themselves under similar conditions, without encountering contradiction or rectification, were not only associated with real movement, but were themselves, from another point of view, real movement. It is therefore not surprising that this person, thinking what we have said, actually walks and walks around the room before our eyes.

The automatic development of perceptions brings about a new phenomenon, that of hallucination, which seems to require a particular explanation. The phenomenon produced seems to be indeed something different, to take place in the mind, instead of manifesting itself as a movement of the body. In reality, this difference is, as we have seen, only very superficial; for in every suggested act there was already a hallucination, and every suggested hallucination is, in some way, an act, a movement of the body that we control. But, one might say, hallucination presents a new and essential characteristic; instead

of remaining internal, of appearing to the subject subjective as the image of a movement, it appears to belong to the external world and to become objective. First of all, this difference is not absolute: Rose who, on the order to move her leg, sees it in the air, does indeed have an objective image about an act; Léonie, who feels a vague pain, or heat or cold, has many subjective images, although hallucinatory. We could say that the notion of objectivity joins the hallucination when the latter is sufficiently complex; for, as has been very well explained, it is on the degree of complexity that our distinction between internal images and objective perceptions depends. "Our ordinary representations appear internal to us because they are much less complex than real perceptions ¹." The subjects we study having, thanks to the automatic development of images, very complex representations, must confuse them with external objects. Most often, moreover, the question is much simpler; for hallucination, associated in an indissoluble manner with real perception, naturally assumes the same appearance and the same nature. When Marie sees a bird perched on the window sill, she cannot believe that the bird is inside her and the window sill is outside. There is therefore no new problem here. Without a doubt, hallucinations provoked by suggestion raise many peculiar and interesting problems, and moreover they have already been studied separately in remarkable works. But when we consider the automatism of the mind in general, we see no reason to separate the suggested hallucination from the suggested act.

As for more complicated suggestions, hallucinations with a landmark, changes in personality, we understand that they are the consequence of more complex perceptions. In the subject's mind, a certain idea of a princess or an archbishop once formed; evoked by a word, then left to itself, this idea subsists and shows us, in the form of acts and hallucinations, the elements it contains, for, in this restricted mind, no perception is formed in this moment to obstruct the suggested idea.

2nd These characters strongly resemble those already exhibited by the automatism of isolated images during catalepsy. Let us now see the new features which properly belong to the automatism of perceptions. The acts which we are now studying are, in many respects, superior to cataleptic attitudes in their number, their variety, their adaptation to circumstances and even sometimes their independence.

Consciousness being, during catalepsy, too restricted to allow the understanding of signs and language, acts can only be provoked by the emotions in small enough that it is possible to arouse. Among these emotions, only these develop and provoke associated acts which are part of a system, of a set already frequently realized: the scene of anger, the religious scene of communion, salvation, etc., this is what the complex actions of Leonie during the catalepsy are reduced to. This cannot be compared with the infinite diversity of acts and hallucinations that speech can provoke in subjects who are simply suggestible. The cataleptic acts are perfect, without hesitation, without a sign which does not contribute to the general expression; the acts suggested are less perfect, and the expressions of the physiognomy never acquire the same unity or the same intensity.

The former are still invariable, as we have shown elsewhere; suggestions are not always executed the same. This is because the former do not adapt to circumstances and unfold without concern for obstacles, or stop when the obstacle is insurmountable. Let us insist on this last point: Léonie, when she is playing the communion scene, walks a few meters forward and a little to the right. If she does not have space, if

¹ Souriau. *Sensations et perceptions*. Revue philosophique, 1883, II, 75.

she runs into a wall, she does not think of leaning slightly, she stops against this wall, head lowered and hands clasped, pressing on the wall until the end of the catalepsy. One of those people we're talking about now acts quite differently. If I told Marie to walk, to go to a designated place, she does not stop in front of the walls, knows how to find doors and avoid obstacles. She changes and she corrects her act according to the circumstances. I told her one day to sweep the room, she walks to a corner where she expected to find a broom, but not finding it and without waiting for me to add anything, she goes to another place where she finds it and is then starts to sweep. Lucie, when I order her to write, takes a pencil if she is in bed, and goes to get a quill and ink if she is up. Finally, the cataleptic sees nothing, hears nothing apart from the act by which her very small consciousness is entirely occupied; the somnambulist who executes a suggestion is also very absent-minded and insensitive to many impressions; but she can, to a certain extent, hear a few words, see some objects which agree fairly well with her dominant perception, and adapt a little to these new impressions.

This difference is understandable; it corresponds to that which exists between a sensation and a perception, one invariable, because it is unique and can only exist in one way and only bring about a series of images having the same characteristics; the other variable, because it contains multiple elements which may change in part depending on the circumstances without the overall perception disappearing. If I dared to make a similar comparison, I would say that cataleptics resemble brainless ducks that M. Ch. Richet kindly showed me in his laboratory. At first glance, the brainless ducks could not be distinguished from the others, they fled, shouting and spreading their wings like their comrades; but when the whole band had come up against a wall, their inferiority broke out; while the ducks with intact brains scattered to the right and to the left, the ducks without brains bumped their beaks against the wall and did not move. This comparison may seem dangerous, because it seems to result in the comparison of acts performed by suggestion of acts performed by intact ducks, that is to say, the behavior of animals. This assimilation does not strike me as too absurd, for intelligent animals too behave according to complex perceptions which allow them to vary their actions and to adapt them to some extent to circumstances.

Another difference relates to the previous one. The cataleptic performs few acts, never modifies them, but she never resists; his mind reduced to a single fact does not allow the opposition of the elements; the broader perception of suggestibles allows resistance. Not that the subject can resist freely and by an act of will, he actually does not have any; but, among the constitutive elements of a perception or among the images that it evokes, there may be opposites, or better, there may be images which are part of another perception, of a another synthesis opposed to the first and which awakens it. If I tell Leonie to kneel down, she doesn't, it's because her first magnetizer made her kneel down to punish her and she cries out. "But I haven't done anything wrong, I don't want to be punished." I once wanted (admittedly the idea was unfortunate) to turn her into her own husband to see how she would play the role of someone she hates. The hallucination had only just begun, she saw herself for a moment in a man's costume; but then she knocked on herself indignantly as she pushed back this costume; the opposing images outnumbered the images suggested. Another day, I want to suggest that she steal tickets from a safe, she stops terrified before doing the deed. I order Lucie to say her prayer, she answers with irreverent gestures and taunts against religion. The idea of prayer awakened what it contained in the subject's mind, that is to say, images quite opposed to its realization. The more the subject's consciousness expands, the more likely the rebirth of these ideas becomes and the less the power of suggestion.

However, in the subjects that we have studied, whose field of consciousness is always very limited, this resistance is quite rare and does not seem to me to constitute true freedom. It is simply an image which is opposed to another and whose driving power balances that of the first. This is when the mind looks like a balance swinging and tilting to the side of the heaviest weight. But nothing has changed in the mechanism of action and belief, which are still determined only by perceptions. As catalepsy was the whole realm of sensations and emotions, the states we have studied are the realm of perception.

VII. The characteristic of suggestible individuals

These conclusions and the preceding ones come up against a difficulty and raise a serious objection which must be turned into verification of our hypotheses. If suggestion has no power of its own and only acts as a perception deposited in a mind of a certain kind, it should not alone cause automatic acts in these subjects. All the ideas, all the perceptions must find in them the same favorable ground for their development and give to the conduct of these individuals a very particular aspect.

Well, we believe that this is really so, and our theory of the reign of perceptions applies to their natural acts as well as to their suggested acts. Nothing is more curious, in fact, than the character and conduct of these feeble persons whose consciousness undergoes the most singular modifications as a result even of its narrowing. It is understandable that this subject has tempted many novelists who, obeying the taste of the day, include in their works the portrait of a hysteric or a sleepwalker. Unfortunately most, in my opinion at least, are content with a few random scientific terms and believe they have said it all when they talk about a four-phase nervous breakdown and a hemi-anesthetic heroine. The portrait of hysterics has also been the temptation of all those who have dealt with mental illnesses: the descriptions of Legrand du Saulle, de Moreau (de Tours) ¹, by M. Ball ², by M. Ribot ³, are among the most interesting. Fortunately, we don't have to try anything like it. It suffices for us to bring together, from a single point of view, the few observations which we have been able to make and which confirm the general idea which we have expressed on the nature of consciousness in these patients.

An observation which I made one day by chance, these are the best, explained to me better than any research the nature of the intelligence of the weak people of which we speak. I arrived one day near Lucie, intending to do some research on the phenomena of anesthesia; she pretended to be tired and unwilling to answer me. In fact, she had been annoyed by my experiences the night before and did not want to do it again. "Either way, I said, we'll be lazy today, but so that I didn't come for nothing, you're going to tell me a story. – What madness! I don't know. You don't want me to tell you about Ali-baba? – But if, why not? I listen." And here she is, half laughing, half angry, begins Ali-baba's story. At first she tells badly and stops every moment to see if I am listening. Little by little, she gets excited, tells more enthusiastically and no longer takes care of me... She screams and stops with her eyes fixed on a corner of the wall, then she speaks quietly to herself. – even: "Here they are, all the thieves... in big pots..." She no longer tells, she sees, she follows the whole scene that unfolds before her eyes and, from time to time,

¹ *Psychologie morbide*, 76.

² *Maladies mentales*, 519.

³ *Maladies de la volonté*, 1883, 111.

whispers her opinion like the children at the show. “We’re going to kill them all... it’s done well.” As for me, Ali-baba’s story had never seemed so interesting to me and I was careful not to interrupt it. It was because I saw in front of me the way in which hysterics and sleepwalkers think; instead of being dull and abstract as with us, thought is with them colorful and alive, it is image and almost always hallucination. M. Richet would ask a sleepwalker what time something had happened: “Wait”, she said “... I don’t see”; then she said, “I know now.” She saw in front of her a dial with the hands marking the time. A thought that presents itself with this vivacity can hardly be hesitant and variable like ours. “I saw it, I have seen with my own eyes”, we say when we are certain; but these spirits see everything with the same force and the same clarity; it is not surprising that they are convinced of everything. “Every internal ghost contains an affirmative conception”, said Mr. Taine ¹. No doubt, but the affirmation will be all the stronger the more colorful and real the phantom will be, and if the lightest of our imaginations is already accompanied by a certain conviction of the existence of the object, how much must this conviction be stronger in people whose every thought is equivalent to a sensation? When we dream, the most absurd ideas seem realities to us, because they take a form and are placed before us; spirits like this always dream and everything is in front of them like a real object. Saint Thérèse described in a very precise way this state of mind that she must have known: “I know, she says, people whose minds are so weak that they imagine they see everything they think. This state is very dangerous” ². Also, whatever the idea that currently fills their minds, nothing equals their conviction: it is not within the power of any reasoning, of any objection, however founded, to shake it, because it is more than a conviction, it is the impossibility of thinking otherwise. You shouldn’t argue with suggestibles, it’s useless: when I want to modify Léonie’s conviction, I always get this answer which, basically, is full of common sense: “I see this is so, why do you want me not to believe this is? you believe what you see ... you don’t see the same thing as me ... what do you want me to do about it? it’s because you can’t see, too bad for you.” Isn’t that how believers speak in religions: “You don’t understand that... it’s because you don’t have faith, it’s a meaning that you lack; but I feel, I see... therefore I believe.” And this conviction could become the origin of all devotion and all fanaticism.

We observe in the same people another characteristic of intelligence which seems, at first glance, quite opposite to the preceding one and which it will not however be very difficult to reconcile with it. It is an extraordinary credulity. When we tell them stories, instead of having them tell them, they believe in them just as much and take them as realities as well. I am not speaking here of those hallucinations that one voluntarily communicates to a sleepwalker, I am speaking of everyday facts which occur in the normal life of these weak spirits. Lucie, passing in a street, heard a few words say about someone she knew. The words as she told it to me were absurd and had probably not been said that way: however, she remained completely convinced of it and I could not make her change her mind. The most incredible example that I have seen of this credulity is the following: a hysteric hears it said in her youth, by a clumsy, that the women affected by her disease die at the menopause. Twenty years later, at the time of the first manifestations of the critical age, she is preparing to die, suffocating and perhaps would have died, if we had not ended up discovering her secret and modifying her, not without difficulty, her conviction. She decided to live and has been doing very well ever since. Rose was ill and paralyzed; no remedy, neither physical nor moral, seemed to have a hold on her. During the delirium of an attack of hysteria, I hear him say: “I will not be cured; it is not an illness that I have, I am bewitched by this old

¹ Taine. *Intelligence*, II, 76. Cf. *Ibid.*, I, 89.

² Hack Tuke. *Le corps et l’esprit*, 14.

wizard whom I angry with myself; there is nothing to do.” I made him confess this singular story; I succeeded with great difficulty in removing this truly delusional conviction from him, and I no longer had any difficulty in suppressing the paraplegia. But let us put aside these extreme cases where credulity has dramatic consequences; Let us note in a general way that the awake or sleeping hysterics, it does not matter, are like the small children, that they do not need hypnotic practices to be convinced and that they believe everything that strikes their mind.

Their activity, as is natural, presents the same characteristics as their thought; it is first of all extremely fast and almost instantaneous; As soon as an idea is conceived, it must be executed, and the movement is accomplished as by a convulsive discharge. Lucie thinks of leaving the room, and here she is through the streets barely dressed, running and gesturing. Leonie, sleepwalking, wants to go down to the garden; the door resists a little, suddenly here it is on the open window, and I barely have time to hold it back; If she is interested in someone, she always rushes to look for him or to follow him as soon as she hears about it. Numerous examples are unnecessary; it would be necessary to quote all the life and all the actions, because one always finds this same characteristic of irrational precipitation. The motives for even the most serious acts are therefore futile. A sleepwalker said to Bertrand ¹ “that she went to the roofs to look for a pin or a nail that she thought she saw there”. Lucie goes off to buy a lot of furnishing objects one day that she cannot afford: “I wanted”, she said, “to see how my room would be a little fuller.” The motives for these acts are still all determined by present desires or feelings, they are not provided by the thought of future happiness or distant evil. The recklessness of hysterical women is incredible and it is found in the behavior of all weak or degraded beings.

These sudden and dazed acts are, however, sometimes violent and lasting; although they often look like convulsions, they sometimes look like contractures. Rose takes it into her head to do some crochet work, a dawn for a priest, I believe; she works on it unceasingly, speaks only of that, even in somnambulism and even during her crises: for eight days, she could not think of anything else; then a sudden remark, a disgust, and she no longer wanted to touch it. When she begins to yawn, she continues for hours without being able to stop. After being paralyzed for seven months, she was cured by prolonged sleepwalking; but then it seemed that she wanted to abuse her legs, for she ran all day without being able to stop, until she was exhausted. Marie, usually very gentle and in a good mood, gets angry with a servant and suddenly decides not to say a word to any of the people in the hospital. She is willing to chat with me when I arrive, but remains silent with everyone else. It lasted more than two weeks and suddenly disappeared; the past access, she no longer wants to be told about it and says that it was nothing. It would be too easy to add here a quantity of examples of tenacity which these weak spirits show in acts which they have undertaken quite at random and which they likewise cease.

Activity will show us another characteristic parallel to the one we have already seen in intelligence; although abrupt and tenacious, it is nevertheless very modifiable by all external influences. These people, apparently spontaneous and enterprising, are of the strangest docility when you know how to lead them. Just as we can change a dream by a few words addressed to the sleeper, so we can modify the acts and all the conduct of a weak individual by a word, an allusion, a slight sign which he obeys blindly, while ‘he

¹ Bertrand. *Du somnambulisme*, 87.

would resist with fury if anyone seemed to command him. A word causes laughter or crying, or blushing, a word makes them soft or violent.

This modification of their actions by the influence of others manifests itself in a remarkable way in their habits of imitation. We are all more or less changed by the people we hang out with, but in weak minds this change is a complete and rapid transformation. The most serious acts have no other origin than imitation. “A first suicide is done by means of a chemical match, and who could make the statistics of the cases of death of this kind? An unfortunate man thought of throwing himself under the wheels of a locomotive: the immediacy of this new kind of suicide immediately awakened those who aspire to desert life, and the imitators came to stain the wheels of the heavy machine”¹. Very often crime, like suicide, will be the result of this contagious imitation, and for a period of time the assassinations will be of the same kind and the corpses will be mutilated in the same way. But imitation can become a disease and cause some individuals to continually imitate the act they see performed*. Nervous diseases acquired by imitation, natural sleepwalking produced by reading the story of the somnambulist Caselli, demonopathic epidemics, the disease of the Andous in Belgium, the possessions of the monastery of Kérndrep, Loudun, Morzine, are too many known facts so that I insist.

To understand this way of acting, let us look under what circumstances it seems to be more accentuated. These sudden and absurd resolutions, these irresistible imitations will be much more manifest as the state of psychological weakening is more considerable. “One of the most extraordinary effects of drunkenness is that it makes us give in with extreme ease to impulses that we have resisted”². Moreau (de Tours), gives a curious example: an unhappy wretch who wishes to end his life cannot resolve to kill himself, he makes up his mind and will achieve execution when he is gray³. Somnambulism can sometimes be considered as an existence inferior to that of the day before, so he presents us with facts of this kind: “An individual, a natural sleepwalker, is struck by the number of *ique* verses he has just read, he doesn’t care; in the evening, he falls asleep without thinking about it. The next day, he finds his notebook on which he wrote during the night 75 verses in *ique* on the same subject”⁴:

Oh! you who know how to sing on your poetic lute
The glory of the prelate and civic virtue,
Allow, son of Apollo, that my modest wall
Put on his white tunic for you... etc.

Another hystero-epileptic patient imitates all the noises she heard during the day in her natural sleep⁵. Just as the unleashing of passions is complete in the dream⁶, just as an inclination that had long dormant during waking takes over during dreams the empire that it once had⁷, likewise, impulses weak in one state can become all-powerful in another. Three hysterics were in the same ward of the hospital and, as often happens, hardly loved each other and affected in quite different ways, during their normal state; but,

¹ Legrand du Saulle. *La folie devant les tribunaux*, 537.

* Cf. Saury. *Les dégénérés*, 96. – Cullerre. *Magnétisme*, 253.

² Moreau (de Tours). *Le haschich*, 137.

³ Id. *Psychologie morbide*, 404.

⁴ *Le révélateur du magnétisme*, avril 1838.

⁵ *Journal du magnétisme*, 1855, 487.

⁶ Maury. *Du sommeil*, 87.

⁷ Charma. *Du sommeil*, 1852, 19.

when they were in crisis, they copied each other so well that they had the same delirium and pronounced exactly the same words. However, for at least one that I had seen in another room, this form of crisis and this kind of delirium that she did not have before was a pure imitation. The hashish gives a disposition of this kind: “it produces in the will, in the instincts, such a relaxation that we become the plaything of the most diverse impressions. With a word, a gesture, our thoughts can be turned on a host of subjects”¹. The intoxication of hashish looks like elsewhere, says Mr. Richet², in a hysterical state and we find there the same exaggeration of feeling and the same powerlessness of the will. All ideas are translated without our being able to prevent them.”

As in catalepsy, the automatism of ideas is sometimes revealed, not only by their duration, but also by their associations; – we see certain acts being explained in this way by involuntary connections between ideas. “We know the story of this poor young man from the house of Mailly, of whom La Palatine speaks in her memoirs. A bag had been given to him by Ms de la Forge; Bewitched by the magical power of this bag, he begged his family to consent to the marriage. The refusals made him desperate and he resolved to drown, but no sooner had he removed the bag than the spell ceased and the most icy indifference succeeded passion”³. How many stupidities, crimes committed under the influence of a spell, as a consequence of a fixed idea, could be explained in the same way. We have lost, as in dreams, the power to direct thoughts; they develop in their own way, and one or the other, the last if not all, arrives at complete execution. In this case the action seems even more irresistible, for it does not run up against the other ideas of consciousness, it comes out of them quite naturally; just as we are not astonished at our own dreams, so hysterics and sleepwalkers are seldom surprised at their own absurdities, for they do not have opposing images in their minds which can serve as a point of comparison. This association of ideas still has, especially in these people, a singular effect that it is necessary to know well; it is often exercised by contrast, and the thought of one thing quickly brings in the idea, then the execution of the absolutely opposite thing; “they want to laugh when they see them cry, say inappropriate words while thinking of being modest, etc.”⁴. This association by contrast which we have already pointed out exists in a natural way before presenting itself in the experiences of the transference. In short, there is not a single characteristic of the suggested acts which does not find its analogue in the natural conduct of these constantly suggestible individuals.

Let us now make the same study of the feelings and passions of these same weak personalities, still in the same states as we have described, when, either by disease or by hypnotizing processes, the field of their consciousness has been restricted and not can contain more simultaneously than a number of images much less than that which it should regularly contain.

It is commonplace observation that people of this kind are extraordinarily emotional and that, for the slightest pretext, they seem to experience with unheard-of violence all the jolts of joy, of sorrow, of love, of terror, etc. Examples abound. It was enough to tell in front of Lucie (awake or at first somnambulism) some absurd story of a crushed dog or of a husband who beats his wife, so that she immediately changed

¹ Moreau (de Tours). *Haschich*, 66.

² Ch. Richet. *L'homme et l'intelligence*, 124.

³ De Gasparin. *Les tables tournantes*, 1855, I, 427.

⁴ Liébault. *Du sommeil*, 235.

her face and retired to a corner crying like a Magdalene. The joy of seeing me again overwhelms Léonie, and for a few minutes there are tremors, sobs, inarticulate cries, almost the beginning of a nervous breakdown. Moreover, it is thus with a real nervous breakdown that all of Rose's emotions end; I saw her, for forty-eight hours, in a series of almost continual fits of disappointment, because a person she was expecting had not come to see her.

What should we think of this suddenness and this emotional violence? Note first that the expression of the emotion is here, if I am not mistaken, much more violent than the emotion itself. These great upheavals of their whole being, when they have not yet brought about the crisis, because then the nature of the phenomena changes, calm down as quickly as they were caused. You should not try to console a hysteric as you would an ordinary person, by talking to her about the object of her grief and showing her that it is futile. No, if we talk about the object that caused their anger or despair, however we talk about it, we increase their cries and tears. It is quite simply necessary, without any art of transitions, to speak abruptly about something quite different; they remain taken aback, hesitant for a moment, then, in a few seconds, give themselves completely to the new subject and laugh cheerfully when they still have tears in their eyes. Leonie had lost a child a few years ago in the saddest circumstances, and for the poor woman, it was a very just cause of grief. The most trivial incidents, a consonance, a date, the black color of a piece of paper, reminded her every moment of the misfortune when she was sleepwalking, and did not remind her when she was awake. It was tears and screams then, then endless contractures. I tried to console her first, but to no avail; It wasn't until quite late that I figured out the real way to stop this grief. As soon as her face saddened and she started screaming, "Oh! my poor little one", I would suddenly talk to her about something else, she would laugh and it was over. Much better, if we manage to make them confess what they are feeling, we see that they actually feel very little. One day, Lucie, who was in total anesthetic and did not even feel a strong burn, cut her hand and the blood flowed rather heavily. She began to cry and cry as if she was going through real martyrdom. I was a little surprised, for at that very moment she did not feel a pin stuck in her hand without warning her, and I asked her if she really was in great pain: "But ... no, not precisely, she says, but you see, my blood is flowing, I must suffer a lot, it is only natural that I cry ... ah! ..." I find this word which escaped her very significant; she is not screaming because she is in real pain, here I think she did not feel anything, but because she must be in pain. A more or less vague idea of suffering, perhaps a very faint hallucinatory image of old pain, that was all there was below those loud cries and despair.

In some cases, it will be said, the emotion is very real; Léonie's grief at thinking of her child, Lucie's terror during her crisis, are true feelings. That is fine, but that does not prevent the expression of emotion from still playing a large role; for I am disposed to believe here that the real feeling is posterior to the outward expression. A well-known American psychologist, Mr. William James, has supported a very appealing theory about the origin of emotions ¹. According to him, it is wrong to say with common sense: We are losing our fortune, we are sorrowful, we cry. "This order is not correct, the second mental state is not immediately introduced by the first, the physical manifestations must be interposed between them. The rational order is that we feel sorrow because we cry, anger because we hit, etc." All our thoughts produce in us physical changes, movements, changes in circulation, respiration, the condition of the skin, glands, bladder, etc. By a kind of feedback shock, the sensitivity brings back to consciousness the notion of these changes and gives us an emotion which is precisely only the more or less confused sensation of

¹ William James. *What is an emotion*, from *Mind.*, n° XXXIV.

all these modifications. The author concluded that a totally insensitive individual should not be aware of these organic changes and therefore no longer experience emotions, and he wrote to me about this when, in my early studies, I pointed out to Lucie as a total anesthetic. I replied that the hysterics seemed to me badly chosen to verify this theory, first of all because their anesthesia was not very real ^{*}, then because they were on the contrary very emotional. It has since appeared to me that these observations were in fact more favorable to the opinion of Mr. William James, but in a different way than he himself believed. The emotion is not suppressed in the hysteric by his anesthesia; because, if she does not feel the changes in her skin, she sees her own movements and hears her cries; but it seems to be produced at home and maintained by the very exaggeration of manifestations. Similar to those people who make big movements and shout loudly to get angry, they gesticulate a lot for the smallest thing and make faces of their own. "Oh! how well I shout, might say Lucie; I must be very angry, therefore I am." Even in the case of real emotion, it is the power and the characteristic of the physical manifestation always determined by the same laws which bring the force of the emotion.

These few observations on the behavior of suggestible persons will find their confirmation and their conclusion in some fairly well-known and famous phenomena. It is now accepted as an axiom that hysterics and people of the same kind lie continually, and more than one repeats this formula, according to some famous cases, without having sought to verify its accuracy. I don't want to rehabilitate their reputation, but I think it's fair to say that they don't lie much more than the average person. Out of about fifteen people that I have studied and who, admittedly, were not perfect, I have hardly met one, in whom the habit of lying was truly curious. When this characteristic exists, and, as I have just said, it is found, one must not be indignant, which is perfectly inappropriate here, it is better to try to explain it.

Many psychologists, who reasoned more than they observed, have argued that truthfulness, the habit of loving and telling the truth, is a natural thing to man who constantly finds himself, when the human mind was observed in all its primitive candor, in children and in the savage. I will not speak of the savage whom I do not know, but I will notice that children, unless they are little prodigies, are far from always scrupulously telling the truth, that they embellish their stories, and that they know how to lie, as soon as they can speak. The fact seems to me quite natural and quite simple. The idea of truth is actually a very abstract idea, the result of a series of complex judgments that one does not make upon coming into the world. I even believe that one does not have a good idea of the truth and its importance until the day when one became interested in the sciences. The spirit of truth and the scientific spirit are two analogous things, and he who does not understand the value of knowing what is, does not feel the importance of saying what is. Also, any simple, rudimentary mind, which makes few abstract reports, does not direct its words by the abstract idea of truth, but directs them by the dominant images in its mind. Now, the mind of the hysteric is precisely, by the loss of several senses and by the narrowing of consciousness, a rudimentary mind; she understands nothing of science and does not imagine that one can be interested in it; she says what comes to her mind, without further concern. If one thinks of the hallucinatory nature of all their ideas, of the absence of control which characterizes their thought, instead of being scandalized by their

* See Part II, ch. II.

lies which are, moreover, very naive, one will be rather surprised that there still have as many honest ones.

It is easy to make a similar remark for their conduct. Morality is no more than truth a natural thing; it is not debasing it to regard it as the most beautiful result of the work of human intelligence. The idea of good, the idea of duty, are abstract relations, judgments, real discoveries; to conceive them, it is necessary to unite in the same thought a very large number of apparently foreign terms: the idea of the present act, of its future consequences, even distant ones, the thought of other men, of their resemblance to ourselves, their rights, etc. It is no wonder that a poor mind, at a time when it can only have one picture, does not bring together and compare all of these ideas. If his actions remain moral, it is because the chance of circumstances or the habits of thought happily bring back into his mind images of honest or insignificant actions; but the same chance can bring images of dishonest actions which will be carried out without encountering more obstacles. We are very surprised that some authors can speak about moral responsibility and have admitted its very existence in dreams. "M. Fodéré is of the opinion that a man who would have done a bad deed during his sleep would not be entirely excusable... He would only have carried out the projects with which he would have been concerned at the state standby"¹. Doubtless the thought of the dream sometimes repeats that of the day before; but, in the day before, it was stopped by the other simultaneous ideas; in the dream, she is alone and dominates. Has man not done enough by resisting as long as he could, as long as he had a will; how would he be responsible now for thoughts and actions that develop automatically? It is the same for suggestible individuals, they have no responsibility because they have no will. They are selfish, conceited, jealous, for these are their main vices, but they cannot be otherwise; the strength of their mind has become sufficient to form the idea of personality and to direct conduct according to that idea; but it cannot rise above and give more general motives to actions. Morality is like science, it requires complete minds, it is unapproachable for those impoverished intelligences in which the elements of thought are more alive than the whole.

Conclusion

The studies which we have just made of all these phenomena, so numerous and so complicated, have made known to us a new form of psychological automatism, which, in certain respects, is similar to the phenomena already studied in the preceding chapters, and which, by others differ markedly. Among the authors who have studied the phenomenon of suggestion in our day, there are some who, drawn by the discussion, seem to have enlarged the meaning of the word inordinately. For them, all action, all human thought, determined and regular, seems to be suggestion. Without doubt, they mainly used this expression to make it understood that all these regular states, all these determined acts, were due above all to psychological causes and not to physical causes; in that they were completely right, and they contributed to restore to the conscience the importance which it must have in the explanation of the human person. But, once admitted, it must nevertheless be noted that all psychological phenomena are not identical and that there is no advantage in replacing the old words known to memory, emotion, association of ideas, by this new word of suggestion, as if all these phenomena had just been discovered. For us, suggestion

¹ Georget. *Maladies mentales*, 126.

designates an automatism of a particular kind, that which gives rise to language, and in general to perceptions.

This automatism is in part analogous to the preceding ones. Just as an emotion or a memory is constituted by a reunion of partial phenomena which were aggregated, synthesized in the past by consciousness, so also the intelligence of language and a perception in general are a set of complex phenomena, which have been once reunited when language was learned, when perception was first formed. This synthesis once made, since we do not have to concern ourselves, in this work, with the activity which presided over its formation, is preserved; when one of its terms is given, the total perception which has begun is completed and brings about the other images which constitute it. By laws, on which we do not have to go back, these successive images form hallucinations, beliefs and acts. This was already contained in the automatism of sensations and in that of memory, it is quite natural that this same characteristic is found in the automatism of perceptions.

Since language can express all things, it may happen that at its lowest degree, suggestion provokes very simple acts, analogous to those determined by the simplest sensations, and that at a higher degree it brings about changes, more complex, similar to those brought about by changes in memory. But these suggestions can only have their power because there was already an automatism of images and memories which they put into practice in a more complicated way.

Already, in studying, in the preceding chapter, the automatism of memory, we had encountered a new fact which seemed quite foreign to the automatic phenomena which we described and which nevertheless came to mingle with it. It is a question of those judgments which the subject made from time to time on his own phenomena and on the states in which he was. The phenomena, sensations, images, memories which filled the consciousness, were brought automatically; but from time to time they were compared, synthesized into a new and complex idea, that of a new personality. It was the present unifying and synthesizing activity of consciousness, manifesting itself in the midst of the automatism of images and memories. This new phenomenon has assumed a much greater importance in the study we have just made. When our subjects became capable of making large numbers of these new syntheses, of coordinating and comparing a quantity of sensations and perceptions, they ceased to be suggestible. This teaches us that the automatism of perceptions, the basis of suggestion, is the result of an old activity which continues to act in the same way, but that it is in opposition to the present activity of thought. The more it develops, the more it is capable of making new combinations with the more numerous elements which are brought to consciousness, the more the automatism is reduced. The simpler the psychological state and the narrower the field of consciousness, the more manifest the automatic activity. So we cannot take our study any further in the direction we have followed so far: in passing from the simplest to the most complex conscious phenomena, we have seen the automatism decrease more and more. We must now move on to another point of view and see if this regular and determined activity does not hide itself and does not exist in another form when it seems to have disappeared from consciousness.

Second part. Partial automation

Chapter I. Subconscious acts

The very different psychological states which have been reviewed in previous studies had a common characteristic; they were a disposition, a way of being of the mind of the whole subject. The people observed were completely or awake, or sleepwalking, or delirious, but they were never half in one state and half in another; also their consciousness, extended or restricted, whatever its nature, embraced all the psychological phenomena of the subject. The sensations, normal or abnormal, resuscitated by somnambulism or by electricity, spontaneous or suggested acts, everything was known to the subject. "I feel I have an arm in the air, I feel it is moving, I see a bird." This was the language of our subjects at the time when we directed their acts or their sensations. Is it always the same, and does the automatic life of the phenomena of the mind always develop with such unity, so as to allow this common consciousness to exist? If this were so, three-quarters of the phenomena observed in sick or even normal states would be inexplicable. All psychological laws appear false if one seeks their application only in the conscious phenomena of which the individual is aware. At every moment, we encounter facts, hallucinations or acts which seem inexplicable, because we cannot find their reason for being, their origin in the other ideas that consciousness recognizes, and, in the presence of these gaps, the psychologist is too often disposed to declare himself incompetent and to ask physiology for help which it can hardly provide him. Psychology cannot be constituted if it remains incomplete and if it neglects phenomena whose knowledge is necessary to explain the problems it poses. If we consider in particular the question which occupies us, it will not be long in noticing that the laws of psychological automatism are very often at fault.

These laws are however, we believe, exact and general and the difficulties will be removed, if we admit that these psychological laws, while being the same, can, in certain cases, be applied in a very particular way. Psychic automatism, instead of being complete, of governing all conscious thought, can be partial and govern a small group of phenomena separate from others, isolated from the total consciousness of the individual which continues to develop for its own sake, account and in another way.

It is therefore not a new research that we are undertaking, it is a particular application of our previous studies to new circumstances. We think, in our examination, to follow the same order, to show the simple automatism of sensations, that of more complete perceptions, the constitution of memories and distinct personalities, as we have already done; but, in these studies, we will only examine phenomena ignored by the very subject who experiences them and apparently unconscious.

I. Partial catalepsies

We cannot give at the beginning of our research a clear and general definition of the unconscious acts or supposedly such, it is enough, in order to observe and describe them, to stick to this banal notion: by unconscious act we mean an action having all the characteristics of a psychological fact except one, is that it is always ignored by the very person who performs it at the very moment when it is performed^{*}. We therefore do not consider as an unconscious act the action which a person forgets immediately after having done it, but which he knew and described while performing it. This act lacks memory and not consciousness, as we have already shown. We will now consider acts of which the subject never shows any conscience. Acts of this kind can be presented in two ways: either the individual, at the time when he performs the act, seems to have no kind of consciousness either of the act or of anything else, he is not speaking and expresses nothing. It is a case analogous to those which we have studied at length in speaking of catalepsy, we will not return to it now. Sometimes, on the contrary, the individual retains a clear awareness of all other psychological phenomena, except for a certain act which he performs without knowing it. The individual then speaks with ease, but other things than his action; we can then verify, and he himself can, that he is entirely ignorant of the action his hands are performing. It is this particular form of unconsciousness that it now seems very important to understand.

Unconscious acts of this kind have long been reported and studied from different points of view. Speculative philosophers were, on this point, forerunners and supported the existence of unconscious phenomena in the human mind, long before actual observations could show them. We know the doctrine of small perceptions or deaf perceptions of Leibniz. “I grant to Cartesians”, he said, “that the soul is still thinking now; but I do not allow her to notice all her thoughts, for our great perceptions and our great appetites which we perceive are made up of an infinity of small perceptions and small inclinations which we cannot perceive. And it is in these insensitive perceptions that the reason for what happens in us is found, just as the reason for what happens in sensitive bodies consists in insensitive movements¹.” And elsewhere: “Thus, it is good to distinguish between the perception which is the inner state of the monad representing external things and the apperception which is the consciousness or the reflected knowledge of this inner state, which is not point given to all souls nor always to the same soul².” Many philosophers, especially in Germany, repeatedly adopted ideas similar to those of Leibniz; one will find a more complete indication of it than I can give it here in the great treatise by Hartmann on the unconscious, in the introduction to M. Colsonet’s thesis on the same subject and in an article by M. Renouvier devoted to the discussion of these doctrines³. I would only like to point out a very interesting passage from Maine de Biran, where the illustrious French psychologist, on whom we have already relied in treating of catalepsy, still seems to adopt and defend the ideas that we are going to present on the unconscious: “By setting aside what is absolute in Leibniz’s system, we can see that the affections specific to the component monads or sensitive elements can take place without being represented or perceived by the central monad

* This chapter and the next contain a number of studies that we have already published in the *Revue philosophique* under these titles: *Les actes inconscients et le dédoublement de la personnalité*, 1886, II, 577. *L’anesthésie systématisée et la dissociation des phénomènes psychologiques*, *ibid.* 1887, I, 449. *Les actes inconscients et la mémoire pendant le somnambulisme*, *ibid.*, 1888, I, 238. We take these studies again to complete them and link them to more general theories.

¹ Leibniz. *Edition Dutens*, II, 214.

² Leibniz. *Principes de la nature et de la grâce*, § 4.

³ Renouvier. *Critique philosophique*, 1874, I, 21.

which makes the ego, or the principle of unity ¹.” Cabanis, Condillac, Hamilton, more recently Hartmann, Léon Dumont ², Colsenet ³ and many others have expressed similar ideas.

All these philosophers spoke of unconscious phenomena only in a theoretical way; they have shown that according to their systems, such facts were possible; at most, they have tried to interpret in this sense some facts of daily observation. Those who have tried to establish in an experimental way the existence and the properties of these unknown phenomena are much less numerous and less known. During the ancient epidemics of possessions, the exorcists had many occasions to ascertain these facts; but it is needless to say that they were quite incapable of understanding them. In more recent convulsive epidemics, like that of Saint-Médard, we find more interesting descriptions, like this one by Carré de Montgeron: “It often happens that the mouths of speakers utter a series of words beyond their control, so that they listen to themselves like the assistants and that they only know what they say as they say it ⁴.” It must be admitted that it is the followers of one of the most curious superstitions of our time, the spiritualists, who, by turning the tables around 1850 and by questioning minds, have drawn the most attention to unconscious phenomena. They have observed and even produced them in all their varieties; but the way they explain them is so strange, their descriptions are so altered by their religious enthusiasm that one cannot take their studies on the unconscious as the starting point of a work. It will be more natural to return to their descriptions when we have observed enough things to be able to understand them and sometimes explain them. But the problem raised by them was studied with more precision in the works of Faraday and Chevreul ⁵, 1854, who were the first to show the intervention of real unconscious psychological phenomena. These studies were, as we know, continued in the work that M. Ch. Richet recently dedicated to the illustrious centenary ⁶, and in M. Gley’s research on the same problem ⁷. Since that time, research has been much more numerous and we will have to take it into account in our work.

Another question, which was raised around 1840, led, by another route, to the study of similar phenomena. Sir Henry Holland argued that the two hemispheres of the human brain were two independent organs, each functioning on its own ⁸. Since then, Wigan, Mayo, Laycock, Carpenter, Brown-Séquard, Luys, etc., studied the facts favorable or unfavorable to this hypothesis and noted that, in certain cases, the man seems double, to make, on the one hand, actions he ignores, on the other. Certain studies on hypnotism were directed in this direction, one noted dimidié states affecting only one side of the body; hemilateral catalepsies were studied and suggestions were made to both sides of a subject at the same time, in order to give him simultaneously two thoughts and two expressions ⁹. We will not dwell much on these phenomena, which seem to us to be linked quite easily to the preceding ones.

¹ Maine de Biran. *Œuvres inédites*, II, 12.

² Léon Dumont. *Théorie scientifique de la sensibilité*, 102.

³ Colsenet. *La vie inconsciente de l’esprit*, 1880.

⁴ Carré de Montgeron. Cité par Bérillon. *De la dualité cérébrale*, 103.

⁵ Chevreul. *Lettre à M. Ampère sur une chose particulière de mouvements musculaires*. Review of *Deux-Mondes*, 1833. *De la baguette divinatoire, du pendule dit explorateur et des tables tournants, au point de vue de l’histoire, de la critique et de la méthode expérimentale*. 1854.

⁶ Ch. Richet. *Revue philosophique*, 1884, II, 653, et *Des Mouvements inconscients*, dans l’hommage à Chevreul, 1886.

⁷ Gley. *Société de biologie*. Juillet 1884.

⁸ See Bastian. *Le cerveau*, II, 127. – Ribot. *Maladies de la personnalité*, 114.

⁹ Cullerre. *Magnétisme*, 286, 296.

The simplest unconscious acts of all have been designated by Lasègue ¹, who is the first to point out them, under the name of *partial catalepsies*, a very correct expression which we will keep. These are in fact cataleptic phenomena quite identical to those we encountered at the start of our research in the attack of complete catalepsy: continuation of the attitude or of the movement, imitation, association of movements, all these facts come together, find here almost as we have described them. But now they are partial, that is to say, only exist in one part of the subject's body, while the rest of the body is occupied by quite other acts and presents quite different characters. An arm, for example, behaves as if it were the arm of a person in catalepsy, but the whole subject, far from being in this state, laughs and talks without worrying about what becomes of his arm ².

Mr. Liébault ³ repeatedly reports facts of this kind; somnambulists keep their arms outstretched without seeming to notice it, while talking about something else, and even seem to be able to keep several fixed ideas at the same time. But these phenomena were the object of a meticulous study of MM. Binet and Féré ⁴. We will only summarize the observations they gave and which we were able to verify, emphasizing only a few details that we found new and interesting.

These experiments are carried out especially on hysterics suffering from total or partial anesthesia of the skin and the muscles; they succeed especially when we experiment on the side or on the limbs affected by anesthesia and cannot be repeated, without special precautions which we will indicate later, on the limbs which have remained sensitive. Consider a person of this kind, Rose or Marie, who are total anesthetics, or Leonie who is anesthetic on the left side, and take the precaution of hiding the subject's arm or leg whose movements we want to observe. For this, we are often content to close the eyes of the subject; this process appears to us to be defective, for very often in subjects of this kind it produces a general modification of consciousness and even complete somnambulism, which we now wish to avoid; it is better to simply turn the subject's head away and hide the arm with a screen. Then take the arm and put it in the air in any position; very frequently, when the preceding precautions have been taken, the arm remains motionless in the position in which we have placed it. If we apply a movement to the arm, the movement continues exactly with the regularity of a pendulum. These positions and movements can persist for a very long time. MM. Binet and Féré observed them for more than an hour, without there being, either in the limb, any oscillation, or in the subject's breathing, any modification which manifested fatigue. These are exactly, as we see, the characteristics of general catalepsy; but we cannot insist too much on it, the subject is not in catalepsy, he speaks and can make with the other members the movements he wishes; only he feels absolutely nothing of what is happening in the arm that we have raised and even seems to have forgotten its existence. If we talk to him about this arm which he no longer seems to think about, sometimes he can lower it easily, sometimes he finds himself unable to move it voluntarily.

We can complicate these movements unknown to the subject, make him send kisses or make signs of the cross in the air; one can even, after having put a pencil in his hand and closed the fingers on it, imprint

¹ Lasègue. *Études médicales*, II, 35.

² Saint-Bourdin. *Catalepsie*, 29 and 59.

³ *Du sommeil*, 72.

⁴ *Archives de physiologie*, 1er octobre 1887.

on the arm above a sheet of paper the movements necessary for writing; the hand will indefinitely write the letter or even the word whose characters you had drawn. "It is difficult to immobilize the fingers which have started such an unconscious movement; if we remove the pencil they continue the movement empty ¹." One day, I wanted to stop a movement of this kind in Leonie and I squeezed her right hand, the tremor passed to her left hand; I stopped this too, it was the right foot that began to move. Usually when the subject looks at his hand he can stop it immediately; but in certain subjects, as in Rose, the movement continues for some time, even when she sees it and tries to stop it.

The second characteristic phenomenon of general catalepsy was the imitation or repetition of acts and words; it is rare and difficult to observe in these partial catalepsies. However, one can notice imitations of this kind which the subject accomplishes without realizing it while talking about something else. M. Despine cites curious examples of this: All he had to do was touch the head of a subject with one hand and make a few gestures with the other free hand, for all these movements to be immediately reproduced. If we questioned this person, she would reply: "Sir, I don't know, I don't want to do anything... I obey in spite of myself, it seems to me that the member no longer belongs to me... I know that I am doing something, but I can't say what it is, I have no idea ²."

I have just observed an analogous rather curious fact, because it took place during a delirium, in a woman with the last degree of pulmonary phthisis. She imitated just about every gesture made in front of her, without interrupting her delirium for that. In many diseases, similar facts have been pointed out, on which it is not necessary to insist now, because the anesthesia of the limbs which make the unconscious movements and which is here the principal condition of the phenomenon does not always exist there. On the contrary, I observed with Léonie some facts much more comparable to the previous ones and clearer. If I stand in front of her during the entire wake and if she does not look at her arms, she imitates my gestures with her left arm which is anesthetic and never with her right arm which is sensitive.

During sleepwalking, this unconscious imitation may be more complete. I was writing with my right hand beside Leonie in sleepwalking and I was touching her with my left hand, when I noticed that her right hand was continually shaking, although she pretended not to notice it. In reality, his hand unconsciously repeated almost all the movements mine made to write: it was enough to stop touching the subject to interrupt the phenomenon. I made other gestures with my right hand while touching it with my left hand and these gestures were repeated. I ate and drank beside her, and she did, without knowing it, all the movements, even those of swallowing; this last point is all the more curious because, if she wants to drink then consciously, she cannot do so. I even drew, in a curious circumstance, a practical use of this unconscious imitation. Leonie was recently stricken with rather violent attacks of hysterical asthma; she had during a sleepwalking a real stop of breathing with choking. After several unsuccessful attempts to put it back on, I approached her, holding both her hands, and began to breathe very hard and loudly. After a moment, she began to copy my breathing in the most peculiar way, coughing if I was coughing, breathing fast or slow like me; I regularized my breathing, she did the same and the asthma attack was over.

¹ Binet et Féré. *Loc. cit.*, 351.

² Despine. *Somnambulisme*, 193. – Cf. Baretty. *Magnétisme animal*, 1886, 390. – Hack Tuke. *L'esprit et le corps*, 41, also points out a similar fact of unconscious imitation.

We have seen that, during true catalepsy, the movements generalized and gave the whole body a harmonious expression; one cannot expect to see the phenomenon here in such a complete way. However MM. Binet and Féré¹ describe something analogous when they say that, in hysterical anesthetics, any motor phenomenon provoked on one side of the body determines an analogous phenomenon although weaker on the other side. They do not speak of the expressions of the physiognomy in these partial catalepsies and say they have not noticed any². I have had the opportunity to observe twice that a change of physiognomy can however occur even under these circumstances. When I put Leonie's hands in the prayer position, taking precautions so that she did not see them, I saw her face take on an ecstatic expression similar to that which occurs during total catalepsy, while the mouth spoke indifferently about something quite different. This expression was very imperfect and did not generalize as it takes place in the wholeness. Another time, I put Lucie's hands in the position they took during the crisis of terror which forms one of the periods of her great hysterical crisis. The whole face assumed an expression of very marked terror, although the words which she then spoke had nothing to do with frightening. I asked her if she felt any sense of fear: "Not at all", she said; "why do you want me to be afraid?" But these expressions in partial catalepsy must be very rare; I only saw them twice.

What is more frequent is the association, the coordination of unconscious movements among themselves and with the impressions which serve as their starting point. If you pull both arms forward, the whole body rises and the movements coordinate to maintain the upright position³, without the subject suspecting that he is up. If one disturbs a movement which occurs unconsciously, sometimes the arm corrects the deviation and returns to the original movement⁴.

The anesthetic arm seems to understand the intention of the experimenter and, on the slightest impulse, to continue this or that movement. Even an initial impression is enough for the movements to develop in a certain direction. Indeed, if we put, without his knowing it, a weight on the arm of the subject thus raised, the arm does not bend under the added weight, but on the contrary the tension of the muscles adapts to the weight to be supported⁵. This was especially remarkable in Lem., a hysterical man whom I studied at the military hospital with Dr. Pillet: I put on his outstretched arm sometimes a weight very light as a feather, sometimes a weight of several kilos and the tension of the muscles unwittingly adjusted with each new weight, so that there was no change in the position of the arm. With Léonie this adaptation goes further, because her hand grasps the weight and holds it so that it does not fall. If we put a pencil in this anesthetic hand, the fingers, as we have noticed, unconsciously bend and place themselves without the knowledge of the subject in the position desired for writing.

I will add that things are the same for all objects. I put a pair of scissors in Léonie's left hand (the left side is completely anesthetic) and I hide this hand with a screen. Leonie, whom I question, absolutely

¹ *Loc. cit.*, 353.

² Binet et Féré. *Loc. cit.*, 342.

³ *Id, Ibid.*, 342, 326.

⁴ *Id, Ibid.*, 342.

⁵ Binet et Féré. *Loc. cit.*, 343.

cannot tell me what she has in her left hand, and yet the fingers of the left hand have entered by themselves into the rings of scissors which they alternately open and close.. I also put an eyeglass in my left hand; this hand opens the eyeglass and lifts up to bring it up to the nose, but, halfway, it enters Léonie's field of vision, who sees him then and remains stunned. "Here", she said, "it's an eyeglass I had in my left hand." These phenomena obviously present something contradictory: the hand, we said, is anesthetic and feels nothing, and, on the other hand, it feels scissors, an eyeglass, in order to adapt its movements to the nature of the eye, the object; there is not only an unconscious act there, there is also an unconscious sensation. Let us simply see the fact, which we will study in more detail later.

We see therefore that all the phenomena of catalepsy can exist partially, while the ordinary consciousness of the subject seems, on the other hand, to remain intact. Let us make some general remarks on all the circumstances in which these facts arise, before attempting to interpret them. We will not speak here of the influence of this or that operator to produce these phenomena, the anesthetic limbs of the subject having their preferences and obeying such and such a person and not such another: the analysis of this fact comes within the study of the electivity that we will do later. Note rather that for such phenomena to occur, there must be anesthesia. Partial catalepsies do not exist naturally without special processes in the limbs which have preserved their sensibility. Much better, if by some process, electric current or metal plate or simply suggestion, when possible, I restore sensitivity to Rose's or Marie's arm, the cataleptic state disappears, their arm no longer remains in the air, when I put it there. If sometimes, as in one of Rose's profound somnambulisms, the left arm still remains in the air, although there is apparently tenderness, it is because the tenderness is not complete, it is cutaneous and is not muscular; the subject manages to appreciate the position of his arm more or less by the friction of the clothes, the folds of the skin, etc., but he does not know if his muscles are contracted or not, which we verify easily by causing contractures that he ignores. There's always anesthesia, when there's a catalepsy like that. Much better, when, on a normally sensitive subject, partial catalepsy is provoked, it is accompanied by an identical anesthesia; thus Be... is normally perfectly sensitive; if Dr Powilewicz who was studying him suggested that his arm remain in all positions, the arm would become cataleptic, but no longer tender. I had no influence over her and could not make this suggestion to her while awake; I put the curved magnet of Ochorowicz on his finger, it brought anesthesia to the whole left side. Immediately this left side became cataleptic for me, although it was not originally. If we object to cases where the arm remains in the air even when it is sensitive, I will say that we then fall back into the study of the conscious suggestion made in the previous chapter and that it is not a partial catalepsy. The same phenomenon, we have not always noticed enough, can present itself in many different ways.

This partial catalepsy is not peculiar to the waking state; it can be found when the subject is in other states very different from each other, provided that its two main conditions, anesthesia of the limb and a certain unconscious electivity for the operator, have subsisted. When a hysteric is put into a mild somnambulant state, she usually retains her various anesthetics, and her limbs obey the same way without her knowing it. There is thus a cataleptic state of the limbs, while the subject can speak and understand what is said to him. This partial catalepsy by anesthesia during somnambulism should not be confused with the attack of complete catalepsy.

These partial acts have been reported during general catalepsy itself: each arm of the subject can perform a different gesture. Thus, with Léonie, the right arm can throw punches, while the left arm keeps the position of the prayer, and each of these movements brings on a part of the figure the expression which corresponds to it.

But I do not believe that this partial catalepsy was reported during the crisis of hysteria. When Rose is in a great fit of hysteria, at any time, I can, so to speak, grab an arm or a leg by touching them lightly. The member that I touched for a few moments then remains inert and no longer takes part in the tremors or convulsions of the rest of the body. If I lift it, it stays in the position I put it in or oscillates regularly, while the other limbs continue to convulse. I even, under these circumstances, put a pencil in his right hand and I made him write an a and a b. The hand continued to write these two letters for almost a minute, as the body arched and the left hand punched hard on the chest. This fact is verified, and more easily still, during hysterical delusions and natural somnambulisms. In short, whatever state the main part of consciousness is in now, these cataleptic actions can exist apart and live, so to speak, of their own life.

How should we interpret these new cataleptic phenomena? We find all the hypotheses and all the discussions that have already been studied about complete catalepsy. We believe it is unnecessary to repeat them. Here again, we believe that there is no valid reason to exclude consciousness completely from these phenomena; much more, that only one is able to explain the unity, the coordination which is manifested in these movements. These are muscular sensations which explain, under normal circumstances, analogous movements; we must believe that it is still muscular and tactile sensations which provoke and direct these movements of the same kind.

But there is one more difficulty here which we did not encounter at the beginning. Now, there is already a consciousness in the subject which tells us: "I see, I hear, but I do not feel that my arm is moving". This consciousness, which is in the subject, is not the consciousness of cataleptic movements, since it declares to ignore them. So is it possible that in the mind of the same subject there is another consciousness? Let us content ourselves with showing for the moment that this is not absurd, and we will see if other facts can confirm this hypothesis. When we have spoken of consciousness during catalepsy, we have admitted, with Maine de Biran, that it must be very inferior, that it consisted of sensations and images and not of perceptions. We have said that the characteristic of these elementary images was that they were not united in the same thought, that they did not form a personality; they were conscious images without ideas of the ego; it is therefore not surprising that these images are not part of the normal consciousness of the subject who speaks to us, who says "I", and whose mind is very complicated. If such images could exist on their own in the mind, I see no absurdity in admitting that they can now exist apart, while the subject's ordinary mind seems to function in a normal way. We find in a passage from Dumont the full expression of this hypothesis: "The words consciousness and unconsciousness are taken sometimes in a relative sense and sometimes in an absolute sense. We will say, for example, that a phenomenon is unconscious to express the idea that the ego is not aware of it, but without thereby asserting that the phenomenon is not conscious in itself and on its own account. Physiology tends to establish that there is thus accomplished in the human organism an immense number of facts of consciousness which are, for the ego, as if they belonged to other persons and, even with this

disadvantage in more, that they are not in connection with faculties of expression ¹.” Let us add that these phenomena, in the cases which we are studying, being isolated and, for particular reasons, not finding resistance to their manifestation, behave according to the law of isolated psychological phenomena; they manifest themselves, which for them is to exist and to last. Partial catalepsies show us the first seeds of partial consciousnesses that we will see grow and become clearer in our other studies.

II. Distraction and subconscious acts

Anesthesia was the essential condition of the preceding phenomena; catalepsy normally only existed on unresponsive limbs and disappeared upon return of tenderness. Now all observers have noticed incidentally that sometimes the sensitive limbs participate in this state and remain, even if only for a moment, in the position in which they were put. I inquired what were the conditions of this new fact and they seemed to me to relate to a momentary state of distraction from the subject. Distraction, in fact, as we have seen, is equivalent in hysterics to at least momentary anesthesia.

Leonie being wide awake, I let her talk to another person and, for a moment when, completely in the conversation, she was no longer thinking of me, I gently raise her right arm; this arm remains in the air, continues the movement started, etc., behaves exactly as the left arm was doing earlier. There is however a difference between the unconscious movements of the right arm and those of the left arm, it is that they exist in this one, even when Leonie is warned and pays attention to me, provided that the arm is concealed by a screen, the anesthesia of the left arm making the distraction unnecessary or rather being itself a sufficient distraction; while the unconscious movements of the right arm only exist if Leonie’s attention is completely distracted from another object. She stops talking, she notices what her right arm is doing and stops him immediately. No doubt, theoretically, the unconscious movement can be more easily simulated by the sensitive right arm than by the anesthetic left arm ², but we will not stop at this too general and too vague objection which would relate to any kind of psychological experiment. It is for the observer to take his precautions and to test the good faith of the subject in a host of previous experiments. The best proof of the reality of the facts seems to us to be, as we have said, in their complication, in the link that the experiences have with each other: most often the subject does not understand what we are doing, and he would fake everything wrong.

If the preceding distraction produced momentary anesthesia of the tactile and muscular senses in the right arm, it may produce other anesthesia for the other senses. Here is first a visual anesthesia obtained by this means. When Léonie’s eyes are open and I am not using a screen, there are no unconscious movements, the movement I am starting stops immediately. But, as soon as one speaks to him, the left arm is raised and resumes, even in front of the eyes, the position that I wanted to give it. He had registered the order without being able to carry it out; at the first opportunity, that is to say, at Leonie’s first distraction, he hastens to take his place again.

¹ Dumont. *Sensibilité*, 102.

² Binet et Féré. *Op. cit.*, 333.

The same distraction will produce (without it being possible in this chapter to explain how) particular anesthesia of hearing, at least for my own words. Leonie, with this easy distraction which is, as we have seen, characteristic of hysterics, will listen to the other people who speak to her, but will no longer listen to me and will not hear me, even if I order her at this moment something. This woman does not present, like other subjects, a real suggestibility in the waking state. If I address myself directly to her and command her to move, she is surprised, argues, and does not obey. But when she talks to other people, I can manage to speak quietly behind her without her turning around. She no longer hears me, and that's when she does the commandments well, but without knowing it. I whisper to her to pull out his watch, and his hands do it very slowly; I walk her around, make her put her gloves on and take them off, etc., all of which she wouldn't do if I commanded her directly when she hears me. It is the same in other states. In her first sleepwalking, Leonie 2, she is so barely suggestible that she always seems to act independently and that, moreover, she boasts of it. In fact, you have to shout very loudly and repeat the same sentence for a long time, when you want to directly make a suggestion. But we can proceed otherwise, let her chat with another person, which distracts her much more than in the waking state, then speak to her very softly and the commands that one does in this way are immediately executed without she notices it ¹. One day, Léonie 2, quite busy, was chatting with people present and had completely forgotten about me; I whispered to her to make bouquets of flowers to offer them to the people around her. Nothing was curious like seeing her right hand pick up one by one of the imaginary flowers, place them in her left hand, tie them with such a real string and offer them gravely, all without Léonie 2 having suspected it or interrupted his conversation. These same facts do not exist in the second somnambulism, in the state of Leonie 3 because, as we will study it further on, she can only hear me and can therefore no longer be distracted.

The same suggestions by distraction are found very easily in other subjects. It was at Lucie's that I had noticed them for the first time during sleepwalking and during the night before without really understanding them. At first she accepted my orders or refused them and then did not carry them out. To avoid this resistance, I commanded her in a low voice when she was not paying attention and then she always carried out what I had said without protesting. But I was then quite surprised to see that she was performing unconsciously. I told her to thumb her nose and her hands go to the end of her nose. We ask her what she is doing, she always replies that she does nothing and continues to talk for a long time, not suspecting that her hands are moving at the end of her nose. I make her walk across the room, she continues to speak and thinks she is sitting. What is more, one day, without having warned her, I tried another experience: I begged another person, MM... to order an act in my absence, but in my name. In the middle of the day, Messrs. Said behind her, "Mr. Janet wants both arms to go up in the air." It was done immediately, both arms remained contracted above her head. But Lucie was in no way moved and continued what she was saying. When we produced a permanent action in this way, such as contracture of the arms, we could force her to notice it by forcing her to seek her arms, to look at them, to try to move them. So she was frightened, moaned and would have started a seizure if, with one word, all the evil had not been suppressed. But, once healed and with tears still in her eyes, she remembered nothing and resumed her occupations at the point where she had interrupted them. The unconscious suggestion in her, as in Leonie for that matter, could be opposed to her conscious will. When either one refused to do or even say something, it was enough to distract them and whisper to them, they either did it without knowing it or

¹ Charpignon had already noticed a similar fact when he said that if a sleepwalker refuses to do an act consciously, he can be made to do it automatically, without his knowing it. *Physiologie magnétique*, 379.

suddenly said the sentence in the middle of a conversation that they then resumed, without realizing the interruption. For example, Doctor Powilewicz asks Lucie to sing something, she energetically refuses. I whisper behind her, "Come on, you're singing, you're singing something." She stops her conversation and sings an aria from *Mignon*, then resumes her sentence, convinced that she has not sung and does not want to sing in front of us.

Most of the other subjects would present to us, in large numbers, identical phenomena with insignificant variations; it is more interesting to examine the same facts on an entirely different subject. The previous subjects are hysterical women, who have been frequently hypnotized before. This time it is about a man, P..., aged forty, whom we have no reason to consider as hysterical and who has never been hypnotized, P... is brought to the hospital in Dr Powilewicz's ward for an attack of subacute alcoholic delirium. We have already described the suggestions which could be made to him by addressing himself directly to him and which he carried out consciously; but he also presented acts of a different kind.

While the doctor was talking to him and having him explain some details of his profession, I got behind him and ordered him to raise his arms; the first time, I had to touch the arm to provoke the act, unconscious obedience then took place without difficulty; I made him walk, sit down, kneel, all without his knowing it. I even told him to lie face down on the floor, and he fell immediately, but his head was still lifting to answer the doctor's questions. This one said to him: "How do you hold on then, while I speak to you. – But, he said, I'm standing by my bed, I'm not moving. – Can't you see how little you have become? – Oh, I've always been shorter than you, but I'm no shorter than usual." I couldn't believe a man in his right mind, for he was not delusional, and wide awake could believe he was standing when he was lying on his stomach on the floor. In reality, there was a sort of hallucination which joined with unconsciousness to produce this singular result. The next day, when I wanted to start the study again, this disposition of the patient to unconscious acts had greatly diminished; two days later, everything was gone. The alcoholic delirium had ceased and with it these phenomena of unconsciousness.

We have so far only studied acts suggested in this manner without the subject's knowledge during his distraction; what would happen if we suggested hallucinations and not acts? At first glance, this seems almost absurd, for a hallucination cannot be unconscious; Let us experience it anyway, however, it will show us that a suggestion of this kind can be realized in two absolutely different ways. One is quite simple, or at least relates quite easily to all of the subconscious acts we have just examined. The suggestion seems to be executed without the subject knowing anything about it, without his being aware of it and only manifests itself to us by acts or expressions of the physiognomy, like all the preceding acts. M. Ch. Richet has already pointed out this way in which a hallucination could be carried out and pointed out how curious the phenomenon was. He gives a glass of water to a person suggesting that the water is bitter, this person makes by drinking all kinds of faces: when questioned and asked if the water is bitter and bad: "No", she said, "the water isn't bitter and yet I can't help but make faces as if it is bitter." The same subject who was told there was a snake in front of him recoils with gestures of terror, while saying that he sees nothing in front of him ¹. This is exactly the way things are done with Lucie: if I tell her

¹ Ch. Richet. *Revue philosophique*, 1886, II, 326.

quietly (always by the same distraction process and not by direct suggestion which would have another result) that there is a butterfly in front of her, here she is, following him with her eyes, making gestures to catch him, etc., while talking about something else, and, saying, if you question her, that she sees nothing. This is an identical phenomenon to the previous ones, things happened the same when Léonie picked flowers without knowing it.

But quite often, and with most other matters, things turn out differently. The command is not heard by the subject, the origin of the hallucination is unconscious, but the hallucination itself is conscious and suddenly enters the subject's mind. So, while Léonie is not listening to me, I tell her in a whisper that the person she is talking to has a frock coat of the most beautiful green. Léonie seems to have heard nothing and is still chatting with this person, then she stops and bursts out laughing: "Oh! my God, how did you dress like that, and to say that I hadn't noticed it yet." I tell her in a low voice that she has a piece of candy in her mouth; she seems to have heard nothing and, if I question her, she does not know what I said, but here she is now making faces and shouting: "Ah! Who is it that put this in my mouth?" What seems to me the most singular is that, if I speak directly about this subject (which is not directly suggestible), and if I command him to hallucinate in this way, he will resist me, say that it is absurd and in reality will not experience the hallucination, unless I insist very hard. Whereas, if I give the command by distraction, Leonie will not know if I am ordering something from her, will not resist me, and will nevertheless immediately experience the commanded hallucination. This phenomenon is very complex, it includes a mixture of unconscious facts and conscious facts related to a certain point of view and yet separated to another. We have thought it necessary to point out here its existence so as not to leave a serious gap in the enumeration of the suggestions by distraction, but we do not believe that we can show various other examples of them and discuss them before having completed other studies; we will resume their examination later.

Let us return to the phenomena which are uniquely and completely subconscious: an easy characteristic to observe is the intelligence which can manifest itself in such facts separated from the normal mind of the subject.

We are no longer in the presence of a partial catalepsy in which the acts are simply determined by a sensation or an image; rather we are, as we will see, in the presence of a partial somnambulism, where the actions are determined by intelligent perceptions. The subject does not repeat the words, he interprets them and performs them; So there is intelligence there which is fairly easy to manifest in different ways.

So I order Leonie to raise her arm, not immediately, but when I have clapped my hands ten times. I clap my hands, and on the tenth knock, my arm is raised. All this was unknown to her, the command, the sound of blows in my hands, and the act itself: there is obviously a phenomenon of unconscious numeration here. But these unconscious calculations, having been studied more fully in connection with another problem, we will postpone their study a little. I give Léonie another intelligent suggestion as well, that of answering my questions by a sign, not by mouth (which is possible, but what interrupts normal conversation), but by a wave of the hand; you will shake my hand to say "yes", and you will shake my hand to say "no". I take her left hand which is anesthetic, she does not notice it and talks with other people. Then I also chat with her, but without her seeming to hear me: her hand alone hears me and answers me with small movements very clear and very well suited to the questions.

Let's go further, if we don't want to make her speak without her knowing it, we can at least make her write; I put a pencil in his right hand and his hand grips the pencil, as we know; but instead of pointing her hand and having her draw a letter which she will repeat over and over again, I ask a question: "How old are you? In which city are we here?... etc.", And here is the hand which shakes and writes the answer on the paper, without, during this time, Léonie having stopped talking about other things. I made him do some arithmetic operations in writing, which were quite correct; I made him write fairly long answers which evidently manifested a fairly developed intelligence.

This kind of writing is known under the name of automatic writing, a fairly correct expression if one means that it is the result of the regular development of certain psychological phenomena, but by which one should not understand, I believe, that this writing is not accompanied by any kind of consciousness. M. Taine, in the preface to his work on *Intelligence*, shows very well the possibility and the interest of this singular phenomenon: "The more bizarre a fact, the more instructive it is. In this regard, the spiritualist manifestations themselves put us on the path to these discoveries, by showing us the coexistence at the same moment, in the same individual, of two thoughts, of two wills, of two distinct actions, one of which he is aware, the other of whom he is not aware and which he attributes to invisible beings... There is a person who, while chatting, singing, writing without looking at his paper, followed sentences and even whole pages, without being aware of what she is writing. In my eyes, his sincerity is perfect; however, she declares that at the end of her page, she has no idea what she has drawn on the paper. When she reads it, she is astonished, sometimes alarmed... Certainly we see here a duplication of the ego, the simultaneous presence of two series of parallel and independent ideas, of two centers of action, or, if one wants, two legal persons juxtaposed in the same brain; each has a work, and a different work, one on stage and one behind the scenes ¹."

Distraction already played a considerable part in the ordinary consciously executed suggestions which we studied in the preceding chapter; but then it only concerned the antagonistic ideas and left the consciousness of the suggested act itself. We have just seen that distraction gives rise to another kind of suggestion; while the distracted consciousness is occupied with indifferent ideas, the suggested act is also performed but without the knowledge of the subject. In a nutshell, the distraction seems to split the field of consciousness into two parts: one that remains conscious, the other that seems ignored by the subject. The suggestions previously studied gave rise to phenomena belonging to the first part of the field of consciousness; those which we now point out determine actions which seem to remain in the second and which completely retain the appearance of partial and unconscious catalepsies. Before explaining these facts further, we must see them in other aspects and in other circumstances.

III. The posthypnotic suggestions. History and description

The persistence of the commandments beyond sleepwalking and their execution after returning to normal were phenomena so well known to ancient magnetizers that their description can still be

¹ Taine. *De l'intelligence*. Préface, I, 16.

considered accurate today. “The magnetizer”, says Deleuze, “can, after having agreed with them, imprint on them during sleepwalking an idea or a will which will determine them in the waking state, without their knowing the cause. So the magnetizer will say to the somnambulist: “You will go home at such and such an hour; you will not go to the show this evening, you will cover yourself in such a way; you will have no difficulty in taking such and such a remedy; you will not take liquors, no coffee; you will no longer be concerned with such an object; you will drive away such fear, you will forget such and such thing, etc.” The somnambulist will naturally be inclined to do what has been prescribed to him; *he will remember it without realizing that it is a memory*; he will have attraction for what you have advised him, distance for what you have forbidden him ¹...” However this author, who knew so well the power of suggestions after awakening, does not seem to recognize that there is a phenomenon of the same kind in the action of his *magnetized water* which “sometimes purges and sometimes constipates according to need ²”, and which “retains its power for five years”. Bertrand better understands the role of post-hypnotic suggestion in these phenomena, and he uses it to produce all the effects attributed to magnetism. He describes, one of the first, this very curious experiment which consists in ordering a subject during his sleep to return on such and such a day at such an hour. “It will not be necessary”, he adds, “to have him remember his promise (when he is awake) for him to carry it out; and, at the appointed moment, the desire to do what he wills in sleepwalking will spontaneously arise in him without his being able to realize the motive which drives him ³.”

Since, from this time (1823), the post-hypnotic suggestion was thus known and used, it is not surprising that all the later writers give us very clear and very curious examples of this phenomenon. Teste, who did not have the same scruples as Deleuze, made real experiments and ordered his subjects to light a fire the next day, to embroider for an hour, etc. ⁴. He even proposes, with as much conviction as some hypnotists today, “to regulate thereby the moral and physical life of the subjects who are put to sleep and to work for their moral improvement ⁵”. In the same way, moreover, Aubin Gauthier succeeds, he says, in changing the feelings of a young girl and reconciling her by suggestion with her mother: the touching scene he aptly describes is quite singular ⁶.

Charpignon is more precise in his experiments; he notices that a complex hallucination suggested in this way (that of having received a wallet as a gift) persists two days after waking up ⁷, and he demonstrates the role of suggestion in the sleep induced by sending magnetized tokens, showing that sleep also occurs if the tokens have not been magnetized and if the subject has simply been warned for sleepwalking previous they would be ⁸.

The *Journal of magnetism (Journal du magnétisme)* of Dupotet naturally contains a large number of cases of this kind; I noticed an interesting experiment on the sleep induced at the appointed time ⁹; but I

¹ Deleuze. *Instruction pratique*, 1825, 118.

² Deleuze, *Histoire critique*, I, 125. *Instruction*, 65.

³ Bertrand. *Traité du somnambulisme*, 1823, 199.

⁴ Teste, *Magnétisme expliqué*, 1845, 341.

⁵ Id. *Ibid.*, 435.

⁶ A. Gauthier, *Histoire*, II, 361.

⁷ Charpignon, *Physiologie du magnétisme*, 82.

⁸ Id. *Ibid.*, 94, 362.

⁹ *Journal du magnétisme*, 1855, 181.

believe that it is better to quote entirely the summary, given by an interesting magnetizer who deserves to be better known, of the phenomena of hallucinations on awakening by post-hypnotic suggestion. “It is often easy”, writes Dr. A. Perrier ¹, “to induce this kind of neurosis (hallucination) at will in somnambulists and to prolong it even when they wake up. We made them see people who were absent or dead for a long time as we liked; they brought back to their drinks or their food the taste which we had pleased to give them; their sense of smell showed the sensation of the most varied perfumes which really only existed in our imagination. We now have a somnambulist, in whom the most perfect insensitivity and the illusion of taste persist for several hours on his return to normal life. Before *waking her up*, we emit some will, and when she wakes up, she experiences all the hallucinations of the senses that we have imposed on her. *An individual present remains for her perfectly invisible*, she sees another whose voice she does not hear; a third pinches her and she doesn’t feel it. Liquids have the flavor we want in his mouth; hearing perceives the most variable sounds. His perceptions are transfigured like the images of our thoughts... etc.” It is difficult to give a more complete summary of all hallucinations, even those which have been more recently referred to as negative hallucinations, which may be produced by suggestion. Liébault, in 1860, speaks of suggestions for 52 days and studies their execution ².

However, such was, at that time, the puerile contempt which one affected for animal magnetism that all these psychological descriptions were completely forgotten and one really believed in a very recent discovery when M. Ch. Richet ³ in 1875 published his observations on some suggestions made after the awakening. It was hard to believe that a woman, having forgotten everything she had been told during sleepwalking, could nevertheless come back after eight days at the appointed time without knowing why. But, in 1823, Bertrand already considered this experience to be banal. It must be recognized that M. Richet’s descriptions were more successful than those of Bertrand. They were able to convince more people and, since, the study of the suggestion carried out after the awakening was made by a large number of observers who found one after another all the facts which the ancients had seen. We will not repeat the description of this phenomenon which is now well known: the preceding quotations can take the place of a general description; we will only insist on the details, which will make us better understand the functioning of the mind in these singular operations.

Let us first notice that this persistence of an idea, despite the passage from one state to another, also occurs outside of hypnotism. “Usually”, says Moreau (from Tours) ⁴, “dreams stop with sleep, sometimes they persist in waking... An individual dreams that he can fly in the air; awake, he feels the need to try it by jumping a ditch.” “Another dreamed of his father who died and sees the ghost of it, he continues to see it in the half-alarm clock and even a little during the day before ⁵.” “The delirium of many insane takes its starting point in the dreams of their sleep ⁶.” Nervous crises and ecstatic states show us phenomena of the same kind. M. Fontaine, one of the convulsants of Saint-Médard, announces, during a crisis, that, all the rest of Lent, he will take only one meal a day and that he will take it with bread and water; after his seizures he remembers nothing and yet he is forced to fast and fulfill his prescription ⁷. Liébault ¹ speaks

¹ A. Perrier, *Recherches médico-magnétiques*. – *Journal du magnétisme*, 1854, 76.

² Liébault, *Du sommeil*, 153.

³ Ch. Richet. *L’homme et l’intelligence*, 251.

⁴ Moreau (de Tours). *Le haschich*, 252.

⁵ Id. *Ibid.*, 230.

⁶ Id. *Ibid.*, 261.

⁷ Gasparin. *Tables tournantes*, II, 62. – Regnard. *De la sorcellerie*, 178.

of a patient who dreams that he has become dumb and who on waking has really lost his speech. Along the same lines, let us quote the ingenious process of a lover who obtained permission to approach his beauty while she was asleep and whisper his own name *in* her ear. This young person later had a lot of affection for him by a sort of recurring dream ². Finally, M. Charcot quotes a hysteric who, after a crisis in which he believes he has been bitten by animals, examines his arms to look for traces of the bites he believes he has suffered ³, and Maudsley speaks of a doctor who believed he owned a white horse he had dreamed of during the delirium of typhoid fever ⁴. All these phenomena are obviously identical to those which occur after hypnotic sleep, but they are neither so clear nor so accessible to the experiment.

IV. Performing suggestions during a new sleepwalking state

We already know under what circumstances a suggestion of the kind which we are now considering must be made: it does not differ in this respect from those which were considered in the previous chapter. The subject must be normally or artificially in an incomplete psychological state where his limited number of consciousness phenomena do not oppose sufficient resistance to the ideas suggested to him. But, under what circumstances are such suggestions made? This is where things are not so simple anymore. Indeed, if we wake up the subject, to use the time-honored expression, we bring him back to a psychological state different from the previous one in two points. First, the nature of the predominant images no longer being the same, the memory of somnambulism and the memory of the suggestion itself seem completely lost, and then the number of simultaneous phenomena being ordinarily greater, the *subject is no longer currently suggestible*. We then wonder how this suggestion can represent itself in his mind and how it can have a power that other sensations and other memories do not have at this moment. The answer to these questions is quite difficult, because the mechanism of post-hypnosis suggestion is far from being the same in all subjects.

Let's start by setting aside the subjects who do not have real sleepwalking, that is to say who do not have a second life quite distinct from the first. Some people, like Blanche of whom I have spoken, or like a hysteric whom I have often put to sleep, G.... keep the same state of sensibility when they are awake or asleep and therefore retain the more or less complete memory of their second state. In addition, the field of their consciousness varies little, being always very restricted, and they are as suggestible in one state as in the other. There is no real change, their sleep or awakening is just a suggestion obtained by suggestion. In similar subjects, of which there are quite a few, the post-hypnosis suggestion is identical to one of those ordinary suggestions with a benchmark previously studied. If I tell G.... while she is sleeping, to go around the room when I clap my hands, this idea stays consciously in her mind and comes true on the given signal. I wake her up now before the realization, whatever, since in her the memory of sleepwalking persists quite completely. (It is true that she remembers more easily the suggestions than the other words, it is probably that she attached more importance to them.) Awake, she said to me again: "I know very well what you have just said, ask me, you told me to walk around the room." As she is very suggestible in

¹ Liébault. *Revue hypnotique*, I, 145, et *Le Sommeil*, 157.

² *Proceed. S. P. R.*, 1882, 287.

³ Charcot, *Maladies du syst. nerv.*, III, 262.

⁴ Maudsley, *Pathologie de l'esprit*, 219.

the waking state, she does not know how to resist this idea any more than she did just now and, at the given signal, she gets up saying to explain her action to herself. "You really have funny ideas ... it's very boring ... well since you hold on to it ... You know, if I hadn't wanted to go around the room, I would have stayed on my chair it's because I want to." His ideas are in fact a little more numerous and rapid than during the previous state; so she has a little the idea of resistance and the idea of freedom. This idea is not absolutely wrong, because it is a fact that it can resist this kind of suggestion. I told her one day to thumb his nose at me when she woke up. I wake her up: she still kept the memory and said to me: "You think I'm going to thumb your nose at you... ah! but no... I'm not that foolish." And, in reality, she doesn't. Besides, don't we know that a subject resists very well even during somnambulism; this is nothing new. This only confirms our observation: there are subjects in whom the state of wakefulness and sleepwalking are almost identical and who execute post-hypnotic suggestions in the same way as ordinary suggestions.

We will arrive at a roughly similar conclusion if we consider apparently quite different subjects. I am talking about those who have a real sleepwalking different from the day before in all respects, with complete loss of memories upon awakening. Let us carefully examine their psychological state after and during the execution of a post-hypnosis suggestion. A first very important fact has been observed by M. Beaunis: whatever way they have carried out the order received, once the action is accomplished, they completely lose their memory, they no longer know what they have done, although they acted during the day before. I tell N... to go after waking up and kiss Mrs X... She gets up, deliberately performs this action, joking even as if she was wide awake. A moment later, I ask her why she got up and what she wanted. "Ah! I don't know", she said, "it was to walk a little. – What were you saying in a whisper to Mrs X...? – Nothing at all, it's been half an hour since I spoke to him." This is almost always the case, and the fact has been too fully described for me to insist further. Let us pass to a second fact pointed out for the first time, I believe, by Mr. Gurney, and which is at least as important as the preceding one. If a subject is questioned while he is performing a post-hypnosis suggestion, he will be found to have, at this time, the memory of all his previous somnambulisms, although usually he has completely lost these memories. "He is told a piece of news during the hypnotic state; when he wakes up he does not remember it, but when he executes a suggestion he remembers the news that was told to him during hypnosis ¹." I have verified this characteristic, especially with Marie, in the clearest way.

A third characteristic, naturally related to this one, is found indicated in Mr. Gurney's article and has been able to be verified by us in an interesting way. "If we give a suggestion to a subject in a state where he is insensitive and if we wake him up in another state where he is normally sensitive, he becomes insensitive again when he performs the suggestion ²." I have seen a fact that confirms this, although it seems to be the opposite. Rose was normally a total anesthetic, but in a certain somnambulism she regained the sensitivity on the right side and was no more than a left hemianesthetic; when she woke up, she still lost this sensitivity and became completely insensitive again. In this particular somnambulism, I command him to look for an object on a table and to come and show it to me. Then I wake her up completely, a few moments later she gets up, walks around the room a little, goes to the table, takes the object she brings me, When she passes near me, I pinch her right arm, she screams and turns around, which she never did in the waking state. The next moment she had lost both the memory of showing me

¹ Gurney. *Problems of hypnotism. Proceed. S. P. R.*, 1887, 273.

² Gurney. *Problems of hypnotism. Proceed. S. P. R. II*, 65.

something and the sensitivity of her right side. Marie does not present, in the first ordinary somnambulism, great variations in sensitivity, she is total anesthetic as in the waking state; but here is a detail that I have seen regularly. Her right eye (she was then completely blind in her left eye) has very poor visual acuity during the vigil, one-eighth of Wecker's table; during sleepwalking, if he is made to open his eyes, the visual acuity of the right eye always rises without any suggestion to a quarter or a third. During this sleepwalking, I suggest that she take a broom and sweep the room when she is awake. Sometime after waking up, she picks up the broom and sweeps, "because it's dirty", she said. I then place it, without removing its broom, in the same place as before, five meters from the board and I have it read. Visual acuity is a third. Some time later, the broom being removed, I still measure the right eye, visual acuity is one eighth. In short, when executing the post-hypnosis suggestion, she resumed the sensory state she had in somnambulism. It is thus that we must interpret, we believe, the observations of certain authors according to which a particular anesthesia would characterize the execution of post-hypnotic suggestions. This only takes place if the state during which the suggestion was made was itself a state of anesthesia. In short, in subjects of this category, the state of sensibility at the time when a suggestion is executed is the same as when it was received.

Finally Mr. Gurney points out yet another fact which we will put in fourth place. If we take a subject which is not suggestible in the waking state, but which is clearly so in somnambulism, he resumes, when executing a post-hypnotic suggestion, this disposition *to* the suggestion which he no longer had during the normal day before. "During this execution, a new command can be imposed on the subject which would be regarded as a joke if the subject were awake and which is then executed as if given during the hypnotic state ¹." I have verified this new fact, but I do not find my observation to be of much value, for the subject on which I made it was quite strongly suggestible even during normal waking. This experience should be repeated, because Gurney's observation remains very interesting. Thus, in summary, one can, in certain cases, observe four important psychological characteristics at the time of the execution of a post-hypnotic suggestion: 1st forgetting of the act after it has been performed; 2nd memory at the time of the accomplishment of the suggestion of the previous somnambulisms; 3rd variations of the sensory-sensory state; 4th increase in suggestibility. The connection now seems obvious and these four characters are precisely those which distinguished the somnambulic state from the waking state. Some subjects, in order to perform post-hypnotic suggestions, return to a somnambulic state identical to that during which the suggestion was received. This idea has already been expressed by MM. Fontan and Ségard ² and by M. Delboeuf who even gave it, at least in my opinion, too general a scope, but it had not been sufficiently demonstrated. The author in fact insists on the variation in the physiognomy of subjects who take haggard eyes when they execute a post-hypnotic suggestion. The choice of this characteristic seems unfortunate to me, because sleepwalkers do not necessarily have haggard eyes. As we have said, and as we now seem willing to admit, there is no physical sign of sleepwalking. But the psychological phenomena are here very characteristic and show that, in certain cases, the subjects are again in somnambulism when they carry out the suggestion.

Shall we say, however, that this observation, interesting though it may be, completely resolves the problem of post-hypnotic suggestion? Obviously no. First of all, it is essential to notice that things do not happen thus in all subjects and that it is even very rare to observe, during the execution of a post-hypnotic

¹ Gurney. *Proceed. S. P. R.*, 1887, 271, 273.

² *Médecine suggestive*, 158.

suggestion, the four characters that I have mentioned. There are people who do not have the memory or the sensitivity of sleepwalking at the time they execute a suggestion, so they do not fall back into a hypnotic state. Furthermore, even in subjects conforming to the preceding description, these phenomena are far from being all explained. If the suggestion is carried out immediately after the apparent awakening, it can be said with enough certainty that they did not actually wake up. But if, as is usual, the suggestion is carried out much later, two days to the same one hundred days later, an essential fact remains to be explained: Why do they go back to sleep at this time?

There is no point in saying, which is hardly true, that any post-hypnosis suggestion is equivalent to this: “You will go back to sleep at such-and-such a time and you will do such-and-such,” for the post-hypnosis suggestion of sleep is just as difficult to explain as any other. After waking up, they have completely forgotten that they have to go back to sleep and they do not think of this suggestion until the moment it has to be carried out. Why does this forgotten memory present itself at this moment? After their sleep, they are no longer suggestible; we can, as observed by Mr. Beaunis ¹, make them believe that a suggestion was made while they were asleep: if the suggestion was not actually made while sleepwalking, this idea is not enough and the act is not carried out. Why does this idea of sleep occurring among other ideas have the power to be carried out? This is not explained, although we admit that any suggestion is carried out during a new sleepwalking. In order to move forward in the study of this problem, we must examine other subjects which present in a distinct, somewhat typical way, another way of carrying out the suggestion. The new phenomena that we will see in these subjects already existed in the others, but without precision, mixed with other facts; it is better to examine them *in hand* before returning to more complex phenomena.

V. Subconscious execution of post-hypnosis suggestions

A hysterical woman, whom I had the opportunity to study, presented in the highest degree and in an extremely clear manner an important phenomenon which exists in all other subjects in a more or less concealed manner. It is one of those prerogative cases of which Bacon speaks that it is necessary to understand well before moving on to the others. This is Lucie, this 19-year-old young woman who had severe seizures every day and whom I had put to sleep for the first time in the middle of a stroke. After studying the ordinary suggestions on her during the hypnotic state which were remarkably successful, I gave her orders to be performed after awakening and was struck by the singular manner in which she carried them out. She had, at this moment, the most natural appearance, spoke and acted by being well aware of all the acts which she made spontaneously; but, through all these natural acts, she performed, as if by *distraction*, the acts commanded in sleep. Not only did she forget them like most subjects after completing them, but she didn't seem to know them even as she performed them. I tell her to raise both arms in the air after she wakes up: hardly is she in the normal state that she lifts both arms above her head, but she does not worry about it; she goes, comes, talks, while keeping both arms in the air. If someone asks her what her arms are doing, she is surprised at such a question and says very sincerely: “They don't do anything at all with my hands, they are like yours.” By this process, I make her thumb her nose, I make her walk across the room; I order her to cry and when she wakes up she really sobs; but she

¹ Beaunis. *Somnambulisme*, 208.

continues in the midst of her tears to speak of very gay things; the sobs stopped, there was no trace of this grief which did not seem to have been conscious. I even begged her one day to make every effort to resist me; she did not seem to understand very well, for she did not remember his obedience. She assured me with a laugh that she certainly wouldn't do the deed I was about to say. I order something while I am asleep and my command is immediately executed when I wake up; but she continues to laugh, always saying: "Try to command me, I won't do anything at all." In short, everything to do with the post-hypnosis suggestion seemed to no longer enter his consciousness.

Things were a little different when it was no longer an act, but a hallucination prescribed for waking up. The command was also ignored; but the hallucination itself was or seemed to be conscious, that is, it suddenly invaded consciousness without Lucie knowing where it came from. "You are going to drink a glass of cognac" Awake, she says she hasn't heard anything and wants to talk about something else; but her arm is raised automatically, the hand approaches her lips, Lucie seems to be tasting something and, when questioned, says that she is drinking cognac, which she is very happy with because the doctor forbade her to ¹. Forgetting, moreover, is very rapid and you have to question quickly enough to see this fleeting awareness of hallucination. Except in this case, where the suggestion was executed with some perception, consciousness seemed to be completely abolished.

Once convinced of this unconsciousness which, no doubt, has already been noticed by many observers, but which I had not yet noticed to this degree, I tried to determine how far it extended, that is to say, what were the acts, the psychological phenomena which could assume this characteristic; at the same time, I have tried to shed some light on a little problem in psychology which was once pointed out in connection with hypnotic suggestion.

M. Paul Janet, in his articles on hypnotism ² and by which he made known to philosophers these curious and too neglected phenomena of human thought, had raised some doubts about a particular kind of suggestion. MM. Richet and Bernheim, following the example of most of the old magnetizers, had cited examples of suggestions that the subject had to accomplish when he woke up, not at a fixed deadline marked by a sign, but after a certain number of days: "At S...", said M. Bernheim, "I had them say in somnambulism that he would come back to see me after thirteen days; awake, he remembers nothing. On the thirteenth day, at ten o'clock, he was present." Mr. Paul Janet writes on this subject – "I admit that these ignored memories, as Mr. Richet calls them, can awaken at any time, according to such or such circumstance. I could still understand the return, even to a fixed period, of these images and of these acts which follow from them, if the operator associated them with the appearance of a vivid sensation; for example, "the day you see Mr. So-and-so you will kiss him", the sight of Mr. So-and-so to serve as a stimulus to awaken the idea. But what I absolutely do not understand is the alarm clock on a fixed day without any point of attachment than the counting of time, for example, in thirteen days. Thirteen days is not a feeling; it is an abstraction. To account for these facts, we must assume an unconscious faculty of measuring time; however, this is an unknown faculty." M. Ch. Richet answered a few words ³; but, if I am not mistaken, he did little more than confirm the correctness of the fact and related it rather vaguely to

¹ This is a complex phenomenon analogous to those noted above.

² *Revue littéraire*, 26 juillet, 2, 9, 16 août 1884.

³ *Revue littéraire*, 23 août 1884.

others of the same kind: “Intelligence, he says, can work outside of me, and since it works, it can measure time; this is obviously a simpler operation than finding a name, writing verses, solving a geometry problem, all of which she can accomplish without the ego participating in it.”

Since then, Mr. Bernheim has attempted an ingenious explanation that the measurement of time, he says, took place really and consciously; from time to time the memory of the suggestion came back to consciousness, and from time to time the subject counted the days that had passed, but this reflection quickly passed through his mind and he forgot it. “He doesn’t remember what he remembered ¹.” It is the same when we go to bed with the intention of waking up the next day at a fixed time; from time to time we wake up, we watch the time, then we go back to sleep and, “when we are awake we do not remember that we have been thinking all night not to miss the time and we believe that the awakening was spontaneous and unconscious ².” The supposition is interesting and it had already seduced several philosophers, we find it in Jouffroy’s article on sleep ³ and in Charma’s work on the same subject: “Intelligent acts, precautions taken in sleep are actually taken in a waking moment which separates two immediate sleeps and which is forgotten afterwards. This is why we wake up to a noise that interests us and not to another, because, after another, we go back to sleep without remembering it ⁴.” This explanation would have the advantage of simplifying things and substituting a phenomenon of forgetting for a phenomenon of unconsciousness. I believe, however, that it is still insufficient; first of all, this theory would not explain to us why the memory of the suggestion, which does not seem to exist, returns from time to time and what prompts the subject to take these precautions. Moreover, the supposition does not appear to me to be consistent with the facts. If we seriously examine the mind of a subject in all the moments preceding the execution of the suggestion, we will not find a moment when he really remembers it. There is there, not an oversight, but a real unconsciousness, like M. Beaunis ⁵ noted this when discussing Mr. Bernheim’s supposition.

To shed some light on this question, I admit that I would not pose the problem in the same way as Mr. Paul Janet. “It is there”, he said, ⁶ “a new fact, of a completely different order from the previous ones and which, if it were true, would bring us into the domain of the mysterious and unknown faculties of animal magnetism, double sight, foreboding, etc.” I cannot share this feeling: the somnambulist who has been suggested to perform an act in thirteen days does not need a particular and mysterious faculty to measure time; he finds himself in the same conditions as all of us; he sees day and night; he sees the time on the clocks and I do not know why he would measure time in a mysterious way, when nothing prevents him from measuring it in the ordinary way. But, it will be said, he does not remember, he is not aware of the suggestion; this does not prevent the days and nights from making an impression on him and to carry out the suggestion at the appointed time, he has only to count them. It is true that this count must be made without consciousness, since the subject, in his ordinary consciousness, does not know that he has an action to accomplish in thirteen days. But, anyway, it is only a faculty of unconsciously counting perfectly real things and not a mysterious faculty of measuring time which seems to me useless here. Having said that, I find Mr. Paul Janet to be absolutely right on the other hand, to distinguish this

¹ *De la suggestion*, 174.

² *De la suggestion*, 172.

³ Jouffroy, *Mélanges philosophiques*, 1875, 233.

⁴ Charma, *Du sommeil*, 1852, 26.

⁵ Beaunis, *Somnambulisme*, 243.

⁶ Réponse à M. Richet. *Revue littéraire*, 23 août 1884.

operation from an ordinary memory, and this particular kind of suggestion from all the others. When one makes an ordinary suggestion: "As soon as you see M. X... you will kiss him," the sleepwalker, when awake, does not keep anything in his consciousness, or rather he preserves a latent association of ideas which has no need to translate itself currently into a psychological phenomenon. We ourselves do not know all the latent associations that are in our mind; the sight of such and such a person must perhaps awaken in us a sad or cheerful idea which we do not now suspect. The awakened somnambulist has in his head one more latent association; the sight of M. X... will awaken in him the idea of kissing her. There is nothing there that departs from the most normal psychology. But in the second case, when he has been told, "You will do such and such an act in thirteen days," his mind cannot entirely forget the suggestion upon waking; this cannot remain latent until the thirteenth day, for this thirteenth day, not being in itself different from the others, would not awaken in him the idea of suggestion more than the twelfth or the fourteenth. Since waking up and throughout the interval, he must constantly think: "Today is the first day, or the second..." then when he thinks: "This is the thirteenth", the association will be made. Now, it is obvious to everyone that awakened sleepwalkers do not have such a memory even at times, and are not aware of making these remarks and this account. However the count must be made. We have here, not an association, that is to say a pure possibility persisting in a latent state, but real psychological phenomena, remarks, accounts, in a word judgments persisting for thirteen days in the head of an individual, without his being aware of it: an unconscious judgment is quite another thing than a latent association.

The problem thus reduced to terms which seemed simpler to me, I tried above all to verify the reality of the fact in question. The person I was dealing with presented to me, like the others, many examples of latent associations. I had suggested that he fall asleep as soon as I raised my arm and I put him to sleep with the greatest ease. I questioned her one day while awake to see if she knew the process I was using to put her into sleepwalking; she was absolutely ignorant of it. I gave her a sign, arm raised: she thought it was a joke and yet the sight of my arm raised immediately put her to sleep. This is a well-known fact: M. Bernheim had already noticed that if, during sleepwalking, the subject was made to understand that the magnet produced the transfer, he retained no memory of what it was when he woke up, he was told about it. "However, if I repeat the transference experiment made during sleep with suggestion, the same phenomena will be reproduced to their great astonishment, proof that the brain had preserved in the waking state the unconscious memory of the suggestive phenomena caused during sleep, hypnotic state¹." So there are latent associations in the minds of the subjects, but are there similarly unconscious judgments and can the subject make accounts without knowing it?

Lucie being in a state of sleepwalking, I told her in the tone of the suggestion: "When I hit my hands twelve times, you will go back to sleep". Then I talk to her about something else and, five or six minutes later, I wake her up completely. The forgetting of everything that had happened during the hypnotic state and of my suggestion in particular was complete. This forgetfulness, an important thing here, was guaranteed to me, first of all by the previous state of sleep which was a real somnambulism with all the characteristic signs, by the agreement of all those who took care of these questions and who have all noted the forgetting on awakening of similar suggestions, finally after all the preceding experiments made on this subject where I had always noted this unconsciousness. Other people surrounded Lucie and spoke to her about different things; however, withdrawing a few paces away, I clapped my hands five fairly widely and weakly. Noticing then that the subject was paying no attention to me and talking briskly, I

¹ Bernheim. *Revue philosophique*, 1885, I, 312. – Cf. *De la suggestion*, 161.

walked over and said, “Did you hear what I just did? – What, I wasn’t paying attention. – And that? (I clap my hands). – You just clapped your hands. – How many times? – Only one”. I pull back and keep hitting a weaker shot every now and then; Lucie distracted no longer listens to me and seems to have completely forgotten me. When I have thus struck six blows which, with the preceding ones, made twelve, Lucie immediately stops, closes her eyes and falls back asleep. “Why are you sleeping? I said. – I don’t know, it came to me all of a sudden.” If I am not mistaken, this is the experience of MM. Richet and Bernheim, but reduced to greater simplicity. The somnambulist must also have counted, for I applied myself to making the equal strokes and the twelfth was no different from the previous ones; but, instead of counting days, which had made it seem like a measure of time, she had counted noises. There was no new faculty, for all the knocks were easy to hear, although she claimed to have heard only one: she must have listened to them and counted them, but without knowing it, unconsciously. The experiment was easy to repeat and I did it again in many ways: Lucie unconsciously counted up to 43, and the shots were sometimes regular, sometimes irregular, without ever having made a mistake about the result. One of the most striking experiences was this. I command: “At the third stroke your hands will go up; at the fifth they will lower; on the sixth you will thumb your nose; on the ninth you will walk into the bedroom; in the sixteenth you will fall asleep in an armchair”. No memory on awakening and all these acts are accomplished in the desired order, while, all the time, Lucie answers the questions that are addressed to her, and is unaware that she is counting noises, that she thumbs her nose or walks around.

After having repeated the experiment, it was necessary to think of varying it and thus I tried to obtain very simple unconscious judgments. The arrangement of the experiment always remains the same; the suggestions are made during the well-established hypnotic sleep, then the subject is fully awake, the signs and the execution take place during waking. “When I say two identical letters one after the other, you will remain stiff.” After waking up, I whisper the letters “a... c... d... e... a... a...”, Lucie remains motionless and fully contracted; this is an unconscious judgment of resemblance. Here are the difference judgments: “You will fall asleep when I say an odd number” or, “Your hands will start to spin on top of each other when I say a woman’s name.” The result is the same: as long as I whisper even numbers or names of men, nothing happens; the suggestion is executed when I give the sign: Lucie has therefore unconsciously listened, compared and appreciated these differences.

I then tried to complicate the experiment to see how far this unconscious faculty of judgment went. “When the sum of the numbers I’m going to say is 10, your hands will send kisses.” The same precautions; she is awake, forgetfulness is noticed and, far from her, while she talks with other people who distract her as much as possible, I whisper 2... 3... 1... 4.. and the movement is made. Then I try more complicated numbers or other operations: “When the numbers that I am going to pronounce two by two, subtracted from each other, give as a remainder six, you will do such and such a gesture,” or multiplications or even very simple divisions. Everything is done almost without error, except when the operation becomes too complicated and could not be done head-on. As I have already noticed, there was no new faculty there, but ordinary phenomena occurring unconsciously.

It seems to me that these experiments relate quite directly to the problem raised in the *Revue littéraire* (translation: *Literary Review*) and, in general, to the problem of the intelligent execution of suggestions which seem forgotten. The reported facts are perfectly correct: somnambulists can count the days and

hours which separate them from the accomplishment of a suggestion, although they have no recollection of that suggestion itself. Outside of their consciousness, we do not know how, there is a memory which persists, an attention always awake and a judgment well capable of counting the days, since it can make multiplications and divisions. But it is nonetheless true that these phenomena are, at first glance, strange and that it is necessary to try to push their study further, in order to better understand both the phenomenon of post-hypnotic suggestions and perhaps the general nature of the conscious life.

To make some progress in this study, it was necessary to try to penetrate this unconsciousness, to make sensitive these psychological operations which were outside the normal mind and of which we had hitherto only seen the results. How to make them manifest by a sign, any language? The lyrics revealing nothing to me, let's try another kind of signs, writing. "When I clap my hands, I said to her, always arranging the experiment in the same way, you will take a pencil and paper from the table and write the word "Hello." At the given sign, the word is written quickly, but in legible handwriting. Lucie hadn't noticed what she was doing; but this was only pure automatism which did not show great intelligence. "You are going to multiply by writing 739 by 42." The right hand writes the numbers regularly, does the operation and does not stop until everything is finished. All the while Lucie, wide awake, was telling me about her day's schedule and hadn't stopped talking once while her right hand was calculating correctly. I wanted to leave more independence to this singular intelligence. "You will write any letter." Here is what she wrote without knowing it, when she woke up: "Madame, I cannot come on Sunday, as it was understood; please excuse me. I would be happy to come with you, but I cannot accept for this day. Your friend, Lucie. – P. S. – Many things to the children, please" This automatic letter is correct and indicates a certain reflection. Lucie was talking about something else entirely and responding to several people as she wrote it down. Besides, she understood nothing of this letter when I showed it to her and maintained that I had copied her signature. Strangely enough, when I wanted to repeat this experience, Lucie wrote the same letter a second time without changing a word; it seemed that the machine was mounted in this direction and could not be disturbed. The writing of these letters is interesting; it is analogous to Lucy's normal handwriting, but not identical; it is a slanting and very loose writing; words tend to lengthen indefinitely. M. Ch. Richet, to whom I showed these fragments of automatic writing, taught me that this characteristic was frequent in the writings of mediums of which we will speak later and that, in their letters, often a word filled the whole line.

After having made Lucie write several automatic letters of this kind, I had the idea of questioning her when I made the suggestion to her and of ordering her to answer me in writing. I started by asking the question during sleep; then I woke up the subject in order to be more certain of forgetting and unconsciousness. At an agreed signal, Lucie took the quill and wrote down the answer without knowing it. It wasn't long before I realized that it wasn't necessary to put her back to sleep for every question. It was enough to suggest to her, during sleep, to answer my questions in writing, so that, once awake, she always did so and in the same automatic way. At this moment, Lucie, although awake, seemed to no longer see or hear me consciously; she did not look at me and spoke to everyone, but not to me; if I asked her a question, she answered me in writing and without interrupting what she said to others. I had to change my tone entirely and even take her hand to force her to listen to me again in the ordinary way. So she shivered slightly and seemed a little surprised to see me again. "Here, I forgot you were there." But, as soon as I moved away a little, she forgot me again and began to write back to me.

We cannot now study in a more complete way these conversations by automatic writing and the intelligence which manifests itself in them; we will only be able to do this after having pointed out other phenomena. But, before going any further, we must modify a little our previous affirmations on the unconsciousness of these acts carried out by post-hypnotic suggestion. This expression, applied to the preceding facts, hardly has any more meaning: what is an unconscious judgment, an unconscious multiplication. If speech is for us a sign of the consciousness of others, why should writing not be a characteristic sign? These phenomena seem to belong to a particular consciousness below the normal consciousness of the individual. No doubt this is not an explanation, it is the observation of a fact, however bizarre it may seem, and we will only summarize these observations by henceforth calling these acts subconscious facts, having a consciousness below normal consciousness, even if, when we get to know them better, it returns with more precision to their nature.

This particular way of executing post-hypnotic suggestions in the form of subconscious acts is also found in other subjects, although in general with much less clearness than in Lucie. While sleepwalking, I ordered Leonie to take off her apron when she woke up and put it back on. Once awake, Léonie leads me back to the door and asks me what time I will come the next day. As she speaks, her hands gently untie the knot in her apron and remove it entirely. With a gesture, I draw Leonie's attention to her apron. "Here", she said, "my apron falling," and suddenly, consciously this time, she picks it up and pulls it up again, then talks about something else; but now the hands begin their operation again, untie the cords, completely remove the apron. As this time, Léonie does not look, her hands, after removing the apron, take it back and put it back neatly. The suggestion, it seems, had not been fully carried out the first time, since Leonie had put the apron back on herself and the hands wanted to repeat the operation to go through with it. This time, moreover, the act was over, there was nothing more; the subject had not had the slightest awareness of all these acts.

I reproduced on another subject, N..., more complicated experiments, the suggestions with a calculated deadline which were so curious with Lucie: N... added figures without knowing it and even without hearing them. Moreover, it also presented automatic writing by post-hypnotic suggestion. "If I speak to you, I told her while she was sleeping, you will answer me in writing." She is wide awake and chatting with several other people, "How old are you?" I whispered to her behind her. Her hand takes a pencil and writes: "Thirty years." – "Do you have children?" she writes again "Yes, two boys and a girl." If we stop her by saying "What are you writing? – But I do not write anything, she says in astonishment." She looks at the paper and says, "Who scribbled this?" No need to multiply the examples; I was able to reproduce on this subject almost all the experiences that I reported in the previous study on Lucie.

These topics, however, are not quite alike. N... comes close to the type we described at the beginning of this study on post-hypnotic suggestion: it sometimes executes an order with apparently complete awareness, it is true with consequent loss of memory. Léonie would rather approach the second; she has a tendency to fall asleep completely on the execution of a suggestion, and sometimes she must be fully awakened after an act of this kind, such as after a session of somnambulism. Only certain acts are performed by these two subjects in the manner just described.

The study of these phenomena on these new subjects allows us to make another remark which is important. When there are several different and successive somnambulisms, as in Leonie, the post-

hypnotic suggestion can be made from one somnambulism to another, as from a sleepwalking on the eve, and it still has the same characteristic. So let us suppose Leonie in her last somnambulism which we have described, in the state of Leonie 3, I order her then to look for a scarf and to put it on; then I wake her up, that is to say, I make her pass from this deep state to another state which is still somnambulism, but in which the memory of Leonie 3 is completely lost. In this state, Léonie 2 does not remember the order given and speaks of something else, but her hands seek the scarf and put it around her neck without her knowing it. The thing was done subconsciously, as if the subject was in a waking state from the second sleepwalking. It is the same with Lucie; as we had not seen it first, the suggestions made in Lucy 3 are carried out unconsciously during the first sleepwalking. It can even be said that in general the suggestions always seemed to address this group of third-order phenomena, as they were seldom known even during the first somnambulism. These remarks on the execution of the suggestions are therefore general; they apply not only to the transition from sleepwalking to waking, but to all changes of state. A suggestion given in a deeper state takes the form of a subconscious act when the subject has returned to a different and above all less deep state.

It is again to the persistence of a subconscious thought that I would relate the action of most of the post-hypnotic suggestions with a therapeutic effect on which we do not insist. The formation of a red plaque on the skin in the shape of a star, whether it takes place after waking up or during sleepwalking as before, can also only be explained by a thought. It is not enough to say that this redness is due to the excitation of a vasomotor nerve, because there is no nerve that distributes itself precisely to this place in the form of a six-pointed star. It is a partial and systematic excitation of several nerves that I cannot understand without the intervention of a thought which coordinates these excitations. During sleepwalking, the subject expressed this thought directly and told us: "I have always thought about your sinapism." Now that he is awake immediately after the suggestion, he seems to think of it no longer and is unaware of nothing, but something must be thinking about it in him in the same way though without his knowledge. This therapeutic thought is sometimes seen manifesting itself in subconscious acts. Rose, among her various hysterical accidents, had fairly prolonged uterine hemorrhages: we were unable to stop them by direct suggestion by simply forbidding her to have any. She said, while sleepwalking, that she had already stopped a similar accident by drinking an ergotine potion. "Either, I said, you will drink a spoonful of ergotine potion every two hours." I wake her up and refrain from telling her about the previous suggestion. Every two hours Rose made a singular merry-go-round; his right hand closed as if to hold a spoon, and brought it to his mouth which opened and a rapid swallowing movement took place. In vain we asked her what she was doing, she maintained that she had not moved. The most curious of the observation is that the hemorrhage stopped, the subconscious thought had been in this case very visible.

We admitted at the start of this study that all post-hypnosis suggestions were not executed in the same way in all subjects, that some of them remained in a state of normal wakefulness to accomplish them and that others fell back to this moment in a real sleepwalking. Thanks to the new studies which we have just made on subconscious acts, we can go back a little to our first descriptions and complete them. We will not dwell on the subjects which remain constantly in a state of normal wakefulness with memory of the suggestion and its execution; these, as we have said, were not hypnotized, they were simply suggestible in

the normal state: but let us show that the second, those who go back to sleep at the moment of suggestion, differ only slightly from those who perform unconsciously and that there is only a difference of degree between them.

Léonie executes, we said, the suggestions subconsciously, but, for that, they must not be too complicated. By complicated suggestion I do not mean only one which involves a large number of successive acts to be performed; in this case, as we have already noticed ¹, each part of the act appears successively and gradually in the mind of the subject and there is no real complication; but I am talking about delicate acts which require an intellectual effort like a calculation or a reflection. The suggestion is still difficult to carry out, one can understand, when it has been little or badly explained, or when it has not been verbally, as in the cases of mental suggestion which I have had to deal with. In these cases, the subject is confused without knowing why; he feels in him an effort, an intense work of which he does not realize. He tries in vain to resist, the subconscious work increases, takes for itself all the forces of thought, and the ordinary conscious individual faints. The suggestion is then carried out in a complete sleepwalking state, which often happens with Leonie. But here again this bout of somnambulism is only secondary. If there was not a prior subconscious work, one would not be able to explain why the subject would fall asleep without reason precisely at this moment.

It is therefore only in appearance that the post-hypnotic suggestions present different characters; in reality, these phenomena always contain a common element. The idea that was suggested during sleepwalking does not go away after awakening, although the subject seems to have forgotten it and has no consciousness of it. It subsists and develops outside and below normal consciousness. Sometimes it comes to its complete completion and brings about the performance of the suggested act without ever having entered this consciousness; sometimes, at the end of its development, during this execution, it enters thought for a moment, modifies it, and more or less completely brings back the initial somnambulant state. The essential thing is the existence of the subconscious thought that post-hypnosis suggestions, more than any other phenomenon, come to reveal to us, because they cannot be understood without it.

Conclusion

By examining partial catalepsies and inadvertent suggestions, we have been led to believe that they must depend like ordinary suggested acts on an image and perception which develops automatically. But since this image or perception seemed completely absent from the subject's mind, we were forced to assume its existence outside of consciousness. The study of post-hypnotic suggestions seems well suited to confirm this supposition, for they are inexplicable if one does not admit a thought which retains the memory of somnambulism despite waking up and which persists below normal thought. But we have not yet seen this second consciousness manifesting itself only through acts: the study of acts is suitable for revealing a consciousness, but not for explaining it. To understand this new thought, it is necessary to study the sensations or images it contains and to join the study of subconscious acts with that of subconscious sensibilities.

¹ De Rochas. *Les forces non définies*. 1887, 215.

Chapter II. Simultaneous anesthetics and psychological existences

We come to a very important study and, let's say it right away, very difficult. The problems which we have studied have brought us back one after another and as necessarily to the same point. On what does sleepwalking and the forgetfulness that characterizes it depend? Of the disappearance on awakening of a certain dominant sensitivity during the second state, that is to say of anesthesia. How can we explain obedience to suggestions without voluntary consent? By a narrowing of the field of consciousness which manifests itself sometimes by a complete and lasting anesthesia, sometimes by a transitory and systematic anesthesia. What are the conditions for partial catalepsy and distraction suggestion? A complete and lasting anesthesia of a member for the first, a distraction, that is to say a temporary and systematic anesthesia for the second. Finally, what was the most important characteristic of the execution of the post-hypnosis suggestions? This is because the subject thinks about them without knowing it and executes them without being aware of them; is that it is really anesthetic with regard to them. Everything brings us back to the psychological study of this singular anesthesia which we have so often pointed out, which consists, not in the lesion of an organ of the senses, but in the abolition of a true mental faculty, of all its powers and all the memories it has acquired. The study of this problem is all the more delicate because, if I am not mistaken, it has hardly yet been approached from this point of view. We find numerous and excellent studies on hysterical anesthesia considered from the physical point of view, in its localization, and in its supposed lesions; but we hardly find authors who consider this phenomenon from the psychological point of view, who seek the moral results which it can have and the intellectual troubles on which it depends. The importance of the problem in our studies of automatism, however, forces us to engage in it. The observations and experiences which we report and which may be of some interest will excuse the attempts at explanations which are subordinate to them.

I. Systematized anesthetics. – History

Anesthesia has presented itself to us in two forms: sometimes it was general and removed from the subject all the sensations ordinarily furnished by a sense, sometimes it was *systematic and only removed from the subject a certain number, a certain system of sensations or images, by letting consciousness reach the knowledge of all the other phenomena provided by this same sense*. It is this that we will examine first, because it is easy to reproduce it artificially and to study it, thanks to a very curious experience and known for a very long time as the *suggestion of negative hallucination or suggestion of systematized anesthesia*. In fact, thanks to suggestion, one can forbid a somnambulist as easily as one can command one, and, when the prohibition concerns sensations, it can produce deafness or artificial blindness, how the positive command led to a hallucination. This prohibition is especially interesting when it does not take away from the subject the vision of all objects, but only of a certain object *which remains invisible, while all the others are clearly distinguished*.

Facts of this kind have been pointed out for a very long time: “We often take advantage of the hour of sleepwalking”, said Deleuze in 1825, “to make the patient take a remedy for which he loathes. I saw a

lady who hated leeches get them applied to her feet while sleepwalking and tell her magnetizer: “Now forbid me to look at my feet, when I’m awake.” Indeed, she had never suspected that she had been asked leeches ¹.” Bertrand, at the same time, wrote: “ I saw the person who magnetized the sleepwalkers tell them when they were asleep: I want you not to see any of the people in the room when you wake up, but that you believe that you saw such and such a person whom he designated to them and who was often not present. The patient opened his eyes and, without appearing to see any of the people *who* surrounded him, addressed himself to those she believed to see ²...” Here is a curious account from Teste: “Mme G... is asleep, M... directs two or three large longitudinal passes over a few people present. Mrs G... which he then wakes up only sees him and me; all the rest of the room, where she seems convinced to be alone with the two of us, seems to her filled, she said, with a whitish cloud: “It’s amazing”, she said, “I hear voices which speak... but where are these gentlemen, and Mrs. ***, what has become of her? I am sure I can hear them; tell them to show up, please, that scares me ³.” The most singular is the way in which Teste explains the phenomenon. “It is the magnetic fluid, inert vapor, opaque and whitish, staying like a mist where the hand deposits it, which hides objects from the somnambulist.” We must quote a whole passage from Charpignon ⁴, where despite the fallacy of theories analogous to these, we find a very precise psychological description: “The ability to bring the memory of what takes place in the somnambulist state into ordinary life extends to changes in the functions of the senses. Thus, having presented three oranges to somnambulists, only one of which had been magnetized and surrounded by a thick layer of fluid, with the intention that it would remain visible, this orange was indeed visible when these somnambulists were restored to their normal condition. In vain we claimed that the tray had three oranges, they laughed at us and presented us with the two oranges they grabbed. Finally groping with their hand, they meet a body which they take, the spell disappears, and the three oranges become visible. (The last detail forms an interesting observation which we have sometimes verified.) I ask another sleepwalker if she sees the small table in the middle of our living room, she answers yes. So I wrap the entire foot in the fluid and she is amazed to see a hanging table top. Upon awakening, astonishment cannot be described; this young lady presses this aerial table on all sides, she finds it solid and is very worried about us. We have varied these experiences in a thousand ways, which we believe to be very little known, and we have always succeeded when we were dealing with a very lucid sleepwalker.” We should not, moreover, attribute to all the old magnetizers this somewhat childish explanation; Bertrand, as we know, supported a theory quite analogous to that of Braid. “The impression suggested”, said the latter in 1843, “has taken hold of the mind of the patient to such an extent that one can, under its influence, suspend the functions of sight, make him blind in front of an object placed in front of it, him or cause the thought that this object is transformed into another ⁵...” This theory of the phenomenon is found with few modifications in the work of Dr Philips ⁶ and in that of Dr Liébault ⁷.

M. Bernheim, who resumes the study of the same fact, distinguishes with precision the ordinary or positive hallucination from this suppression of sensation which he calls *negative hallucination*. “To a lady

¹ Deleuze. *Instruction pratique*, 4e édit., 1853, 119.

² Bertrand. *Traité du somnambulisme*, 1823, 256.

³ Teste. *Magnétisme expliqué*, 1845, 415.

⁴ Charpignon. *Physiologie du magnétisme*, 1848, 81.

⁵ Braid. *Neurypnologie*, 1883, 247.

⁶ *Cours de braidisme*, 1860, 120.

⁷ *Du sommeil*, 279.

G... in my department, I suggest that when she wakes up she won't see me anymore, won't hear me anymore, I won't be there anymore. Awake, she looks for me, in vain I corner her in her ear that I am there, pinch her hand which she suddenly withdraws without discovering the origin of this sensation... This negative illusion, which I already had produced at home in other sessions, but which had only persisted for five to ten minutes, this time persisted throughout the time, twenty minutes, that I remained with her ¹." M. Bernheim cites other facts, but without varying the experience much. Mr. Bernheim has been strongly criticized for the name he has chosen to designate this fact. This is not a hallucination, it is said, but the suppression of the perception of a specific object which leaves the perception of another object intact... It is a phenomenon analogous to systematized paralysis of movement, loss special movements with the conservation of movements of another kind, it is a *systematized anesthesia* ². No doubt the fact in question is more akin to anesthetics than to hallucinations, and it is, as we shall see, of the same nature as paralysis; the two words *negative hallucination* also form a rather incorrect association; Unless we call general anesthesia a total negative hallucination, which is not the habit, it seems more natural to designate this fact by the expression *systematized anesthesia*, than MM. Binet and Féré adopted. However, M. Bernheim is right not to make of this phenomenon a real anesthesia, a real suppression of sensation. "I did not produce", he said, "a paralysis of the eye, the subject sees all the objects except the one which has been suggested invisible to him; I erased a sensory image in his brain, I neutralized or made negative the perception of this image: I call it a negative hallucination ³." The facts which we have studied confirm this opinion of M. Bernheim, and if we adopt the word new, it is because it seems to us more correct to designate by an analogous term the general anesthetics of hysterics and those partial anesthetics which are, as we will show, of the same kind.

The last authors who made a special study of this phenomenon are, I believe, M. Paul Richer ⁴ and MM. Binet and Féré who have indicated, on this subject, several very precise experiments:

1st If it has been suggested to a sleepwalker that a person, Mr X..., had disappeared, the sleepwalker can no longer see him wherever he is in the room; but if we add an object on M. X... a hat for example, as it is not included in the suggestion, this hat remains visible and then appears to be standing in the air. On the contrary, if Mr X... takes a handkerchief from his pocket, this handkerchief remains invisible like him. I have had the opportunity to observe, as the authors themselves note, that these two phenomena and others of the same kind are very variable. For a sleepwalker, any object added to M. X... always becomes invisible like him, for another it is always visible. I once saw a person who saw the object in half, as if cut in half, when it was held by both the invisible person and a visible person.

2nd The person or the object which one made invisible really hides the objects which it covers, but the somnambulist makes up for the vision of these objects by a hallucination which replaces them; this is moreover what we do daily for objects which come to paint themselves on the blind spot of the retina. This hallucination can go very far: I once saw a subject, to whom I had suggested not to see the room, to replace it with the hallucination of another apartment of which I had not spoken.

¹ *De la suggestion*, 1884, 27.

² Binet et Féré. *Revue philosophique*, 1885, I, 23.

³ *De la suggestion*, 2e édit. 1886, 45.

⁴ *La grande hystérie*, 1885, 724.

3rd The invisible object must be really perceived, because it sometimes produces a consecutive image of complementary color which is visible: if a red paper is made to disappear, the somnambulist does not see it, but, after some time, will see a greenish color in the same place. I have not observed this phenomenon clearly enough, but the physical and moral conditions on which sleepwalking depends are so complex that one should never be surprised not to encounter exactly the same phenomena as other observers..

4th “Between ten boxes of similar affiliation, we designate one to the sleepwalker patient and that one alone will be invisible. When he wakes up, in fact, we present the ten boxes to him successively, this one alone is invisible to which we have, during sleepwalking, drawn his attention. If the patient is sometimes wrong, it is because the point of reference is missing and the boxes are too similar; likewise if we show her only a small corner of the boxes, they will see them all ¹.” This experience is, in my opinion, capital and it indicates to us the true position of the question. In fact, it is no longer a question of paralysis of the retina, neither complete nor partial, “the subject must recognize this object in order not to see it... The recognition of the cardboard, which requires a very delicate operation and very complex, however results in a phenomenon of anesthesia; it is therefore probable that this act takes place entirely in the unconscious... There is always an unconscious reasoning which precedes, prepares and guides the phenomenon of anesthesia”. Not only is this probable, but it is necessary; awakened, the somnambulist no longer remembers what she was ordered, she does not know that there is an object that she should not see, nor what that object is. When we show her the box, however, this memory must be reborn and she must recognize this box by certain signs, although she is not aware of any of this. It seems to me that there is some analogy between this question and one of the problems we studied in the previous chapter. How does a sleepwalker who has been ordered to return in a week count those eight days, when she has no memory of the suggestion? How does she recognize a sign that she doesn’t remember and that she doesn’t even seem to see? These two problems are identical and if the observation of the subject of which we spoke, of Lucie, allowed me to shed some light on the first point, perhaps it will allow me to clarify a little the second.

II. Persistence of sensation despite systematized anesthesia

The experiments reported previously make “probable”, said their authors, the existence of an unconscious distinction of the sign; let’s repeat them with precision first. During the complete hypnotic sleep, I place on the sleepwalker’s lap five white cards, two of which are marked with a small cross. “When you are awake, I told her, you will no longer see the papers marked with a cross.” I wake her up as completely as possible about ten minutes later, and she has no memory of my command or of what she may have done while sleepwalking. As she is surprised to see some papers on her knees, I beg her to count them and hand them to me one by one. Lucie, take three papers one after the other, the ones that are not marked, and give them to me. I insist and ask the others, she maintains that she can no longer get over it, because there are no more. The physiognomy does not seem altered and she seems wide awake; she can chat freely and remembers everything she does, even telling me that there are only three papers in her lap. I take all the papers and I spread them out on her knees upside down, so as to hide the crosses, she

¹ Binet et Féré. *Magnétisme animal*, 236.

counts five and gives them all to me. I replace them leaving the crosses visible, it can only take the three names marked and leave the other two. This is the experience of MM. Binet and Féré, and it seems natural to conclude like them that the crosses are seen and recognized in some way. We can make this supposition even more plausible by complicating the experiment. I put the subject back to sleep and put twenty small numbered papers on his knees. "You will not see, I said, the papers which bear numbers multiples of three." Awakening, same forgetfulness and even astonishment from Lucie at these papers which are still on her knees. I beg her to give them to me one by one: she gives me fourteen and leaves six which she is careful not to touch; the remaining six are multiples of three. No matter how hard I insist, she sees no other. Here was it not necessary to remember that it was about the multiples of three and to see the figures to recognize these multiples. We can end with this joke: suggest that the subject not see the paper on which the word "Invisible" is written and in fact it is this paper that he does not see.

This object which appears invisible is therefore seen. This is plausible; but we know, and we are not the only one to note it, that the subject is sincere when he says that he does not see it. The vision of these objects must be of the same kind, the same level as the subconscious acts we were talking about earlier. Let's demonstrate it. I said to Lucie during sleepwalking, I no longer repeat the arrangement of the experiment, which is always the same, that Dr Powilewicz, then present, has just left. When she wakes up, she no longer sees him and asks why he went out, I tell her not to worry about it. Then, putting myself behind her as she speaks, as it is said of distracted suggestions, I whisper to her, "Get up and go and give the doctor your hand." Here she gets up, walks towards the doctor and takes his hand, however her eyes continue to seek him. We ask her what she is doing and who she is giving her hand to, she replies with a laugh – "You can see it, I am sitting in my chair and I am not giving a hand to anyone." Since she thought she was sitting and still, she probably didn't feel a reason to move and remained standing with her hand outstretched. He had to be commanded in the same way to return to his place. Naturally Lucie had no memory of getting up and giving her hand; but she remembered everything else, especially the doctor's disappearance. There had been a subconscious act; but we will notice that the doctor's subconscious vision had remained attached to this act despite its apparent disappearance for Lucie.

The same experience can be done differently; it is the missing person now who gives him commands and tells him to get up, to thumb his nose, etc. Everything is executed perfectly, although Lucie still maintains that she cannot see and hear this person. I even made this remark about this with another subject, Marie. Little-known people, who cannot make any suggestion to it when they are seen and heard normally, take on a power similar to that of the magnetizer when they have thus disappeared. They then command the group of subconscious phenomena less resistant than the group of conscious phenomena. It is to phenomena of this kind that we must link the observation of M. Beaunis, that people who have thus disappeared can nevertheless lull the subject by passes ¹. This is quite natural, since they are still in relation with those subconscious phenomena of which somnambulism is, as we will see, the greatest development. Moreover, by a command addressed directly and strongly to the subject, we can make him remember all these commandments that he was supposed not to have heard. In general, we can, by suggestion, restore the memory of all the sensations which seem to have been suppressed by the systematized anesthesia; but we will meet again, in connection with general anesthesia, this question of the memory of subconscious phenomena.

¹ Beaunis. *Somnambulisme*, 179.

According to these observations, which are now sufficient, it is therefore most likely first that the suppressed sensation still exists and then that it is related in some way to the subconscious acts. The use of automatic writing which we have already spoken of will provide a definitive check here. Let's go back to our first experiences. Lucie does not see the papers marked with a cross, nor the papers which bear a number multiple of three, and she has not given them to me. At this moment, I step away from her, and taking advantage of a sufficient moment of distraction, I order to take a pencil and write what is on the knees. The right hand writes: "There are two papers marked with a small cross. – Why did Lucie not give them to me? – She can't, she doesn't see them." – Or else she writes: "There are six little papers on my knees. – And what's on these papers? – Numbers 6, 15, 12, 3, 9, 18, I can see them clearly." – The same experiment was repeated by removing the multiples of two, then the multiples of five. I then put in front of her some papers marked with a letter and I made the vowels or consonants disappear; then I used papers marked with several lines and I made disappear those which carried three; finally, showing him colored papers while he slept, I forbade him to see red. The result of these experiments was exactly the same as the previous ones. Lucie did not see the deleted object at all; but the group of subconscious phenomena, which we do not yet know how to designate otherwise, responded by automatic writing that they saw them perfectly.

It remained to be seen whether more extensive anesthetics would present the same characteristic. While sleeping, I suggest that when she wakes up she will be completely blind. Upon awakening, complete blindness which, fortunately, does not frighten her too much, because she invents, as an explanation, that the lamp has gone out and that we are all in the dark. A strong light projected directly into his eyes does not even make him look away; usually, in such a circumstance, she hides her eyes with terror and even falls into catalepsy. This experience recalls that of MM. Binet and Féré, who by suggestion made a gong disappear, the noise of which was no longer heard by the patient and no longer caused catalepsy. Despite Lucie's apparent blindness, I question the unconscious through ordinary procedures, which claims to see very clearly and designates in writing all the objects I show it.

I am not talking about other experiences of systematized anesthesia made on the sense of hearing or the sense of smell, by removing a smell or the sound of the voice of such and such a person who is no longer consciously heard, but who can still command unconscious acts; these experiments always give the same results. It seems to me more interesting to insist a little on the same observations applied in the sense of tact. The systematized anesthesia of touch can be observed in two ways: either the subject is told that he will not feel the contact of such and such an object among a crowd of others, and things happen as before. Or we indicate a part of the subject's body (on an ordinarily sensitive side of the body) and declare that this part no longer feels anything, while the rest remains sensitive. This is the experience that Charpignon¹ was already doing when he boasted of being able to render a hand or an arm insensible at will. I remember my astonishment when Mr. Gilbert showed me that one could draw a circle on Leonie's right arm and make this circle insensitive, while the rest of the arm remained normal. Here we are more inclined to believe in a real anesthesia: the anesthesia, in this case, they say, is not systematic, it is partial: a nerve no longer feels anything, as does an eye or a part of the retina may not feel anything. I do not

¹ Charpignon. *Physiologie du magnétisme*, 282.

believe it is so. The circle or the anesthetic star that is drawn on the arm does not exactly correspond to the superficial distribution zone of a cutaneous nerve. It is not a single nerve as a whole that is anesthetized, it is a portion of one, plus a portion of several others.

This intelligent distribution of anesthesia so as to draw a circle or a star can only be done by a conscious idea. To answer me correctly when I question him by pricking his arm, the subject must know, even without looking, when my prick enters the circle; he must therefore feel it. Also we will not be surprised that the unconscious responds to us by automatic writing that it feels very well what we are doing and that it distinguishes a prick, a touch, a hot or cold object even on this anesthetized plate.

Having thus determined the existence of a sort of new consciousness during systematized anesthetics, I wanted to examine the extent of this consciousness, that is to say the number of phenomena that it could contain. Let us take the first experiment again; it is not dramatic and has the disadvantage of not entertaining the public or sleepwalkers, but it is very precise. While sleeping, I put the five papers on her lap again and repeat the same command: "You will not see the papers marked with a cross." When I wake up, I do not question Lucie, as I did previously, and I do not make her remove the papers she sees. It is the group of subconscious phenomena that I now question first, and it is by subconscious acts that I have the papers that are on my knees handed back to me. The eyes drop for a moment and my hand holds out two papers to me, both marked with a cross. I insist, the hand does not move, finally she writes: "There are no more." I call Lucie – "Give me the papers which are on your knees." She looks and gives me the three remaining papers without hesitation. So all the papers have been seen, and handed in, but some have been by Lucie and others by a person below her whom she seems to ignore, but neither has seen them all.

If the preceding remark is true, and I add that the experiments were not on this point as numerous nor as precise as on the preceding one, it must have this consequence: any phenomenon added artificially to the second group will be removed from consciousness normal of Lucia constituted by the first group, and we must thus make systematized anesthesia for Lucie, by producing in the subconscious group a positive phenomenon. Let us try: during sleep or during waking, it doesn't matter, I address myself to the subconscious character by the process of suggestion during the distraction: "You will see, I said to him, the papers marked with a cross, the multiples of 3, etc." The result is exactly the same as before. Lucie, the first to be questioned, no longer sees these same papers. I had noticed that the secondary character did not use his eyes to write and that in general he did not see; I suggest that he use his eyes and see clearly. This is what takes place, but Lucie immediately exclaims – "What is it then, I no longer see." And I have to put her back to sleep to dispel her confusion. Note *in* this connection that we have already seen facts of this kind by studying the post-hypnotic suggestions. The subconscious acts thus obtained have a general, evident and even necessary characteristic: they are accompanied, if not constituted, by a systematized anesthesia of the kind we are now studying. I told Leonie to thumb his nose at me; when she wakes up, she lifts her hands and puts them at the end of her nose without knowing it; it is an unconscious act, yes, but she does not see her hands which are in front of her eyes. I told N... to raise her right arm, she does it while awake, but she doesn't feel her arm in the air; however, she has not usually lost the muscular sense of her right arm. I count numbers, I punch blows behind them, and they don't hear them; however they are not deaf. Here is an even clearer example: I had suggested to Lucie one evening, while sleepwalking,

to come the next day to Dr. Powilewicz at two o'clock. When she arrived the next day, I could never make her recognize where she was; she still maintained that she was at home. There is, no doubt, an unconscious act by post-hypnotic suggestion, but it is still a fine case of systematized anesthesia. Lucie had seen neither the road, nor the house, nor the study where she was; she made up for this absent vision by a hallucination; we know this is the rule, but the main fact was visual anesthesia. I had quite simply suggested an act to the subconscious character and consequently knowledge of the road, of the house, of the office; at the same time, without knowing it, I had taken this knowledge from Lucie by virtue of this law of mental disaggregation which seems to characterize more and more subconscious phenomena.

All these experiments made on all the senses, either by directly provoking anesthesia by suggestion, or by directly provoking it by commanding a post-hypnotic action, lead us to this conclusion: *In the suggestion of systematized anesthesia, the sensation is not suppressed and cannot be, it is simply displaced, it is removed from normal consciousness, but can be found as part of another group of phenomena, of a kind of other consciousness.*

III. Systematized electivity or esthesia

We will no doubt be surprised to see me examine here the phenomenon which will be the subject of this paragraph, because we are not in the habit of *relating the electivity* of sleepwalkers to their systematized anesthetics. However, these two phenomena seem to me to be very close or, to put it better, they are, in my opinion, only one and the same fact considered from two different points of view.

Somnambulists are always or almost always elective, such is the observation which has been made unceasingly since the time of Mesmer and Puységur. By this is meant that, in this particular state of somnambulism, the *subjects do not feel all the sensations indifferently, but that they seem to make a choice among the different impressions which fall on their senses, in order to perceive these and not those.* The most subjects when asleep hear their magnetizer very well and talk to it, but seem to hear no other person, no other noise, not even that of a pistol being fired near them, as in Dupotet's experiments. "The very sounds of a piano are only heard if the magnetizer touches it ¹;" "Sounds are heard only if they are magnetized; the magnetizer must touch the air or the piano keys for the sleepwalker to hear the notes that have been touched ²." "A bouquet has no smell unless it has received the breath of the magnetizer ³." "A subject does not feel the pins stuck in his skin, although he has a very fine sense of tact to behave ⁴." "The subject will feel the pencil that has been touched by the magnetizer and will not feel the pencil if it has been touched by another ⁵."

This link between the subject and certain people or certain objects which allows him to feel them to the exclusion of others, has received the name of *magnetic relation*, and we put a person in touch with the

¹ De Lausanne. *Principes et procédés du magnétisme*, 1819, II, 160.

² Charpignon. *Physiologie magnétique*, 79. – See as well Baréty, *Magnétisme*, 398. – Myers, *Proceed.*, 1882, 255. *Ibid.*, 1887, 538. – Ochorowicz, *Suggestion mentale*, 404.

³ Baréty, 284.

⁴ Demarquay et Girault-Teulon. *Hypnotisme*, 32.

⁵ Ochorowicz. *Suggestion mentale*, 337.

subject when we force the subject to see it or hear it. This fact of the magnetic relation is very interesting and very easy to ascertain: it existed to a greater or lesser degree in most of the subjects I have studied. Léonie at first somnambulism hardly presents this character, she hears and sees everyone; she presents it much more strongly in the second somnambulism, because then she hears only me and again only when I touch her. She has a greater electivity in all the states as regards the suggestions, because she never obeys only me. Marie and Rose are generally more elective than Léonie; from the moment they fall asleep, they seem to lose all notion of the outside world, only to see, hear or smell the one who put them to sleep. Marie only keeps a little tactile sensitivity for other people, if you can call it that, for she experiences a very marked feeling of pain and loathing when touched by a stranger unrelated to her. Rose never feels anything like it. I am not talking here about Lucie, who was not very elective and only distinguished me from other people to obey me.

This isolation manifests itself in different ways; one of the most curious and well-known is this: if I raised their arm in the air in a particular position, it has remained still, and I move it very easily just by touching it. But if another wants to move it, the arm suddenly becomes stiff and violently resists the movement you want to impose on it. If you force it to change position, it returns as if by elasticity, as soon as you abandon it, to the position where I had put it.

We know that this electivity can be different in the different parts of the subject's body. The right side can obey one experimenter and the left side another. Neither of them can cross the center line and enter the territory reserved for the other. I did not often repeat this experiment which, at least from what I saw, tires the subjects enormously.

This electivity can be modified by different procedures which allow one observer to substitute for another in the preferences of the somnambulist: some, to achieve this result, use the touching of the vertex, others, the passes, some- some simply succeed by the word. This substitution from one magnetizer to another is sometimes easy, sometimes difficult: for the subjects I have observed, the person who most often put them to sleep is the one who takes and keeps this influence most easily. When I have frequently put a person to sleep, no other observer can take my place, and I can easily take them back, even if another has started sleepwalking. When the subject has been put to sleep by all kinds of people often, these substitutions are easy for everyone; but, in general, in this case, all electivity does not take long to fade.

It is also more or less easy, without losing control over a sleepwalker, to make her hear another person whom one wants to put in touch with her. With Rose, this is very difficult; the somnambulist must be strongly commanded to hear M. such-and-such, and yet this relationship thus established lasts very little. With Mary, on the contrary, it is very simple, a presentation is enough. She looks like a reserved young person waiting to chat with strangers to be introduced to her. All you have to do is say to her: "Marie, here is Mr. So-and-so coming to say hello," so that she receives him very well and continues to hear him throughout the rest of the session. Curiously enough, this simple word was enough for her to no longer fear his contact. With Léonie, as a second somnambulism, you have to take both the subject's hand and the foreign person's hand on the other side. Léonie then pretends to hear a distant voice which passes through my body. "It's like in a telephone", she said.

In some more difficult cases, this connection can be established by means of a *magnetic chain*, as the old operators said. I myself once reported an example of this kind ¹: several people can hold hands, and, depending on whether the magnetizer, while hiding and without the subject's knowledge, touches or does not touch the last, these people are or are not in touch with the subject. The difficulty here is to understand how the subject learns that the magnetizer touches or does not touch the people in the chain; as for the phenomenon of the report itself, it is identical to the preceding ones.

I do not pretend to explain all these details, the study of which does not entirely belong to our subjects. They contain hallucinations, memories, habits, perhaps even, I am careful not to deny it, very particular physical phenomena and until now very little known. Let us only retain the main fact, that the subjects hear, see, or even feel by touch only a small number of people who, under different circumstances, can change; but that they seem to be deaf, blind, and callous to others.

We find analogous facts during natural somnambulisms which we cannot avoid citing, although they are well known. "In a crisis that has arisen naturally, a patient, of whom M. Paul Richer speaks, can only hear and feel one person ²." I have just collected the very authentic account of a similar fact: Mr X... had the opportunity to render a great service to an individual suffering from serious hysteria; one day he finds him in the throes of a great nervous breakdown, during which he could not hear any of the people present, and takes his arm to hold it. The patient stops and, keeping his eyes closed, begins to say: "Ah! it's you... I owe you everything, I must not resist you... You want me to be good, well! I don't move any more." As soon as M. X... let go of his arm, the convulsions started again and no other person could stop them. I have already reported similar facts observed on hysterics that I was studying, but this one is much more interesting, because M. X... had never thought of hypnotizing this patient, and no somnambulant influence comes to explain this due electivity, to recognition alone.

The electivity of natural sleepwalkers does not generally relate to people, but to objects. Just as the magnetized subject hears only a certain person, the natural sleepwalker seems to see only certain objects, while he is completely insensitive to others. Who does not know the often-quoted description of the somnambulant Castelli, who was only lit by his own candle and who believed he was in the dark when it was extinguished ³? There is no observation more curious and more complete, from this point of view, than that of the automaton studied by Dr. Mesnet. During his bouts of sleepwalking, this individual seemed to have only the sense of tact by means of which he walked and received all kinds of suggestions from surrounding objects. No other sense could be awakened in him, he neither saw nor heard. But when, by means of the sense of touch, his attention had been drawn to an object, he could see that object very well. "The sense of sight was awakened only on the occasion of touch and its exercise remained limited to objects only with which it was currently in contact through touch ⁴." "The patient", says the author again, "sees certain objects and does not see certain others; the sense of sight is open to all personal objects related to him by the impressions of touch and, on the contrary, closed to things outside him... He sees his

¹ *Les phases intermédiaires de l'hypnotisme*. Revue scientifique, 1886, I, 581.

² Paul Richer. *Op. cit.*, 318.

³ Cf. Gilles de la Tourette. *Op. cit.*, 179.

⁴ Mesnet. *Automatisme*, 1874, 19.

match, he does not see mine ¹.” One of the subjects I studied, Lucie, repeatedly exhibited similar phenomena during certain attacks of natural sleepwalking. She gets up one night with the fixed idea of cleaning, it was one of the habits she had during sleepwalking and not during the night before. She lights a lamp, comes down from her room with her light and begins to wipe everything and put everything in order. A person who had followed her seeks in vain to be heard or to be seen; Lucie does not seem to see anything that this person puts in front of her eyes. But now the lamp brought by Lucie begins to go down, as soon as the sleepwalker rushes on her and pulls her up again: she did not see the people present trying in vain to attract her attention, but she immediately sees that her lamp has need to be reassembled.

These elective phenomena differ from systematized anesthetics only in one point, which is that they are or appear to be the opposite. Instead of previously the subject becoming blind for a person or a determined object while continuing to see all the others, he now appears to see only a specific object while remaining blind for all the others. We can easily go from one case to another: suppose that the subject initially hears all the people present and that I forbid him to hear M. X... it will be systematized anesthesia, if I continue and forbid him to hear M. Y... M. Z..., etc. until he can only hear me, it will be electivity. This last phenomenon is in fact only a very considerable sort of systematized anesthesia, in which the suppressed phenomena are more numerous than the preserved phenomena, and, to express this analogy, one could designate it by a word already used by some authors, that of *systematized esthesia*.

If this is so, is it not natural to push the comparison further and to find out whether the psychological phenomena, apparently disappeared, are really absent? The simplest reflection shows that this is not likely. Since the subject hears and sees me, it is because he has neither hearing nor paralyzed sight. Since he only hears and feels me, it is because he distinguishes my voice and my touch from all the others. This is not very difficult, because we easily recognize a person by his voice or by his contact, but he still has to hear and feel the others to make this distinction and this recognition, and that he has the sensations apparently suppressed.

It is a natural supposition which comes to the mind of several authors: “Deep sleepers”, says Liébault ², “who seem isolated, nevertheless have sensations, although they seem to ignore them; they can tell them later as if through their own intuition.” “The lonely sleepwalker”, says Ochorowicz ³, “does not hear strangers, but we are mistaken if we believe that the auditory sensations remain completely inactive. They enter the brain, and it is then that a phenomenon occurs which I will gladly call latent hearing; they can combine with the others and give results which, at a given moment, can appear among the other more intense states.”

These assumptions can, in some cases, be fairly easily verified. Thus a young man, H.... who, in a somnambulism, had seemed not to hear two people who were trying to speak to him, was able to repeat to me later, at my request, everything they had said to him, noticing that at the time he couldn't answer them. Sometimes it is necessary to strongly command the subject to remember, so that the memory of these seemingly un-felt phenomena returns complete, but other subjects recover this memory even more

¹ Id. *Ibid.*, 22.

² Liébault. *Du sommeil*, 68.

³ Ochorowicz. *Suggestion mentale*, 227.

quickly and easily. It suffices that they are put in touch with a person, for this operation to have a sort of retroactive effect and to restore to them the memory of everything that has been said previously. Marie does not hear at all and does not see M. X... speaking to her. After a few minutes, I introduce M. X... "Marie, look at this gentleman who comes to see you." She now sees and hears it, and, from that moment, she remembers and replies to her previous conversation. Am I not allowed to say that she heard it?

As before, the person who appears to be unheard may give suggestions which are carried out unconsciously. If M. X... says to Marie: "Raise his arm," she raises his arm although she does not hear M. X... who has not yet been introduced. Finally, another, N... who, in somnambulism, claims to be able to hear only me, is sometimes mistaken in an original way. She hears other people and answers them, but then she calls them by my name and takes them for me. It is only by mistake that she answers them and that she is aware of hearing them; but this error is only possible because the words of strangers were actually heard. Unfortunately, I have not had the opportunity to verify by automatic writing this real, albeit subconscious, hearing of unrelated people. Lucie, who had such a high degree of automatic writing, had no natural electivity. But the preceding remarks seem to me sufficient to establish the identity between the phenomenon of electivity and that of systematic anesthesia, and to propose to explain them in the same way. *The sensations of which the subject seems to have no consciousness have not disappeared and still exist in him in another way.*

IV. Complete anesthesia or natural anesthesia of hysterics

The anesthetics previously studied were incomplete; they suppressed the perception of this or that object, leaving the perception of this or that other. It seems that the results of the observation must be quite different, if we examine the complete anesthetics which occur much more frequently in the natural course of hysteria¹. In fact, in this case, the subject seems to have totally lost a certain kind of sensitivity; instead of making a choice among objects, of seeing, hearing, feeling some when he no longer feels others, he seems to feel none. The ear is deaf to all noises; the eye blind to all lights, the skin insensitive to all contact. Can we not say here that anesthesia is quite different and that it is due to a state of the organ itself? Can we not believe that there is no longer reason to support here the persistence of the sensation which has actually disappeared?

There are undoubtedly differences between complete anesthesia of hysterics and systematized anesthesia; but we must not believe in an absolute opposition between these two phenomena which are similar in many ways. I will first point out a small singular detail which had escaped my observation and which was pointed out to me by my brother about a patient at the Hôtel-Dieu. There is sometimes electivity even in these natural anesthetics, and patients who have apparently completely lost all sensitivity may still recognize certain objects in particular. Here are the facts: A hysterical woman, Mr.... very seriously ill, seemed to have totally lost all skin sensitivity, at least in both hands and both arms, the only parts of her body that had been subjected to observation in front of regular me; she didn't feel any pain, didn't recognize any object, didn't appreciate any temperature. However, she recognized perfectly

¹ Hysterical anesthesia has been so thoroughly studied in the latest work by Dr. Pitres: *Des anesthésies hystériques* (Bordeaux, 1887), that I can only insist on the particular facts which justify my interpretation.

on contact certain usual objects of her toilet. She knew, by touching her ear, whether she had her earrings or not, she recognized her ring and knew when it was put on or when it was taken off, without needing to look closely. At first I thought that these gold jewels had a special influence on her touch, and I put a gold coin in her fingers; she couldn't feel it and persisted in saying that she had nothing in her hand, as she immediately smelled her earring. Besides, she also felt in her hair its iron or tortoiseshell pins which she could seek by contact, remove or put back, even if they were moved. It must be recognized that there is there, during normal wakefulness, a case of elective anesthesia quite identical to what occurs during sleepwalking. M... feels her pins and does not smell a piece of gold, like Lucie, in natural sleepwalking, sees her lamp go down and does not see the people around her. The fact must not be rare among hysterics and I believe I have found it in Marie. At a time when she feels nothing with her hands, she can do her hair without ice and feel if the position of her hair has been disturbed. Complete anesthesia is similar to systematic anesthesia.

In the second place, complete anesthesia, that is to say covering all external objects, is rarely general, it rarely extends to the whole body and even to an entire sensory organ. The cutaneous anesthesia does not exist on all the skin, but on some parts only, often on one half of the body, and then more often on the left half, but sometimes also on irregular patches disseminated on all the limbs and on trunk. The anesthesia of taste, smell, even sight, is also rarely complete; it occupies portions of the tongue and nasal mucosa, and leaves other sensitive parts ¹; it extends irregularly over the retina, sometimes concentrically narrowing the visual field, sometimes cutting it by half, sometimes forming irregular scotomas, that is to say spots of insensitivity in the middle of a retina that has remained normal ². It seems to me that there is something analogous to the phenomena of systematic anesthesia in this singular distribution of insensitivity. In fact, this distribution is in no way explained by anatomical or physiological characteristics of the organs, it does not correspond in particular to the distribution on the surface of the body of the cutaneous nerves, nor to the distribution of the arteries. In some cases, when a limb has hysterical paralysis, anesthesia, says Charcot ³, is terminated by a circular line perpendicular to the axis of the limb. This may make a lot of sense, as it is as if the patient imagines that his limb has been cut off by surgery, but one only has to look at an anatomy board to see that this does not correspond to any very clear physiological notion. I saw a hysterical woman whose arm was divided naturally, for a few days, in a series of parallel zones, alternately sensitive and insensitive. Here is something which is hardly anatomical, but which is singularly reminiscent of the squares and circles which one could by suggestion make insensitive on Leonie's skin. Many current psychologists are inclined to believe, with Wundt, that a "local shade of tactile sensation or pressure sensation varies continuously from one point of the body to another ⁴", and that, therefore, "each point of our epidermis having a special way of feeling, the quality of the sensation varies with the region of the skin ⁵". If this is so, and considering the advantages that this hypothesis presents in explaining many problems, I, for my part, am fairly certain of its truth; it should not be said that hysterics have lost the sensitivity of such and such a region of the skin, it must be said that they have lost certain groups of tactile sensations of such shade, of such quality and that they have

¹ Pitres. *Op. cit.*, 41, 96, etc.

² Id. *Ibid.*, 54.

³ Charcot. *Maladies du système nerveux*, III, 348.

⁴ Wundt. *Psychologie physiologique*. Traduct, I, 415.

⁵ Binet. *Psychologie du raisonnement*, 1886, 99.

retained other tactile sensations of another shade. It is a reflection which brings us singularly closer to previous observations, because it is always a question of preserving a certain sensation, when one has lost a certain other. These two sensations do not differ by the organ which receives them, since the same nerve branch innervates the sensitive plate and the insensible plate, these two sensations differ only in quality. He is still a person who, with the same eye, always sees M. X... wherever he is, and never sees M. Y... This distinction, as we have shown, can only be made if the two people, the two groups of tactile sensations are actually felt. The study of partial anesthesia brings us to the same conclusion as the study of systematized anesthesia.

But the anesthesia can be quite general, extend over the entire skin surface, completely remove an eye or an ear; this was the case with Lucie who had absolutely no tactile sensitivity on any point of the body, or with Marie who sees nothing with the left eye and is in complete darkness when you close her right eye. Here again we could, perhaps with a little subtle reasoning, still speak of systematized anesthesia, for the tactile sensations differ in quality from the auditory sensations which are preserved; the sensations of the left eye are not qualitatively the same as those of the right eye, and the patient still shows some electivity in this anesthesia. But the analogy, I admit, is a little distant, and in order to arrive at the same conclusions with regard to general anesthesia as for the preceding insensitivities, it must be subjected to new observations.

All the observers who have taken care of this partial blindness of hysterics, which seems to take away one eye completely, have noticed with astonishment a very singular fact: the patients claim to see absolutely nothing through the left eye and to be plunged into the darkest night, complete when closing the right eye; but if we leave them with both eyes open, they see, without realizing it, both to the left and to the right. The observations made on this point are summarized in the article published by M. Bernheim,¹ and in the book by M. Pitres². They are very conclusive and easy to repeat. Here is one of the simplest that I borrow from M. Pitres' book: "Let us now practice the screen experience. I write a line of letters on the board: a cardboard strip is placed vertically in front of the middle of the patient's face and the patient is seated opposite the board. With her right eye closed, she declares that she is unable to distinguish the characters written on the board. With her left eye closed, she reads without hesitation the letters placed to the right of the screen. With both eyes open, she reads all the letters, both those on the left of the screen and those on the right." Other experiments in great number have been made and all have the same conclusion that M. Pitres expresses thus: "Hysterical amblyopia corrects itself, because it is in its nature to exist only in monocular vision. As soon as both eyes are open and act synergistically, the amblyopia disappears and vision becomes normal." Which amounts to saying: the hysteric is blind in her left eye when she pays attention to it and believes she can see only through this eye; she is no longer blind at all, when she does not think about it and when she thinks she sees everything with the right eye.

M. Pitres' proposal summed up the preceding observations well, but I believe that we must go much further and ascertain new and more serious facts. I claim that the amaurotic hysteric sees perfectly with

¹ Bernheim. *De l'amaurose hystérique et de l'amaurose suggestive*, Revue de l'hypnotisme, 1887, 68.

² Pitres. *Op. cit.*, 58 et sq.

her left eye, even when the right eye is closed, that this amblyopia does not even exist in monocular vision, and that in general even the most complete hysterical anesthetics do not exist, suppress any sensation. Let us stick to the facts without trying to understand now how this singular contradiction is possible. To verify this sensitivity of the anesthetic parts, one must not address the subject directly and wait for an immediate response, one must use somewhat indirect procedures which I would reduce to two main ones: the examination of memory and the study of subconscious acts.

If there is one point admitted in psychology, it is that memory is only the conservation of sensations: any sensation may, for different reasons, not become a memory, but every memory has been a conscious sensation. If our subjects really do not feel the impressions made on the anesthetized parts of their body, they obviously should not remember them. What then to think of the following few experiences? Mary's right eye being carefully closed, she claims, as we know, to be in deep darkness. Without worrying about what she says, I pass a small drawing in front of her left eye several times, which I then remove. The design depicted a tree and a snake climbing around the trunk. I then let her open her right eye and I question her: she claims to have seen absolutely nothing. A few minutes later, I apply an iron plate on his left temple, which is his favorite metal; tingling is felt in the left side of the head, and the eye, as we know, regains the usual sensibility for some time. I then ask her if she remembers what I showed her. "But yes, she says, it was a drawing, a tree with a snake climbing around it." A few days later, I repeat the experiment as follows: I only show the left eye which had become anesthetic again a drawing: it was a large star drawn in blue pencil. Then, when both eyes are open, I show him a dozen small drawings among which is the star; she does not recognize any of them and claims to see them for the first time. I apply the iron plate to the temple, the sensitivity returns, and Marie takes the paper where the blue star is and says to me: "Except this one, however, which I have already seen once."

The same experiment can be done on the tactile sense: one day I put a small object in the completely anesthetic hand of the same subject (it was a rosebud) and I leave it there for a few moments, taking all the necessary precautions to that she cannot see it. I ask her if she has anything in her hand, she searches carefully and assures that she has absolutely nothing. I do not insist and remove the rosebud without her noticing. Some time later, by applying an iron plate, I restore the tactile sensitivity to this hand; No sooner has the shivering which signals the return of the sensation over than she spontaneously says: "Ah! I was wrong, you put a rosebud in my hand, where is it?" I repeated this experiment several times on this subject and on three other hysterical anesthetics, and I modified the experience in various ways. Sometimes it suffices, as with systematized anesthetics, to command the subject to remember, so that the memory returns while also bringing back sensitivity; in other cases, we can suggest the return of the sensitivity which then brings back memory; finally, it is sometimes necessary to have recourse to the electric current, to the metal plates, different according to the subjects, to bring back the sensitivity; I even once left an interval of two days between the moment when I had made the object felt by the anesthetic hand and the moment when I returned the sensitivity: the result has always been the same. When the sensitivity became conscious again, the memory of this sensation which apparently had not existed reappeared completely.

Finally I thought about doing the same experiment with Rose, on the muscular or kinesthetic sense. I give her arm, which is anesthetic, any position, I put two fingers in the air and the others closed, or I make

her make a threatening gesture: Rose doesn't know anything about it, because I hid the arm well by a screen. I now lower my arm and put it back on her knees, then, by a weak electric current (suggestion cannot establish the sensitivities of this subject), I restore to Rose the complete skin and muscular sensitivity of her arm; she can now show me the positions her arm had previously and repeat the gestures conscientiously.

We have already studied analogous experiments with regard to the memory of somnambulists; but then the return of the sensitivity brought back the memory of a sensation which had been really recognized by the subject at the time it took place and which had simply been forgotten. Here the sensation has never been recognized by the subject, but it must nevertheless have taken place in the same way, since it can be remembered in the same way. We can speak of unconscious physiological recording, although this is far from clear; but how can a physiological phenomenon, which did not bring a sensation at its onset when it was strong, can it bring about a conscious memory two days later when the trace is obviously weaker? This is quite the opposite of the idea we usually have of memory. I, for one, prefer to suppose that this sensation, the memory of which can be so lasting and so vivid, really existed and was a conscious phenomenon.

Let us also consider things from another point of view and our supposition will be confirmed. We know that acts are the continuation and manifestation of conscious states; Let us examine the acts which follow these impressions, apparently not felt, made on anesthetic limbs. I am not speaking, in order to avoid complicating the question, of those reflex acts which subsist in large numbers despite the disappearance of conscious sensation; we are in the habit of considering them, wrongly I believe, as purely physiological phenomena. Let us take for the object of our studies complex acts which can only take place as a result of a conscious, precise and intelligent phenomenon. Lucie or Léonie are blindfolded and several people, silently, raise their left arm completely anesthetized and then abandon it; the raised arm falls heavily without the subject noticing anything; I lift it in my turn without anything that can prevent them and the arm remains in the air in a cataleptic state. There is nothing wonderful there, the arm obeys because it is me, it is a point of reference suggestion. But it is still necessary that the anesthetic hand has distinguished by touch the contact of the different people who raised the arm. Lucie doesn't feel the contractions of her muscles, either: but then why then, when I close my fist to her without her being able to see it, does she take on her face the expression of anger? I tell Marie to touch her ear with her left hand, she makes a mistake and touches her cap, then corrects her movement and goes down to the ear; she claims not to have felt the touch of her cap, and I am willing to believe it, but why did she correct her movement? I once made Rose believe that I was electrifying her leg and I purposely used a device which did not work and gave no current. After covering her eyes with a screen, I applied the electrodes to her apparently absolutely unresponsive skin and muscle contractions occurred. That's a suggestion, either; but why then did the contractions suddenly cease as soon as I lifted the electrodes, and resume with a vengeance as soon as, without warning her, I applied them gently to the skin? A list of similar facts would be endless. All observers must have seen a lot; let us pass to still more decisive observations.

We have pointed out, in the preceding studies, the curious phenomenon of automatic writing; we have seen how it is produced and how it allows one to penetrate into regions of consciousness that the subject

does not know himself. This phenomenon being extremely clear in Lucie, it is on this subject that we will resort. While she is chatting with other people, I pinch her left arm tightly. Lucie, as I had known for a long time, does not flinch, but her right hand in which I have put a pencil abruptly writes: "But you are pinching me." I ask this subconscious handwriting questions while Lucie is talking about something else: "Which finger am I touching? The little one... the second," writes the right hand. "What do I put in my left hand? – A little pencil... a penny. – Where is your arm placed? – He is up... you stretched him out... you put a hand on his head... Now she is touching his ear." One could expect this result, it was only the continuation of the preceding facts; but I was nevertheless very surprised, I was so used to considering this person as absolutely anesthetic. Out of curiosity, I measured this subconscious sensitivity with the oesthesiometer and, while Lucie was unable to feel even a strong burn suddenly made, the automatic writing shows that she appreciates very well the separation of the two points of the instrument like a normal person might do. On the underside of the wrist, the minimum spacing that can be given to the two points, so that the writing still shows two punctures without error, is to the right of 22 millimeters, and to the left of 30 millimeters. The same observation, made on normal people, gives me figures varying between 25 and 35. The sensation, despite the apparent anesthesia, is therefore very fine. We never really enter a person's consciousness; we only appreciate it according to the external signs it gives us. If I believe in the word of Lucie, who tells me that she does not smell, why should I not believe her handwriting, which tells me that she smells? Writing is something as complicated as speaking; when it adapts to questions, it manifests intelligence and conscience equally well, and I see no reason to deny all credence to one manifestation rather than the other.

Let us note rather that all these observations on the various species of anesthesia are absolutely concordant: whether it is a question of systematized anesthesia obtained by suggestion, of systematized aesthesia or of the electivity of somnambulists, of plate anesthesia, for hysterics, their amaurosis or their general anesthesia, the results are exactly the same. Note also that these observations are in complete agreement with those of M. Bemheim, M. Pitres and many others on unilateral amaurosis in hysterics. Just as they have observed that the hysteric sees through her blind eye in many cases where she believes the contrary, so I have shown that she feels in many cases where she imagines she does not feel. So let's admit the facts, even if we can't understand them. Just as there are a great number of complicated unconscious acts which the subject can perform intelligently without knowing it, *so there are a great number of sensations which he can experience, which he can remember, on which he can reason without being aware of it*¹.

¹ An article by M. Binet. *Recherches sur les altérations de la conscience chez les hystériques*. Revue philosophique, 1889, I, 135, unfortunately too recent for us to be able to take advantage of it in this work, fully confirms the conclusions of this study on hysterical anesthesia through a few new experiments. We are very happy to see this agreement, which is important when it comes to research carried out under very different conditions on such delicate phenomena. We will observe, in the following chapter, on what particular point the studies of M. Binet complete our own. Other works, which we have not been able to make use of, have also appeared since January 1889; we will only note with pleasure that they agree completely with the observations on hysterical anesthesia that we ourselves published in 1886 and in 1887 in the *Revue philosophique*.

V. Different hypotheses relating to the phenomena of anesthesia

We encounter very few hypotheses which have been proposed to explain the facts which we have just reviewed, for hysterical anesthesia has rarely been presented in this way, and, in particular, it has rarely been compared to systematized anesthesia, of which it is however only a special case.

We will not insist on the simplest and most banal hypothesis which naturally comes to mind when considering subjects of this kind; they claim not to feel and yet it can be shown that they feel perfectly, so they lied and they are mere simulators. Hysterical simulation has been used and abused to suppress problems that we did not understand, and this too simple hypothesis makes no sense here. First of all, we cannot simulate anesthesia: “a little attention is enough to thwart the deceptions”, like M. Pitres ¹ showed this in connection with an individual who professed to exhibit himself as an insensitive man and who had learned to suppress the manifestations of pain. Then, we must not forget that these subjects do not brag about their anesthesia, that, more often than not, they ignore it absolutely and that it is us who reveal it to them. Finally, we must not take all the hysterics for stupid people and lend them simulations that are also absurd and so awkward. The first comer will know that, if he is simulating blindness in the left eye, he must not read the letters placed on the left of the screen. Marie, who is not stupid, would know very well, if she pretended, that the drawings shown in her left eye should not be remembered, and yet we have seen that she always remembers them. Let us not insist otherwise.

We will not further study the physiological or anatomical assumptions which have been made, first, because they are not within our competence, and then, because they seem to us only to be a roundabout way of presenting psychological assumptions. Thus M. Pitres explains the general anesthesia of hysterics by a functional inertia of the basilar centers of the brain, that is to say of the cell groups of the protuberance and the peduncle ². Why this hypothesis? It is because he represents anesthesia, from the psychological point of view, as being a lesion, not of intelligence or of perception, but of raw sensation, and that these basilar centers are considered today as being the organs of raw sensation. Let him make another psychological hypothesis, and the author will indicate another anatomical location. After noticing the curious phenomena relating to unilateral amaurosis in hysterics, M. Pitres will admit the multiplicity of cortical centers of vision ³ and will suggest that the lesion sits in these centers; it is because here he saw, without him saying it clearly, that the modification is found in perceptions and not in raw sensations. This parallelism between the anatomical and psychological hypotheses is not surprising, it would even be hoped, for the progress of the two sciences, that it was taken much further. But, as is natural, we will only concern ourselves with the psychological hypotheses in themselves, not to mention the anatomical translation that it is always possible to make of them.

We have just pointed out a first psychological hypothesis which appears, at first glance, to be very natural and simply translate the facts. Anesthetic individuals present no other psychological disturbance than their insensitivity; they reason well on what they know; they do not present, with regard to preserved sensations, those disturbances of interpretation and recognition so characteristic of verbal blindness and verbal deafness. The patient who presents an intellectual disorder in “the organs of the psychic

¹ Pitres. *Op. cit.*, 156.

² Id. *Ibid.*, 137.

³ Pitres. *Op. cit.*, 63.

elaboration of sensations”, sees and hears in reality, but does not recognize or understand what he sees or hears. Hysterical anesthesia does not have this characteristic; it suppresses such and such a sensation purely and simply, it is *a lesion of the raw sensation*.

We cannot share this opinion. From a theoretical point of view, the intellectual elaboration of phenomena descends lower than the authors seem to suppose. The elaboration which enables one to understand language or writing and whose lesion causes verbal deafness or verbal blindness is a higher elaboration below which there are several others. And such a modification of an elementary elaboration, while respecting the raw sensation, can perfectly well prevent a person from having the personal consciousness that he sees or that he hears. From the experimental point of view, the facts are in complete opposition to this theory and constantly show us that the raw sensation has not been destroyed. M. Pitres himself recognizes that, in the case of monocular anesthesia, the sensations of the blind eye are not definitively suppressed and that the subject can fully appreciate them in certain circumstances. Experiments with systematized anesthesia show that in some cases the subject may be convinced that he does not see an object, while we know that he must necessarily see it to recognize it. Finally, the experiments which I have indicated and which are sometimes easy to reproduce show that one can always find the sensation which has apparently disappeared and demonstrate its existence.

Not only do natural or experimental anesthetics not seem to suppress the sensation, they even fail to modify it. Here is some research I did about it. During sleepwalking, I forbid Lucie to see the color red; when she wakes up, she does not distinguish this color, but the subconscious character declares, by automatic writing, that he sees it very well. Now, we know that the color white is formed by red rays and green-blue rays; a person whose tired retina can no longer distinguish red rays, feels in a white color only green rays and sees it green. At least this is the explanation given for consecutive images of complementary color. If the anesthesia modifies sensations such as retinal fatigue, Lucie who no longer distinguishes the red must therefore also see a white paper with the color green. I show her white paper, and she finds it absolutely white, the red alone is invisible and its disappearance in no way affects the other colors that are seen normally (with some confusion for some due to a slight achromatopsia that existed already before the experiment). On the other hand, if the second consciousness sees red, it should in white color distinguish red rays, which it does not do, because it does not distinguish white paper. The same fact would be found, I believe, in natural achromatopsia; a hysterical woman who no longer recognizes red, however, continues to see the color white without modifications. From these experiences it seems to me that one can draw this conclusion which confirms the preceding remarks: anesthesia does not change the raw sensations in any way. It is therefore not in the study of sensations in themselves that we can find the reason for these insensitivities; it must be sought higher up, in the mechanism of elementary perception. Although there is no real verbal blindness or verbal deafness here, Mr. Bernheim is nevertheless right to say: “These phenomena are due to an illusion of the mind.... the blindness of hysterics is psychic blindness ¹.”

¹ Bernheim. *De l'amaurose hystérique et l'amaurose suggestive*. Revue de l'hypnotisme, 1887, 71.

It is however necessary to examine beforehand another theory which is not, that I know, clearly stated by an author, but which will be it some day, because it presents enough plausibility. Could we not explain anesthesia or subconsciousness by the weakness of certain images, just as we wanted to explain conscious suggestion by the force of certain others? Could we not say, for example, that the visual image of the drawing shown to Mary's left eye is very weak and that the metallic applications result in increasing its strength and making it perceptible? We have already explained ourselves as to M. Binet's hypotheses in relation to the suggestion, and our opinion has not so far been modified by these new facts. I see no reason to admit that the sensation produced on the anesthetic organs is a weak sensation. This sensation is precise, it allows the subject to recognize very small details of the object that is shown to him and to indicate them later by memory or immediately by automatic writing.

When can a person be said to have a lively and strong sensation, assuming that this word has any meaning, except when he appreciates minute details of the impression made on that meaning? Visual acuity is measured by reading small letters, and the acuity of the tactile sense is measured by distinguishing tactile sensations that are close together, that is to say almost similar. There can be nothing more in a strong sensibility, if it is not a mixture of painful phenomena foreign to the sensation itself, which are modifications of the nature and not of the quantity of the sensation. However, these anesthetic organs appreciate very delicate things. Marie's left eye, as I have verified, recognizes my drawing even when it is small and placed far enough away; Lucie's hand recognizes the spacing of the points of the oesthesiometer at a distance where many people who have a supposedly strong sensitivity do not appreciate it; Léonie's unconscious actions show that she recognizes my hand by simple contact, which is not the mark of a weak sensation. On the other hand, if the subjects disregard these sensations produced on their anesthetic organs because of their weakness, they should not be aware of any other weak impression. We know, however, that a subject can be anesthetic in one sense and have another very delicate; Rose, who does not feel the bites made on her limbs, gets angry because, far from her, in the courtyard, she hears someone singing out of tune. It is therefore not the smallness or weakness of these sensations that prevents the subject from being aware of them.

The best study on these phenomena that I know of is that of M. Bernheim which is entitled *De l'amaurose hystérique et de l'amaurose suggestive* (translation: *Hysterical amaurosis and suggestive amaurosis*) ¹. The author admits as demonstrated two very important points: 1st the complete analogy between natural hysterical anesthesia and systematized anesthesia produced by suggestion: it is well, in both cases, a certain sensation distinct from the others, not by the organ which produces it, but by its psychological quality which does not manage to enter the consciousness of the subject; 2nd sensation really exists with all its psychological characteristics; the visual or tactile image is completely real and conscious. We fully share the author's opinion on these two points and believe that we have made some observations which help to strengthen it. But the author tries to explain the phenomenon in a language which seems to me to lack a little precision and clarity: "The visual image perceived, the hysteric unconsciously neutralizes it with his imagination... Psychic blindness is blindness by imagination; it is due to the destruction of the image by the psychic agent." Mr. Pitres, who cites this theory, does not seem,

¹ *Revue de l'hypnotisme*, 1887, 68.

in my opinion, to attribute sufficient importance to it. “I don’t understand”, he said ¹, “how the hysteric can unconsciously neutralize monocular perceptions with his imagination and not also subconsciously neutralize binocular perceptions or, at least, the part of binocular perceptions that comes from the amblyotic eye.” M. Bernheim would undoubtedly answer, if I may speak for him, that the hysteric does not neutralize binocular perceptions, because she does not imagine herself being blind in both eyes, but only in the left eye, that she does not neutralize some of these binocular perceptions either, because she does not know that these perceptions come from the left eye, because she thinks she sees everything through the right eye. Point out to her, in the experiments, that such and such an object can only be seen by the left eye, and she will no longer see it.

For my part, I will make another criticism of M. Bernheim’s expression: I find that the image is neither neutralized nor destroyed, because it still exists and it manifests its existence through subconscious acts and automatic writing.. In addition, this image did not need to be neutralized, because it was never in the subject’s consciousness: one cannot say that Marie begins by seeing my drawing, then ceases to see it; she has no such negation to make, for she has never seen this drawing. Finally, the role which M. Bernheim attributes to the imagination hardly corresponds to his ordinary definition; this ability to represent and combine images seems to have the role of evoking them rather than denying them. We do not hope, moreover, to be much happier than M. Bernheim in explaining clearly these delicate and complex phenomena, and perhaps we will only express a different theory on many points analogous to his.

VI. Psychological disintegration

The phenomenon which occurs in our consciousness as a result of an impression made on our senses and which results in these expressions: “I see a light... I feel a sting”, is a phenomenon already very complex: it does not it is not only made up of simple raw sensation, visual or tactile; but it still contains an operation of active synthesis and present at each moment which links this sensation to the group of images and previous judgments constituting the ego or the personality. The apparently simple fact which translates into these words: “I see, I feel”, even without speaking of ideas of exteriority, distance, location, is already a complex perception. We have already insisted on this idea when studying automatic acts during catalepsy; we have adopted the opinion of Maine de Biran, who distinguished in the human mind a purely affective life from sensations alone, phenomena conscious but not attributed to a personality, and a perceptual life from sensations united, systematized and attached to a personality.

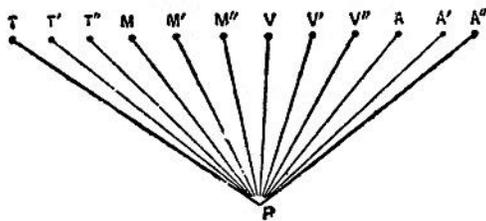


Fig. 4.

¹ Pitres. *Op. cit.*, 60.

We can, while attaching to these representations only a purely symbolic value, to imagine our conscious perception as a two-step operation: 1st the simultaneous existence of a certain number of tactile conscious sensations, such as $TT'T''$, muscular like $MM'M''$, visual like $VV'V''$, auditory like $AA'A''$. These sensations exist simultaneously and in isolation from each other, like a quantity of small lights which would light up in all the corners of a dark room. These primitive conscious phenomena, prior to perception, can be of different kinds, sensations, memories, images, and can have different origins: some can come from a current impression made on the senses, others be brought about by the automatic play of association as a result of other phenomena. But, in order not to complicate a problem which is already quite complex, let us first consider, in this chapter, only the simplest case and suppose main holding that all these elementary phenomena are simple sensations produced by an external modification of the sense organs.

2nd An active and actual operation of synthesis by which these sensations are linked to each other, aggregate, merge, merge into a single state to which a main sensation gives its nuance, but which probably does not resemble completely none of the constituent elements; this new phenomenon is perception P . As this perception occurs at every moment, following each new group, as it contains memories as well as sensations, it forms the idea that we have of our personality and henceforth we can say that someone smells the $TT'T''$ images $MM'M''$, etc. This activity, which thus synthesizes the various psychological phenomena at each moment of life and which forms our personal perception, should not be confused with the automatic association of ideas. This, as we have already said, is not a *current* activity, it is the result of an old activity which formerly synthesized some phenomena into a single emotion or perception and which left them with a tendency to occur again in the same order. The perception we are talking about now is the synthesis at the moment when it is formed, at the moment when it brings together *new* phenomena in a unit at each *new* moment.

We don't have to explain how these things happen; we have only to ascertain that they happen thus or, if one prefers, to suppose so and to explain that this hypothesis allows to understand the preceding characteristics of hysterical anesthetics.

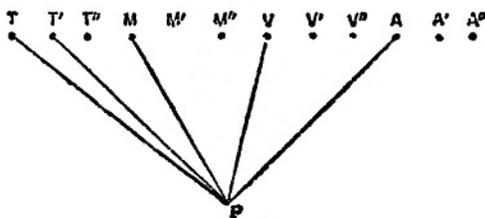


Fig. 5

In a theoretical man, such as there probably does not exist, all the sensations included in the first operation $T T' T''$, etc., would be united in the perception P , and this man could say: "I feel", with regard to all the phenomena which take place in him. It is never so, and in the best constituted man there must be a host of sensations produced by the first operation and which escape the second. I am not speaking only of the sensations which escape voluntary attention and which are not understood "in the clearest point of gaze"; I am speaking of sensations which are absolutely unrelated to the personality and which the ego does not recognize, not to be conscious, because, in fact, it does not contain them. To represent this, let us suppose that the first operation remaining the same, the second only is modified. The power of synthesis

can no longer be exerted, at each moment of life, that on a given number of phenomena, on 5 p ar example and not on 12. Of the twelve supposed sensations TT'T" MM'M", etc., the ego will only have the perception of five, of TT'MVA for example. Regarding these five sensations, he will say: "I felt them, I was aware of them"; but if we talk to him about the other phenomena of T'V'A', etc., which, in our hypothesis, were also conscious sensations, he will answer "that he does not know what we are talking about and that he does not has known nothing of all this". Now, we have carefully studied a particular condition of hysterics and neuropaths in general which we have called the narrowing of the field of consciousness. This characteristic is precisely produced, in our hypothesis, by this weakness of psychic synthesis pushed further than usual, which does not allow them to unite in the same personal perception a large number of the sensitive phenomena which really take place in them..

The things being thus, the sensitive phenomena which occur in the mind of these individuals are divided naturally into two groups: 1st the group TT'MVA which is united in the perception P and which forms their personal consciousness; 2nd the remaining sensory phenomena T'M'M"V'V"AA'', which are not synthesized in the perception P. For the moment we are only concerned with the first group.

In most cases, the phenomena which fall into the first group, that of personal perception, while being limited in number, may however vary and do not always remain the same. The operation of synthesis seems to be able to choose and relate to the ego, consequently to the personal consciousness, sometimes some, sometimes others, the sensations of the tactile sense as well as those of the visual sense; at one point, the perceived group will be TT'MVA, at another, it will be MM'V'AA'.

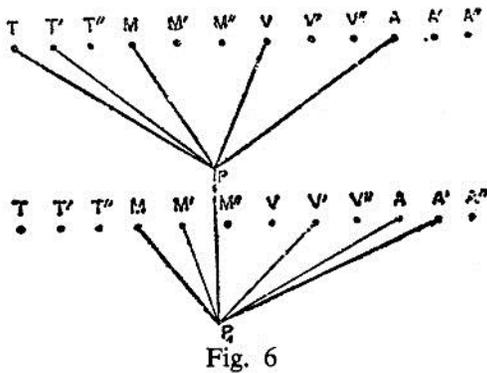


Fig. 6

When things happen in this way, there are indeed at each moment phenomena that are ignored and which remain unperceived, such as M 'at the first moment, or V at the second; but, on the one hand, these unknown phenomena are not perpetually unconscious, they are only momentarily, and, on the other hand, these phenomena, which are unconscious, do not always belong to the same meaning; they are sometimes muscular sensations, sometimes visual sensations. This description seems to me to correspond to what we have observed in a particular form of narrowing of the field of consciousness by distraction, by electivity or systematized aesthesia, in a word, in all anesthetics with variable limits. The distracted hysterical subject who hears only one person and does not hear the others, because he cannot perceive so many things at the same time and that, if he synthesizes the auditory and visual sensations which come to him from a person, he can do nothing more, the hypnotic who hears everything his magnetizer says and knows everything he does, without being able to hear or smell any other person, the natural sleepwalker who

sees his lamp and smells his own movements, but not noticing the other visual sensations forming in his mind, are striking examples of this first form of weakened and restricted synthesis. In these people, in fact, no sensation is perpetually unconscious, it is so only momentarily; if the subject turns towards you, he will hear what you say to him; if I put you in touch with the hypnotized he will speak to you; if the sleepwalker dreams of you, she will see you. In addition, the disappeared sensations do not always belong to the same sense and, if the subject is questioned by a person successively on each of his senses, he will prove to him that he smells very well everywhere and does not apparently have any real anesthesia.

It is to this type, at least I am inclined to believe it, that hysterics without anesthesia must be attached. They are very rare; Mr. Pitres says he met two of them, but I have not had the opportunity to see any. These hysterics must still have the essential characteristic of their illness, the narrowing of the field of consciousness, the diminution of the power of perceptual synthesis; but they have retained the power of successively exercising this faculty over all sensitive phenomena whatever they may be.

For what reason do they perceive at a time such a group of sensations rather than another? There is no voluntary choice here as in attention, because, for such a choice to be possible, there must first have been a general perception of all sensitive phenomena, then a reasoned elimination. The electivity is only apparent here, it is due to the automatic development of such or such a sensation which is repeated more frequently, which associates more easily with such or such another. When a hysteric looks at a person, she will rather hear the words of that person than the words of another, because the sight of the speaking mouth, of the gestures, of the attitude, is associated with the words spoken by that person, and not with the words spoken by others. A sleepwalker who does her housework will more easily see her falling lamp than she will see a stranger in the room, because the sight of the lamp combines with the sight of other household objects and fills this small field of consciousness, without leaving room for the image of the foreigner. In other cases, a feeling remains dominant and brings those related to it, because it dominated in a moment of still greater shrinkage of the field of consciousness reduced almost to unity. At the start of hypnotism, the semi-cataleptic subject can perceive only one sensation; that of the magnetizer is essential, because he is present, he touches the hands, he speaks to the ear, etc. The field of consciousness widens a little; but it is always the thought of the magnetizer which retains its supremacy and which directs the associations towards this or that other sensation. In all these cases, systematized aesthesia is a form of this automatism which brings together in the same perception the sensations having between them some affinity, some unity. The current activity, by a kind of laziness, does little more than continue or repeat the syntheses already made in the past.

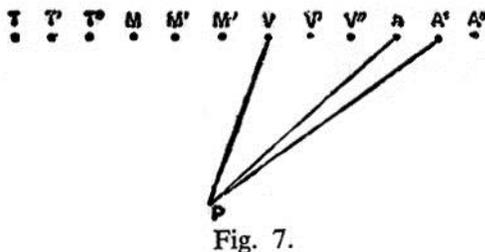


Fig. 7.

But things can turn out quite differently. The weak power of synthesis can often be exerted in the same direction, unite in the perception of sensations always of the same species and lose the habit of bringing together the others. The subject makes more use of visual images and rarely addresses the images of touch; if its power of synthesis decreases, if it can only bring together three images, it will

completely renounce perceiving the sensations of such or such a species. At the beginning, they lose them momentarily, and he can find them again; but soon the perceptions which allowed him to know these images not being made, he can no longer, even if he tries it, relate to the synthesis of the personality the sensations which he has let escape. He thus gives up, without realizing it, sometimes the sensations which come from a part of the cutaneous surface, sometimes the sensations of an entire side of the body, sometimes the sensations of an eye or an ear. It is still the same psychic weakness, but this time it results in a much clearer and more material symptom, in a permanent anesthesia with a fixed limit of the arm, the eye or the ear. The subject you are questioning can only tell you what he perceives and cannot talk to you about the sensations that are happening in him without knowing it, since he never perceives them again.

Why does the anesthesia localize in certain ways? We suspect it in some cases, we hardly guess it in others. Hysterics are more likely to lose tactile sensitivity, because it is the least important, not psychologically, but practically. At the beginning of life, the tactile sense is used to acquire almost all notions; but later, thanks to acquired perceptions, the other senses almost always replace it. These people tend to lose sensitivity on the left side rather than on the right side, probably because they use that side less often. I thought I noticed that there are parts of the body, fingertips, lips, etc., to which they retain sensitivity longer than others, probably because the sensations they provide are particularly useful or pleasant. A hysterical woman I observed had lost sensitivity to her limbs, but retained sensitive bands in all her joints: this may have favored her movements. But if we consider the scattered islets of anesthesia that some subjects have on the skin, we do not know enough about the variations in local sensations, their similarities and their differences to understand the reasons for these bizarre distributions.

The sensations provided by these anesthetic parts still exist, and it only takes the least of things for the perception which has lost the habit of grasping them to hang up once, if I can put it that way. Force them to think of a visual image usually linked to a tactile image, tell Marie that a caterpillar is walking on her arm and the whole arm becomes sensitive again; only this cannot last, for the field of consciousness has remained very small; it has moved, but it has not grown, and it will be necessary for it to return to the most useful sensations on this subject which does not have enough psychic strength to allow itself to luxury perceptions. It is the same for the sensations of the two eyes which are associated together and complement each other. However weak their power of perception may be, these subjects cannot, however, stop at half a word when the neighboring sensation which is indeed present forms the complete word. The sensations of the right eye, which are kept in the center of the small field of perception as useful and indispensable, bring about the perception of the images provided by the left eye, as soon as there is some reason for taking them up again, such as the image of a caterpillar on the arm brings up the tactile sense of the arm. But that there is no longer, in the restricted field of perception, an evocative image, that the right eye is closed, or even that the right eye is looking at an object arranged so as to be able to be seen in its entirety, by only one eye, and the sensations supplied by the left eye, too neglected by perception, are not taken up. If I am on Marie's right and if I speak to her, the people approaching from the left are not seen, although she has both eyes open; if I pass to her left, drawing her attention, she continues to see me with her left eye. Anesthesia seemed to have a fixed limit, but, as there is no absolute separation between these various kinds of anesthesia, it behaves in many cases like a systematized anesthesia with variable limit. It is the importance of the dominant perception which causes the sensation

to change and which brings to light, according to the needs, such and such an image, since none had really disappeared.

Perhaps the metal plates, the currents, the passes act the same. It is possible, but, without commenting, I would admit that I doubt it. These processes, which can ultimately lead to the last somnambulism, that is to say a complete widening of the field of consciousness, seem to me to directly increase the force of perception. But no matter what, for one reason or another, the ego now contains the sensations it had lost, it regains them as they were with the memories recorded in its absence. He recognizes a drawing that he has not seen, he remembers a movement that he has not felt, because he has picked up the sensations which had seen this drawing and felt this movement. Complete anesthetics which embrace an entire organ therefore differ from systematized anesthetics only in degree. The same weakness of perception, which causes such a person to neglect a particular image, causes another to neglect almost entirely the images furnished by the left eye, except when they are necessary to supplement those of the right eye, and brings about a third to permanently neglect, so as to no longer be able to find them, the sensations of an arm or a leg.

Without doubt, this is only one way of representing things, an attempt to bring together facts which appear contradictory and consequently unintelligible. This supposition has obvious advantages from this point of view. It explains how certain phenomena can both be known by the subject and not be known by him; how the same eye can see and not see, because it shows us that there are two different ways of knowing a phenomenon: impersonal sensation and personal perception, the only one that the subject can indicate by his conscious language. This hypothesis further explains to us how impressions made on the same sense can be subdivided, because it teaches us that it is not always all the raw sensations of a sense that remain outside personal perception, but sometimes only a part, while the others can be recognized. These explanations seem to summarize the facts with some clarity and that is why we are disposed to consider *systematized or even general anesthesia as a lesion, a weakening, not of sensation, but of the faculty of synthesizing sensations in personal perception, which brings about a real disintegration of psychological phenomena.*

VII. Simultaneous psychological existences

Let us refer once again to the symbolic figure which enabled us to understand anesthesia and now study it from another point of view. Instead of examining the three or four visual or auditory phenomena VV'AA' (fig. 8, below) which are united in the personal perception P and of which the subject accuses consciousness, let us now consider in themselves the remaining sensations TT'T'M, etc., which are not perceived by the subject but which nevertheless exist. What becomes of them? Most often they play a well-effaced role; their separation, their isolation makes their weakness. These facts contain a tendency to movement which would take place if he were alone, but they mutually destroy each other and above all they are stopped by the stronger group of other sensations synthesized in the form of personal perception. At most, they can produce these light tremors of the muscles, those convulsive tics of the face, that tremulation of the fingers which give many hysterics a special characteristic, which make it so easy to recognize, as they say, a nervous woman.

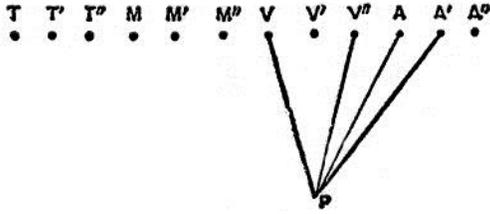


Fig. 8

But it is easy enough to promote their development, it suffices for that to remove or reduce the obstacle which stops them. By closing his eyes, by distracting the subject, we reduce or divert in another direction the activity of the main personality and we leave the field free to these subconscious or not perceived phenomena. It suffices then to evoke one, to raise the arm or to move it, to put an object in the hands or to pronounce a word, so that these sensations bring about, according to the ordinary law, the movements which characterize them. These movements are not known to the subject himself, since they occur precisely in that part of his person which is anesthetic for him. Sometimes they take place in limbs whose sensation the subject has completely and perpetually lost, sometimes in limbs with which the distracted subject is not concerned at this moment; the result is always the same. Leonie's left arm can be made to move without any other precaution than to hide it with a screen, because it is still anesthetic; you can move your right arm by diverting your attention elsewhere, because it is only anesthetic by accident. But, in both cases, the arm will move without her knowing it. Strictly speaking, these movements determined by the unconscious sensations are not known by anyone, because these disaggregated sensations reduced to the state of mental dust, are not synthesized in any personality. They are indeed cataleptic acts determined by conscious sensations, but not personal ones.

If things sometimes happen this way, it is not difficult to see that they are often more complex. Subconscious acts do not always manifest simple impersonal sensations; here they are obviously showing us memory. When the arm of a hysterical anesthetic is raised for the first time to verify partial catalepsy, it is necessary to hold it in the air for a while and to specify the position which one wishes to obtain; after a few tries, all you have to do is lift your arm a little for it to assume the desired position by itself, as if it had understood half a word. Has an act of this kind been done in a determined circumstance, it repeats itself when the same circumstance occurs a second time: I have shown an example of Leonie's subconscious acts to M. X..., by making her left arm do snaps that she does not suspect; a year later, when Léonie sees this same person again, her left arm is raised and starts to thumb her nose again. Certain subjects, like Marie, are satisfied, when one guides their anesthetic hand, to repeat the same movement indefinitely, to always write the same letter on a piece of paper; others complete the word they were made to begin; others write from dictation the word that is pronounced when they are distracted and do not understand by a kind of systematized anesthesia, and finally here are some, like N..., Léonie or Lucie, who begin to respond in writing to the question put to them. This subconscious writing contains correct reflections, detailed accounts, calculations, etc. Things have changed in nature, they are no longer cataleptic acts determined by simple raw sensations, there are perceptions and intelligence. But this perception is not part of the normal life of the subject, of the synthesis which characterizes it and which is represented at P in our figure, because the subject ignores this conversation held by his hand, just as he ignored the partial catalepsies. It is absolutely necessary to suppose that the sensations which have remained outside the normal perception have in their turn been synthesized in a second perception P'. This second perception is probably composed, it will be necessary to verify it, of tactile and muscular

T'M' images which the subject never uses and which he has definitively abandoned, and of an auditory sensation A" that the subject can grasp, since, in certain cases, he can hear me, but that he has momentarily left aside, since he deals with the words of another person. A second psychological existence has formed, at the same time as normal psychological existence, and with those conscious sensations that normal perception had abandoned in too many of them.

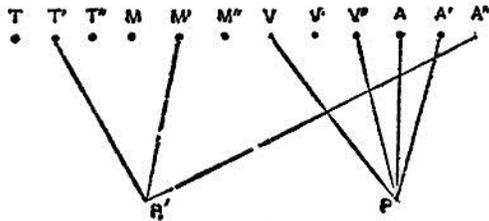


Fig. 9.

What, in fact, is the essential sign of the existence of a perception? It is the unification of these various phenomena and the notion of the personality which is expressed by the word: "I or me". Now this subconscious writing constantly uses the word "I", it is the manifestation of a person, exactly like the subject's normal speech. There is not only secondary perception, there is secondary personality, "secondary self", as some English authors used to say, when discussing the experiments on automatic writing that I had published in the past. No doubt this "secondary self" is very rudimentary at the beginning and can hardly be compared to the "normal self", but it will develop in a very unlikely way.

Having noticed, not without some astonishment I admit, the secondary intelligence which manifested itself in Lucie's automatic writing, I had the following conversation with her one day, while her normal self was chatting with another person. "Can you hear me, I said to him? - (She answers in writing) No. - But to answer we must hear. - Yes, absolutely. - So how do you do it? - I do not know. - Does someone have to hear me? - Yes. - Who? - Other than Lucie. - Oh well! another person. Do you want us to give it a name? - No. - Yes, it will be more convenient. - Well Adrienne ¹. - So, Adrienne, can you hear me? - Yes." - No doubt it was I who suggested the name of this character and thus gave him a kind of individuality, but we saw how much he had developed spontaneously. These denominations of the subconscious character greatly facilitate the experiences; moreover, automatic writing almost always takes a name of this kind, without anything having been suggested, as I have observed in automatic letters written spontaneously by Léonie.

Once baptized, the unconscious character is more determined and clearer, he shows his psychological characters better. He shows us that he is especially aware of these sensations neglected by the primary or normal character; it is he who tells me that I am pinching my arm, or that I am touching the little finger, while Lucie has long lost all tactile sensation; it is he who sees the objects which the negative suggestion has removed from Lucie's consciousness, who notices and indicates my crosses and my figures on the papers. He uses these sensations that have been abandoned to him to produce his movements. We know in fact that the same movement can be performed, at least by an adult, in different ways, thanks to visual

¹ There was a little difficulty about the name of this character, he changed his name twice. I do not insist on this trivial detail that I have discussed elsewhere. *Revue philosophique*, 1886, II, 589.

images or kinesthetic images; for example, Lucie can only write by visual images, she bends down and ceaselessly follows her pen and paper with her eyes; Adrienne, who is the second simultaneous personality, writes without looking at the paper, because she uses the kinesthetic images of writing. Each has its way of acting, like its way of thinking.

One of the first characteristics that this “secondary self” manifests and which is visible to the observer is a marked preference for certain people. Adrienne, who obeys me very well and who willingly chats with me, does not bother to answer everyone. Let another person examine this same subject in my absence, as happened, they will not notice either partial catalepsy, or subconscious acts by distraction, or automatic writing, and will come and tell me that Lucie is a normal person, very distracted and very anesthetic.. Here is an observer who has seen only the first self with its shortcomings and who has not entered into relations with the second. According to the observations of MM. Binet and Féré, it is not enough for a hysteric to be anesthetic for her to present with partial catalepsy. Without a doubt, this phenomenon requires one more condition than anesthesia, a sort of bringing the experimenter into contact with the subconscious phenomena. If these phenomena are very isolated, they are provoked by any experimenter, but if they are grouped in personality (which happens very frequently in severely ill hysterics), they manifest preferences and do not obey everyone.

Not only does the secondary self not obey, but it resists the stranger. When I lifted and put Lucie’s arm or Léonie’s arm in the cataleptic position, which presents the same phenomenon, no one can move them. If you try to move it, the arm seems contracted and resists with all its strength; if you bend it with effort, it rises as if by elasticity to its first position. As I touch the arm again, it suddenly becomes light and obeys every impulse. We must remember this elective characteristic which belongs to the subconscious character and which will serve us later to better define its nature.

This personality usually has little will, she obeys my slightest orders. We do not have to insist on this already well-known character: the suggestion is explained in this case, as in the circumstances previously studied. It is produced here, as always, by the smallness, the weakness of this personality grafted next to the first and which is even narrower than it. The only fact to remember, because we already know it, is that these suggestions are executed (in typical cases, the only ones that we consider now) ¹ without being known by the subject himself. It is a second individual even more suggestible than the first who acts alongside and without the knowledge of the subject we are studying, but who acts according to exactly the same laws.

However, just as the most suggestible individuals have shown themselves capable of resistance and spontaneity, so too the secondary character is sometimes very rebellious. I had some very funny quarrels with this character of Adrienne who was so docile at first and who, as she grew up, became less and less so. He would often reply in a sassy manner and write “No, no”, instead of doing as I commanded him. He was so angry with me one day that he refused to answer me altogether; Partial catalepsy, unconscious acts, automatic writing, everything had disappeared through Adrienne’s simple bad humor. Can we, like certain authors, consider these phenomena of catalepsy in the waking state as purely physiological and muscular phenomena, when we see them suddenly disappear as a result of anger which is manifested by

¹ See exceptions in the next chapter.

writing? automatic? I was then forced to chat with the normal character, with Lucie, who, quite ignorant of the drama that was going on within herself, was in a very good mood. When I was able to reconcile myself with Adrienne, the cataleptic acts began again as before. Such facts are far from rare and I have observed them on several other subjects.

These resistances of the secondary character prepare us to understand more easily his spontaneous acts, because I was forced to note that there were similar ones. Another subject, Léonie, had learned to read and write fairly well, and I had taken advantage of his new knowledge to make him write a few words or a few lines unconsciously the night before; but I had sent her away without suggesting anything further. She had left Le Havre for over two months when I received the most unusual letter from her. On the first page was a small letter in a serious tone: "she was indisposed", she said, "more in pain one day than the next, etc., and she signed with her real name "Woman B..."; but on the back began another letter of a completely different style and which I will be allowed to reproduce as a curiosity: "My dear good sir, I have come to tell you that Léonie, all true, all true, makes me suffer greatly, she can't sleep, she hurts me a lot; I am going to demolish it, it bothers me, I am also sick and very tired. It is from your very devoted Léontine." When Leonie returned to Le Havre, I naturally asked her about this singular missive: she had kept a very exact memory of the *first letter*; she could still tell me the content; she remembered having sealed it in the envelope and even the details of the address which she had hardly written; but she didn't have the slightest memory of the *second letter*. Besides, I explained this oversight to myself: neither the familiarity of the letter, nor the freedom of style, nor the expressions used, nor above all the signature belonged to Léonie in her waking state. On the contrary, it all belonged to the unconscious character who had already manifested himself to me through many other acts. At first I thought there had been an attack of spontaneous sleepwalking between the time she finished the first letter and the time she sealed the envelope. The secondary character of somnambulism who knew the interest I took in Leonie and the way in which I often cured her of her nervous accidents, would have appeared for a moment to call me for her help; the fact was already very strange. But since then, these subconscious and spontaneous letters have multiplied and I have been able to better study their production. Fortunately, I was able to surprise Leonie once, when she was performing this singular operation. She was near a table and still held the knitting she had just worked on. The face was very calm, the eyes staring upward with a little fixedness, but she did not seem in a cataleptic attack; she sang in a low voice a country round, her right hand wrote quickly and as if stealthily. I began by taking away his paper without his knowledge and I spoke to him; she turned around immediately wide awake, but a little surprised, for in her distracted state she had not heard me come in. "She had spent", she said, "the day knitting and she sang because she thought she was alone." She had no knowledge of the paper she was writing. It all happened exactly, as we have seen with the unconscious acts, inadvertently, with the difference that nothing had been suggested.

This form of subconscious phenomena is not as easy to study as the others; being spontaneous, it cannot be subjected to regular experimentation. Here are just a few remarks that chance allowed me to make. First of all, the secondary character who writes these letters is intelligent in his spontaneous manifestations, as in his provoked manifestations. In what he writes, he shows a great deal of memory: one letter contained the story of Léonie's very childhood; he shows common sense in ordinarily correct remarks. Here is even an example of unconscious insight, as M. Richet would say. The subconscious

person noticed one day that the conscious person, Leonie, was tearing up the papers she had written when she left them within reach at the end of the distraction. What to do to keep them? Taking advantage of Leonie's longer distraction, she started her letter over again, then went to carry it in a photo album. This album, in fact, formerly contained a photograph of M. Gibert who, by association of ideas, had the property of putting Leonie in catalepsy. I took the precaution of having this portrait removed when Leonie was in the house; but the album still retained a sort of terrifying influence on her. The secondary character was therefore sure that his letters put in the album would not be touched by Léonie. All this reasoning was not done in sleepwalking, I repeat, but in the waking state and subconsciously. Distracted Leonie sang or dreamed of a few vague thoughts, while her limbs, obeying a somewhat foreign will, thus took precautions against herself. The second person thus benefits from all his distractions. Léonie walks alone in the streets and recklessly abandons herself to her reveries; when she pays attention to her way, she is quite surprised to find herself somewhere else in the city. *The other* found it spiritual to bring him to my door. If we warn her by letter that she can return to Le Havre, she finds herself there without knowing how; the other, in a hurry to arrive, made him leave as quickly as possible and without luggage. Finally, let us add, as a last remark, that these subconscious and spontaneous acts have yet another feature of resemblance to the acts provoked; they bring into normal consciousness a particular void, a systematic anesthesia. Leonie having often come to see me, I thought she knew my address well; I was astonished, chatting with her one day while awake, to see that she was completely unaware of him, much more, that she did not know the neighborhood at all. The second character having taken all these notions for himself, the first seemed to no longer manage to possess them.

We cannot terminate this study on the development of the subconscious personality without recalling a fact already pointed out and on which consequently we will not dwell. Subconscious acts and latent sensations may exist during sleepwalking, as during waking, and also develop at this time in the form of a personality. Sometimes she will present the same characters as during the day before, as happens with Lucie; sometimes it will be quite different, as happens with Léonie. These possible complications should not be forgotten.

We have insisted on these developments of a new psychological existence, no longer alternating with the normal existence of the subject, but absolutely simultaneous. Knowledge of this fact is indeed essential to understand the behavior of neuropaths and that of the insane. We have only studied, in this chapter, typical cases, so to speak theoretical, of this duplication, in order to see it in the simplest circumstances and to be able to recognize it later when the cases become more complex. This notion, which is important, we believe, in the study of pathological psychology, does not lack a certain seriousness from a philosophical point of view either. We have become accustomed to accepting successive personality variations without too much difficulty; the memories, the characteristics which form the personality could change without altering the idea of the ego which remained one at all the moments of the existence. It will be necessary, we believe, to set back still further the true nature of the metaphysical person and to consider the very idea of personal unity as an appearance which can undergo modification. Philosophical systems will certainly be successful in coming to terms with these new facts, for they seek to express the reality of things, and one expression of truth cannot be in opposition to another.

VIII. Simultaneous psychological existences compared to successive psychological existences

By studying, in certain subjects, this second personality which has revealed itself to us below normal consciousness, we cannot help but some surprise. We do not know how to explain the rapid and sometimes sudden development of this second consciousness. If it results, as we have supposed, from the grouping of images that have remained outside normal perception, how could this systematization have taken place so quickly? The second person has a character, preferences, whims, spontaneous acts: how, in a few moments, has she acquired all this? Our astonishment will cease if we are to notice that this form of consciousness and personality does not exist now for the first time. We have already seen her somewhere and we have no difficulty in recognizing an old acquaintance: she is quite simply the character of sleepwalking which manifests itself in this new way during the waking state.

It is memory which establishes the continuity of psychological life, it is this which has enabled us to establish the analogy of various somnambulatory states, so it is again this which will bring the subconscious existence which takes place closer together, during the day before the subject, of the alternating existence which characterizes somnambulism. We can show in fact: 1st that the subconscious phenomena during waking contain the memories acquired during sleepwalking, and 2nd that we find during sleepwalking the memory of all these acts and all these subconscious sensations.

1st The first point could already be considered as demonstrated by the study we have made of post-hypnotic suggestions. The subject sometimes executes all the suggestion without knowing it, as we saw Lucie do, but, in other cases, he makes, at least in this way, all the calculations, all the remarks necessary to correctly execute what was ordered from him. When the suggestion is attached to a point of reference, it is the unconscious person who keeps the memory of this signal: "You told me to do such and such when the hour strikes", Lucie writes automatically after waking up from sleepwalking.. It is also she who recognizes this signal which the normal person does not care about. "There is a stain on this paper at the top and to the left," Adrienne wrote of the portrait experience. It is she who combines the procedures in these unconscious deceptions so curious that Mr. Bergson had pointed out ¹. When there is a calculation to be made, it is again this same character who takes care of it, who counts the noises I make with my hands, or makes the additions that I have ordered. Lucie's automatic writing confirms this at every moment. Mr. Gurney ² relates that he had ordered a subject to do an act in ten days and that he questioned him the next day using the spiritualists' planchette (this is a process in my opinion very useless, including the English are almost always used to trigger automatic writing). This subject, who consciously did not remember any suggestion, wrote, without knowing it, that it was still necessary to wait nine days; the next day he wrote that he would do the deed in a week. I wanted to repeat the experiment and I obtained a

¹ Bergson. *La simulation inconsciente*. Revue philosophique, 1886, II, 525.

² Gurney. *Proceed*. S. P. R, 1887, 294.

different result, but just as demonstrative. I suggest Rose, while sleepwalking, write me a letter in forty-two days, then wake him up. The next day, without putting her back to sleep, I ask her, according to the procedure already described for distraction, when she will write to me. I thought she was going to write, like Mr. Gurney's subject "in forty-one days", but she simply wrote: "October 2". And, in fact, she was right, it had been a good forty-two days and the subconscious character had just done the math. The suggestion became a simple suggestion with an unconscious point of reference which, moreover, was carried out very correctly.

When it is necessary to suppress the sight of an object to the conscious character, in the experience of negative hallucination or systematized anesthesia, it is again our second character who takes care of it. He takes for himself the sight of this object of which he retains the memory and, consequently, prevents the primary character from bringing these sensations together in his ordinary perception. Here is an example which summarizes all these phenomena. I ordered Lucie one evening, during the sleepwalking state, to come the next day at three o'clock to Dr. Powilewicz. She did indeed arrive the next day around half-past three: but when she spoke to me on entering, she seemed to experience a singular hallucination; she thought she was at home, took the cabinet furniture for her own and maintained that she had not gone out all day. Adrienne, whom I questioned then answered sensibly in writing that, on my order, she had dressed at three o'clock, that she had gone out and that she knew very well where she was. The memory of the suggestion, the recognition of the signal, the commanded act, the systematic anesthesia, everything depended on the second character who carried out my orders during the vigil below the conscious person, as he would have done during sleepwalking himself. In short, the post-hypnotic suggestions establish a very clear link between the first somnambulism and the second simultaneous existence.

But the suggestions only form a small part of the memories of sleepwalking, and the subconscious writing still shows the memory of all the other incidents. Here's an easy-to-repeat experiment Mr. Gurney¹ describes. During the sleepwalking state, he chats with a subject and tells him some story, then he wakes him up completely. At this moment, the subject has completely lost the memory of what has just been said to him, but if he puts his hand on "the planchette" and lets it write apparently at random, we will read the story on the paper, complete of this story that the subject claims to ignore and that he cannot tell, even if he is offered a sovereign to do so. Here are similar facts: For various experiments I had asked N... while she was sleepwalking, to draw in pencil some small drawings, and she had sketched a house, a small boat with a sail and a figure in profile with a long nose. Once awake, she has no memory of it all and talks about something else entirely; but her hand, which has picked up the pencil, begins to draw on a paper without her knowing it. N... finally noticed it and, taking the paper, said to me: "Here, look at what I have drawn: a house, a boat and a head with a long nose; what took me to draw this?" I had shown V..., while sleepwalking, a small dog on her knees and she had caressed it with great joy. When she was awakened, I noticed that she had a weird movement of her right hand which seemed to still be stroking something on her knees; she had to be put back to sleep to get rid of this idea of the little dog, which persisted in the second consciousness. We had made the mistake of talking about spiritualism in front of Leonie while she was sleepwalking. When she woke up, she kept various subconscious movements, trembling of the hand, as if she wanted to write, and singular movements of the head and the eyes which seemed to seek something under the furniture: the second person was still thinking of spirits. It is unnecessary to cite other examples; it suffices to recall that with a subject presenting to a high degree

¹ *Proceed. S. P. R.*, 1887, 294.

automatic writing, like Lucie, one can continue by this means, during the day before, all the conversations started during the somnambulism.

We have already observed that, during the sleepwalking itself, the subject can sometimes rediscover the memory of certain states forgotten during the vigil and yet distinct from the hypnotic state, the memory of certain dreams, of some delusions and sometimes of crises. ‘hysteria. So we will not be surprised if the subconscious writing also contains these memories. While Léonie has forgotten her natural sleepwalking, her nightmares and her crises, when she is awake, her automatic handwriting which marks Adrienne will tell us all the incidents of these kinds of crises. This is a very natural fact which results too simply from the preceding phenomenon for me to insist on it.

Another consequence of this recollection is that the subconscious person has completely the characteristic and the paces which characterize sleepwalking itself. The subjects, when they write unconsciously, take the same names that they have already taken in such and such a hypnotic state: Adrienne, Léontine, Nichette, etc. They show, in acts of this kind, the same electivity as during somnambulism. If the unconscious acts, if the partial catalepsy can only be provoked by me on Lucie or Leonie, it is because, being asleep in a daze, they also obey only me alone. Finally, the nature of intelligence during somnambulism has the greatest influence on the nature of the unconscious act. Lem has no memory during sleepwalking, so cannot perform post-hypnosis suggestions when due. The unconscious acts of N... are childish, like the very character of N. 2 or Nichette, but, as she has a great memory, these unconscious acts can be obtained at any time with great precision. Here is an observation made by chance on this subject, which is nonetheless curious. In the first studies that I had made on N.... I had observed a very great aptitude for suggestions by distraction in the waking state; I then ceased these experiences and lost sight of this person for several months. When I saw her again, I wanted to try these same suggestions without prior sleepwalking, but they did not have the same result as before. The subject, who was talking to another person, did not turn around when I commanded him something and seemed not to hear me: there was therefore the systematic anesthesia necessary for the subconscious act, but this act was not executed. I then had to put the subject to sleep, but even in somnambulism, N’s demeanor remained so unique that I no longer recognized the characters studied some time before. The subject heard me badly or did not understand what I was saying to him: “What is the matter with you today? I tell him at the end. – I can’t hear you, I’m too far away. – And where are you? – I am in Algiers on a large square, I must be made to come back.” The return was not difficult: we know these journeys of sleepwalkers by hallucination. When she arrived, she heaved a sigh of relief, straightened up and began to speak as before. “Will you explain to me now, I said, what you were doing in Algiers? – It’s not my fault; it is M. X... who sent me there a month ago; he forgot to bring me back, he left me there... Earlier you wanted to order me, make me raise my arm (that was the suggestion I had tried to make the day before), I was too far away, I couldn’t obey”. Checking this out, this singular story was true: another person had put this subject to sleep in the interval between my two studies, had caused various hallucinations, among others that of a trip to Algiers; not attaching sufficient importance to these phenomena, she had awakened the subject without removing the hallucination. N.... the awake person, had remained apparently normal; but the subconscious personage who was in her retained more or less latent the hallucination of being in Algiers. And when, without prior somnambulism, I wanted to give him commands, he heard but did not believe he had to obey. The hallucination once removed, everything went as before. A modification in intelligence during sleepwalking had therefore brought, even two months later, a corresponding

modification in the subconscious acts, just as the anger of Lucia 2 during sleepwalking brings after waking up the bad mood manifested by the automatic writing.

2nd Another consideration, to which we can now pass, brings these two states closer together, is that the *subconscious acts have a sort of hypnotizing effect and by themselves contribute to inducing somnambulism*. I had already noticed that two subjects especially, Lucie and Léonie, frequently fell asleep in spite of myself in the midst of experiments on unconscious acts in the waking state; but I had related this sleep to my presence alone and to their habit of somnambulism. The following fact brought me back from my mistake. M. Binet had been kind enough to show me one of the subjects on which he was studying subconscious acts by anesthesia, and I had asked his permission to reproduce the suggestions on this subject by distraction. Things happened quite according to my expectations: the subject (Hab...), wide awake, was chatting with M. Binet; placed behind him, I unwittingly made him wave his hand, write a few words, answer my questions by signs, etc. Suddenly, Hab... ceased speaking to M. Binet and turning to me, eyes closed, continued correctly, by *conscious speech* the conversation she had started with me by *subconscious signs*; on the other hand, she no longer spoke to M. Binet at all, she no longer heard him, in a word, she had fallen into elective somnambulism. The subject had to be awakened, who naturally had forgotten everything when he woke up. But Hab... didn't know me in any way, so it wasn't my presence that had put her to sleep; sleep was therefore here the result of the development of subconscious phenomena which had invaded and then erased normal consciousness. The fact, moreover, is easily verified. Leonie stays wide awake with me as long as I don't provoke phenomena of this kind; but when these become too numerous and too complicated, she falls asleep. This rather important remark explains to us a detail which we had noted, without understanding it, in the execution of the post-hypnotic suggestions. As long as they are simple. Leonie performs them without her knowing it, talking about something else; when they are long and complicated, the subject talks less and less while performing them, ends up falling asleep and quickly performs them while sleepwalking. The post-hypnotic suggestion is sometimes performed in a second sleepwalking, not because the subject has been suggested to go back to sleep, but because the memory of this suggestion and the performance itself form a subconscious life so analogous to sleepwalking that, in some cases, it produces it completely.

The subject is now again in somnambulism: the analogy between the states we want to compare will show itself in yet another way. All the authors have noticed that the subject executes *the post-hypnosis suggestions on awakening* without knowing who gave them to him, but *that, in a new somnambulism, he finds this memory*¹. One might think that the subject only remembers the order received during a previous sleepwalking and that there is only a memory from one sleepwalking to another. We can choose suggestions which were executed unconsciously, but whose execution was characterized by a small unexpected detail, and we see that the subject, when we put him to sleep again, has a complete memory of these acts. which have not been known to normal consciousness. It is useless to cite examples: we only have to remember the post-hypnotic suggestions of which we have spoken and whose unconsciousness we noted during the day before. All the subjects repeat, when I put them to sleep again, what they did to obey me and the various incidents which characterized the execution of my commandments.

¹ Gilles de la Tourette. *Op. cit.*, 153.

Everything I just said applies exactly to *spontaneous subconscious acts*, especially those of Leonie. *Sleepwalking in the state of Leonie 2, she keeps a recollection of it.* In the letter I mentioned, there was an ignored part of the awakened subject and signed with the name of Leontine. We can now see what this name meant, for this is how she designates herself during the sleepwalking state. She could tell me in effect in this state that she had wanted to write to me to tell me of the disease of *the other* and recited to me the terms of the letter. An excellent proof, moreover, that acts of this kind are indeed actions of Leonie 2, is that, as we have said, the subject can fall asleep while they are being performed: the same acts are then continued during the sleepwalking without modification. I caught Leonie once, writing a letter unconsciously in the way I have described and I was able to put her to sleep without interrupting; Léonie 2 then continues her letter with much more activity.

It is useless to describe this phenomenon of memory in other subjects, because it remains absolutely identical; but I will move on to a very important remark. Some subjects, like N.... have, from the onset of somnambulism, the memory of all the subconscious acts of the day before, whatever they are, even those which were obtained by anesthesia or by distraction. The subject Mr. Gurney often talks about was this kind. "When he has written a sentence automatically on the clipboard, he ignores it in the waking state, but, asleep, he almost always repeats it without error ¹." It should not be imagined that all subjects do so, for we would very quickly encounter a number of exceptions to the law which we point out. Lucie does not find in this first somnambulism any memory of her subconscious acts, Léonie, Rose or Marie only find in this same state the memory of a certain number of acts of this kind.

When this happens, when a subject does not find, once in somnambulism, the memory of his subconscious acts of the day before, we will notice that these acts still exist in the same way and that the consciousness continues to present the same duplication. Partial catalepsy on the left side, and unconscious acts by distraction still exist in Leonie during the first somnambulism. Furthermore, these acts seem to remain associated with those which occurred during the previous day and which were not remembered. With Lucie, the subconscious character, when he was writing during the vigil, signed his letters with the name of Adrienne, he still signs them with the same name during sleepwalking and continues to show in these letters the same knowledge and the same memories. During the day before, did I order Leonie an act which was performed without her knowing it during a distraction; she still ignores it when she is now sleepwalking. But if, during this very state, I take advantage of a distraction to order "the same act as earlier", without specifying more, this act is very exactly reproduced, but still unbeknownst to Léonie 2, see you later, by Léonie 1. When I make speak, either by signs or by automatic writing, this unconscious which still seems to subsist, it can very exactly recount all the other unconscious acts which still remain ignored. It therefore seems that, in this subject, the subconscious acts and the images on which they depend, below somnambulism, a new synthesis of phenomena, a new psychic existence, just as the somnambulist life itself existed below waking.

When things are like this, the subject should be put to sleep more, because the persistence of subconscious acts as well as anesthesia indicates that there is deeper sleepwalking. We know these varied somnambulant states which one obtains sometimes by insensible gradations, sometimes by sudden leaps through lethargic or cataleptic states. *Each new state of sleepwalking brings with it the memory of a*

¹ Gurney. *Proceed.* S. P. R., 1887, 296.

certain number of these subconscious acts. Léonie 3 is the first to remember certain acts and attributes them to herself. “While the other was talking”, she said of an unconscious act from the day before, “you said take out her watch, I pulled it out for her, but she wouldn’t look at the time...” “While she was chatting with M. un tel”, she said about an unconscious act of sleepwalking, “you told me to make bouquets, I made two, I did this and that...”, and she repeats all the gestures that I have described and which had been completely ignored during the preceding states. Leonie 3 also remembers well the actions which were performed during the complete catalepsy which, in this subject, precedes the second somnambulism. It is to this memory that we alluded at the beginning of this work, to show that the actions carried out in this state were not absolutely devoid of conscience. Lucie who had absolutely no recollection of the subconscious acts in the first somnambulism, nor of the character of Adrienne, takes up these memories in the most complete way in her second somnambulism. We must not therefore deny the relationship between successive existences and simultaneous existences, because the subject does not immediately find, in his first somnambulism, the memory of certain subconscious acts; it is often enough to put him to sleep more for his memory to be complete.

These facts are easily understood, moreover, if we reflect on the conditions already studied for the return of memory. The memory of an act is linked to the sensitivity which served to accomplish it, it disappears with it, remains subconscious as long as this is not linked to normal perception, it reappears when this sensitivity is itself restored. Let’s take an example: while Léonie is wide awake. I put a pair of scissors in her left hand, which is anesthetic; the fingers enter the rings, alternately open and close the scissors. This act obviously depends on the tactile sensation of the scissors, and it is unconscious, because this sensation is disaggregated, exists apart and is not synthesized in Leonie’s normal perception at this time. I put the subject to sleep and I see that in this new state, he is still anesthetizing his left arm. It is therefore quite natural that the memory of the previous act has not reappeared and remains outside personal consciousness. I put the subject in another state, he has regained the sensitivity of the left arm and he now remembers the act he has just done with the scissors. This is a new, but easy to predict, application of the studies we have made on memory. In this case, several simultaneous subconscious personalities are formed, just as several successive somnambulisms have previously been formed.

I will attach to this remark a fairly well-known fact. when a suggestion has been given to a subject in a particular sleepwalking, it can only be removed by reducing the subject to exactly the same sleepwalking. If I gave a command to Leonie 3, I will not remove it by talking to Leonie 2, or Leonie 1. Why is that? Because my command is part of a certain group, of a certain system of psychological phenomena which has its own life apart from the other psychological systems which exist in the head of this individual. To modify my command, it is necessary to start by reaching this group of phenomena of which it is part, because one does not change an order given to MA, by going to make a speech to MB. Sometimes these subconscious psychological systems, formed apart from personal perception, are in small number, two at Lucie or Léonie, only one at Marie, three or four at Rose; sometimes they are, I believe, very numerous. A subject’s sleepwalks are almost never identical to each other, they change especially when they are produced by different experimenters. I would thus explain to myself the misadventures of a somnambulist told by M. Pitres ¹. A bad joke had put her to sleep and suggested to her

¹ D’après Gilles de la Tourette. *Op. cit.*, 127.

the desire to kiss the hospital chaplain, then woke her up and left. The suggestion abominably tormented this unfortunate woman, but no one could succeed in taking it away from her, although she was put into hypnotic sleep. It was because we couldn't reproduce the same hypnotic sleep. The group of psychic phenomena which had received the suggestion always remained outside the state of consciousness which could be provoked and continued to act in the direction it had taken. This remark, *which shows us different subconscious existences like different somnambulisms*, is not of great theoretical importance, but is often very useful in practice.

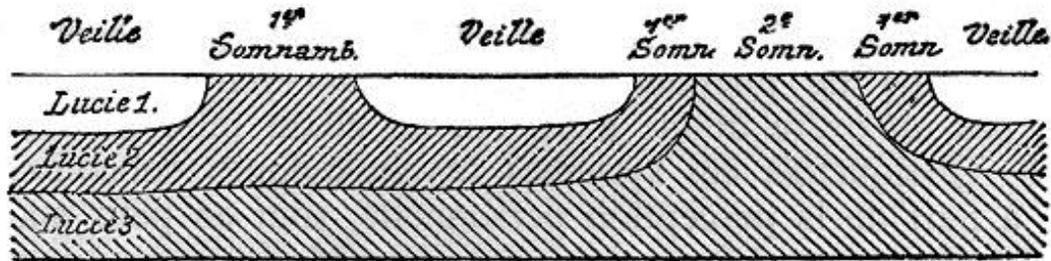


Figure 10

These relations between the subconscious and simultaneous existences on the one hand, and the various successive sleepwalking on the other hand, are obviously complicated and perhaps, despite all my efforts, difficult to understand. So I once tried ¹ to represent these facts by a schematic figure which unfortunately did not seem very clear, perhaps because I had tried to include too many things. Let us now try to represent the result of these observations in a different and, I hope, simpler way. The conscious life of one of these subjects, Lucie for example, seems to be made up of three parallel currents one under the other. When the subject is awake, the three currents exist: the first is the normal consciousness of the subject speaking to us, the other two are groups of sensations and acts more or less associated with each other, but absolutely ignored by the person who is speaking to us. When the subject is asleep in the first somnambulism, the first current is interrupted and the second emerges, he shows himself in broad daylight and makes us see the memories he has acquired in his underground life. If we pass to the second somnambulism, the second current is interrupted in its turn, to leave alone the third which then forms the entire conscious life of the individual, in which we no longer see either anesthesia or subconscious acts. Upon awakening the upper currents reappear in reverse order. The figure would have to be complicated to represent other subjects who have more sleepwalking states, natural somnambulisms, hysterical attacks, etc., but the general arrangement could, I believe, remain the same.

IX. Relative importance of the various simultaneous existences

A truth must never be exaggerated under penalty of turning into an error: that subconscious life resembles sleepwalking life, this is obvious: that it is absolutely identical to sleepwalking and can be assimilated to it, this is what we cannot admit. Léonie 2, the somnambulist, talkative, petulant, childish character, cannot exist complete and as is below Léonie 1, this elderly woman, calm and silent. This

¹ *Les actes inconscients et la mémoire pendant le somnambulisme*. Revue philosophique, 1888, I, 279.

mixture would lead to perpetual delirium. Also, the sleepwalking character who has the absent sensitivities would still complement the normal character and leave him with no visible paralysis. Here is a detail that my brother told me about it. A hysterical woman with anesthetic legs, Witt.... rests her feet on a ball of hot water and, feeling nothing, does not notice that the water is too hot and burns her feet. This subject, however, contained a second personality which manifested itself perfectly by subconscious signs or in a profound somnambulism and which then had tactile sensitivity. When questioned, this second character claimed to have felt the pain in his feet very well. "Well then why didn't you pull the legs? – I do not know ¹." It is obvious that the second figure who possesses the tactile sensitivity of the legs was not to exist during waking in the same way as he now exists in deep sleepwalking. In short, the second personality does not always exist in the same way and the relations or the proportions between the different psychological existences must be very variable.

To examine these variations, we can start from a first extreme point: *The state of perfect psychological health. The power of synthesis being great enough, all psychological phenomena, whatever their origin, are united in the same personal perception*, and consequently the second personality does not exist. In such a state, there would be no distraction, no anesthesia, neither systematic nor general, no suggestibility and no possibility of producing somnambulism, since one cannot develop subconscious phenomena which do not exist. The most normal men are far from always in such a state of moral health, and, as for our subjects, they very rarely succeed. However, for over eighteen months, Lucie remained without anesthesia, without suggestibility and without being able to hypnotize her. Marie is now in a period of this kind, I do not know for how long. It is a relative state of health.

When this perfect health does not exist, *the power of psychic synthesis is weakened and lets escape, apart from personal perception, a more or less considerable number of psychological phenomena: this is the state of disintegration*. I do not call this the hysterical state, although this state exists constantly during hysteria, for I believe that the state of disintegration is something more general than hysteria and that it can still exist in many years. 'other circumstances. It is the moment of distractions, of systematized anesthetics, of general anesthetics, of suggestions carried out consciously by the subject. But the disaggregated phenomena still remain incoherent, so isolated that, except for a few which still lead to very simple reflexes, they have, for the most part, no action on the behavior of the individual, they are as if they did not exist. When Witt... burned her feet, there were phenomena of pain somewhere in her, but so elementary, isolated and incoherent that they could at most provoke a few convulsive contractions here and there, but could not directing an overall, coordinated movement, such as spreading and moving the legs. It is in this state that our subjects remain most often, when we do not take care of them and especially when we have not put them to sleep for a long time.

The only changes that occur naturally in this state are the various distributions of anesthesia. So, to take an example, Marie, for several months, oscillated between three forms of anesthesia. 1st It is most often left hemi-anesthetic: the body is divided into two parts by a vertical line passing through the middle. On the right, all general or special sensitivities are preserved, on the left all the sensations of all the senses

¹ See in this connection the very interesting experiments of M. Binet, in the article of which I spoke above, on the phenomena of subconscious pain. *Revue philosophique*, 1889, I, 143. The author notes, like me, that these simple pain phenomena produce less movement than the precise sensations; and he gives a reason that seems very correct to me, and that is the simplicity and the lack of coordination of these phenomena. We have already made an allusion to facts of the same kind in the first chapter of this work, p. 61, discussing Bain's theories.

have disappeared. 2nd After having remained fifteen days or three weeks in this first state, it often passes, without apparent reason, in a second. It is still semi-anesthetic, but in a different way: the body is divided into two parts by a horizontal line passing a little above the breasts, at the level of the shoulders. The whole lower part is absolutely anesthetic; the entire upper part including the head and the special senses (excepting for special reasons the left eye and temple) cover full sensibility. Often it changes again and is felt for some time all over the body, but in an extremely obtuse manner; as if the same amount of sensitivity had spread by halving over a double surface. Other subjects will be able to distribute their sensitivity in another way, by choosing in each direction, to perceive them, certain particular impressions and by abandoning the others. We have seen that electivity and distraction are forms of the narrowing of the field of consciousness and of psychic disaggregation, like anesthesia itself. These are some of the variations which a state of disintegration left to itself will naturally present.

If the person who puts the subjects to sleep approaches them, they experience a very special emotion which makes them feel a change in their consciousness. This is because the subconscious and disintegrated phenomena have grouped together under this excitation, have gained strength and even robbed normal consciousness of some phenomena of which it had retained until then the property. The anesthesia increased: Lucie, who previously heard everyone, can no longer hear me. "I see your lips moving", she said, "but I can't hear what you are saying." It is because the subconscious character who formed took my words for him at that moment. Suggestibility has also increased, but it is exercised in two ways, sometimes provoking the conscious acts of the first character, sometimes the acts of the second ignored by the first; it is the moment of partial catalepsy, of suggestions by distraction and of automatic writing. This is the state in which the spiritualists are so happy to see their mediums, in order to evoke the spirits through the intermediary of the disaggregated phenomena. This state corresponds fairly well, it seems to me, to that which has already been described under the name of *somnavigil* or *sleepwalking* ¹. We criticized this name, saying that it was not from the day before. Obviously, if the word awake is understood to be an absolutely normal psychological state, the subject is not in a normal awake state. We are not in the habit, when we are wide awake, to walk or write without knowing it; but it should not be concluded from this that the subject is in a state of complete hypnotic sleep. Mr. Beaunis ² gives the proof very well: it is that there is continuity of memory between the normal vigil and the words of the subject in this state he will remember indefinitely a part of what he did he was therefore at least partly in the standby state. But the other part of his being whose existence and characters we have abundantly shown and which is now manifest, is indeed in somnambulism, as is shown by another continuity of memories which we have just studied. But here again the somnambulic state is not complete. The second personality has a little hearing which he delighted with the first, he feels the touch and the movements; but he does not see, at least usually, he does not move very easily and above all he does not speak or very hardly, all things that he could do during complete sleepwalking. It is therefore a half-somnambulism like a half-wake, and M. Ch. Richet had obviously found the right word, which we will keep to designate this state, when he called it a *hemi-somnambulism* ³.

¹ Beaunis. *Somnambulisme provoqué*, 166.

² Beaunis. *Somnambulisme provoqué*, 166.

³ Ch. Richet. *Les mouvements inconscients*, dans l'hommage à Chevreul, 93.

The previous state is a transient and so to speak fragile state which oscillates between a more perfect wakefulness and a complete sleepwalking.

Let us excite these systems of subconscious ideas a little more, or make this unsteady first personality disappear by some sort of fatigue, and we arrive at true somnambulism. The first personality no longer exists, but the second personality is enriched at the expense of the first; it has now taken, in addition to the phenomena which were proper to it, those which belonged to the other synthesis; she sees, she moves, she speaks as she wants. She remembers her previous humble existence: "It was I who did this, who felt this" but she does not understand how she could neither move nor act just now, because she does not realize of the change that has occurred. After somnambulism, the first personality reappears and the second diminishes without disappearing entirely. This persists for a longer or shorter time depending on its strength and the post-hypnosis suggestions made to it; it gets up from time to time to accomplish them, then it decreases still further so as to occupy only the small space left to it by anesthesia during the state of disintegration which is now reestablished. If the return to health were complete, it would disappear entirely and there would be a new restoration of psychic unity which would undoubtedly take place around another center, but which would be analogous, for the extent of the field of consciousness, and for independence, to complete sleepwalking. Let us try, in a new figure a little less schematic than the previous one, to represent these relative extents of the various personalities, assuming for simplicity that there are only two.

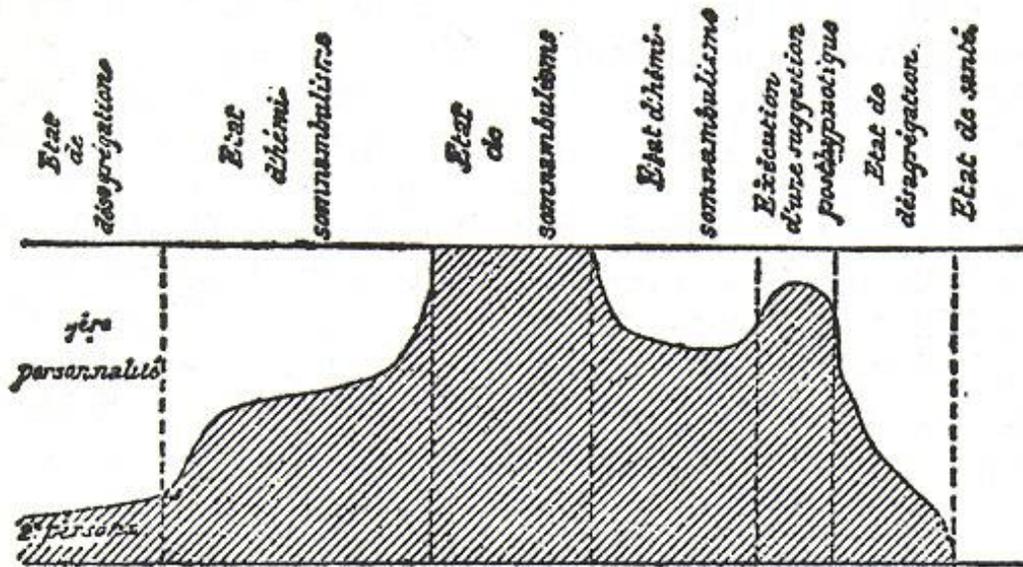


Fig. 11

The problem of the relations between the successive secondary personality during sleepwalking and the simultaneous secondary personality during waking may be presented in a more precise manner and take a particular form: we know that, during complete sleepwalking, the second person has memory, not only from her own actions during previous sleepwalking, or even from acts she did during hemi-sleepwalking below primary consciousness, but even from actions consciously performed during waking by the first person, by "the other", as the somnambulists say. Since this somnambulist personality already

exists during the hemi-somnambulism under the consciousness of the day before, is it not natural that it already has at this moment the knowledge of the acts performed above it by the ordinary personality? I had been struck by this reasoning and, in my first articles on this subject, I had admitted, as a kind of law, that the first personality completely ignored the second acting below it, but that the latter knew the first very well; I even used this remark to explain the memory of the day before during sleepwalking. Mr Gurney, who soon after published studies on the same problem, still accepted this law, but began to have reservations ¹. “In many cases”, he said, “it is not at all obvious that the second personality has exact knowledge of the first when it acts above it.” Not only do I now recognize the correctness of Mr. Gurney’s reserves, but I am prepared to increase them further.

We must not give in to this illusion which leads us to identify the second personality during sleepwalking with the second subconscious personality during hemi-somnambulism. It has, in the first state, when it is complete, knowledge and memories which are due to the sensitivities which it has recovered; she remembers the actions of the day before, because she took over the sensibilities of the day before, in addition to her own. But when she was rudimentary or flawed next to normal consciousness, she didn’t have those sensitivities and didn’t have to have full knowledge of what the first character was doing. When Lucy 1 or Lucy 2, to take an example, exist simultaneously, they generally act on their own, and they ignore each other. If one knew the other, if the images of the tactile sense were associated with the images of the visual sense, a common consciousness for the benefit of one of the two people would be reconstituted, which does not seem to take place.

One of the great difficulties of observation, when we want to verify these things, is that it is not possible to question the second personality on any fact, without thereby giving him knowledge of it and without taking away from the primary personality. “The subconscious character”, said Mr. Gurney ², “however, hears signals, describes objects from the outside world about which he is asked to speak.” No doubt, but it is easy to verify that at this moment, the first personality ignores these signals and no longer sees these objects; when the normal ego really continues to see something, it is not at all certain that the abnormal ego also sees it at the same time; we no longer dare to conclude, like Mr. Gurney, that there is a difference between the two personalities and that one knows the other without being known by her: the situation must be the same for both.

We must not forget, moreover, that we are only talking in this chapter of the simplest cases of disaggregation, the most theoretical in a way. It is easy to observe a very large number of varieties and complications in which the two characters can more or less know each other and react to each other. We now avoid entering into the study of these complications.

The examination of the schematic figure that we have just studied suggests to us yet another new reflection which is of interest. We immediately notice that the representation of the complete somnambulant state is absolutely identical to that of perfect health, these two states also being

¹ *Proceed. S. P. R.*, 1887, 320.

² *Proceed.*, 1887, 317.

characterized by the reunion of all psychological phenomena in one and the same consciousness. From a certain point of view this resemblance should not surprise us and agrees quite well with previous studies which have shown us the absolute integrity of sensitivity and will in complete somnambulism, as in perfect health. But, on the other hand, this resemblance raises a difficulty. Do we not know, in fact, that, during sleepwalking, memory too is intact and embraces all periods of life, even the periods of waking, while waking and the normal state would be characterized by forgetting sleepwalking states. How, if this difference in the state of memory is real, could these two states of complete sleepwalking and perfect health be the same? When two psychological states are absolutely similar, the memory must be reciprocal.

Well, maybe it really is, maybe the state of perfect health, when it exists, brings about the full recollection of sleepwalking itself. If our subjects, after waking up, do not retain the memory of their sleepwalking, it is because they do not return to perfect health and that they always retain more or less visible anesthetics and distractions; if they were radically cured, if they widened their field of consciousness to embrace definitively in their personal perception, all the images, they would have to find all the memories which depend on them and to remember completely even their periods of crisis or somnambulism. I must say that I have never noticed this return of memory and that this remark is based on the examination of a schematic figure and on reasoning more than on experience. Perhaps we could have seen something like this during the times when Lucie seemed completely healed; but I was not thinking of this problem then and I did not do any research on this point. I also believe that they would have had a negative result, I have never seen these hysterical people find after their apparent recovery the memory of their second existence. Perhaps these women who are still young, and in whom slight signs of hysteria reappear from time to time, never have a sufficiently complete cure for this phenomenon to be manifest.

If observation does not tell us about this point, history perhaps provides us with some indications to collect. We know the misadventures of a subject who was famous at the time of the greatest quarrels caused by the study of animal magnetism. For several years, a woman named Pétronille, interned at the Salpêtrière, had presented all the phenomena of sleepwalking, as well as the clearest and best observed forgetfulness on awakening. Much later, in her old age, this woman, released from the hospital, claimed to make a confession and claimed to have continually simulated all the phenomena of sleepwalking. To prove her point, she recounted everything she had been made to do during the alleged sleeps and found all the memories. This fact caused quite a stir, and was the occasion for many triumphant jokes against the magnetizers. Even today, certain rather superficial authors, who do not see in all nervous phenomena, somnambulism, hysteria, perhaps even epilepsy, as pure comedies, repeat from time to time, like a “Carthage must be destroyed”, this solemn warning to the hypnotists: “Pétronille cellar.”

Similar facts are also found in the history of spiritualism, of which we will speak shortly. The Fox misses, which in 1848 were the occasion for the development of all American spiritualism, having grown old, are now laughing, it seems ¹, of their ancient exploits and claim to have always simulated their unconscious movements and conversations with spirits. In fact, whether Pétronille was sincere or not, whether the Fox misses in 1848 had genuine hysterical accidents and real automatic movements, or whether they exploited a lucrative deception, we do not care. We might even point out that one can hardly

¹ Cf. *Journal of the society for physical Research*. 1888, 360.

accept the testimony of a woman of sixty, when she claims to explain the feelings she had at eighteen. She is no longer the same person and is no longer able to understand her own youth. She can very well accuse herself now of a deceit, which has never been committed, to explain to herself things whose memory has reappeared and which she cannot interpret otherwise.

These phenomena, indeed, can they not be understood in an interesting way. Is it not possible that at sixty, the hysteria, the mental disintegration that existed at twenty, has totally disappeared and that the fully reconstituted mind has recovered all the images, as during a perfect somnambulism. Phenomena of this kind would justify the theoretical comparison which we have been led to make between the state of health and the state of somnambulism. But it is useless to discuss further on facts so old and so little known; perhaps those who have been able to follow hysterics for a very long time have been able to make observations of the same kind on this complete return of memories after the disappearance of the disease. It would be interesting to bring them together: they would provide a curious sign of the complete cure of hysteria and would come to confirm the assumptions which we made on the distinct psychological existences in the same individual.

Leaving aside these problems, the solution of which is still doubtful, we can conclude with this remark. Psychological disaggregation gives rise to unequal thought groups whose relative importance is constantly changing. The state of perfect wakefulness and the state of complete sleepwalking are two extremes: between them are many degrees in which the various existences coexist in changing proportions.

The study of nervous diseases has made great progress when it has been proven that a woman is not only sick when she has her attack of hysteria, but that she is all the time hysterical, even in the interval of his seizures. We must make a similar progress in the study of sleepwalking and we must admit that an individual does not become sleepwalker, when one wants to, for a few moments, then that after waking up everything is over, but that a subject is hypnotizable because he was already in some way somnambulist and continues to be so after waking up, sometimes for a very long time. *The simultaneous psychological existences, which we have been obliged to admit in order to understand anesthetics, are due to this more or less complete persistence of the somnambulist state during waking.*

X. Anesthesia and paralysis

A hypothesis must be defended in two ways, showing: 1st that it is useful, that is to say that it brings together and clearly summarizes certain facts; 2nd that it is fruitful, that is to say that it makes it possible to interpret other new phenomena for which it had not been imagined. The hypothesis of the disintegration of psychological phenomena and of their union into two or more distinct groups, although simultaneous, seemed to us to easily represent the various anesthetics and their singular characteristics; let us seek if there are not other new phenomena whose interpretation can be linked to the same supposition.

The study of amnesia would raise an extremely interesting psychological problem. When a memory seems forgotten, and you don't think about it, has it completely disappeared from consciousness? Can we

not say of it, like sensations ignored by anesthetics, that it is preserved in some obscure region that consciousness does not know? It is a very attractive theory and from certain points of view quite probable; it is admirably expressed in Saint Augustine and has been defended with great skill by contemporary philosophers, such as M. Bouillier and M. Colsenet ¹. It is certain that this hypothesis appears to be linked to the theses which we have supported up to now, and yet we will not discuss it. In composing this work, we had the pretension, justified or not, of doing a work of experimental psychology and of deviating as little as possible from the facts that we were able, more or less well, to observe ourselves; however, we have not observed any facts which are directly linked to this somewhat transcendent hypothesis. The great difference between an experimental study and a philosophical theory is that the former does not need to push ideas to their most distant consequences and ends at the point where the solid basis of observations and experience seems to slip away.

The only amnesia we have studied is much simpler, it is the loss of a memory when it should normally present itself to consciousness. A subject who has been suggested during sleepwalking to forget such a memory can no longer find it when he wakes up, nor can he have the sensation of an object that he has been forbidden to see. But the memory, like the sensation, persists in a second consciousness and can be recovered by the same procedures. We will not insist on this fact either, for we have studied the conditions of memory sufficiently to admit without further examination that the various amnesias of this kind are explained in the same way as the various anesthetics. To understand this amnesia, we need only recall a remark already pointed out. In all the figures which have been examined in paragraph VI of this chapter to explain perception, the simple phenomena T, T', M., etc., prior to the synthesis which forms perception, may also be memories or images, although sensations, and all studies on the reunification or disaggregation of these images would remain the same.

But we often meet in the studies of pathological psychology two new and very important phenomena: *paralysis* and *contractures*. If these facts can be linked to this theory of psychological disintegration which we have sketched, they will give it a fairly serious verification; we will therefore have to devote a special study to them.

As a general rule, all anesthesia and all amnesia always lead to paralysis: if I have forgotten the name or the place of an object, I cannot pronounce this name, nor make the movement to pick up the object from its place. A hysteric who completely loses the memory of any kind of verbal images, or who loses all sensitivity of a limb, can no longer speak or can no longer move that limb. On the other hand, paralysis and contractures are almost always, except in quite exceptional cases, accompanied by anesthesia. "Tactile and muscular anesthesia always accompanies hysterical paralysis," said Mr. Charcot ². "The patient", says another author, "is only aware of his limb as a foreign body the weight of which is troublesome and is felt in the part of the thorax which has remained sensitive ³." Likewise, contractures are generally indolent and accompanied by deep anesthesia of the muscle and almost always also of the

¹ Colsenet. *La vie inconsciente de l'esprit*, 227 et Bouillier, *Ce que deviennent les idées*, Revue philosophique, 1887, I, 150.

² Charcot. *Maladies du système nerveux*, III, 302.

³ Berber. *Hystérie et traumatisme*, 1887, 19.

skin which covers it ¹. These anesthetics bring, of course, amnesias, and a hysteric, paralyzed like V... for example, can no longer manage to represent the visual or muscular image of the moving leg. Generally speaking, it is the hysterics presenting numerous anesthetics and amnesias who have these accidents, and they have them on the side which is mainly anesthesia; conversely, when the anesthetics disappear, we see the contractures give way and the paralyzed limbs recover their movements. After all that we have said about the motor role of sensations and images, this relationship between the suppression of an image and the suppression of a movement seems so natural that it is not necessary to dwell on the typical and regular cases; it is better to examine the exceptions, which are numerous and important, and to find out how they can be brought back to the rule.

A theory, formerly quite widespread and which today is not supported any more, seems to oppose the assimilation which we want to make; for it separates absolutely, like two phenomena different and independent of each other, the paralyzes and the anesthetics. M. Joly, in an article published recently, explained in detail all the facts which, according to him, show the separation of these two diseases, and we can summarize under two headings all the arguments he gives: 1st there are *anesthetics without paralysis*, and 2nd there are *paralyzes without anesthesia*. Can we explain facts like this?

1st "A hawk which has cut the sensitive nerves of the leg no longer feels touching or pricking in this member", said Claude Bernard, "but it retains the ability to stand on its perch and walk ²." In a more general way, we can, by sectioning the sensitive roots, suppress sensibility while allowing motility to persist; it is the old experience of Bell and Magendie. So, says Mr. Joly, movement exists without sensitivity. In any way; surgical lesions are, in my opinion, a bad process of psychological experimentation, because so far they are not delicate enough and do not precisely reach the fact that one wants to remove. The severing of a sensitive root simply removes the material communication between external impressions and the animal's sensibility; it absolutely does not destroy this faculty. Claude Bernard's hawk is still able to sense the sensations relating to its paw and, therefore, it retains the memory of all the images of the old sensations transmitted to it through this once intact nerve. No one has ever claimed that movement is always produced by a current sensation: we can write now without having writing models in front of us; but this does not prove that writing is not a movement produced by images of old visual or muscular sensations. This is the case with most of the examples cited by the author: the anesthesia of which he speaks is produced only by anatomical lesions, hemorrhages, tumors, etc., which interrupt conduction, but do not suppress the psycho-faculty physiological of sensation and image. Doubtless there is no paralysis, but it is because there is no amnesia, because the anesthesia is not complete.

It is only in neuroses that the psychologist can fruitfully study disorders of sensibility and movement. Now M. Joly does not seem to make much of it, for, he says, "disorders of the sensibility in neuroses only affect the peripheral region of the nervous system ³." This proposition seems untenable to me, because it is precisely in these diseases that the lesion is truly central and psychological. Let us see then if, in the neuroses, there are disturbances of sensibility without disturbances of movement. This is certain;

¹ Cf. *Proceed.* S. P. R. 1881, 228.

² Joly. *Sensibilité et mouvement*. Revue philosophique, 1886, II, 125.

³ Joly. *Sensibilité et mouvement*. Revue philosophique, 1886, II, 117.

all observers, in fact, have noticed that there are hysterics who are absolutely anesthetic and who move very well. Deneaux's famous observation will dispense with the description: "She put her muscles into play under the influence of the will, but she was not aware of the movements she was performing. She didn't know what the position of his arm was, she couldn't tell if it was extended or flexed. If the patient was told to put her hand to her ear, she immediately performed the movement; but when my hand was interposed between hers and her ear she was not aware of it. If I stopped her arm in the middle of the movement, she didn't notice it; If I stared, without her noticing it, at her arm on the bed and then told her to put her hand to her head, there was a moment of effort, then she remained quiet, believing that she had executed the movement. If I told her to try again, she was trying to bring into play the muscles on the opposite side of the body (she was only struck with hemianesthesia) she recognized that there was opposition to the movement ¹." This is a fine example of complete tactile and muscular anesthesia without paralysis. Many of the subjects I have studied, especially Marie, would give rise to an absolutely identical description. How do these movements occur?

I answer without hesitation, with most observers, that these *movements are executed by means of other images and here by means of visual images*. "The loss of the motor images of language", said M. Charcot in the past, "does not always lead to the loss of language, for there are people who speak with auditory images and these lose their muscular images with impunity; they don't feel their mouths speak, but they speak all the same ²." Hysterics likewise do not feel their arm moving, but they do move it nonetheless, because they picture to themselves the visual image of the movement of their arm and that this visual image, as we have seen in all related experiences in imitation, is sufficient to produce the effective movement. The role of visual images can be demonstrated, I believe, by at least two observations. I have noticed, on two different occasions, that when a hysteric loses all tactile and muscular sense, she becomes more easily paralyzed in the legs than paralyzed in the arms. As soon as Rose becomes anesthetic, she is paraplegic; V... likewise cannot lose muscle sensitivity without losing the use of his legs; but both always keep the movement of their arms. Now, for women especially, the movement of the arms is much more visible than the movement of the legs and leaves much clearer visual images in the memory; this is why they know how to move their arms and do not know, like Lucie, also how to move their legs with the sense of sight; they are less accustomed than the latter to making constant use of visual memory ³. A second observation is commonplace: for a long time Duchenne (de Boulogne), Bell, Lasègue, etc., observed that these women, so restless when they have their eyes open, can no longer move when they have their eyes closed, or when they are do not look at their limbs: "A mother feeding her child is paralyzed, she loses muscle power on one side and at the same time sensitivity on the other. A strange and truly alarming circumstance, this woman could only hold her child at the breast, with the arm which had retained the muscular power, only on condition of looking at her infant. If surrounding objects *distracted* his attention from the position of his arm, his flexor muscles gradually relaxed and the child was in danger of falling ⁴." In a nutshell, when she was distracted, other visual images filled her little field of consciousness, and the visual images of her arm movement faded away. It was therefore the visual

¹ Id. *ibid.*, 125.

² Ballet. *Langage intérieur*. 123.

³ Subjects of this kind will be able to preserve the visual images of the movement of their legs and yet remain paralyzed, because it is the muscular images alone which in them put the legs in motion. Rose could hallucinate to see her legs move and still remain paraplegic. Lucie could not have had a similar hallucination without moving her legs, or conversely can only be paraplegic if she loses visual images such as muscle images.

⁴ Observation de Ch. Bell., Joly. *Op. cit.*, 129.

images which replaced the absent muscular images and masked, by their movement, the paralysis that this anesthesia should have produced.

However, this last observation is not absolutely convincing. If some hysterical anesthetics, as Lucie was an example, fall absolutely paralyzed when we close their eyes, most still retain movements, or at least, according to the observation of M. Pitres, can continue the movement which has been started, eyes open, if they cannot start another with their eyes closed. This is easily explained, because visual images persist even after closing the eyes and can, like visual sensations themselves, determine movement. But then why, in some cases, do they lose movement when they have their eyes closed, and in other cases, do they keep it? I believe that there is an important notion to take into account, it is *the notion of the position of their arm when starting a movement*. If Marie can raise her arm with her eyes closed, although she is insensitive, it is because, when I ask her for a movement, she imagines her hand which was visible on her knees before the eyes were closed. She starts from this representation to make the movement, or to continue the movement whose beginning has been seen. But now I stop her movement without letting her see where her hand is falling, or I move my arm without warning her and put it on her head. She didn't feel any of it, believes her arm on her knees, or better does not know where it is, and says that she lost it. I ask her to hold out her hand to me, and her arm doesn't move or has only inconsistent tremors, is that, ignoring the initial position of her arm, she no longer knows what to visualize to reach out to me. Much better, without touching his arm, I make him believe that I am moving it; that is enough for her to no longer know where he is and to say to me in a sorry tone: "But let me watch and I will give you my hand." It is not even necessary to let her watch, it suffices, as we have learned from a very pretty observation by Lasègue reproduced by M. Pitres, to place your hand on a part of the body which has remained sensitive, the right cheek, for example, so that she is happy to learn the initial position of her arm, so that she can represent the movement and therefore do it. These reflections on the importance of the visual notion of the position of the arm allow me to understand one of my old observations that at first I could not explain. To study a well-known sign of hysterical anesthesia, I would take the arm of these people and put it behind their backs; they could no longer manage to withdraw it; if, on the contrary, I asked them to put their hand behind their backs themselves, most of them could withdraw it easily. This is because, in the first case, they did not see where I had put their arm and that, in the second, they kept the visual representation of the position of the arm moved by themselves. The exceptions therefore fit quite easily into the rule – if there are muscular anesthetics which are not accompanied by paralysis, it is that all relative sensitivity to movement has not been removed, that sensations and visual images have intervened to replace those that were lost, and we cannot conclude that movement exists independently of sensory images.

2nd Let us now consider the second form that this discussion can take: there are, it is said, *paralysis without anesthesia*. Let us first rule out, as before, the paralysis due to anatomical lesions, the type of which would be the paralysis produced by the section of the motor root leaving the posterior root intact ¹. We could do, in my opinion, the experiment in a much simpler way, tie the legs of the animal tightly so that it cannot move, and then say: "You can see that there is paralysis without anesthesia, since this dog feels and does not move," It would be just as demonstrative. It is also necessary here, for the

¹ In all this discussion, moreover, we make no allusion to paralysis and contractures due to an organic cause, which may present quite other characteristics.

psychological study, to seek paralyzes without lesion and to see how they can occur in spite of the conservation of the sensibility. Some authors, such as Huchard, Prégel, Lober, cite psychic paralyzes of this kind which are not accompanied by anesthesia ¹. How can we understand this irregularity.

Let us take as an example, an experimental suggestion. I chalk a line on the floor and tell a hysterical woman that she won't be able to cross that line. She shrugs, claims I'm kidding, and doesn't care what I've said. A few minutes later, she gets up to go out and quickly walks straight ahead. Both legs stop stiff at the edge of the line and the body remains leaning forward without being able to move forward. Here she is furious, pulling back to gain momentum, she runs, but she is still suddenly stopped at the same point. It is a kind of paralysis, for she is unable to lift her legs and cross the white stripe; but it is easy to see that the sensitivity has not changed, her legs are, as before, one sensitive, the other insensible (it was a hemianesthetic). You can do a lot of experiments like this, tell a subject that his arm is glued to the table, that he cannot pick up an object, etc. M. Bernheim remarks that, if it has been said, during sleepwalking, that such and such an object paralyzes, this effect still occurs after awakening, without the subject knowing why ².

In all these cases, the suppression of movement does not seem to me to be true paralysis, it is an act which results in apparent stillness, but which is nonetheless energetic. The suggestion, either during sleepwalking or during distraction, caused a subconscious fixed idea which stops the movement at the moment when the subject wants to produce it and could moreover do so by means of the sensory images which he has completely preserved. The subject is no more paralyzed than a man would be in a prison hitting the walls. Natural pseudo-paralysis without anesthesia must be of this nature: "I dress to go out", said a patient from Descourtis, "and at the same time I remain motionless; they have to push me outside, I am unable to enter a store, or, if I enter, I am inert... I feel that there are two people in me, two wills and these two successive wills counterbalance each other, and make me stay put ³." M. Charcot analyzed very important and very curious cases of this kind of which he gave the real explanation ⁴. The emotion caused by an accident, the "nervous shock", caused a mental state analogous to hypnotism or, at least, different from the normal psychological state, during which the idea of injury, of paralysis entered the mind. The consciousness returned to the normal state, this idea nevertheless persisted below and stopped, "inhibited" all the movements that the patient wanted to make. From the psychological point of view, as from the physiological point of view, the apparent suppression of movements can come sometimes from "a true abolition of the activity of the motor apparatuses, sometimes from an increase in the activity of the stopping apparatus ⁵". The first alone is a real paralysis: the previous studies do not seem to us to have succeeded in separating it from the anesthesia.

XI. Paralysis and contractures explained by psychological breakdown

¹ Lober. *Paralysies, contractures..., de cause psychique*, 1886, 17.

² Bernheim. *De la suggestion*, 163.

³ D'après Langle. *De l'action d'arrêt ou de l'inhibition dans les phénomènes psychiques*. Thèse, 1886.

⁴ Charcot. *Maladies du système nerveux*, III, 355.

⁵ Beaunis. *Recherches expérimentales sur les conditions de l'action cérébrale*, 1884, I. 145.

Far from being able to develop independently of anesthetics, these two phenomena of paralysis and contracture: 1st *present the same varieties, can be placed in the same classifications*; 2nd *arise under the same circumstances, and 3rd finally can be interpreted exactly in the same way as the phenomena of insensitivity.*

1st Just as there can be general anesthetics eliminating absolutely all the sensations of a sense, so there can be *total* paralysis, completely suppressing all the movements of a limb, and total contractures, stiffening to the highest possible degree all the muscles of an arm or a leg. These two forms of paralysis and contracture are the simplest and, if you will, the most frequent; they can be recognized by constant signs. In complete paralysis, the limb always falls inert, obeying the laws of gravity; in general contracture, a limb, and sometimes the whole body, assumes a fixed, invariable position, determined by the position and the relative strength of the different muscles. This attitude of the limbs in general contracture has often been described in connection with attacks of tetanus or certain epileptic fits: the leg, for example, will be in forced extension, because the extensor muscles predominate over the flexors, the leg, fist will be closed, slightly turned in, the body bent backwards slightly in an arch, etc. Just as anesthesia may be *partial*, affecting only part of the eye or a portion of the skin surface, so paralysis or contracture may be partial and affect only a muscle or 'a group of muscles to which the same nerve ends, but only these ones. It is in this class that the ulnar, median and radial claws which have been described so often must be placed. Finally, there is a third group of anesthetics of which the preceding ones are very similar: it contains those which we have described under the name of *systematized* anesthetics. It is easy to see that there are exactly corresponding paralyzes and contractures.

The old magnetizers had already noticed that one can forbid a subject to make a certain movement, to pronounce such a word, or to write such a letter. "An individual cannot manage to write the letter A, he deletes it when he writes his name ¹." "Systematic paralysis consists of the loss of special movements, of adapted movements. The subject who is affected does not completely lose the use of his member; he is only incapable of using it to perform a specific act and this act alone ²." It is easy to understand how a subject who can make all possible movements with his arm, except those necessary to write an A, is like the subject who can see all objects with his eye except one designated person. There are even, although this is a less well-known fact, systematized contractures, that is to say contractures in which all the muscles of the arm or of the hand are not contracted to the highest degree, but in which only some are contracted and some more, others less, so as to give the member an equally rigid, but expressive attitude. The arms, for example, may remain contracted in the pose of threat or in that of prayer. *Paralysis and contractures can therefore present all the modifications presented by anesthetics and be classified in the same way.*

2nd From another point of view, if we study the phenomena obtained by suggestion, we will see that paralysis and contractures occur under the same circumstances in which anesthesia occurred, and give rise

¹ Dr Philips. *Cours de braidisme*, 120.

² Binet et Féré. *Magnétisme animal*, 253.

to the same experiences. The post-hypnotic suggestion brought on partial insensitivity and systematic anesthetics; it will produce paralysis and contractures of the same kind.

While sleepwalking, I command N... to say her prayer, then wake her up before she starts. When she is awake, both hands come together unnoticed and take the position of prayer while she is talking about something else. This is one of the subconscious acts accompanied by systematic anesthesia that we know. After a while, needing to make a movement, she spontaneously moves her hands, and nothing seems to remain of the suggestion. At this point, N... is asked to put his hands in the prayer position; she refuses at first, finding the request ridiculous, finally she tries jokingly, but she closes her fists instead of extending her hands. "Here", she said with annoyance, "I no longer know how to put my hands in prayer ... ah! like this." And she crosses her fingers. "No, he was told, his hands clasped like statues in churches. – I know what it is, she says, interrupting, but I don't know how to do it anymore." This language naturally recalls that of the agraphic which has lost the faculty of writing; but, in the latter, the faculty is destroyed, in the hysterical, it is only disintegrated. Indeed, N... no longer wants to deal with her prayer and talks about something else, but while she is speaking, her hands are raised without her knowing and are placed very well against each other: M. can only pray unconsciously. This is not exactly what we had found about anesthesia, when automatic writing showed us knowledge of an object that the subject could no longer see. Another day, I suggest on the same subject to tie knots in a string that I gave him when I wake up. When he woke up, his hands were making knots quickly, without N... realizing it. We then address to her and ask her to tie knots in another string that is given to her; she agrees to it in jest. But here is her anger starting again, because she gets confused surprisingly, makes circles, loops with her string and never can tie a knot. She renounces it and does not take care of it; the hands pick up the string on the knees and subconsciously make very correct knots. Here are the same experiments made on another subject. "When you are awake, I said to Lucy 2 during sleepwalking, you will recite the numbers to me and write them down on a piece of paper." As she writes them down after waking up, in the automatic fashion we have often seen in her home, another person questions Lucie, and asks her to count to 10. She thinks she is being laughed at and tries to count, but, to her amazement, she no longer knows a single number and yet at this very moment the hand is still writing them. I make, by this process, write the alphabet, Lucie does not know it any more. I ask the subconscious character to spell a word, "hat, house, etc." He writes it correctly; but if we ask Lucie at this very moment, she looks for and claims to have forgotten it. Much better if, with some precautions, we stop this automatic writing, without destroying the state of hemisomnambulism which then remains, we see that Lucie has, at this moment, totally lost the faculty of consciously writing and that she cannot express oneself only through speech.

In these same circumstances, there sometimes occurs, more rarely it is true, instead of paralysis, a contracture. I want to start over with N... one of the previous experiences and I again suggest that he say his prayer when he wakes up. Things seem to go as before, but the hands take longer to lower. Finding that the experience had lasted long enough, I want to take them away from him to free them from their singular position and I am quite astonished to meet a great resistance; the muscles of the arms and hands were fully contracted and kept the arms in this position indefinitely. As the subject now noticed his contracture and began to be frightened, he had to be put back to sleep and the contracture then dissipated easily. Léonie also presented, but only once, a similar phenomenon. I had suggested that when she woke up to take a flower in a bouquet, she did so unconsciously; but, after a moment, she looks at her hands and cries out. The hand was all contracted in an elegant, but awkward position, the thumb and forefinger close together and clutching a rose, the other fingers slightly curved, but also rigid. With her, it was easy

for me to reach the subconscious figure even during the wake; I let the subject distract and forget me, then I whispered to her to give me her hand, she stretched it out very easily and gave it to me without knowing it. Without looking for other examples, we see that *contractures, like paralysis, can present themselves in a systematized way about a post-hypnotic suggestion*, exactly like anesthesia, and we further find that *these phenomena are not more real and definitive than the anesthetics themselves, that they exist only for the normal consciousness of the subject and disappear completely if one addresses another consciousness or another personality*.

However, the examples just cited have a serious drawback: they have been observed on subjects accustomed to hypnotic experiences and they have been produced artificially. Do paralysis and contractures have analogous characters when they are reproduced naturally? I think so, although it is sometimes quite difficult to verify. The great difference between the hysterics who have already been studied and hypnotized and the hysterics who have never been, is that, in the former, the group of disaggregated phenomena separated from normal consciousness has been more or less reorganized into a personality who knows the operator and obeys him, while, in the latter, this group of phenomena which exists as well, as their anesthetics and paralyzes prove, is incoherent, most often incapable of understanding and obeying. Despite these difficulties, we can sometimes observe the same phenomena as before.

Several authors, including Dr. Lober ¹, have already noticed that one can sometimes provoke movements in a painful limb by diverting the patient's attention. I have had the opportunity to make a more general observation on this subject, which seems interesting to me and which I ask permission to summarize.

M. le Dr. Piasecki (du Havre), knowing that I wished to examine a case of natural hysterical paralysis, of which there was no example *at* that time in the hospital, would have been kind enough *to* take me to see him one of his patients. She was a young woman of 30 who we have already mentioned sometimes under the name of V... ². She had been suffering for six weeks with a complete paraplegia of obviously hysterical origin. So as not to interrupt our current study, I am speaking only of the characteristics of this patient which interest us at the moment: the legs, which were absolutely flabby and which fell by their own weight, had lost all tactile or muscular sensitivity up to the hips.. The trunk had retained a normal sensitivity and even presented numerous points of hyperesthesia especially along the spine. The upper limbs had only extremely obtuse tactile and muscular sensitivity. The face and the special senses were still *in* fairly normal, except his left eye dyschromatopsique strongly enough. Leg movements were totally impossible, even when the patient was looking at them; the arms, on the contrary, appeared to move easily and were constantly gesticulating; but it wasn't long before I noticed that they only moved like that on one condition. V... had to have his eyes open and look at them constantly; when she had her eyes closed or did not look at her hands, she lost the movement of the arms like that of the legs. If I unwittingly raised my arm to her as she looked the other way, the arm would stay up in the air and take whatever cataleptic position I wanted. If I asked V... to move, without looking at it, the arm that I had just

¹ Dr Lober. *Paralysies, contractures, affections douloureuses de cause psychique*, 1886, p. 45.

² For some biographical details, see the Appendix.

raised, she would make vain efforts which resulted in convulsive tremors of the whole body, complaining of much pain and would have started a seizure if I hadn't lowered the arm that hadn't moved.

After having quickly made these few remarks on the state of the subject's consciousness, I signed to Dr. Piasecki to do what had been agreed between us: he began to speak seriously with the patient so as to completely divert his attention.. For my part, I moved away from her on the pretext of writing a few words, when I saw that, following the habit of hysterics, she had completely forgotten my presence, I ordered her in a low voice to raise an arm, to say such or such gesture. While previously she couldn't make any movement without looking at his arm and would start a fit when she wanted to try, she was moving her arm now without knowing it anyway, even behind her back. Emboldened by this result, I command him without hesitation to raise the right leg, then the left leg, to bend them, etc. All of this is accomplished very accurately and with the greatest ease. Thus, his legs, paralyzed for six weeks, could move perfectly as soon as they were commanded to move. Only this movement took place subconsciously, outside the real personality of the subject who, for her part, had indeed lost the movement of both legs. I am not telling here how, at the end of this session, I was able, without touching the subject and with a few words, to definitively cure this paraplegia which has not reappeared for a year. In this way my visit and my psychological experiences were as beneficial for the subject as for me.

Hysterical contractures are much more frequent than paralysis, because the anesthetic muscles have a curious tendency to contract constantly under the slightest influence, massage, circular pressure, the approach of a magnet, etc. We have been able to make several observations which bring natural contractures closer to those which have occurred in our experiments.

A 26-year-old woman, obviously hysterical, has a quarrel with her husband and raises her fist to hit him: as if by heavenly punishment, the right arm remains contracted in the position of the punch. After three days she came to ask for assistance, for the contracture had not given way: M. le Dr. Gibert was kind enough to show it to me. I first tried the experiments with the magnet which, I must say, had no influence on this very ignorant peasant woman of transference theories. But she was very emotional, cried and did not understand anything more than what was said to her. I took advantage of his emotion to make suggestions to him in the waking state; with one word, I passed the contracture from right to left, from left to right, and finally I made it disappear.

Another similar example. A 19-year-old sailor, suffering from hystero-epilepsy and anesthetic of almost the whole body, receives a rather violent shock in the lower chest. He did not actually have any harm, but he remained completely bent forward in the most painful position, which he had kept for a month, when M. le Dr. Pillet, medical officer of the hospital, offered me obligingly to examine it. All the anterior muscles of the chest and abdomen were contracted and it was impossible to straighten him. It was this time by hypnotism that I tried to reach the fixed idea which obviously held under its dependence this really systematic contracture. I put him to sleep very easily and, without commanding him, I simply ask him if he can stand up. "Why not?" He replied in that stupid tone that sleepwalkers have at the start of sleep. – "Hey! well, then, straighten up my boy". He did so immediately and it was found that the healing was maintained very well after waking up. It is unnecessary to cite other examples of such facts which are

now well known. Those which I have cited suffice to show that these *natural accidents have the same characteristics as the paralyzes and contractures* suggested, as natural anesthetics were identical to artificial anesthetics.

3rd Since it emerges from these discussions that paralysis and contractures are so similar to anesthetics, we have the right to seek if it is not possible to explain them by the same hypotheses.

The seventeenth- century medical psychologist Rey Regis, whom we have already spoken about, had noticed that paralytics who have lost the movement of a limb can find it again when, by moving that limb, by showing them its movements, they are taught again to use, what they seemed to have forgotten ¹. Paralysis must in fact be an amnesia, the movement of the limbs being, as we have seen, determined by the succession of certain images in the consciousness, it suffices, to lose the movement, to forget these motor images. In reality, these two things, forgetfulness and paralysis, are one and the same phenomenon considered from two different sides, like image and movement. This assimilation is generally accepted today. But we must add, we believe, that this amnesia is of the same kind as all the others, that it is a disintegration much more than a destruction of memories. It must be admitted that these images still exist and are simply part of another more or less coordinated group of psychological phenomena, in order to understand how the movement of the paralyzed limbs is preserved and takes place, when desired, without the knowledge of the person subject itself.

The simple disintegration of psychological phenomena produces paralysis along with anesthesia and amnesia, but real activity of the second group of separate images of consciousness must be assumed to explain the arrest paralyzes discussed above and contractures. Some paraplegic subjects, like Rose, cannot try to move their limbs without immediately producing small, inconsistent contractions in all the muscles. In others, the limb whose direction they have lost is twitching convulsively or stiffening entirely. Can we not suppose that these movements and these permanent contractions are due to the indefinite persistence of some motor images, outside the consciousness of the subject who ignores them and cannot oppose their action? This is why it is sometimes sufficient to enter into contact with the second character, either by distraction or by somnambulism, to make him stop this bad joke. The second group of phenomena, which during this time forgets to maintain the contracture, may also be engaged in some work. "When the unconscious is occupied in automatic writing, we have noticed, the procedures which ordinarily contract or paralyze the arm no longer have any effect, the hand continues to write ²." When Rose's contractures reappeared too often, I could make them go away by suggesting sweat on the leg or by applying an imaginary sinapism. It really seems that the subconscious, occupied in making my leg sweat or blushing the place of my star-shaped sinapism, no longer thought of contracting the muscles. For the contracture thus disappeared, while direct suggestions, commanding to move the leg, had no success. Lucie's jaw muscles contracted and no suggestion could make her open her mouth; it suffices to suggest that he stick his tongue out for the contracture to disappear. It therefore seems that contractures are related to psychological disaggregation like the paralyzes themselves.

¹ Paul Janet. *Un précurseur de Maine de Biran*, Revue philosophique, 1882, II, 379.

² Binet et Féré. *Archives de physiologie. Loc. cit.*, 351.

Conclusion

The studies contained in this chapter have made, we believe, to the theory of automatism which we wish to expose, progress sufficiently great for it to be useful to summarize in a general way the results obtained, without taking into account of the particular order followed in discovery and demonstration. While, in the preceding analyzes, we always considered positive phenomena, sensations, hallucinations, movements, we have mainly examined in this one inverse and almost negative phenomena: anesthesia, amnesia and paralysis. Well, this new way of looking at things absolutely confirmed the first one; just as there was never feeling or hallucination without a corresponding movement, so there is never anesthesia or amnesia without a corresponding suppression or modification of movement. Here again the exterior and visible side of human activity is only the shadow of its internal and psychological activity.

But then let us penetrate into the study of these negative phenomena, anesthesia and amnesia, and seek to understand their nature. We find ourselves in the presence of an enormous quantity of curious, strange, contradictory facts, observed for a very long time and which make this anesthesia totally incomprehensible. The general impression, which remained from their study, is that, on the one hand, the subjects were certainly sincere and did not feel at all the impressions produced on their anesthetic limbs, and, on the other, that they had to feel perfectly and that their whole behavior would be inexplicable if their anesthesia were taken seriously. In the presence of this problem, I do not pretend to say how things are in their absolute reality; scientific hypotheses are not so ambitious, they have no other goal than to bring together in a single conception a very large number of facts which, isolated, could neither be retained nor understood. From this point of view, it seems to me that we are making an economic and useful supposition which, gathers and represents the facts well, by saying: *Things happen as if elementary psychological phenomena were as real and as numerous as in most normal individuals, but could not, because of a particular weakness of the faculty of synthesis, unite in a single perception, in a single personal consciousness*; or again: Things happen as if the system of psychological phenomena which forms personal perception in all men, were, in these individuals, disaggregated and gave rise to two or more groups of conscious phenomena, simultaneous but incomplete groups and ravishing each other the sensations, the images and, consequently, the movements which must be united normally in the same consciousness and the same power.

The examination of this hypothesis made us know a very curious and until now little known alteration of human consciousness, it is the simultaneous doubling of the personality. The systems of psychological phenomena which formed the successive personalities of somnambulism do not disappear after awakening, but subsist more or less complete below normal consciousness which they can alter and disturb in the most singular manner.

From a more general point of view, the examination of this hypothesis has made us know again something very closely related to the automatism which is the main object of our studies, I mean the activity which is antagonistic to automatic activity. On the one hand, in fact, we have already shown that the power of automatism depends on the narrowing of the field of consciousness. The series of thoughts and acts was all the more regular, all the more identical to what it had already been in the past, as the phenomena united in present consciousness were fewer and less varied. But this aggregation of phenomena in current consciousness, in the personal perception of each moment, depends precisely on

this power of synthesis, the existence and variations of which have been shown to us by anesthetics. On the other hand, what was the automatic succession of images and acts for us until now? Nothing else if not the result or better still the continuation of a synthesis carried out formerly, and which, when one began it today, tended to be replenished. The synthesis which forms personal perception at each moment of life therefore shows us the original activity which was once the source of what we today call automatism; for the perceptions it now forms will later become the origin of habits and suggestions similar to those we have studied. We have therefore known, in these studies, the activity which is both the obstacle and the source of automatism. It only remains for us to go into a few details and to see better the relations that these two activities, that of the past and that of the present, can have between them.

Chapter III. Various forms of psychological breakdown

To study and understand a phenomenon, the observer is always obliged to isolate it; he must choose the cases where this phenomenon occurs with the greatest simplicity or that he tries, by experimental precautions, to eliminate the circumstances which could complicate and obscure it. To analyze the phenomenon of disintegration, we have chosen the subjects which presented it in the highest degree and, sometimes by closing their eyes, sometimes by working to distract them, we have removed as much as possible the causes which modify or complicate it. We must now put ourselves face to face with reality, and consider the same fact as it presents itself in different more or less sickly states with its varieties and details. This will also be a new way of demonstrating more strongly the existence of this psychological modification which at first seems in opposition to all our beliefs.

The essential characteristic of psychological disintegration was the formation in the mind of two groups of phenomena: one constituted the ordinary personality, the other, capable moreover of being subdivided, formed an abnormal personality, different from the first and completely ignored by her. Without going into too many complicated and obscure details, we can say that psychological disintegration takes several forms depending on the relationships that exist between these two personalities and the degree of their reciprocal independence. We will distinguish a first case in which the separation is incomplete: the second personality is not absolutely independent of the first, it depends on it and only repeats or develops its thoughts or actions. 2nd The two personalities are as independent as possible and develop in different directions. It is the simple and theoretical form of disintegration of which it will be interesting to see natural and spontaneous examples, after having studied it in an experimental way. 3rd The two personalities are again brought together and dependent, but in a completely opposite way: it is the second personality, that which is abnormal and subconscious, which dominates and determines the ideas and the acts of the first personality. Perhaps, by studying these three cases, we will have the opportunity to describe and clarify a little some little known and interesting psychological phenomena.

I. The divination wand. – The explorer pendulum. – Reading thoughts.

Popular beliefs and superstitions, ahead of philosophical speculation, have always attributed great importance to the subconscious movements of our members. We are so convinced that our arms and legs are made to blindly obey every whim of our personal will, that we are absolutely amazed when we see a fleeting emancipation in them. Who has not been surprised by a cramp, a tremor, an involuntary movement of his limbs? But this astonishment increases and soon becomes a superstitious terror when these movements, which escape us, take on a meaning, express an idea, an advice, a threat. It is an intelligence that speaks, it must be a spirit foreign to humanity, good or bad, that we must implore or that we must fear.

One of the oldest and simplest practices for these mysterious revelations is the use of the *divination wand*. It is a rod, usually of a coudrier, which has the shape of a fork and which was used in the past in the countryside to discover the sources, the hidden metals and even the traces of the criminals. The diviner, for it is only a privileged person who can use this instrument, takes the two branches of the fork in his two hands and advances on the ground which he must explore, taking care not to not intentionally move your arms. If, on a point of the course, the wand oscillates, tilts until twisting the wrists of the diviner who cannot resist, it is there that it is necessary to excavate to find the sources or the treasures. The famous Jacques Aymar even led the magistrates on the trail of two criminals from Lyon to Toulon ¹. It is probable that, in some campaigns, the belief in the revelations of the divinatory wand still subsists.

If the village diviners have recourse to the elbow tree wand, there are fortune tellers in the towns who use a more elegant process. A ring suspended at the end of a wire plunges into a glass: the sybil holds the end of this *explorer pendulum* and asks it questions which it must answer by the movements or the beating of the ring against the glass. This little game deserves some celebrity, because it provoked the first researches of M. Chevreul and it was the starting point for experimental studies on the subconscious phenomena of the human mind.

However, another parlor game has today inherited the favor granted in the past to the pendulum. This exercise is called in England, where it is very widespread, the “*willing game*”, the game of will, and in France the *reading of thoughts* or *cumberlandism*, from the name of the one who introduced it a few years ago. I borrow the description of Cumberlandism from authors who have made a careful study of it and who indicate to us the usual terms which characterize it. The “*willing game*” usually takes place as follows: a member of society who must play the role of “*thought reader*”, reader of the thought, or “*percipient*”, diviner, leaves the room; the other people who remain choose some simple action that they have to perform or hide some object that they have to find; the diviner is then brought back and one or more “*willers*”, conductors, lightly touch his hand or shoulder. Under these conditions, the chosen action is often quite quickly accomplished or the object is found. The “*willer*”, the driver asserts however and with perfect good faith that he has given no directing impulse ². I had the opportunity once to attend a session of this kind given by a Russian, Osip Feldmann, who a few years ago had a rather great reputation as a follower of Cumberland. Although sessions of this kind, especially when they are public, always leave some doubt and cannot be reported with as much confidence as personal experiences, I believe that in this case the precautionary measures against possible deceptions were pretty well taken. In this session of “*mentvisism*”, as he called it, Osip Feldmann succeeded, not always, but quite often, to perform the act which one had in mind by squeezing his wrist tightly. He was more successful in complicated experiments than in simpler ones, those which involved a lot of movement than those which had to be done on the spot. He also did better with some people than with others: thus, I tried in vain to lead him, he did not understand what I was thinking, while he understood several of my friends very well. He even managed to understand a person who did not touch him, but was content to follow him everywhere,

¹ Cf. Gasparin. *Des tables tournantes*, 1855, II, 124. – De Mirville. *Des esprits et de leurs manifestations fluidiques*, 1863, I. – Appendice, 61, etc.

² Myers, Gurney, Podmore. *Phantasms of the living*, 1886, I, 14.

staying a meter away: this experience has already been described in England ¹. But here is a feat of this kind that I have not seen reported anywhere. Instead of being held directly by the person who had chosen the action to be performed and who played the role of “willer”, he interposed between her and him a third person totally ignorant of what there was to do and whose the role consisted only of holding the wrist of the diviner on one side and the hand of the willer on the other, without thinking of anything specific. I saw this curious experiment succeed once with great precision.

It is not necessary, to see experiences of this kind, to attend the always somewhat suspicious sessions given by professional diviners, many people can, without any preparation, succeed very well. I have seen young girls play this role of diviner in a remarkable way and, simply led by a person who held their hand and tried to remain still, not only making the movements, but even writing, as under the dictation, the words that person meant.

We have compared these three facts, the divinatory wand, the explorer pendulum and the reading of the thoughts, which are certainly analogous. It is obvious that one cannot explain these phenomena of movement by the action of external physical objects, sources, metals, traces of criminals, hidden objects, on the wand or on the diviner, like many the once believed ². “Why, Gasparin was already saying, do not the corpuscles of water make themselves felt when one is in pursuit of gold, why did Aymar’s wand turn in the footsteps of the assassins and remain insensitive? to the corpuscles of a great river like the Rhône ³?” In England, where one has an intelligent and active curiosity for all these questions, several observers have undertaken, in order to study the divinatory wand, a series of long and expensive experiments which one would never have had, thought about doing in France. One would find the account of these experiments in the articles of MM. Solla ⁴ and Edw. Pease ⁵, which also give a complete bibliography on the subject.

The conclusion of this research was what one might expect. “Everything depends on the ordinary insight of the soothsayer and the wand has nothing to do with it... The action of the hidden object does not bear on the wand, but on the mind of the soothsayer.” It is the same conclusion that M. Chevreul arrives when he shows that physical objects do not influence the pendulum, but that the thought or the sight of a movement determines its oscillations: “When I held the pendulum at the hand, he wrote, a muscular movement of my arm, though insensitive to me, brought the pendulum out of the state of rest and the oscillations once started were soon increased by the influence that sight exerted to put me in this particular state of disposition or tendency to movement ⁶...”

¹ Myers, Gurney, Podmore. *Phantasms of the living*, 1886, I, 15.

² Charpignon. *Physiologie magnétique*, 61. Rutter. *Journal du magnétisme*, 1852, 64, etc.

³ Gasparin. *Les tables tournantes*, II, 140.

⁴ The dividing rod. *Proceed.*, S. P. R., II, 73.

⁵ *Ibid.*, II, 79.

⁶ Chevreul. *De la baguette divinatoire, du pendule explorateur et des tables tournantes*, 1854, 155.

Imagine that the pendulum must oscillate in one direction, it takes this movement; do we imagine that he stops, he remains motionless ¹. Finally, it is evident that it is the driver's thought that plays the main role in mind reading experiences. In the session of which I have spoken, the soothsayer once seemed to be mistaken and to perform an entirely different act than the one which had been chosen, we remarked on this; "but it is I who am mistaken, replied the one who was leading him, I had forgotten the act which had been agreed upon and I was thinking of something else." "I have noticed", wrote an English observer, "that if an object was first hidden in one place and then moved to be put in another, the person leading me does not fail to lead me to the first place, then it leads me to the real one ²." In short, in all of these experiences, the role of thought is indisputable.

But we must not forget that, in all these cases, the subject who held the rod, the pendulum, or who directed the diviner, affirms, and we often have sufficient reasons to believe in his sincerity, that he does not 'has made no voluntary movement and is the first surprised to see the phenomena that take place. Several people to whom I held Chevreul's pendulum were amazed and frightened to see the ring obey me and oscillate in the direction I indicated. The movement is however real; "the patients", said an experimenter, "claim not to have moved when in reality they have used my hand as a feather ³." It must be concluded from this that they *stirred 1st without wanting to and 2nd without knowing it*.

1st The first point, that is to say the movement produced without wanting it, should no longer surprise us; we already know that the will is not necessary to produce the most complicated acts, that perceptions, or even sensations, are always accompanied or expressed by movements when they are isolated. Here, the subject is asked to think of only one thing and the images therefore remain as isolated as possible. Also, sometimes the words, as in my experiments on the pendulum, or the sight of a movement are enough to provoke it. MA Bertrand, taking up the experience of M. Chevreul, even showed that the imagination of a movement produces the same effects as real perception. "The circle that I imagine", he said, "gives an impulse just as clear, although perhaps weaker, than the circle that I see ⁴." To be able to reproduce this experience, one must belong to the visual type and usually have movements determined by visual images. This is why many people, who usually act differently, cannot set the pendulum in motion by this process. We already know, from all the previous studies, that one can without hesitation conclude like M. Chevreul: "There is therefore an intimate connection between the execution of certain movements and the act of thought which is relative to them, although this thought is not yet the will which commands the muscular organs ⁵."

¹ A. Bertrand. *Deux lois psycho-physiologiques*. Revue philosophique, 1884, I, 249.

² Myers. *Automatic writing*. Proceed. S. P. R., 1885, 4.

³ *Proceed.*, 1882, 293.

⁴ *Revue philosophique*, 1884, I, 251.

⁵ Chevreul. *Op. cit.*, 158.

2nd But there is a second question which seems to me at least as interesting and which one does not usually take sufficient account of. Why do these individuals make these movements *without knowing it*? An automatic movement determined by an image is not necessarily an ignored movement. When we yawn when we see someone yawn, we know what we are doing. The movement is caused by the visual or auditory image; so be it, but why does it not bring in its train the muscular sensation which usually follows every movement. There is evidently here a beginning of at least momentary and systematic anesthesia. I thought I observed that individuals who belong to the motor or muscular type are not, as one might think, the best subjects for this kind of experience. Accustomed to using their muscular sensations and paying attention to them, they do not let these involuntary movements of their hand go unnoticed and they stop them as soon as they start. It is, on the contrary, the auditory and especially the visual ones which succeed the best, because they never take great account of their muscular sensations. In this particular case, absorbed by the image to which they are forced to pay attention, they completely neglect muscular sensations. But this is exactly the mechanism that we have encountered in the formation of subconscious acts, and it can be said that in all the experiences we have recalled there is at least a beginning of psychological disintegration with subconscious sensations and movements.

To verify this, we will notice that these experiments with the explorer pendulum, for example, are all the more successful the more we choose a subject in whom this psychological disintegration is clearer and more advanced. Between the fingers of a hysterical anesthetic, the pendulum works wonders and executes all possible movements, because the muscular anesthesia is already complete and these sensations do not interfere with the movement produced by the visual or auditory images. So far these are only very light movements, “perhaps less a contraction than a release of muscle tension when the pendulum or the diviner moves in the right direction ¹”. The group of subconscious phenomena does not intervene in an active way, it is content to retain muscular sensations outside of normal consciousness. But sometimes things are not so simple, and the movements produced are not only explicable by the action of conscious images. The movement, hardly begun by their influence, is increased, clarified, interpreted completely without the knowledge of the subject. To explain the particular experience of Osip Feldmann that I have related, we must suppose that the person intermediary between the willer and the diviner repeated, without knowing it, with his left hand the impressions he had received, without feeling them, on his right hand. The diviner who lets himself be guided does not always consciously interpret the little impulses he receives. He himself is quite surprised at the act he has performed and which he did not realize while doing it ². He assures us that he did not feel how we were leading him and that he does not know why he did one thing instead of another. Much better, we have seen people play this role of diviner, without having the seem to understand the little impulses communicated to them, to accomplish nothing, and yet to be able to say exactly what we had thought, what we wanted to make them do, if we hypnotized them some time after the experience ³. The sensation had belonged so well to the second consciousness that it only manifested itself in the second existence brought to light by sleepwalking. There is therefore, in some cases, more than an automatic act, an involuntary manifestation of a visual or auditory image; there is a real subconscious action, a real collaboration of the second personality with the first.

¹ *Phantasms of the living.*, I, 14.

² *Id.*, I, 16.

³ *Proceed.* S. P. R, II, 22.

Such collaboration, evident in some cases, is not always easy to understand. Did we not admit, while making reservations, that the two groups of phenomena were reciprocally ignoring each other and that, consequently, they could not collaborate in the same work. Undoubtedly, the two personalities (we name them thus by convention, because, in the present case, the second is far from being complete) do not know each other directly and do not unite the different thoughts in the same consciousness. But they can know each other indirectly, just as we can know the ideas of others. One of the subjects I spoke of, N.... sometimes mixed up in her automatic writing words which had no meaning, but which were the reproduction of those she spoke by mouth. If I made him do an arithmetic operation unconsciously by writing and if another person asked him to pronounce digits consciously, we noticed in the writing the confusion of the two kinds of digits. This mixture also took place, but very rarely, at Léonie's I do not remember ever having observed it with Lucie, but it is easily explained. It suffices that I pronounce a word for the hand of the subject to write it automatically; why not also write, as if from dictation, the words that the subject's own mouth speaks? Communication between the two personalities is here the sound of speech, as between normal people. But let's go further: we know that the second personality possesses tactile and muscular sensitivity in the anesthetic limbs and yet the first person can move them by means of visual images. Isn't it natural that the unconscious feels these movements that it has not produced, but that it observes? I suggested to Leonie that if she touches my paper, her arm will be contracted. She has completely forgotten this commandment and wants to make a joke by tearing up my notes according to her deplorable habit: barely has she touched the paper than her arm stiffens. The contracture is indeed produced by the second person, who moreover boasts of it in writing: she therefore felt, through the kinesthetic sense, the movement that Léonie made, by means of the visual images, and the contact with the paper.. One of the observations which seemed to me the most original, in the article by MM. Binet and Féré on the unconscious acts of hysterics, relates to what they call, very fortunately, the stammering of writing. A hysteric, anesthetic with her right hand, could not write, even spontaneously, without repeating the same letter two or three times, without her knowing it. The collaboration is, in all these examples, evident: the act is started with the normal consciousness, thanks to the images which remain to it; this act provokes a muscular or other sensation in the second character and the latter, weak, unintelligent, repeats it or develops it automatically.

However, in some cases this explanation of collaboration may not be sufficient. It is very likely that conscious thought brings about, by association of ideas, other thoughts which, for their part, are subconscious and which then develop in their own way, without the person who felt the first phenomenon feeling the following ones. This supposition seems odd, because it must be admitted that the phenomena are, on the one hand, united by the association of ideas and, on the other, disaggregated into two personal perceptions, but this does not seem incomprehensible to us. However, as the explanation of this fact is more delicate and that it actually plays a rather weak role in the experiments which we have just reported, we refer this discussion to the end of this chapter where we will encounter more phenomena of this kind, numerous and more precise.

It suffices to note here that, either in one way or the other, the collaboration of the two groups of phenomena is necessary. M. Chevreul pushes as far as possible the explanation of facts by the tendency to movement created by conscious images, but when the facts go beyond this theory, he falls back into banal explanations by deceit and simulation. We must then see how easily M. de Mirville triumphs, by showing that the recording pendulum can be very spiritual without the person who holds it knowing anything, and he returns to his refrain: it is the demon or his subordinate agents who speak by the pendulum. We must

go further than M. Chevreul and, after admitting acts without will, we must speak of thoughts without consciousness or outside our consciousness, if we want to get rid of the countless little devils of M. de Mirville.

II. Historical summary of spiritualism

The facts that we have just observed about some board games are quite elementary and quite simple if we compare them to those which gave rise to one of the most curious superstitions of our time: I mean *the speeches of the tables speaking and the messages of the writing mediums*. We have shown ourselves to be unjust towards the spiritualists as well as towards the magnetizers; we laughed at them too much and we disdained them too much. They too had absurd theories to explain facts that were important and well observed. The leaders of spiritualism have known these facts of psychological disintegration which we have just described for years. It seems that all science has to go through a period of bizarre superstition: Astronomy and chemistry started out as astrology and alchemy. Experimental psychology will have started by being animal magnetism and spiritualism: let us not forget this and do not make fun of our ancestors.

The works of spiritualists, like those of magnetizers, can be divided into two groups. Some which expound a quantity of more or less banal or fantastic theories to explain a small number of hardly described facts: these are in general completely illegible. The others, while still talking too much about spirits and their hierarchy, insist more on the facts observed and the descriptions of the sessions; they are interesting and more enjoyable to read than you might think.

After having begun, not without fear, reading the large volumes of M. de Mirville, studying the *Revue spirite*, that of Gasparin's or Chevillard's theories on spiritualism, I ended up taking a certain pleasure in them. You can find everything in these works which are sometimes written with an almost infectious verve and enthusiasm. Sometimes there are delicious stories, like that of this good Mr. Bénézet and his pedestal table who interrupts his conversation to run after butterflies, that of those evil and unsuitable spirits who hide on chairs and bite people... when they sit down, and above all the story of the misadventures of poor M. X... who flees from the revolt of his furniture and hides behind a sofa that has remained faithful; sometimes it is research of erudition absolutely devoid of criticism, it is true, but sometimes very curious; sometimes they are very interesting and very fine psychological observations, which are far from being useless for observers today. It is unfortunate that the dimensions of this work do not allow me to dwell enough on these different authors. We can only seek out the facts most frequently observed by writers opposed to each other and, therefore, the most likely, and extract them from all these reflections, these discussions, these theories that suffocate them. A nascent science gives much more room to systems than to facts; it is precisely the reverse which takes place in a more advanced science.

We know, in its broad outlines, the history of spiritualism, and I cannot go into details here which would form a whole volume. We know that, around 1848, two young American girls, Misses Fox ¹, had the singular honor of hearing the first mysterious blows that nothing could explain: they attributed them quite naturally to the soul of an individual who died in the house, and, with a courage above all praise, began a conversation with this character. According to a convention established by these young ladies, one hit meant “yes” and two hits meant “no”. M. de Mirville seems to claim the merit of this invention for one of the witnesses in the case of the presbytery of Gideville ². This is a matter of priority to be debated between France and America. I do not believe, however, that the question is of great importance, for a passage from Ammien Marcellin assures us that in the 4th century AD, the leaders of a conspiracy against the Emperor Valencianus interrogated magic tables in a way roughly analogous ³. The process would therefore be very old. In any case, it was in America, de Mirville himself admits, that, thanks to the Fox misses and Judge Edmonds, the spiritualist epidemic made its first progress. The latter was especially amazed at the knowledge that the spirits he questioned had of his own thoughts. “My most secret thoughts”, he said ⁴, “were known to the intelligence that corresponded with me.” Thanks to the knocking of the walls and the movement of objects, “the spirits began to preach spiritual truths in America, and their visible arguments brought about a conviction that a less sensitive kind of preaching could not have produced ⁵”. Their influence quickly spread to all American societies.

These strange facts in the New World were first reported by newspapers in various cities of Germany, Bremen, Bonn, Stettin, etc.; they were announced in France by a small pamphlet by M. Guillard under the title: “Table which dances, and table which answers.” “It gives a detailed account of the many questions to which a table and a huge chest of drawers answered in the most relevant way ⁶.” But soon a letter from a New York merchant, addressed to an inhabitant of the city of Bremen, came to indicate the procedures to be followed in order to reproduce the same marvels. We tried immediately: several people sat around a table in the cabalistic position, so that the little finger of each person touched the little finger of the next person, and we waited. Soon the ladies shouted loudly, for the table trembled under their hand and began to turn. ⁷. We spun other furniture, armchairs, chairs, then hats, and even people by making the chain around their hips ⁸; they ordered at the table: “dance”, and she danced; “lie down”, and she obeys; broomsticks were blown up, as if they had become sorcerers’ horses ⁹; many other wonderful things were done.

The epidemic did not take long to pass in France: although some authors claim that there were attempts of this kind as early as 1842, it was not really until 1853 that we find very authentic experiences

¹ On the history of misses Fox, Cf. Bersot: Mesmer. *Le magnétisme et les tables tournantes*, 4e édit, 1879, 119.

² De Mirville. *Pneumatologie. Des esprits et de leurs manifestations diverses*. Mémoires adressés aux académies, 4 vol. in-8, 4e édition, 1863, I, 328.

³ Lafontaine. *Art de magnétiser*, 27.

⁴ *Journal du magnétisme*, 1854, 90.

⁵ *Le mystère de la danse des tables dévoilé dans ses rapports avec les manifestations spirituelles d'Amérique, par un catholique* (M. de Richemond), 1853, p. 5.

⁶ Id., *Ibid.* 1.

Archives de physiologie, 1e octobre 1887, 351.

⁷ *Instruction explicative et pratique des tables tournantes*, par Ferdinand Silas, 3e édit., 1853, p. 14.

⁸ Id. *Ibid.*, 20.

⁹ Id. *Ibid.*, 21, 24, etc.

in Bourges ¹, in Strasbourg, in Paris. The success was complete and soon exceeded even that of the Germans. Under the pressure of the hands arranged around it methodically, the table was no longer content to turn and dance, it imitated the various drums of the drum, the small war with line or platoon fires, the cannonade, then the squeaking of the saw, the hammer blows, the rhythm of different tunes ²; it was, as we can understand, a vast field open to experiments. But in Europe, as in America, people grew weary of these trivial games and learned smarter exercises at the tables. They were asked to answer the questions with a conventional number of strokes which meant “yes” or “no”, or which corresponded to the different letters of the alphabet. It was now easy to ask them questions and have conversations with them.

However, these procedures were still very primitive and very complicated; they were perfected in two ways. On the one hand, we simplified the signs that the tables had to use and, by successive progress that I cannot review ³, we tried the faster and more famous signs of writing. First we attached a pencil to the foot of a light table, then we used for this purpose smaller pedestal tables, simple baskets, hats, and finally small boards specially built for this use and which write under the most slight impulse. On the other hand, great progress was made by the discovery of *mediums*. It was not long before we noticed that the ten or twelve people gathered around the table did not all play an equally important role. Most of them could withdraw without inconvenience, without the movements of the table being stopped or modified. Some, on the contrary, seemed indispensable, because, if they were to withdraw, all the phenomena were suppressed and the table did not move any more. We designated under the name of *mediums* these people whose presence, whose intermediary was necessary to obtain the movements and the answers of the talking tables.

Thanks to these advances, operations become simpler and more regular: instead of a dozen people standing around a table, listening and counting the number of noises it makes in its movement, there is no longer a than the medium, with the hand resting on a small movable board, or even, in most cases, directly holding a pencil. His hand, carried along by a movement of which he does not realize, writes, *without the help of his will or his thought*, things which he himself ignores and which he is quite surprised to read afterwards.

Mediums, these essential and privileged individuals, do not all have the same powers and fall into innumerable categories that we cannot all enumerate: mediums with physical effects or typtologous mediums, like the Fox misses in America, provoke by their very presence, noises in the walls or under the tables; mechanical mediums use a board, a spinning top, a basket, etc. ⁴; gesticulating mediums answer questions by involuntary movements of the head, body, hand, or by running their fingers over the letters of an alphabet with extreme speed ⁵; writing mediums hold the pencil themselves, and write right side up or upside down, or use specular writing ⁶, or obtain variously transformed writings; the drawing mediums let their hand wander at random and are quite surprised to see “the house inhabited by Mozart in the

¹ Silas. *Op. cit.*, 28.

² Allan Kardec. *Le livre des médiums*, 19e édition, p. 72.

³ Cf. Bersot. *Op. cit.*, 107.

⁴ Allan Kardec. *Op. cit.*, 196.

⁵ Bersot. *Op. cit.*, 123.

⁶ Gibier. *Le spiritisme ou fakirisme occidental*, 1887, 170.

planet Jupiter all in musical notes ¹". It is the work of one of these drawing mediums that the *Revue spirite* offered as a bonus to its subscribers: "a superb head of Christ composed and drawn medianly by the medium J. Fabre, photographic reproduction, 3 fr. 50 ²". Some of these draw only the background of their painting, the figures stand out in clear as on photographers' negatives. There are pantomime mediums "who imitate, without being able to realize it, the face, the voice, the appearance of people they have never seen, and act out scenes from the lives of these people of a in such a way that one cannot help but recognize the individual they represent ³". Speaking mediums cannot prevent their mouths from speaking words whose meaning they do not suspect and which they are quite surprised to hear; the same power "acts in them on the organ of speech, as it acts on the hand of writing mediums.... The medium expresses himself without being aware of what he is saying, whatever it may be perfectly awake and in his normal state... he rarely keeps the memory of what he said ⁴". Hearing or visual mediums unwillingly hear words or see performances which they then report voluntarily ⁵. Finally, intuitive or impressionable mediums "are affected mentally and then translate their impressions into writing or speaking" ⁶. All these varieties, especially the last ones, are very interesting to know and sometimes seem to come close to many known facts.

"What distinguishes the so-called American spiritualist school", writes the *Revue spirite*, "is the predominance of the phenomenal part, in the European school one notices on the contrary the predominance of the philosophical part ⁷". This remark seems fairly correct: French observers seem to care very little about the physical phenomena which had initially attracted attention, the blows in the walls or the dancing of the tables; they hardly concern themselves either with the conditions under which the medium writes, nor with the external circumstances of the phenomenon; they are only concerned with what they call the philosophical part, that is to say the very content of the message they seek to interpret. This choice was perhaps not very happy, because it leads them to many strange assumptions.

All agree on one point, which is that the words, the ideas contained in this message must come from an intelligence foreign to that of the medium himself; but they are far from agreeing on the nature of this intelligence. Some claim that this intelligence is certainly that of an evil and diabolical spirit and see in these mysterious writings only manifestations of the demon. It is the thesis of Chevalier Gouguenot des Mousseaux, M. de Mirville and M. de Richemond which thus ends his mystery of the dance of the tables: "Instead of looking at and making the tables dance, priests and lay faithful will shudder, by thinking of the danger which threatened them, and their faith, rejuvenated by the sight of the prestige which recall the times of the primitive Church, will become capable of lifting mountains. So, grabbing their pastoral staff in defense of their dear flock, NN. SS. the bishops, and, if necessary, N. S. P. the Pope himself, will cry out in the name of the one to whom all power has been given in heaven, on earth and in hell: "Vade retro,

¹ Gibier. *Le spiritisme ou fakirisme occidental*, 1887, 220.

² *Revue spirite*, 1876, 136.

³ *Mystères de la danse des tables*, 15.

⁴ Allan Kardec. *Op. cit.*, 203.

⁵ Allan Kardec. *Op. cit.*, 203.

⁶ *Journal du magnétisme*, 1854, 92.

⁷ *Revue spirite*, 1864, 148.

satanas” (translation from Latin: “Go back, Satan”), word who will never have received a more just application ¹.”

But most of the people who were innocently turning tables could not accept such a terrible assumption and did not understand this solemn warning. They assumed, to explain the messages of their mediums, always intelligent causes, but much more harmless. They were simply the souls of the great men of antiquity, of our relatives or of our friends who preceded us in the other world and who, by this process, are willing to maintain friendly relations with us. It was easy to build on this datum a little system of elementary philosophy which somehow explained most of the observed facts and at the same time gave satisfaction to the deepest feelings of the human heart and food for the love of the marvelous. It was the work of a certain Mr. Rival, a former salesman of counter-marks, it seems ², who wrote, under the name of Allan Kardec, the code and the gospel of spiritualism. His “*Livre des esprits* ³” (translation: “*Book of Spirits*”) is so named because it is “dictated, reviewed and corrected by the spirits”, had a very great success; all the other authors, newspapers and magazines which were more and more numerous ⁴ and, oddly enough, the mediums themselves in their automatic writing soon did no more than comment on it. “This book”, says the *Revue spirite*, which was also founded by Allan Kardec, “rightly, is today the point at which the majority of minds converge ⁵.”

It is absolutely useless to summarize here this philosophical system which, moreover, has no kind of interest; this study was made in the little book of M. Tissandier which examines less the facts than the theories of spiritualism ⁶. It suffices to know that this doctrine is a mixture of current religious ideas and banal spiritualism, that it naturally supports the doctrine of the immortality of souls and complements it with a vague theory of reincarnation analogous to transmigration and to the metempsychosis of the ancients. The only slightly original idea, although already known, is the theory of the perisprit: it is a material envelope, although impalpable, that the mind drags with it and which, like Cudworth’s plastic mediator, establishes an intermediary between soul and body. It is thanks to the perisprit that the spirit embodied in a body sets its members in motion and that, disembodied after death, it enters into relation with the tables or with the hand of mediums.

Under the influence of this doctrine, the experiments made at first a little at random were regularized, assumed an agreed and solemn form. Innumerable societies were formed in which one easily conversed with the soul of his great-grandfather or with the spirit of Socrates. The reviews publish a quantity of small letters signed by illustrious names with which is associated, as is in all fairness, the name of the medium who acts as intermediary. Here is, for example, how some messages end: Mesmer, medium M. Albert; Eraste, medium M. d’Ambel; Jacquard, medium M. Leymarie Paul, apostle, medium M. Albert;

¹ *Mystère de la danse des tables*, 31.

² Gilles de la Tourette. *Hypnotisme*, 476.

³ Spiritualist philosophy, *Le livre des Esprits*, containing the principles of the spiritualist doctrine, on the immortality of the soul, the nature of spirits and their relations with men according to the teaching given by the higher spirits with the help of various mediums, collected and put in order by Allan Kardec, 11th edition, 1864.

⁴ In 1864, there were 10 in Europe, and in 1876, there were 46.

⁵ *Revue spirite*, 1864, 4.

⁶ Tissandier. *Des sciences occultes et du spiritisme*, 1866.

Jacques de Molé, medium Ms Béguet; Jean the Evangelist, medium Mrs Costel, etc. ¹ We maintain the best relations with all these characters: Gutenberg having improvised, by the hand of Mr. Leymarie, a short speech in good French, on the printing press of course, the chairman of the meeting addresses aloud thanks to the spirit of Gutenberg, begging him to take part in the talks of the company when he sees fit. Gutenberg immediately responds by the hand of another medium: “Mr. President, thank you for your kind invitation; this is the first time that one of my communications has been read to the spiritist society of Paris, and it will not be, I hope, the last ².” We are no more suitable. At the same time, young people in love with metaphysics let their hands wander over the paper and then read with delight endless dissertations on the reincarnation of souls, on the origin of the terrestrial globe, on the theory of fluids, etc.: their intrepidity equals their fertility.

Unfortunately we get tired of everything, and when we had all possible great men write variations on Allan Kardec’s book, we realized that the game was hardly varied and we engaged in even more adventurous enterprises. Since 1868, the spiritualists of the continent tended more and more to join their brothers in America and to deal with these physical phenomena which they had somewhat neglected. We had made the spirits speak enough by the hand or by the mouth of the mediums, we wanted to see them a little and even take their photograph, it was quite natural, and it was only a question of the phenomena of materialization. Thanks to the obligatory intermediary of the medium, who played here a role rather difficult to specify, objects were made to move that no one touched, pencils were made to be written which rose and moved by themselves, writings were made to appear on slates locked in sealed boxes, finally we showed the stunned faithful, arms, heads, bodies that appeared in the air in the middle of a dark room. The brothers Eddy, William Douglas, Home, Miss Florence Cook, the well-known medium of Mr. Crookes, and others acquired due celebrity in these exercises.

Sometimes we photographed these apparitions, sometimes we cast them, which was much more original. “Mr. Reymers”, says the *Revue spirite*, “graciously sent us a case of spirits’ feet and hands molded with paraffin ³.” The spirits had been complacent enough to put their hands or their feet in the molds. These attempts resulted, on the one hand, in the famous photographs of Katie King and, on the other, in the resounding trial of photographer Buguet which Mr. Bersot recounted in such an amusing way. This trial did not end anything: one of the most compromised characters, the medium Leymarie, received, after his conviction, a host of letters of condolence: Judge Carter of the United States of America joined to his a remarkable photograph of “the representative”, he said, “surrounded by twenty-three spirits obtained by spiritualist photography... ⁴”. Perhaps the photography of spirits still continues.

But spiritualism was transformed more and more and gradually became that industry that M. Gilles de la Tourette unveiled, and which has little other goal than to exploit the naive. We should not, I believe, completely confuse this spiritualism of today with that which existed in the past and which aroused the enthusiasm of Allan Kardec and the religious terrors of Mirville: these are two very different things. The few sincere believers who still survive painfully defend the teacher’s doctrines against new sects and religions, occultism or theosophy, much more ambitious and more complicated than this modest conversation with the souls of the dead.

¹ *Revue spirite*, 1864, *passim*.

² *Revue spirite*, 1864, 123.

³ *Revue spirite*, 1878, 71.

⁴ *Revue spirite*, 1876, 42.

III. Hypotheses relating to spiritualism

The phenomena which gave rise to the doctrines just summarized deserve careful study and discussion. Disdainful skepticism, which consists in denying everything that one does not understand and in repeating everywhere and always the words of deception and mystification, is no more appropriate here than in connection with the phenomena of animal magnetism. The movement that led to the founding of some fifty different newspapers in Europe, which inspired the beliefs of a considerable number of people is far from insignificant. It is too general and too persistent to be due to a mere passing local joke.

However, if one examines the phenomena alleged by writers of Spiritism, it is absolutely necessary to make some distinctions. The exaggerated credulity which would consist in taking seriously all the nonsense which clutters the journals of this kind would be even more ridiculous than the skepticism: the doctrine of all or nothing is not scientific criticism. But, it will be said, the choice here is absurd and arbitrary, because we eliminate precisely what we cannot explain. No, the choice is not arbitrary: it is determined, as in any historical study, by the critique of testimony. An intelligent author, who shows his common sense and his critical qualities in other works, deserves more to be believed than the first comer, famous only for his naivety. When M. Bénézet, of jovial memory, tells us that he saw dragees still wet falling from the ceiling, because the devil had sucked them, I will be allowed to pass. Yet the annals of spiritualism are full of facts of this kind ¹ narrated by such candid authors. After reading some of their letters, no one would believe these people, even if they reported the most likely things to us, a thunderstorm or the fall of a meteor; why should we take them seriously when they talk about their trade with the other world? Elimination is, moreover, very easy and all authors of some importance never speak of more than a small number of phenomena which are always the same, the only ones that we will consider.

Even among these latter facts which are frequently and seriously pointed out, I think it necessary to make a further distinction. The spiritualists designate under the name of physical phenomena those which occur outside the medium and apparently without its intervention: the blows in the walls, the famous direct writing which takes place far from the medium by means of a pencil walking by itself ², and especially the contactless table lifting, the movements of untouched objects which have been so well studied by Gasparin and Crookes. These things, at least the last ones, should not be lightly denied; these are perhaps the elements of a future science which we will speak about later, but, in any case, they do not have to intervene in our study. Whether the medium acts by means of his arm and writes like everyone else, or whether he manifests his thought by the movement of the pencil placed far from him, it is very different from the physical point of view; but from the psychological point of view, this does not modify the nature of the thought which manifests itself and the problems which concern us remain exactly the same. I hasten to add that these reserved phenomena are infinitely rare and that I would be very embarrassed to speak of them, for, despite all my curiosity, I have never seen anything like them. At least nine-tenths of those who have been concerned with spiritualism will admit, if they are sincere, that it is not these phenomena of direct writing or contactless uprising that have determined their convictions,

¹ Cf. Gasparin. *Tables tournantes*, II, 443.

² Guldenstube. *La réalité des esprits*, 1873.

because they also know them only from reputation. Let us content ourselves with studying the psychological problem of writing in mediums, not to mention a physical phenomenon whose existence is still at least problematic.

A first effort to explain the movement of turntables was made at the beginning of their success by some physicists. Father Moigno ¹ endeavors to prove, in the *Cosmos* of July 8, 1854, that tables only turn because they are pushed. He cites several ingenious experiments devised by Dr. Strombo, professor of physics at the University of Athens, which highlight this impulse. If, for example, we cover the surface of the table with a very mobile layer of talc, the fingers of the experimenters slip on the table and fail to communicate the movement to it. The devices of Babinet and Faraday, the successive layers of paper which rotated under pressure in the direction of the movement of the table, the indicator needle which warned the assistants of their slightest movements, are too well known for me to insist; these processes highlighted the movement of experimenters and mediums. But, we will reply with M. de Mirville, it is not necessary to invent so many devices to prove to us that the medium's hand moves, we suspected a little; the best mediums are those who do not need tables and who hold the pencil themselves, and everyone can see their hand movements. What needs to be explained to us is *how this movement can be involuntary and unconscious, while still remaining intelligent*.

The first two characteristics of this involuntary and unconscious movement seemed to physiologists things fairly common and fairly simple. Many movements, Carpenter said, take place in us without our knowing it, not only movements of organic life, but also a great number of acts of the life of relation which habit or distraction make momentarily involuntary and unconscious. We laugh, we scratch, we blow our noses without knowing it and without interrupting our conversation. "I have seen", writes this author, "John Stuart Mill pass along Cheapside in the afternoon, when this street is full of people, and move easily on the narrow sidewalk without elbowing anyone or running into the gas lamps, and he himself assured me that his mind was quite occupied with his system of logic, of which he had meditated most of it on going every day from Kensington to the offices of the East India Company, and that he had so little awareness of what was going on around him that he did not recognize his best friends ²..." And we can cite a large number of more or less curious facts of this kind: Gasparin, who explains in a similar way the movement of tables; M. Bersot, who finds it a little too easily that things are simple, and several others who similarly compare the facts of spiritualism with those automatic acts which one performs by distraction. I seem to see here something analogous to a supposition already pointed out about the suggestion. We yawn, it was said, when we see yawn, we blush when we see blush, so it is quite simple for a subject to pick up flowers when commanded and an imaginary flame burns his skin. No doubt there is a slight analogy between the involuntary march of the distracted logician and the automatic writing of mediums; but what a difference, what a hiatus between the two phenomena. The involuntary acts that are alleged are usual, simple repetitions, without originality and without intelligence; automatic writing, on the contrary, we must not forget, is very intelligent. "Some are willing to give tables a Boeotian fluid",

¹ Article summarized in the *Journal du magnétisme*, 1854, 83.

² Carpenter. *Revue scientifique*, 1er mai 1878.

said Des Mousseaux, “and now they claim wit; they speak, converse and dialogue with us or sometimes engage in interesting monologues ¹.”

It is too easy to demonstrate this intelligence in spiritistic phenomena; the simple primitive table which strikes strokes in correspondence with the letters of the alphabet shows a sometimes surprising memory of these conventional signs. “It is admitted in Belgium that, to go faster, the table will speak with its three feet: for this, we divide the alphabet into three groups of letters: 1st from A to H, 2nd from I to P, 3rd from Q to Z; the letters in each group are numbered, A is designated by a stroke, B by two, etc., I again by one, J by two, etc. But each foot corresponds to one of these groups and does not take care of the others. So if the first foot hits three hits, it’s a C, the third letter of the first group, if the second foot hits a hit, it’s 1, the first letter of the second group, and so on.” With a small system like this, you quickly get a long communication which, on top of that, is written backwards ². How can you compare a calculation like this to the automatic act of scratching or blinking? Communications written in this way are far, as we shall see, from being works of genius, but still they are incomparably more than a simple mechanical reflex. We know about the experiences of Madame de Girardin’s turntables. She questioned the table and asked it for the definition of love, the table replied: “Suffering ³.” The word is not new, but for a table it is no less curious. There are planchettes that write Latin verses, write fables, tell about the creation of the world ⁴, or else indulge in puns. The hand of the medium who writes without knowing it discusses, reasons or jokes; she stops suddenly when she has had enough and ends by saying: “See you tomorrow, goodbye, enough for today...” Then it is no longer possible to get anything ⁵. In the presence of such facts, which are innumerable, one cannot help finding that physiologists, with the theory of unconscious cerebration, have stopped at the threshold of the question. The *Revue spirite* Allan Kardec takes epigraph this sentence: “Every effect has a cause, every intelligent effect has an intelligent cause.” And Mirville is not wrong when he concludes: “There are in these tables phenomena of thought, intelligence, reason, will, freedom even when they refuse to answer, and such causes always have been called by the philosophers of spirits or souls ⁶.”

Another fairly famous explanation also accounts for two characteristics of automatic movement, but neglects yet a third: it will show us how this movement is intelligent and involuntary, but it will not tell us how it can be unconscious. It is, as we can understand, the theories of M. Chevreul which we have already indicated in connection with the recording pendulum and which the author tried to apply later to all the phenomena of spiritualism. “The ability to strike a table with one foot or the other once acquired, as well as the faith in the intelligence of the table, I understand how a question addressed to the table awakens, in the person who acts on it, her without her suspecting it, a thought whose consequence is the muscular movement capable of making one of the legs of the table strike, in accordance with the meaning of the response which seems most likely to this person ⁷.” In short, thoughts cause, as we know,

¹ D’après Gasparin, II, 508.

² *Revue spirite*, 1864, 310.

³ Gibier. *Spiritisme*, 125.

⁴ Mirville. *Des esprits*, II, 79 et *passim*.

⁵ *Revue spirite*, 1878, 249. – Le même fait dans Mirville, II, 86, et dans bien d’autres.

⁶ Propos de l’abbé Bautain, rapporté par Mirville, II, 76.

⁷ Chevreul. *De la baguette*.... 224.

involuntary movements; it is the conscious thought of the medium which sets the table in motion without his knowledge; “the oracles promulgated by the boards are only the transfer of what is in the head of the people who direct the boards ¹,” and the spiritualistic experiences are only a more complicated degree of the experience of the recording pendulum.

This simple explanation comes up against a difficulty which we had already observed in connection with the pendulum, but which here becomes much more serious. These intelligent acts are not only involuntary, they are also unconscious: the subject not only ignores his movement, but he ignores the thought which directs this movement. It is not his thoughts, the answers that seem plausible to him, which are manifested by the movements of his hand, it is other thoughts and other answers that he did not suspect and of which he is very first surprised when he reads them. This characteristic does not seem well known by the authors who discuss spiritualism, because we see them immediately speaking of joke and deception, when it comes to this unconsciousness of the medium. Yet this is the essential point of all these phenomena, the one which gave rise to all superstitious beliefs.

The best proof of this unconsciousness would be that of which the spiritualists constantly speak and which they never give. “Experience has shown”, says Des Mousseaux ², “that the table teaches me things which I cannot know and which surpass the measure of my faculties.” Here is a fact which would be decisive, but the complete demonstration of which would require minute precautions of which these enthusiasts are quite incapable. We can say that there is no such authentic fact. Moreover, if I have completely avoided talking about lucidity and other similar faculties in connection with sleepwalkers, it is not to deal with the question incidentally in connection with mediums. Apart from lucidity proper, other analogous facts are cited which completely separate automatic writing from the subject’s normal consciousness. Some people, it seems, can automatically answer by means of the planchette to questions posed in mind, not expressed by speech, and of which their normal consciousness has no knowledge. The facts reported by Mr. Myers and especially the case of Mr. Newnham ³, if the author can guarantee the literal correctness of the terms of this observation, are most extraordinary and point to an absolutely new path for psychology. But these phenomena of mental suggestion in automatic writing, which had to be pointed out, require a very special discussion which would divert us entirely from the present object of our studies. Let us only say that in some cases the hand automatically answers questions of which the subject’s consciousness has indeed and could not have knowledge, but these cases are the rarest and cannot provide general proof of the unconsciousness of spiritual movements.

Let us seek less decisive evidence, no doubt, but easier to verify. I will first point out an opposition, an antagonism which is easily observed between the current character and thoughts of the medium and the content of automatic writing. Let us not dwell on those honest and chaste young girls who remain amazed as they read the crude obscenities their hand wrote without warning them: the fact is commonplace and all those who have dealt with this problem have pointed it out. But here is an individual who believes in the power of spirits and seriously invokes them in a grave circumstance in his life; he expects a serious answer, and he thinks about it. He is outraged at the jokes the Spirits respond to him and which are in opposition to his expectant attention. In spite of himself, the medium’s hand only makes jokes of doubtful taste, draws arabesques, signs “Pompon la Joie”, etc.; the medium of a serious character protests that

¹ Casparin. *Op. cit.*, I, 80.

² D’après Gasparin, *Op. cit.*, II, 76.

³ Myers. *Automating writing*, Proceed. S. P. R., 1885, 8.

these stupidities are not his doing: “My character”, he said, “cannot change thus, no matter how goodwill I may put into it; it is impossible for me to understand these sudden and extreme mental variations renewing themselves ten or fifteen times in an evening, under the influence of a cause as simple as this, to touch or not to touch the edge of a board ¹.” Elsewhere we see that, instead of answering questions seriously, the pencil is busy making small drawings and, when we insist, he replies that he has the right to have fun ², or else, another time, instead of responding as the medium wishes, he writes: “It is time to go to sleep, go to bed ³”, “Go to bed”. This opposition of character between a medium and his mind can go as far as reciprocal reproaches and violent disputes. Father Almignana has great difficulty in responding to the nonsense addressed to him by his own hand ⁴, and does not understand how it can be found in him two beings so antipathetic to each other. Other minds are not shy about explaining their errors by the stupidity of their mediums, whom they blame for not being passive enough and for disturbing their writing ⁵. This discontent, more or less legitimate, can be exasperated and go as far as anger; not only is the spirit then distinct from the medium, but it persecutes and martyrs him in a thousand ways; we are then in the presence of these obsessions that Allan Kardec finds very natural ⁶, and which are cases of madness unfortunately too real ⁷.

A second category of proofs, relating to the unconsciousness of medianimic phenomena, will be furnished to us by the very interesting observations collected by M. Myers. The medium knows so little what his hand writes that he cannot reread himself and he is obliged to call on other people to understand what is contained in his message; or else, what is still more curious, he is obliged to ask the spirit to repeat and to write more legibly, which the latter does, moreover, with sufficient good will; or even, the medium makes a mistake in reading the message, he reads for example J. Celen instead of Helen ⁸, and the mind is compelled to take it back and rectify. In other cases, the writing with the clipboard allows itself bizarre jokes; thus she interposes, without warning, a Greek word which no one understands. We read with surprise the word CHAIRETE and we are long enough without understanding that it is the Greek word (in Greek in the text) ⁹, or else the planchette, instead of answering seriously, confuses his letters and makes anagrams. The story of the mind that calls itself Clelia ¹⁰ really forms a psychological document, the importance of which cannot be overstated. A person who tries automatic writing and who, according to custom, poses questions to the mind, only gets an answer as a series of seemingly meaningless juxtaposed letters “What is man?” She asks; “Tefi Hasl Esble Lies” was the answer. “How shall I believe?” “neb 16 vbliy ev 86 e earf ee”, and so always, whatever the question. However, when we insist, when we ask the mind if it is an anagram, the planchette deigns to answer “Yes”. It was only the next day and after much effort that the medium was able to arrange the letters so as to give them a somewhat intelligible meaning “Life is the less able” “believe by fear even 1866”, and the planchette declared itself more or less satisfied, although in some interpretations she indicated another arrangement

¹ *Revue spirite*, 1878, 250.

² Myers. *Op. cit.*, 1885, 20.

³ Myers. *Op. cit.*, 20.

⁴ *Journal du magnétisme*, 1855, 164.

⁵ *Mystère de la danse des tables*, 21.

⁶ Allan Kardec. *Le livre des médiums*, 310.

⁷ Mirville, II, 84.

⁸ Myers. *Automatic writing. Proceed. S. P. R.*, 1885, 37.

⁹ Myers. *Automatic writing. Proceed. S. P. R.*, 1885, 26.

¹⁰ Id. *On a telepathic explanation of some so called spiritualistic phenomena. Proceed., II*, 226.

of the same words. Is there anything more curious than this individual who poses problems for himself and who does not always manage to find the real solution? All these observations of Mr. Myers, which are very numerous, bring to light perfectly the independence of the two series of conscious phenomena, those which form the ordinary mind of the medium, and those which are manifested by the writing of the planchette.

Finally, to admit this unconsciousness of spiritual phenomena, I believe that we have to rely on the testimony of the mediums themselves that we cannot slightly reject. It would be necessary to repeat here all that M. Ch. Richet said in the past about somnambulism, when he wanted to demonstrate its incontestable reality. I have seen very honest people write like the Spiritualists, and they assured me that they did not know what their hand was writing. When we would have believed their word on more serious matters, can we question it now? Now, thousands of individuals have been repeating the same affirmation for thirty years, how can the same lie continue for so long in America, Germany, France, England? One can take these words of Des Mousseaux as the sincere expression of what all mediums think and say: "When my mind seems to speak to me from the bosom of the table, I have therefore lost the consciousness of its action, since I have neither the feeling of what he experiences in his additional home, nor of what he thinks about it, since I do not know, at the very moment when I expect the favors of his word, and what he is going to say and if he will deign to speak to me or operate ¹..." Besides, it is easy to understand, it is precisely this characteristic which made the fortune of the spiritualistic religion. An involuntary movement in connection with our own thoughts, as in Cumberland's experiments, would not otherwise have surprised; but what has seemed inexplicable are these calculations, these reflections, these speeches foreign to the consciousness of the medium. It is, after having felt the impossibility of relating in any way whatsoever these intelligent manifestations to the normal intelligence of the medium, that one has thought it necessary to appeal to a mind different from one's own. We then understand why Chevreul's explanations, like those of Faraday and Carpenter, were mocked by true spiritualists, is that they also remained below the main question.

Was the supposition made by the spiritualists, for their part, then necessary and, if an intelligence other than that of the medium was needed to explain the messages, should we necessarily invoke the souls of those who are no longer? If a hypothesis should not be below the facts, neither should it be above, and this one infinitely exceeds the problem that we want to explain. How did the readers of these messages not realize that these rantings, while presenting some clever combinations, are basically horribly stupid and that it is not necessary to have probed the mysteries from beyond the grave to write such nonsense. Corneille, when he speaks through the hand of mediums, only writes mirliton lines, and Bossuet signs sermons which a village priest would not want for his sermon. Wundt, after having attended a session of spiritualism, complains sharply of the degeneration which has reached, after their death, the minds of the greatest people, because they no longer say anything but demented and spoiled ². Allan Kardec, who doubts nothing, evokes in turn souls who inhabit different stays and questions them about heaven, hell and purgatory. After all, he is right, because this is a good way to learn about interesting issues. But let's read the deposition ³ of M. Samson or M. Jobard, of poor Auguste Michel or of Prince Ouran, and we will see that these brave minds are no better informed than we are and that they would greatly need to read

¹ D'après Gasparin, II, 508.

² Wundt. *Spiritismus*. Revue philosophique, 1879, I, 666.

³ Allan Kardec. *Le ciel et l'enfer selon le spiritisme*, 1869, 4e édition, *passim*.

them- even the descriptions of hell and paradise, given by poets, to know a little about what it is. The same author, always intrepid, devotes a chapter to the evocation of suicides for love. One can read out of curiosity the grievances of Ms Palmyre, as well as the lamentable story of “Louis et de la piqueuse de boots ¹”; but, after this sickening reading, it is necessary to recite the beautiful verses on the lugentes campi... “hic quos durus amor crudeli tabe peredit” and to see again the great shadow of Dido “Illa solo fixos oculos aversa tenebat...” This is much more true, although the author did not mention anyone. It would really be giving up the future life if it had to be spent with people like that.

That the spiritualists do not invoke, in their defense, the names whose automatic writing signs their messages, the changes of writing or of style, the conformity of the declarations with such or such opinion. The writing of the planchette is extremely docile and it does whatever one wants, it corresponds to the thoughts of the people present and repeats all their doctrines. Among Catholics, Father Bautain sees a basket twist like a snake and flee in front of the book of the Gospels that is presented to him, asking for prayers and indulgences ². Among Protestants, the tables were no longer afraid of holy water, no longer had any respect for the scapulars and announced the fall of the papacy within ten years. M. Des Mouseaux, who sees demons everywhere, asks: “Are you the one who tempted the first woman? – Yes, answers the planchette. – Is it in the form of the snake? – Yes. – Are you one of the demons who entered the body of swine? – Yes. – Who tormented Madeleine? – Yes.” He would have asked with the same air of conviction: “Are you Achilles”, or “Are you Don Quixote”, that the table would have answered “Yes” again. In those who believe in ancient black magic, the spirits obey the magic formulas and tremble before the sacred triangles. It is true, as Morin has verified, that one can, instead of reciting the fatal formulas, declaim verses from Horace and that one obtains the same success.

This intelligence, which certainly exists and which manifests itself by the writing of the planchette, becomes whatever one wants; So let’s not do anything too high and let’s not mix up with a question of positive psychology the most disturbing problems of metaphysics and religion.

IV. Spiritism and psychological disintegration

“Everything is said...”, people wrote already in the seventeenth century, and naturally this remark of the moralist is even more true today: the hypotheses which seem the most original and the most unexpected have had precursors which had already expressed them without our deigning to pay attention to them. The theories of psychological disintegration which have just been studied very recently by M. Ch. Richet, by M. Myers, and which I had tried to complete myself, seemed to me absolutely new, when, to my great surprise, I found them perfectly expressed in a small work which dates back to 1855. It is a short brochure of 93 pages without author’s name which I took on the docks because of the singularity of the title: “Second letter of Great John to his bishop about talking tables, possessions and other devils. Paris, Ledoyen, 1855.” I have not been able to find the real name of the one who conceals himself thus: I think he is a philosopher who is attached to the eclectic school of which he has the clarity, the easy and pleasant style, and whose doctrines he shares. He is accustomed, like the psychologists of this school, to

¹ Id. *Ibid.*, 364.

² Mirville, II, 76.

personify the faculties of the human mind, but by this means he manages to explain in the most sensible and scientific manner phenomena so little studied and so poorly understood of his time.

A few quotes will allow us to summarize the psychological theory contained in this small brochure: “Encouraged by the outside world, or fertilizing materials already conquered, our intellectual faculties form ideas or thoughts within us; consciousness or intimate sense gives us knowledge of it; our will or faculty to react to ourselves at the same time provides consciousness with the idea of our personality, the idea of the ego. It remains to establish the link. By this movement of the will on the intelligence that we call attention, the idea or thought is affirmed in its relation with the ego, related, united to it. This is what happens in the normal ordinary state ¹... Sleep is the period during which the will, the intellectual faculties and the organism, collapsing on themselves, loosening the links which unite them, silently repair the forces exhausted by the work of the day. However, is sleep an absolute state and always the same? Far from it... sleep and wakefulness constitute only one and the same hierarchy of states which, by successive modifications, on the one hand, descend towards perfect sleep, immobility and almost complete disjunction of the will, of the intelligence and organism, and, on the other hand, rise to the perfect state of wakefulness, the supreme tension of the will, the intellectual faculties and the physical apparatus directed towards a goal ardently pursued, each modification resulting from the *different degree of activity and the more or less close relation of the will, the intelligence and the organism* each endowed with a certain life of its own ²...”

“In certain individuals, for one cause or another, organic life, sensitivity, intelligence are overexcited, exalted, while the will remains in a state of weakness, softness, intermittence. What will then be more natural, simpler, easier to conceive than the *momentary and partial rupture* of the hierarchical link? The phenomenon which occupies us (the talking tables) is in fact nothing more than this suspension more or less complete, more or less prolonged, of the action of the will on the organism, on the sensitivity, on the intelligence, retaining all their activity, and the various degrees of this *disjunction* as the different forms it takes, follow each other very naturally ³... In the experiences of the talking tables, the young girl hears the question and forms the answer in her mind where the knowledge of the mode agreed to translate, by means of the movements of the table, all the possible ideas and thoughts: these are the first elements of the phenomenon: but here are presented several different states or degrees of the same state.”

“1st Not only is the young girl aware of the response formed in her mind, but she relates it to her own faculties: this is the ordinary psychological situation. But here is what the abnormality consists of, it is that the response is expressed by the movements of the piece of furniture without the intervention of the free and reflected will... The will, the ego is separated only from the apparatus physics which is alone in a situation of independence (this is, as we know, the case of the recording pendulum). 2nd The will having started to split with the intelligence, the young person has only half-knowledge of the answer which is more complete, more extensive or even expressed in other terms; the mind, in short, is in a semi-abnormal situation. The organism, on the contrary, operates under the same conditions as before, directed by intelligence without the intervention of the will (we have seen a few cases of this kind in the study of the willing game). 3rd This degree especially coincides with writing and involuntary speech, but it must also be observed in the phenomenon of talking tables. The young girl knows the answer which forms in her

¹ *Lettre de Gros Jean à son évêque...* 1855, 4.

² *Ibid.*, 5.

³ *Lettre de Gros Jean à son évêque...*, 7.

intelligence, but she knows it within herself as if it did not come from her; attention collects it, but without establishing a link between this thought and the self (this degree seems to me to correspond to the possessions and the impulsive follies of which we will speak later). 4th The young girl has *no internal knowledge of the response formulated in her intelligence outside of the ego*; it is only informed of it as the movements of the table express it: the *intellectual division is complete*. Dissenting thought at the same time enlarges its domain. Questions are no longer addressed to the table and, on the contrary, it is she who, spontaneously, questions one after another of the people present, tackles such and such a subject, throws herself into such or such order of ideas. Distant memories awakened without the young girl being aware of it, romantic inventions, sentimental fantasies, ramblings, everything that intelligence and imagination left to themselves can produce, everything that plays out in our dreams, with this difference that we are witnessing our ordinary dreams and that these, although also formed in us, are however only revealed to us when they are revealed to everyone. This is, at first psychological glance, the phenomenon of the talking table ¹...”

“What does it take for the feather to be replaced by the word that the impulse is communicated to other nerves... This is usually accompanied by a serious disorder of innervation: there is nothing wrong with it? amazing at that. The man whose hand only escapes the action of the will is not taken from himself like the one whose language, speech, this so direct instrument of thought, of the will, is freed from the authority of the ego... In our peaceful medium writings, ordinary thought persists calm, but when the physical crisis assumes a violent character, oh! then the internal division was complete, absolute, persistent; moreover, the *second* exalted, ardent, unrestrained personality, *suffocated the other* for a moment annihilated and, under the names of Jupiter or Apollo, alone possessed all the intelligence and the whole organism of the delirious priestess. *Deus, ecce Deus...* ². We have seen in the same individual *two simultaneous streams of thought, one which constitutes the ordinary person, the other which takes place outside of him*. We are now in the presence of the *second person alone* (in sleepwalking), the other remaining annihilated in sleep, from which derives this impossibility for the ordinary person to remember anything when he wakes up of what was accomplished during its access. Such is somnambulism or perfect sybillism... ³. Talking table, involuntary writing, involuntary speech, medium rapping or knocking, somnambulism, these are the different forms that the phenomenon of intellectual scission takes, which we could perhaps appropriately designate under the name of sybillism, according to its mode of manifestation the highest and undoubtedly the one who has played the most important role in the world, since, transformed into a public institution, it has been for centuries the basis and the sanction of religions” ⁴.

I hope I will be forgiven for this long quotation on account of its importance and the difficulty of obtaining the pamphlet: it must be admitted that, under its bizarre title, is very well summarized all that some contemporary authors and myself – even we thought we had discovered by studying automatic writing and sleepwalking. Moreover, this coincidence between the reflections inspired by simple common

¹ *Lettre de Gros Jean à son évêque...* 1855, 9-11.

² *Ibid.*, 22.

Ibid., 23.

³ *Lettre de Gros Jean à son évêque ...* 1855, 44.

⁴ *Ibid.*, 43.

sense and the conclusions of precise experiments can only be considered as happy and proves that, in one way as the other, we have approached the truth.

The essential point of spiritualism is, we believe, as Great John says, the disintegration of psychological phenomena and the formation, apart from personal perception, of a second series of thoughts unrelated to the first.. As to the means which the second personality employs to manifest himself without the knowledge of the first, movement of tables, automatic writing or speaking, etc., this is a secondary question. Where do the noises heard in the tables or in the walls come from, answering questions? Is it from a movement of the toes, from this contraction of the peroneal tendon supposed by Jobert de Lamballe and which made so much noise at the Academy? Is it a contraction of the stomach and a real ventriloquism, as Great John supposes it, or another particular physical action still unknown? Are they produced by automatic movements of the medium himself, or else, as seems to me probable in certain cases, in the midst of the darkness claimed by the spiritualists, by the subconscious actions of one of the assistants, who deceives others and deceives himself, and who becomes a friend without knowing it? It doesn't matter now. This action, whatever it may be, is always an involuntary and unconscious action of one or the other, and "the involuntary speech of the intestines is no more miraculous than the involuntary speech of the mouth ¹". It is the psychological side of the phenomenon which is the most interesting and which needs to be studied further.

Although the work we have just analyzed was written in 1855, it was not understood and had no influence, neither on the spiritualists, which is natural, nor on the psychologists, which is more astonishing; some continued to admire, others to mock the talking tables, without their study advancing otherwise. However, we must point out a few short but fairly clear passages from M. Liébault, which express a similar opinion: "This doubling of the action of attention in intellectual operations also takes place during waking, and then these operations on two opposing planes do not always both present themselves to consciousness, it is often one that is unconscious ²." Littré, in his *Philosophie positive*, 1878, and Dagonet in the *Annales médico-psychologiques*, 1881, allude to similar theories to explain the speeches of the convulsants of the Cévennes ³. M. Taine, as we have already pointed out, indicates in his preface a rather ordinary case of automatic writing; he notices that the fact is curious, but does not insist otherwise.

We have to go to the last few years to find, in an article by M. Ch. Richet, the precise expression of a theory of spiritualism, comparable to that which we have just read: "Let us suppose", he said, "that there is in some individuals a state of *hemisomnambulism* such that part of the brain produces thoughts, receives perceptions, without the ego being aware of it. The consciousness of this individual persists in its apparent integrity: however very complicated operations will be accomplished outside of consciousness, without the voluntary and conscious self appearing to feel any modification. Another person will be in him who will act, think, will, without consciousness, that is to say the reflected, conscious self, having the slightest notion of it ⁴." And elsewhere: "These unconscious movements are not left to chance; they

¹ *Lettre de Gros Jean à son évêque ...* 1855, 31.

² Liébault. *Du sommeil*, 1866, 249.

³ Cf. Myers. *Automatic writing*. Proceed., 1885, 61.

⁴ Ch. Richet. *La suggestion mentale et le calcul des probabilités*. Revue philosophique, 1884, II, 650.

follow, at least when operating with certain mediums, a true logical direction, which makes it possible to demonstrate, alongside the conscious, normal, regular thought of the medium, the simultaneous existence of another collateral thought which follows its periods clean, and which would not appear to consciousness, if it were not revealed to the outside by this bizarre recording device ¹.” We find, it seems, similar ideas and a more complete study of this interpretation of spiritualism in two German works that I have not had the opportunity to read, the “*Philosophie der mystick*” by Baron du Prel ² and the book by M. Hellenbach, entitled: “*Geburt und Tod* ³.” But the author who, to my knowledge, has contributed the most to developing the scientific study of spiritual phenomena is certainly Mr. Fr. Myers. This author, in fact, in several important articles published by the “*Society for psychical research* ⁴” has set forth a very ingenious theory, both psychological and physiological, of mental disaggregation. We will not expound here the theories of Mr. Myers on spiritualism, they are more developed than the preceding ones, and enter more into the detail of the phenomena. We prefer to set out first, in a general way, how we relate these facts to the studies which we have just made in this work, to return then to the points of detail which separate our interpretation from that of M. Myers.

At about the same time, in fact, without knowing any of the works of which we have just spoken and without thinking of studying spiritualism, we were examining, from the psychological point of view, the somnambulism of hysterics and the acts they performed by suggestion. This study has led us to observe subconscious acts, partial anesthetics, automatic writings, in a word all the characteristics of spiritual phenomena. While these authors proceeded from the study of spiritualism to the theory of multiple personalities and to the study of hypnotism, we found ourselves joining them, albeit from a very opposite point of departure. This encounter leads us to believe, which seems easy to demonstrate, that the phenomena observed by the spiritualists are exactly identical to those of natural or artificial sleepwalking and that we have the right to apply literally to this new question the theories and conclusions we reached in the previous chapter.

V. Comparison of psychics and sleepwalkers

The first remark which will bring spiritualism closer to our previous studies is that most of the mediums, whose descriptions we read, have gaits and present sickly accidents which are not unknown to us; almost always (I do not say always so as not to prejudice an important question), they are neuropaths, when they are not frankly hysterics. The movement of the tables begins only when women or children, that is to say people predisposed to nervous accidents come to put their hands on them ⁵; while we are making the chain around a table which operates very well, we are unfortunately obliged to stop, because two ladies fall backwards in convulsions ⁶. A man who had a lot of action on the talking table was

¹ Id. *Les mouvements inconscients* dans l’hommage à M. Chevreul, 1886.

² Leipzig, 1885.

³ Vienne, 1885.

⁴ *On a telepathic explanation of some so-called spiritualistic phenomena*. Proceed. S. P. R., II, 217. *Automatic writing*. *Ibid.*, 1885.

⁵ Baragnon. *Magnétisme animal*, 375.

⁶ Silas. *Op. cit.*, 20.

unfortunately affected by a continual shaking and swinging of his arms that made it difficult even to eat ¹. A young girl, an excellent medium, had a violent nervous breakdown when she was shown a blessed rosary while she was engaged in these spiritual operations ². “This is probably because of the horror that demons have for the rosary.” Yes, maybe; but it is also permissible to suppose something else. “When spirits get angry, mediums are suddenly plunged into a state of nervous disturbance or tetanic stiffness... ³.” We often read in American relations that speaking mediums have been “vigorously exercised ⁴”, violently tormented by the spirits, which means in good French that they had in the middle of their operations a violent crisis of nerves. In English relations, on the contrary, we are very sober about information on this point, at the most we notice from time to time that the medium presents some choreic movements ⁵, or else that the experiences of automatic writing tire him enormously and that we are obliged to interrupt them because of his delicate health ⁶. I admit that I would have been curious to have some additional information on this delicate health. But this discretion of the English authors on the accidents of their mediums is linked to a general opinion on mental disintegration which we will discuss separately. So let’s not say that all mediums have nervous attacks, which would be exaggerated, but that they very often have them and that their operations predispose to nervous accidents.

Nothing is more decisive, from this point of view, than an observation by M. Charcot on several young people from the same family who all become hysterical as a result of the practices of spiritualism ⁷. This coincidence between the nervous breakdown and the act of writing unconsciously is found in our subjects. Sometimes a crisis of hysteria which begins can be transformed by suggestion into unconscious movements and automatic acts, sometimes attempts to induce partial catalepsy and subconscious writing lead to a crisis of hysteria. G... could easily and safely be put into full sleepwalking, but she could not tolerate hemi-sleepwalking. I had to give up studying the suggestions on them by distraction in the waking state: they inevitably brought on a nervous breakdown, which had to be stopped by complete somnambulism.

If mediums do not present nervous accidents at the moment when they evoke spirits, they do not always remain unscathed, and they often fatally end their brilliant careers. Sooner or later many of them fall into “subjugation”, as Allan Kardec puts it with a happy euphemism, that is to say, they simply end up in madness ⁸: unfortunately everyone knows several examples. Must we say that it is spiritualism which made them mad; I think it would be exaggerating, but the faculty of medium “must depend on a particular morbid state analogous to that from which hysteria or alienation may arise later – mediumship is a symptom and not a cause.

Never are these relations between mediumship and nervous accidents so visible as when the spiritualists take it upon themselves to treat a true hysteric who has convulsive fits. Here is a summary of two observations which are very instructive: A young girl had violent fits of hysteria, the assistants put in

¹ Id, *Ibid.*, 22.

² Mirville. *Op. cit.*, II, 97.

³ Id. *Ibid.*, I, 405.

⁴ *Mystères de la danse des tables*, 15.

⁵ Myers. *Proceed.*, 1885, 32.

⁶ Id, *Ibid.*, 1885, 9.

⁷ Charcot. *Maladies du système nerveux*, III, 228.

⁸ Silas. *Op. cit.*, 23. *Revue spirite*, 1877, 141. Cf. Maudsley. *Pathologie de l’esprit*, trad. 1883, 85.

her mind that she is possessed by a wicked spirit named Fredégonde, and here she is now, in her fits, Fredégonde and talks about it constantly. “I see”, she said, “luminous spirits that Fredégonde does not dare look at, etc.” She is asked, while she is in crisis, to pray for her enemy in order to appease her. “Oh! I will do it well”, she said, “I forgive Fredégonde,” and from that moment the crises subside ¹. Another hysteric having convulsive accidents, the spirits, immediately consulted by the intermediary of a medium, declare that she is under a fatal influence, that of an evil spirit named Jules. The aforementioned Jules is then challenged, with caution it is true, because his evocation tires the medium; we speak to him gently and in a pleasant tone so as not to anger him too much. After much talking and epic adventures, especially thanks to the intervention of a good little spirit named Carita, we get from this ugly Jules the promise that he will leave his victim alone. The hysteric naturally, from the first news of these negotiations, had changed the nature of her crises and did not stop shouting during her fits: “Go away, go away.” When she learned of the conclusion of the peace treaty, she calmed down and obtained a relative cure ². Although I do not have such authority over the spirits of the unseen world, I have achieved much the same result to which I have already alluded. A woman, in her fits, spoke incessantly of a sorcerer who had cast a spell on her, I made appear the soul of the sorcerer, who asked that ten beads of the rosary be prayed for her to lift her curse. After completing this formality, the patient was much better, or at least changed the nature of her illness, as hysterics usually do. We see, by all these examples, that there are great analogies between the subjects whose duplication we have studied and these mediums which serve to evoke spirits.

But, let us push our comparison further and we will be able to point out still more precise analogies between mediumship and sleepwalking proper. Spiritualists may say that it is impossible to find sleepwalkers as obedient and as discreet as their table or their sink ³; this table does not work on its own, you need a medium to turn it and this one does not differ much from a simple sleepwalker. One could, to prove it, show that many characters of the spiritualist writing resemble those of somnambulism: thus the mediums are elective and do not operate in front of everyone. A young English girl, Miss S..., whose very interesting story was published in England ⁴, possesses, by a singular fortune, five or six familiar spirits: Johnson, Eudora, Moster, etc. I was eager to witness their exploits, and Ms S..., who was then in Le Havre, was kind enough to give herself to some experiments. Unfortunately the spirits were in a very bad mood that day and the famous board on which the medium rested his hand only wrote insignificant words: “Johnson must go... Eudora is writing”, and especially these words perpetually repeated: “Most of things, most of men...” Ms S... attributed this failure to the absence of her brother who usually questioned and directed the spirits. This explanation seems very probable to me, I could not make myself heard spirits, nor give them orders, just as a stranger could not make suggestions by distraction to Leonie or to Lucie. Isn't it curious to notice this characteristic of somnambulant electivity, even in Spirits of a natural medium?

But there are more decisive facts which dispense us from insisting on these: “The people who are most successful in turning the tables are those who on the other hand have sleepwalking attacks ⁵.” “A

¹ *Revue spirite*, 1864, 14.

² *Revue spirite*, 1864, 177.

³ *Journal du magnétisme*, 1855, 143.

⁴ *Proceed. S. P. R.*, 1887, 216.

⁵ *Journal du magnétisme*, 1855, 120.

good sleepwalker is, in general, an excellent medium ¹.” Finally, just as mediums sometimes fall into crisis during their operations, they also very often fall into somnambulism. “Finding myself one day”, said a magnetizer, “in a spiritualist group where the young lady of the house, who was a medium, had fallen asleep at the table by the communicability of the magnetic fluids running through the chain, and the spirits having withdrawn without the clearing, as they used to, great was the embarrassment of society... when making myself known as a magnetizer, I offered to wake up the subject and freed him in the space of three minutes at the general satisfaction ²”. Here is an adventure in this connection which has been told to me by the witnesses themselves and in such a way that it seems to me to present a great chance of being true. An assembly of spiritualists was in great joy, for the spirit which deigned to answer them was nothing less than the soul of Napoleon. The hand of the medium which served as intermediary indeed wrote more or less interesting messages signed with the name of Bonaparte. Suddenly the medium, who was speaking freely while his hand was writing, suddenly stops; his face pale, his eyes fixed, he sits up, folds his hands on his chest, assumes a haughty and meditative expression and walks around the room in the traditional attitude which legend attributes to the emperor. No one could make himself heard, but the medium soon sagged of itself and fell into a deep sleep from which no one could wake him either. He did not wake up from that sleep until an hour later, complaining of a great headache and having completely forgotten everything that had happened. Spiritualists explain these facts in their own way. As for me, I can only see in this a natural development of hemi-somnambulism which becomes catalepsy or complete somnambulism.

These facts are so frequent that the magnetizers noticed them and tried to draw to themselves the phenomena studied by the spiritualists. “Mediums are incomplete sleepwalkers”, writes Perrier ³. Chevillard, the damned soul of spiritualists, hated all the more as it approaches the truth more than once, insists on this point several times: “It is the same phenomenon, he says, which produces sleepwalking and spiritualism ⁴...” “The medium produces the blows himself on the table, but does not have the muscular sensation of them and does not believe them from him” ⁵. “The medium is a somnambulist or a partial hypnotized, the consultant becomes unconscious magnetizer and the medium is indeed a magnetized, but partial, since it retains a certain initiative.” ⁶ And Lafontaine writes in the same way: “The medium is in a mixed state which is not somnambulism, but which is not either the waking state... Under its unconscious direction, the pencil traces sentences which it never had consciousness.” ⁷ This is perfect, but these authors do not explain how all of this is possible, how the somnambulist existence can continue under waking in a second personality. Spiritualists do not understand what we mean: “But the medium is not a sleepwalker”, exclaims Allan Kardec, “since he is wide awake and talking about something else.” ⁸ “Isn’t

¹ Guldenstubbe. *Réalité des esprits*, 82.

² Dr Peladan. *Revue spirite*, 1876, 191.

³ *Journal du magnétisme*, 1854, 79.

⁴ Chevillard. *Études expérimentales sur certains phénomènes nerveux et solution rationnelle du problème spirite*, 1875, 19.

⁵ Id., *Ibid.*, 31, 93.

⁶ Id., *Ibid.*, 31, 93.

⁷ Lafontaine. *L’art de magnétiser*, 1860, 31.

⁸ Allan Kardec. *Le livre des médiums*, 46.

it madness”, Mirville will say, “that this second soul of magnetizers existing at the same time as the other”¹.

Without doubt, it is perhaps bizarre, but it is true, and one can show by examples borrowed from the spiritualists themselves that the somnambulatory state, that is to say the second *successive* existence and *alternating* occurs in mediums and that it is identical to this second *simultaneous* existence manifested by subconscious writing during waking. “Miss O... spreads her hands on the table and falls asleep... soon a foreign voice announcing itself under the personality of a Portuguese woman, Luisa, long deceased and hardly speaking French, we greets through the mouth of the medium she has just borrowed...”². This is sleepwalking and the second successive existence. “At the end, Luisa says, “The little one is tired, I’m going to “go away...” and O... goes back to sleep peacefully and wakes up unexpectedly.” When awake, she still has subconscious scriptures signed with Luisa’s name. This is the disintegration and the second simultaneous existence.

It is absolutely necessary to expose, in this connection, with some details, a remarkable observation, published by the revue spirite. Ms. Hugo d’Alesy³ is an excellent medium, she lends her hand with complacency to all the spirits who wish to enter into a relationship with us. Thanks to her, a large number of souls, Eliane, Philippe, Gustave, and many others, wrote messages about their occupations in the other world. But this lady also has a much more wonderful property: she can lend to the spirits not only her arm, but her mouth and her whole body, she can disappear herself to give way to them and let them be *embodied* in her brain. All that is needed is to put her to sleep a little, a magnetizer takes care of it: after a first period of ordinary sleepwalking where she still speaks in his name, she stiffens for a moment, then everything is changed. It is not Mrs Hugo d’Alesy who is speaking to us, it is a spirit which has taken possession of her body. It’s Eliane, a small young person with a slightly precious pronunciation, a touch of whim, a little character that must be handled delicately. New contracture and change of scene, it’s Philippe, or M. Tétard who chews and who drinks coarse wine, or Abbé Gérard who wants to give sermons, but who finds himself with a heavy head and a bitter mouth because of the previous incarnation, or Mr. Aster, a rude obscene character who is quickly dismissed, or a baby, a little girl of three: “What’s your name, my darling? – Zeanne. – And what do you want? – Go and circle mom... and my brother and dad.” She plays and doesn’t want to leave. New contracture and here is Gustave; ah, Gustave deserves to be listened to. He is asked to paint, because he was a “rapin” during his lifetime: “Listen carefully, he replies through the mouth of this poor medium who is still sleeping”, it takes time to brush something that has dog, it would be too long, we would make our hair during that time... I have already tried so many times to manifest myself, but for that you need fluids... to communicate on earth with the friends, it’s very difficult: up there we are like little birds, but on earth, it’s more like that. Ah! it’s annoying to be dead!” (The valiant Achilles has already said that when he came to drink the black blood of the victims, decidedly the spiritistic mediums do not have the inventive spirit.) Gustave continues: “Yet we no longer have a lot of things that are not fun, we don’t have to go to the office, we don’t have to get up in the morning, we don’t have boots with corns on our feet..., but I didn’t stay on the earth enough, I left when I was going to have fun.... if I come back to earth, I want to be a painter... I will go to art school to heckle

¹ Mirville. *Op. cit.*, I, 64.

² *Journal du magnétisme*, 1855, 565.

³ *Revue spirite*, 1879. Plusieurs articles, *passim*. 148, 271 et sq.

with others and laugh with the small models.. On this I wish you good evening.”¹ Who will come after Gustave? Parbleu, the poet Stop finally, “because Stop means stop”. This one is melancholy and he says in a singing tone: “My soul needed love and I was looking without finding any... If I had had a little more time, I would have put it in verse for you.... I know very well that it is a waste to be in prose..., but, given the late hour, I took what was shortest.” After this session which must have been tiring, we wake up the medium who ends up being Mrs Hugo d’Alésy as before.

I would like to know what psychological difference the spiritualists can find between these incarnations which their *Revue* publishes and the changes of personality or objectification of the types that M. Ch. Richet described at about the same time in the *Revue philosophique*: profanes like me fail to find any. But here is where this observation becomes quite interesting, it is when the author of these articles, Mr. Camile Chaicneau, try to prove to us that it is indeed spirits which are thus embodied in the body of the somnambulist. During the eve of the medium, without the personality of Mrs Hugo d’Alésy disappearing, it is possible to obtain written communications from these same spirits; but they will then be subconscious, produced without the knowledge of the subject himself, who continues to speak of something else. In these messages, Eliane still plays the coquette, Father Gérard writes sermons, Gustave makes the same jokes and tries to draw the little picture he promised: they have kept the same character, the same expressions, the same memories, although the medium now ignores all this². This is perfectly observed and which would prove, if necessary, that spiritualism should not be despised by psychologists. But I will now ask a second question – how then do these subconscious and post-somnambulist personalities differ from the characters of Adrienne, Leonore, etc., writing, during Lucie and Léonie’s vigil, without their knowledge, and showing the same memories of previous sleepwalking? At one point perhaps, these observations are more complicated than mine. While I observed, under the day before, the persistence of simple sleepwalking, the author brings to light, during the day before, the persistence of sleepwalking modified by hallucinations and changes of personality.

In short, it is a combination of Mr. Richet’s experiences and mine. Well, let’s try this ingenious combination. While Lucie is sleepwalking, I suggest to her that she is no longer herself, but that she is a little boy of seven named Joseph, a comedy scene which is known and which I pass on. Without undoing the hallucination, I suddenly wake her up, and here she does not remember anything and seems to be in her normal state; some time later, I put a pencil in her hand and distracted her by talking to her about something else. The hand writes slowly and painfully without Lucie noticing it, and when I take the paper from her, here is the letter that I read: “Dear Grandpa, on New Year’s Day, I wish you a perfect health and I promise to be very good. Your little child, Joseph.” It wasn’t New Year’s Day, and I don’t know why she wrote this, perhaps because in her mind a letter from a seven-year-old awakened the idea of happy new year; but is it not manifest that the hallucination is preserved in the second personality? Another day, I put her into sleepwalking again; to see changes of character and to profit from her literary erudition, I transform her into Agnès de Molière and make her play the role of naive candor; I ask him this time to write a letter on a subject that I indicate to him; but, before it has started, I wake it up. The letter was written unconsciously during the day before, manifested the same character and was signed

¹ *Revue spirite*, 1879, 157 et sq.

² *Revue spirite*, 1879, 159.

with this name of Agnes. Another example: this time I change her to Napoleon before waking her; the hand automatically wrote an order to any general to rally the troops for a major battle and signed with a large initial “Napoleon”. I ask again: how does the story of Mrs Hugo d’Alésy differ from that of Lucie? Until proven otherwise, I am willing to believe that the two phenomena are absolutely the same, and that, therefore, they must be explained in the same way by the disaggregation of personal perception and by the formation of several personalities. which sometimes follow one another and sometimes develop simultaneously.

VI. Cerebral duality as an explanation of spiritualism

The difficulties do not really begin until one penetrates into the details, if one tries to realize the form and the particular laws of the disintegration in such or such determined case. It is in connection with these details that I would be disposed, though with hesitation, to oppose Mr. Myers, who has studied all these curious phenomena so well. I am not speaking of his disposition to regard the phenomena of disintegration as compatible with the most normal health, this is a general question which relates to sleepwalking as well as to spiritualism and which we will discuss a little further on. But he tries to explain the phenomena of spiritualism and in general the development of two parallel consciousnesses by a well-known anatomical characteristic of the nervous system, the division of the encephalon into two symmetrical parts and the existence in man of two brains.

This division of the brain into two parts has already given rise to many hypotheses. Since La Mettrie who says that Pascal had a mad brain and an intelligent brain, since Gaétan de Launay who considers dreams made on the right side as absurd and those made on the left side as logical ¹, there have been many anatomists and physiologists who have related to this duality all the complicated and embarrassing phenomena of the human mind. If I have avoided talking about these hypotheses, it is because, on the one hand, I have undertaken not to enter into studies of cerebral physiology, and, on the other, that this supposition does not appear to me explain a lot. In fact, we all have two brains, and we are neither fools, nor sleepwalkers, nor mediums. Diminished hypnotic states, one-sided hallucinations of a different characteristic for each side of the body, are interesting psychological facts which have in recent times been related to brain duality ². They seem to me in general to depend on something else: they are hallucinations with a landmark ³, which natural disease or even suggestion have linked, some to the right, others to the left. These hallucinations and all the experiences of this kind hardly seem to me demonstrative. If I had to express an opinion on the theories of cerebral localization, I would readily follow that of Bastian ⁴ which he expresses in these terms: “We are perhaps dealing less with topographically separate areas of brain tissue than with distinct mechanisms of cells and fibers existing in a more or less diffuse and intermixed manner.” It was for these reasons that I had not submitted these assumptions about cerebral duality to a separate discussion.

¹ Cf. Bérillon. *La dualité cérébrale et l'indépendance fonctionnelle des deux hémisphères cérébraux*, 1884, 115.

² Id. *Ibid.*, 109. Cif Magnin. *Etude clinique et expérimentale sur l'hypnotisme*, 1884, 157.

³ See part 1, ch. III, p. 153.

⁴ Bastian. *Le cerveau, organe de la pensée*, 149.

But Mr. Myers, when he returns to this theory, in connection with spiritualism, sets it out with arguments which are more distinctly psychological and which, therefore, call for discussion here.

To sum up his theory in a few words, Mr. Myers thinks that there is a great analogy between the phenomena of the unconsciousness of mediums and automatic writing, on the one hand, and, on the other hand, disorders of the medium, blindness or deafness, agraphia or aphasia which occurs as a result of certain localized lesions of the left hemisphere. However, in these cases, the restoration of language and writing, when it takes place, takes place thanks to a replacement of the right hemisphere. So automatic writing must also be linked to the functioning of the right hemisphere. "Automatic writing seems, he says, an obscure action of the least used hemisphere; in the case of Louis V... it is the alternation of the right hemisphere and the left which produces the motor and sensory variations ¹. The automatic writing comes from the same cause as the writing of the agraphics, the employment in the writing of the unexercised centers of the right hemisphere of the brain ²." Without commenting on the substance of the physiological question, I do not find Mr. Myers' arguments to be conclusive.

"The medium who writes in this way", says this author, "does not feel his own hand writing, he looks like an individual suffering from verbal blindness ³ who cannot read writing." In no way does the patient in question feel the letters, but he does not understand them; the medium does not have the sensation of movements, he is simply anesthetic at this moment and, for this particular point; if he has the feeling, if he looks at his paper to see the letters, he will read them perfectly. But there are times when he hesitates and cannot read. It is because the message is poorly written: sometimes I cannot read my own handwriting, and I am not verbally blind. "In this case, we will reply, the medium calls on the movements of his hand to start the message again; he resembles the famous patient of M. Charcot who could read only by following the letters, he used muscular sensations to read and not visual sensations; the medium does not feel the muscular sensations any more when the message is written for the second time, he appeals to the visual sensations, this time to read a better written letter. There is nothing in all of this that looks like verbal blindness.

"But now consider the writing itself, it is sometimes awkward, embarrassed, reduced to an endlessly repeated letter or a simple scribble; therefore", claims Mr. Myers, "it is the product of the right brain which is not sufficiently exercised." Bold conclusion: one can write badly without using only the right brain. Writing is more inexperienced because it takes place under new conditions, without the subject seeing the paper, without using visual images, etc.; it depends on a new intelligence which has only muscular images which is often rudimentary and sometimes only knowing, like the cataleptics, to repeat the same letter ⁴. "This automatic writing, we are still told, often shows a bad temper, conceited, lying, immoral, it abuses swear words and obscenities. This resembles the swear words which only the aphasic patient retains and, in either case, they must be blamed on the right hemisphere of the brain, which is uneducated and unethical." How, swear words and obscenities and nonsense can only come from the right hemisphere? Should we therefore return to the theory of dreams of M. Gaétan de Launay? The

¹ Myers. *Multiplex personality*. Proceed. S. P. R., 1887, 499.

² *Id. Automatic writing*. Proceed, 1885, 39.

³ Myers. *Ibid.*, 47 et sq.

⁴ Myers. *Automatic writing*, 1885, 38.

explanation of these inconveniences of automatic writing seems to me much simpler: we find them, whatever one may have said about them, in sleepwalking, in hysteria, in childhood, wherever the personality is weak and unable to govern his words.

A more interesting argument is taken from a curious characteristic of automatic writing; it often affects, it seems, the inverted form, as it is necessary, to read the message, to look at the sheet upside down by transparency or to read it in a mirror. This form of writing is found in children who are left-handed and sometimes in aphasics. I will not discuss this question, for I have never had the opportunity to observe the fact; none of the people who introduced automatic writing wrote in front of me like this. The phenomenon would therefore be quite rare and could hardly be used to establish a general theory. On the other hand, we know that the group of subconscious phenomena which manifest themselves in the writing of mediums is the same which appear in somnambulism; if this writing is that of a left-handed person, why don't the subjects all become left-handed while sleepwalking? Well, out of quite a number of subjects I have not seen a single one which exhibited this character, and Mr. Myers cites only one example which he himself is quite right to regard as doubtful. Finally, note that mirroring is not as difficult as it is generally believed. After two or three tries of a few moments, I got to write this way fairly quickly. This form of writing, which it would be interesting to study, seems to me to depend on certain very specific circumstances and not to be a general characteristic of automatic writing. M. Myers' arguments therefore do not seem sufficient to us to be able to assimilate the automatic writing of mediums to agraphia disorders produced by a localized lesion of a hemisphere.

Consider the question from another point of view. Is it therefore quite certain that an individual who has lost articulated language by a lesion of the left hemisphere can only recover it thanks to the replacement of the right lobe. M. Charcot himself, by his theory of the different sensory types of language, has shown us another possible hypothesis. The patient can restore his language, the faculty of auditory representation for example, to make up for the erasure of visual images ¹, and we will then witness a new education in language or writing that can present all the phases pointed out by Mr. Myers, without the right brain having to intervene more particularly than usual. This remark shows us that, in the same individual, several kinds of languages can be produced which differ in the psychological images used much more than in the cerebral hemisphere which produces them.

It is a difference of this kind, psychological rather than anatomical, which seems to exist between the various simultaneous languages of the medium, as between the various actions of subjects in hemi-somnambulism. Each of these personalities, which develop at the same time, is constituted by a synthesis of images grouping themselves around different centers; but the images constituting the new personalities are not produced by new organs and added to those which formed the normal consciousness. No, the images always remain the same, produced by all or part of the brain, whatever, as they are in all men. It is their grouping and their distribution that are changed: they are aggregated into smaller groups than usual, which give rise to the formation of several incomplete personalities, instead of one more perfect. These separations and these new groupings of psychological phenomena are sometimes done in a very regular manner depending on the quality of the images coming from one or another direction: one of the groups will include, for example, tactile images, the other visual images. Things must be so with frankly

¹ Ballet. *Langage intérieur*, 115.

hysterical mediums, for their disintegration, as we know, goes as far as complete anesthesia. But it may be that, in other persons, in mediums *apparently* in good health, the division and the grouping of the phenomena are much less simple, the images of the same direction being able to be distributed in different syntheses of after very complex association laws. In these people, in fact, the disaggregation does not go as far as anesthesia with fixed limits, but stops at this anesthesia with variable limits, which is the distraction. In either case, it is always only a matter of the grouping of images normally produced in the mind.

This interpretation allows us to understand certain facts which would be difficult to explain, we believe, in Mr. Myers' theory. How could certain mediums, like Ms S... have several spirits of different characters and independent of each other? Mr. Myers, as he did with the six existences of Louis V... arranges all the abnormal existences into one, which he opposes to normal existence. But this is very artificial, the psychological existence which we call normal does not have such clear characteristics which oppose it to others. The different abnormal groups are not different forms obtained by hallucination of the same personality; they are quite distinct from each other, just as somnambulism is distinct from waking. Léonie and Lucie have three personalities and not two; Rose has at least four quite distinct; should we assume that they have three or four brains? This is hardly likely; I prefer to believe that it is a question of simple psychological groupings which can be numerous, because they do not correspond to the physical division of the nervous system. Undoubtedly, a certain physiological modification must accompany, I am convinced, this psychological disintegration; but it is absolutely unknown to us, and it must be abnormal and much more delicate than this regular division of the brain into two hemispheres.

Regardless of these hypotheses, spiritualism has shown us many examples, which were not without utility, of this mental disintegration that we had studied experimentally. Mediums, when perfect, are types of the fullest division in which the two personalities completely ignore each other and develop independently of each other.

VII. Impulsive madness

It is not only in hypnotic sleep and in premeditated experiences that one encounters irresistible suggestions and impulses: many unhappy people are naturally and throughout their lives under the domination of a fixed idea of this kind and feel driven by an invincible power to an act which horrifies them. It is in impulsive madness that these singular aberrations of the human will are found, so instructive for the psychologist. This disease has been too well studied by alienists and by a few psychologists, like M. Ribot, for me to repeat a description which is well known. I only want to show how this particular form of psychological automatism relates to all those which have already been studied in this work.

Let us put aside the acts suddenly committed by certain epileptics during a momentary eclipse of consciousness ¹. These actions are too similar, as we have already shown, to the actions of cataleptic individuals, to merit further study here. Accomplished abruptly, without reflection, without resistance,

¹ Cf. Maudsley. *Pathologie de l'esprit*, 363. – Ribot. *Maladies de la volonté*, 75.

without leaving traces in normal memory, they are the brutal, instantaneous expression of an image remaining alone in an almost entirely destroyed consciousness. Always reproducing the same with each access ¹, they are part of a crisis, they belong to an automatic mechanism which starts up as soon as the personal consciousness is obscured. The impulses which interest us most are those which take place during the patient's waking period, while he is capable of perception and reflection. He can see them, and feels that he is allowing himself to be dragged along as by a foreign force.

The simplest acts of this kind will be nervous movements, tics, jerky grimaces of the face, trunk, extremities ², movements which the subject declares to accomplish in spite of himself, but which he knows and which he could at a pinch resist. Certain choreic movements are of this kind, but already present a greater complication; it is in fact correct to distinguish the vulgar or gesticulatory chorea, which is similar to simple tics, from the great rhythmic chorea, which differs from it in that the irresistible movements are not made at random, but appear ordered and have a determined goal ³. There are rotating, climbing, shouting varieties, in which the sick jump, run, utter animal cries, etc. Perhaps it is necessary to relate to these varieties, although this is not usual, these involuntary and persistent grimaces or expressions of the physiognomy; "certain expressions", said Mr. Luys, "seem to be permanently frozen on the face, and features of terror persisted eight months after the accident which had caused them." All these choreic follies", said Maudsley ⁴ "are characterized by their automatic character, each nerve center seems to act on its own account. They are indeed impulses during waking and the duration of normal consciousness, but the individual who feels them seems not to resist them.

But, in other cases which are more dramatic, the individual who is aware of his impulse can resist it for a longer or shorter time and only succumbs after a desperate struggle. These are sudden, violent *desires* that cross their minds and lead them to perform an absurd or criminal act. They feel what their desire is ridiculous or odious, they resist it and try to think of something else. *The desire* to perform this act returns more precise, more implacable, they reject it and seek to flee from themselves. They can't do it and remain panting, sweaty, in this senseless struggle against themselves, which almost necessarily ends in their defeat. The act is done, then they breathe, calm down, rejoice, not at the act they have done and which is still in their horror, but at the relief they feel at no longer feeling this horrible torture and to regain the free disposal of their mind. One would find, in all the works on alienation, innumerable examples of this really cruel moral disease; Dr. Saury has summarized, in his last book on "degenerates", the most typical and frequent forms of impulses. We cannot dwell on these impulses in childish acts such as removing a stone from a wall or picking up strands of straw ⁵, or terrible, like the crime of homicide or arson. The characteristic of these desires, as described by all patients, is that they appear unreasonable to the very one who feels them, they have neither plausible motive nor interest ⁶, they are at odds with the deepest and dearest feelings. A woman feels an irresistible urge to kill her adoring children; an unfortunate young man flees to Africa, then goes himself to be locked up in a hospital so as not to kill his mother, because he feels that he can no longer resist the terrible impulse that drives him. This is why the

¹ Luys. *Maladies mentales*, 440.

² Moreau (de Tours). *Psychologie morbide*, 151.

³ Mirville, II, 188, describes them very well, although relating them, as always, to the devil.

⁴ Maudsley. *Op. cit.*, 288.

⁵ Id., *Ibid.*, 334.

⁶ Michéa. *Médication stupéfiante*, 12, Georget. *Maladies mentales*, 22, etc. – H. Saury. *Études cliniques sur la folie héréditaire, les dégénérés*, 1886, 223.

patient resists with all his might with singular lucidity and asks for help from all sides. While the real madman surrenders to his delirium and indulges in it, the impulsive pushes him away like something foreign. This is a remarkable characteristic which gives this mental disturbance a very special importance.

Allow me, to clarify this description, to summarize in a few words an observation that I made at the hospital in Le Havre, not that the case itself is of great interest, because it falls within a category of very well-known phenomena, but because the discussion is more easily done on a particular example. An unhappy seventeen-year-old young man, D... is the son of a father and mother both alienated and who both ended their lives in suicide. He has had, until recently, a relatively calm existence, though occasionally disturbed by nervous accidents. He thus had violent fits of melancholy during which he hides, isolates himself and remains crying for no reason about his fate. He wonders with anguish how he will earn his bread, how he will learn his trade, etc.; at the same time he reasons himself, observes that these anxieties have no reason to exist, and yet he begins to moan again; at other times he has hot flashes in his face and choreic tremors in his left leg that last for nights. Once, these convulsive tremors spread to all the limbs, to make it look (completely wrong, in my opinion) to have a seizure. He has almost constantly had the terror of being alone for some years now, and yet he hates society, so he doesn't know what to do, and still begins to moan. He has an intense agoraphobia, and, when it is necessary to cross a place, he begs for a person to accompany him or he follows people behind, with a terrible fear that he will be sent back. Here is the last more tragic accident which brought him to the hospital: One evening he feels one of his anxiety attacks which begins, cannot manage to eat or drink, spends the night awake moaning; the left leg trembles and shakes continuously. However, he makes an effort in the morning to go to his usual work and, as he is a barber's boy, sets about shaving a client. No sooner does he hold the razor in his hand, when the sweat comes to his face, his tremors increase and reach his arms. A horrible thought crosses his mind, he wants, he wants to cut the throat of this individual he is shaving. Terrified by this act, he resists with a sort of rage and clings to the chair so as not to fall. He still tries to raise his razor, but the impulse returning more terrible, he runs away to his room, uttering loud cries. We run after him and we only have time to grab him when he was about to cut his throat. Transported to the hospital, he was for two days in a state of complete bewilderment, refusing to eat and constantly agitated with choreic movements. Then he calmed down and then told me everything he had experienced; he now feels better, but he has a new melancholy idea which he never thought of before: he is convinced that sooner or later he will kill himself as his parents did, and this idea does not contribute little to sadness.

We have just said, at the beginning of this paragraph, that these impulses resembled the suggestions made to somnambulists; however, there is apparently a great difference which is obvious and makes this comparison singular. The subjects we studied carried out the suggestions in two main ways: either with full consciousness, but then they accepted the act, did it willingly, and believed themselves to be free in their conduct; or else without accepting the act, but then they completely ignored it and performed it without knowing it. In both cases, they are different from the impulsive madman who does not act unconsciously, knows very well what he is doing and yet loathes it and resists with all his might; there is something original and new in this. Our somnambulists have, however, presented analogous phenomena which we have not hitherto mentioned, because they are complicated exceptions and it is not necessary to embarrass the exposition of relatively simple phenomena. We must now come back to these irregular cases.

While sleepwalking, Leonie told me one day that she had received an interesting letter, I asked her to bring it to me the next day, but I did not remind her of this recommendation after waking her up. The next day, wide awake, she indeed brought me the letter, but said to me with a little concern: "I don't know what happens to me with this letter, here are three times that I take it to take away, each time I took it out of my pocket and I tightened it because I don't need it, and then I had to take it back, because it's still in my pocket." Another observation of the same kind: I told Leonie, while she was sleepwalking, to bring me from her house, when she returned to Le Havre, a certain bundle of papers that she had. Here is what happened a few months later when she prepared to come to Le Havre. She was about to close her suitcase, when she saw inside a rather bulky bundle of papers. "I'm pretty dumb and dizzy", she said, "for taking this, I certainly won't use it", and she pulled the package out. A few moments later, she visits her luggage again: the package was still there. "Ah, that's too much", she said, and she removes the package, locks it up, and arrives in Havre without having brought it. I agree one day with a young man whom I knew to be hypnotizable, that he will tell me sincerely when he wakes up the impressions he has experienced. During the hypnotic sleep, which was quite deep, I asked him to take my hat off a table and put it on my head, then I woke him up. I then question him according to our conventions, but he said nothing of interest to me, because he had forgotten everything, and, a singular detail but already pointed out, he was convinced that I had not succeeded in putting him to sleep, while, for half an hour, I had made him experience several hallucinations. However, after a while, he takes on an abnormal appearance, wanders around the room and complains of a little headache which has just happened suddenly. As he speaks, he has decidedly moved closer to my hat; he takes it and turns it around in all directions, but here he rejects it suddenly, exclaiming. "Ah, what do I *want* to do with your hat and what am I doing here, it's really too stupid!" He sits down and everything dissipates. It is unnecessary to cite other examples of the same kind.

Although the act seems to have been known here by the subject, who sometimes accepted it as in the first case, sometimes rejected it, I believe that this consciousness is quite secondary and that the essence of the suggestion is 'happened subconsciously. The memory of the suggestion, the notion of when it was to be performed, all this belonged, as always, to the second layer of phenomena, to the person of the sleepwalking persisting under the vigil: the act has been started, halfway executed by motor images belonging to this layer and therefore separated from normal consciousness. But the division was not complete, as in the simple experiments with Lucy, or at least it did not remain complete. The results of the act, or simply the movements of the limbs, were seen by the first personality. This one did not feel the act in itself, because, even now, she does not know what it is about, but she saw the external manifestations as she would have done for the act of a foreign person ¹. She then accepted this act which was beginning again, or else she suppressed it by energetic resistance. This is the case with many suggestions which are supposedly carried out with conscience; the subject continues with good will an act which he did not begin himself, he even takes responsibility for it and he invents reasons to explain it; but the act was nonetheless a subconscious phenomenon subject to the laws of psychological disintegration.

One can sometimes, in a so to speak experimental way, give or take away from the subject this *consciousness in return* for the act begun by the second psychic group. If the subject is distracted while he is performing the act, he will not notice anything and things will be very regular; if we do not distract

¹ "The subject", says Richet, describing more or less analogous facts, "sees whether the suggestion has succeeded or not and enjoys the show he gives to himself." *Revue philosophique*, 1886, II, 325.

him, he will use his small force of perception to watch his own actions and he will be able to accept or resist them.

Usually we always spoke to Lucie while she carried out the suggestions and we saw how remarkable the disintegration was with her. One day I suggested to her while she was sleepwalking a rather complicated act: to go and take an object from the pocket of a person who had accompanied me, and I avoid speaking to him after waking up. She seemed surprised at my silence, got up as if to walk in the bedroom, but she was engaging in the most singular trick. She took three steps in the direction of the person I had indicated to her, then stopped short and turned back; she took three steps forward again and stopped again. She stamped her foot, gritted her teeth, picked up a loom to do something else, then got up to start over. All his gestures could be translated as follows: For a moment of distraction, the legs walked to do the act that the second personality wanted to perform. Lucie, who was not sufficiently distracted, noticed this movement and said to herself, stamping her feet: “Ah, what am I going to do here?” And, voluntarily, she was going to sit down again. This struggle between the two consciousnesses lasted more than twenty minutes, before the act was performed entirely in a moment of more lasting distraction; while, on the contrary, the suggestion would have been carried out immediately, if I had taken some precautions to avoid this consciousness in return and to prevent Lucie from worrying about her subconscious acts.

It is the same for automatic writing: usually we take precautions to prevent the subject from noticing it, we choose people whose arm is anesthetic, we hide it by a screen, we distract the subject by talking to him something else; but when these precautions are not taken, or simply when the subject has partly retained the muscular sense of the arm, he notices his writing and reads it as it is written, or he feels it according to the movements of his arm. Ms S... of whom I have spoken, felt the movements of the board under her fingers and, by a rather long exercise, had come to guess her automatic handwriting before reading it. She said to me, without looking at the clipboard: “Ah it is Johnson who wrote that”, and indeed *the Spirit* had signed “Johnson.” Many spiritualists have noticed this fact, but they have sometimes indicated a more curious thing, which is that the medium, thus guessing the writing of his mind, sometimes completes it consciously and collaborates with him in these singular editions. “If there is, at the beginning, absolute division, so that the ideas are only known as the words appear, the word already drawn often making one guess which one is to follow, the young girl becomes, unwittingly, at least the collaborator of the second person who was formed in her”... “It is the countess who writes”, said Ms N... speaking of her mind, “but we think together ¹.” The muscular sense thus becomes, as M. Richet said ², the route by which a large number of subconscious phenomena enter consciousness after commencement of execution. Besides, many facts of ordinary life are of the same kind; “When you read a book or hear an unpleasant speech, you may remain in a state of indifference for some time, but, if you feel some involuntary yawn, then you no longer doubt, you are authentically warned of your boredom and the awareness that you have it increases it ³.” These remarks show us that there can be a kind of knowledge and awareness of the act which is nonetheless unconscious, that is, which has its point of departure outside the personality of the subject.

¹ *Lettres de Gros Jean*, 17.

² Ch. Richet. *Homme et intelligence*, 517.

³ Joly, *Sensibilité et mouvement*. *Revue philosophique*, 1886, II, 250.

How do subjects understand and express the psychological state we have just described? What do they think of themselves when they see themselves behaving in a weird way? They always use the same word to designate their condition. “But what’s the matter with you?” I say to Lucie in a circumstance analogous to the one I have described. – “It’s funny how *I want* to do that, and yet it’s so stupid.” I had suggested to Leonie to come to my place! as she does not arrive, I go to meet her and find her in the street. “I’ve been to your door”, she said, “and I’m coming back: I don’t know why *I wanted* to go to your place.” “What do *I want* to do with your hat?” said the young man whose suggestion I have described. In a word, they all interpret their state by saying that they want to do something, and then they give in to this urge, or they resist it as the case may be. This expression should not surprise us, because the consciousness of a desire is hardly anything else, if we want to analyze it, “than the sensation of emerging movements sketching out a function or an act ¹.” Now our subjects feel precisely an act which is taking shape, and since they ignore the true origin, they make it a desire or a desire.

We can now come back to our impulsive patients whose psychological character becomes more intelligible. On the one hand, they are indeed disaggregated individuals, although they are aware of their impulses. “Man has lost his unity”, said Leuret in this regard; “he still knows; but, in himself, something different from his ego also knows; he still wants, but the something that is in him also has its will: he is dominated, he is a slave, his body is a machine obeying a will that is not his.” ² On the other hand, they know the movements they are making, they feel the impulse, interpret it as personal envy, accept it or resist it, all of which disaggregated individuals usually do not do. “It’s something that pushes me behind my shoulders,” said a patient observed by Georget. “I was terribly afraid of cutting the throat of the man I was shaving”, this unfortunate D told me ... – “Why were you afraid to do that?” I asked him. – “I could see my hand rising to strike, I only had time to save myself.” The patient does not understand that the idea and, consequently, the act of cutting the throat has been suggested, by the touch of the razor, a group of phenomena which he does not suspect the existence in him. He only saw the result of the suggestion, the movement of the arm, and that’s why he interprets it by saying: “I had a terrible urge to cut his throat.” These impulses have therefore shown us an interesting form of an incomplete disaggregated act, that is to say half known by the subject, but whose starting point, instead of being in the first consciousness, as we know it, seen in our studies on the recorder pendulum, is actually in the second.

VIII. Fixed ideas. – Hallucinations

The impulses sometimes exist in another form which seems a little different; instead of presenting itself as an act, at least as a desire, a desire, it is a simple idea which is equally fixed and haunting, but which does not seem to have any inclination to provoke any act. Sometimes these ideas are manifested in the form of a hallucination of hearing, it is a phrase that patients suddenly hear ringing *in* their ears without any plausible reason, “without it having any connection with previous thoughts ³.” One hears a voice repeating to him: “Do not move or you are lost”, and he then remains motionless in an apparent

¹ Id, *Ibid.*, 230.

² Leuret. *Frag. psychol. sur la folie*, 1834, 259.

³ Maury. *Sommeil et rêves*, 158.

stupor ¹. Another hears a voice commanding him to throw ten francs into the Seine ². Sometimes these ideas seem to remain more abstract, without taking the form of a hearing hallucination ³. This will be, for example, a question that the patient constantly asks himself: “Why are the colors unevenly distributed?” why are the trees green? why do we wear mourning in black? ⁴” It will be a fear, an idea of persecution: “an individual constantly thinks that he will be poisoned by the grape of a vine near which has fallen a fragment of silver nitrate ⁵”; or quite simply an insignificant and absurd idea: “M. N... constantly thinks that his servant likes wine and this idea persists after him, he cannot get rid of it ⁶.” These unfortunate people do not accept their fixed idea as part of their thinking, as we do in our dreams for the most absurd ideas, they resist these ideas and they are aware of the absurdity of their state. “The fixed idea appears to them like a foreign body lodged in them which they cannot expel, but it does not manage to invade them entirely ⁷”. “If I could think like you”, said one of them, “I would be happy, but I am overwhelmed by sinister ideas which I cannot help but believe in, I would rather be completely mad than to have kept my intelligence on most subjects... ⁸” Finally, in other cases, the fixed idea suddenly appears to consciousness in the form of a visual hallucination which arises, without the patient realizing its origin. Facts of this kind are so well known that it suffices to point out them and to inquire how these different kinds of fixed ideas relate to the laws of psychological automatism.

The problem is the same that for motor impulses the abnormal phenomenon is not integrated into the personality, it is foreign to the ego which would like to reject it, it seems to belong to another psychic group, like the disaggregated phenomena, and yet it is conscious, while these disintegrating facts were unconscious.

We still find analogies in our hypnotic experiences which allow us to study the psychology of alienation. Leonie had a sort of crisis of incomplete hysteria, she was fidgeting and screaming without my being able to calm her down. Suddenly she stops and says to me in terror: “Oh! who is speaking to me like this? that scares me. – Nobody speaks to you, I am alone with you. – But yes, there on the left.” And here she gets up and wants to open a cupboard on her left to see if anyone is hidden there. “What do you mean then? I said. – I hear a voice on the left repeating: “Enough, enough, be quiet, you’re boring us.” Certainly the voice which spoke thus was in its right, but I had not suggested anything of the similar kind and hardly thought to cause at this moment a hallucination of the hearing. Another day, the same subject, during the first sleepwalking, was quite calm, but stubbornly refused to answer what was asked of him. She heard the same voice on the left again saying to her: “Come on, be wise, you must say.” These words obviously came, we know enough about this subject to guess, from the inferior character who existed below this layer of consciousness. It was very easy to verify it by automatic writing or by bringing about a deeper sleepwalking. But how, according to the theories of disaggregation that we have outlined, is it

¹ Ellis. *Aliénation mentale*, 200.

² Ball. D’après Paulhan. *Revue philosophique*, 88, II, 119.

³ Cf. Ribot. *Psychologie de l’attention*, 124.

⁴ Saury. *Les dégénérés*, 63.

⁵ Michéa. *Médication stupéfiante*, 14.

⁶ Moreau (de Tours). *Haschich*, 119.

⁷ Westphal. D’après Ribot. *Psychologie de l’attention*, 135.

⁸ Dr C. Pinel. *De la monomanie*, 1856, 41.

possible that the ideas of the second subconscious character become hallucinations of hearing for the first?

Let us reproduce the fact experimentally: during a deep sleepwalking state, I charge Leonie 3 to say something to *the other*, for example to say “Hello” to her, then I wake her up. The hallucination occurs in the same way and Leonie asks again: “Who is saying “Hello?” But this time, I too heard the word “Hello”, because the mouth spoke it perfectly, although very low. These hallucinations of subconscious origin were due, in this case, to the hearing of a true automatic speech analogous to the writing of mediums. The subject heard his own subconscious speech, just as the medium read his automatic writing, and both attributed this speech or writing to beings other than themselves.

These words of subconscious origin are not rarer than other impulses of the same kind and present themselves with the same characteristics. “Often”, said one of the little Cevennes prophets, “I don’t know how the word that the spirit has already made me begin will end. It has happened to me sometimes that thinking I was going to pronounce a word or a sentence, it was only a simple inarticulate song that formed by my voice... While I speak, my mind pays attention to what my mouth is saying, as if it was a speech made by another, but which leaves vivid impressions in my memory ¹”. The famous Lisa Andersdocter, in 1841, sang and delivered in spite of herself the more or less eloquent speeches ². Mrs. X, fifty years old, old hysterical, from time to time experiences the need to go shout in a corner and tell its secrets ³.” Finally, degenerates, of whom M. Saury speaks, very often have impulses to swear and obscenities in spite of themselves, as mediums were inclined to write. But when the subject hears his own voice speaking thus, or when he senses through the muscular sense the beginning of these words, he imagines hearing a foreign voice which he locates in such or such place and which he specifies var, guesses. “A patient himself speaks aloud and then claims that it is a voice that he hears; if we keep his lips closed, he still hears the voice, but we feel the lips move under the fingers ⁴.” “M. X... hears voices, but it is easy to see that his tongue moves in spite of himself as the inner voice speaks ⁵”. I had the opportunity to verify the fact about an insane person quite recently. An excited and half-maniacal individual claimed to communicate from afar with counts and marquises living in Paris. I begged him to say hello for me to M. le marquis – he rubbed his head on one side (it was his cabalistic sign to go to the marquis) and said aloud: “M. le marquis, I am responsible for wishing you good morning”; then he tilted his head to the side as if to listen with great attention; but his mouth spoke very low and murmured: “You will tell this gentleman that...” I could not hear the rest, but the patient straightened up and said aloud to me: “M. le marquis asked me to thank you.... I heard it perfectly.” It was obviously his own words that suggested his hallucination of hearing.

Is it not natural to interpret in the same way the fixed ideas that we have pointed out, and should we not, with many alienists, like Moreau (de Tours), Max Simon ⁶ and others, consider these fixed ideas as impulses of the function of language? “They influence my thinking”, said a madwoman “... they make me

¹ Avertissements prophétiques d’Élie Marion. – Gasparin. *Op. cit.*, II, 22.

² Mirville. *Op. cit.*, I, 241.

³ Luys. *Maladies mentales*, 212.

⁴ Moreau (de Tours). *Haschich*, 354.

⁵ Ballet. *Langage intérieur*, 64. – D’autres exemples, Despine. *Somnambulisme*, 66, etc.

⁶ Max Simon. *Le monde des rêves*, 1888, 106.

speak in spite of myself ¹.” She was absolutely right, for to hear yourself speak in spite of yourself is to think in spite of yourself; repeating the same sentence over and over without having the will to do it is to have a fixed idea ². The conscious mind develops its fixed idea as it wants and increases its delirium, but the idea itself comes from automatic speech which does not depend on this conscious thought. Moreau (de Tours) did not believe in a similar theory when he wrote: “In the mental conceptions of the insane, what is active or belonging to the waking state are the psychological consequences of the fixed idea, the deductions that the patient logically draws from this idea, the feelings and passions that it arouses; but the fixed idea, the morbid thought which sums up in itself all the delirium, because it is the starting point of all the aberrations, this thought belongs entirely to the passive state of sleep, it originated in analogous psycho-organic conditions ³”.

However simple and, in some cases, the truth of these hypotheses, I do not believe that they are sufficient to always explain these kinds of collaboration of the group of subconscious phenomena and the group of conscious phenomena. Very often the intermediary between the two groups, that is to say the physical phenomenon produced by one and felt by the other, is not visible; there is not always a gesture or a word which comes to communicate to one of the people the thoughts and the modifications of the other. When a thought, an auditory hallucination and above all a visual hallucination suddenly appears in the consciousness of the lunatic, it must be admitted that the unconscious phenomena have suddenly and automatically brought about a conscious phenomenon without an intermediary. This fact is obvious; but as we have already noticed at the beginning of this chapter about the divination wand, it is not easy to understand. Were we not saying, in fact, that these two groups of phenomena were separate, disaggregated, and that it was precisely this characteristic which formed the two fields of consciousness? How can these phenomena both relate to each other by association and yet be disaggregated?

Let us first notice that this natural fact presented by mental illness is not unknown to us and that we have already often encountered it in our experimental studies. When we described the suggestions by distraction, we pointed out in passing a very curious fact, it is the conscious hallucination produced by a suggestion which has remained subconscious. I recall the fact. I order Leonie while she is distracted and chatting with another person, and I whisper quietly that this person has a nice green coat. Leonie did not hear what I was saying (a disaggregated subconscious phenomenon belonging to the second field of consciousness), and yet she utters a cry and says: “Oh! how funny your dress is, it’s all green, I hadn’t noticed it” (conscious phenomenon belonging to the first field of consciousness). So therefore by a sort of association of ideas, despite the disintegration, a subconscious phenomenon produced a conscious phenomenon.

But here are many other examples of the same kind. I whisper softly: “When I touch your thumb, you’ll see red, when I touch your pinky, you’ll see yellow.” This is an inadvertent suggestion with a benchmark. But I touch the left hand which is *anesthetic*: however the touching of the thumb which *it does not feel* brings about the conscious hallucination of red, touching of the little finger that of yellow, and there is never any error.. With another subject, total anesthetic at the time, I operate differently. I pinch the back of her hand, Marie feels nothing; but I ask her with an insistence that for her was tantamount to a suggestion: “Do you hear something? – “Yes”, she said, “they look like bells.” A few

¹ Moreau. *Haschich*, 330.

² Cf. Wundt. *Psychologie physiologique*, II, 433.

³ Moreau (de Tours). *Psychologie morbide*, 147.

moments later, I pinch her by the arm and although she doesn't feel anything I ask again: "Do you hear something *else*? – Yes, she says, it sounds like a whistle." Since then, when I pinch her on the back of my hand, she still hears bells; when I pinch her arm, she still hears a whistle. Now, I repeat, she feels absolutely nothing on her arm: it is a subconscious sensation which serves as a point of reference for conscious hallucination ¹.

But is it necessary to look for new facts? Examples of this kind are found among the best known phenomena of hypnotism. The old experience of the portrait is an excellent one. The subject has been suggested to see a portrait on a card and indeed he always sees the portrait on the designated card. He recognizes it by certain signs, no doubt, but the sensation of these signs was never conscious and it was only the second character who told me by automatic writing that there was a stain on the top of the paper.. The landmark here was still subconscious, although the hallucination was conscious. What results from these facts? Just something we had already planned. This is because the automatic association of ideas is one thing, and the synthesis which forms personal perception at each moment of life and the idea of the self is another. This one can be destroyed, while this one remains. This supposition, moreover, agrees well enough with all that we have said of these two operations. The association of ideas is the manifestation of an elementary synthesis which was already carried out in the past and which linked the phenomena to each other once and for all. Personal perception is formed by the present synthetic activity which, by a continual effort repeated at every moment, brings back to the unity of the self all the phenomena which occur, whatever their origin. This synthetic force can be weakened today, rendering the subject incapable of perceiving such and such an auditory sensation or such a tactile sensation and yet, by an automatism of ancient origin which has not been destroyed, this unperceived sensation can lead to problems, other images belonging to those that the subject still perceives. Although these remarks doubtless do not eliminate all the difficulties, they allow us to understand how these new phenomena, fixed ideas and certain hallucinations are simply more complicated applications of the formerly known laws.

IX. Possessions

The disaggregated element of thought has therefore already manifested itself, in these complex phenomena, either by beginning acts, or by a light word constantly repeated, or by hallucinations; it can manifest itself in many other ways and bring about the most varied disorders in the physical and moral health of the conscious individual.

¹ M. Binet has just published, on this persistence of the association of ideas despite the disintegration and subdivision of the field of consciousness, a study so complete that I content myself with referring the reader to it. In this article (*Les altérations de la conscience chez les hystériques*, Revue philosophique, 1889, I, 135), he showed how all the old associations, even the slightest, between the tactile sensations now subconscious and the visual images still conscious, all subsist despite the division of personal perception. The experiences that I had made for a long time and which I have just summarized had dealt only with the *artificial associations, produced by suggestion*, between the subconscious landmark and the conscious hallucination; Binet has found that the same is true when it comes to natural associations between the touch of an anesthetic finger, for example, and the visual and conscious image of that finger. His extremely curious observations, which seem to me to be very accurate, at least for a category of individuals, those belonging to the visual type, complete a point in my milking which had obviously remained incomplete.

We already know that this can be the origin of seizures, anesthesia, contractures and paralysis, we do not have to go back to it. But why shouldn't this thought produce expressive attitudes of the body and physiognomy which would remain fixed, despite the patient, and would keep him in return in a perpetual state of terror, or sadness? To have his body in the attitude of terror is to feel the emotion of terror, and, if this attitude is determined by a subconscious idea, the patient will have in consciousness only the emotion without knowing why He is moved. "I'm scared and I don't know why," Lucie could say at the start of her fit, when she takes haggard eyes and terrified gestures. It is because the unconscious has its dream, it sees men behind the curtains and puts the body in an attitude of terror. If Lucie does not care too much, it is because she is anesthetic. "I cry and I don't know why", said Léonie, "it makes me sad for no reason and it's ridiculous"; it is the second person who is sorry to have left Le Havre and who causes tears. "I don't know why I'm sad", said a poor boy with melancholy madness, "I sigh all the time." We must also suppose that there is a subconscious idea here which directly provokes the sighs and indirectly the melancholy of the unfortunate.

It would be necessary to review all the mental pathology and perhaps even an important part of the physical pathology to show all the psychological and bodily disorders which can produce a thought thus persisting outside the personal consciousness. Allow me only, to give a final complex example of these disturbances, to summarize one more of my observations. The facts in themselves are always of interest, and it is okay to give many descriptions even when the interpretations are wrong.

One of my subjects, whom I have often cited under the name of Mary, presented an equally curious illness and cure. This young girl was brought from the country to the hospital in Le Havre at the age of nineteen, because she was considered to be mad and that people almost despaired of her recovery. In fact, she had periods of seizures and delirium that lasted for days on end. After some time of observation, it was easy to see that the disease consisted of periodic accidents recurring regularly at the time of its epoch, and other less serious accidents continuing and occurring irregularly in the intervals. Let us first consider the former. As her period approached, Marie changed her character, became gloomy and violent, which was unusual for her, and had pain and nervous twitches in all of her limbs. However things went pretty much regularly for the first day, but, just twenty hours after the start, the periods suddenly stopped and a great shiver shook the whole body, then a sharp pain slowly rose from the stomach to the throat, and the great fits of hysteria began. The convulsions, although very violent, did not last long and never had the appearance of epileptoid tremors: but they were replaced by a delirium of the longest and strongest. Sometimes she uttered cries of terror, talking incessantly of blood and fire and fleeing to escape the flames; sometimes she played like a child, talked to her mother, climbed on the stove or on the furniture, and disturbed everything in the room. This delirium and these convulsions alternated, with rather short moments of respite, for forty-eight hours. The scene ended with several vomiting of blood after which everything was more or less in order. After a day or two of rest, Marie calmed down and remembered nothing. In the interval between these large monthly accidents, she retained small contractures sometimes in the arms or in the chest in the intercostal muscles, varied and very changeable anesthetics and above all absolute and continual blindness of the left eye. (We have seen the nature of this hysterical blindness elsewhere.) In addition, she occasionally had small seizures without much delirium, but which were characterized mainly by poses of terror. This disease, so obviously related to the menstrual periods, seemed uniquely physical and of little interest to the psychologist. So at first I took very little care of this person. At most, I had some experiments with hypnotism and some studies on her anesthesia with her, but I avoided anything that might have disturbed her around the time when the major accidents were

approaching. She remained in the hospital for seven months without the various medications and hydrotherapy which were tried having brought about the slightest modification. Besides, the therapeutic suggestions, in particular, the suggestions relating to the rules, had only bad effects and increased delirium.

Towards the end of the eighth month she complained of her sad fate and said with a sort of despair that she felt that everything was going to start all over again: "Come on, I said out of curiosity, explain to me once what happens when you're going to be sick. – But you know that ... everything stops, I have a great shiver and I don't know what is happening." I wanted to have precise information as to how her times had started and how they had been interrupted. She did not respond clearly, as she seemed to have forgotten much of the things that were asked of her. I then thought of putting her in a deep somnambulism, capable, as we have seen, of bringing back apparently forgotten memories, and I was thus able to recover the exact memory of a scene which had never been known except very incompletely. At the age of thirteen, she had been settled for the first time, but, as a result of a childish idea or of a remark heard and misunderstood, she realized that there was some shame in it and looked for a way to stop the flow as soon as possible. Twenty hours or so after the start, she sneaked out and plunged into a large tub of cold water. The success was complete, the rules were suddenly stopped, and, despite a great chill that arose, she was able to go home. She was ill for quite a long time and had several days of delirium. However, everything calmed down and the menses did not reappear for five years. When they reappeared, they brought about the disturbances that I observed. However, if we compare the sudden stop, the shivering, the pains that she describes today in a waking state with the story that she tells while sleepwalking and which, moreover, has been indirectly confirmed, we come to this conclusion: Every month the cold bath scene repeats itself, brings about the same stopping of periods and a delirium which is, it is true, much stronger than before, until an additional hemorrhage has occurred, place through the stomach. But, in her normal consciousness, she does not know any of this and does not even understand that the chill is brought on by the hallucination of the cold; it is therefore probable that this scene takes place below this consciousness and brings about all the other disturbances as a consequence.

This true or false assumption being made, and after having taken the advice of Dr Povilewicz, I tried to remove from sleepwalking consciousness this fixed and absurd idea that menstruation ended with a cold bath. I couldn't do it at first; the fixed idea persisted and the menstrual period which arrived two days later was much like the preceding ones. But, then having more time, I recommenced my attempt: I could only succeed in erasing this idea by a singular means. She had to be brought back by suggestion at the age of thirteen, put her back to the initial conditions of delirium, and then convinced her that the period had lasted three days and had not been interrupted by any untoward accident. Now, this done, the next epoch came to its date and went on for three days, without bringing any suffering, convulsion or delirium.

After seeing this result, it was necessary to study the other accidents. I pass over details of the psychological research which was sometimes difficult: the attacks of terror were the repetition of an emotion that this girl had felt when she saw, when she was sixteen, an old woman kill herself while falling from a staircase, the blood she always spoke of in her fits was a memory of that scene; as for the image of the fire, it probably arose out of association of ideas, for it is not connected with anything specific. By the same process as earlier, by bringing the subject back by suggestion to the moment of the accident, I succeeded, not without difficulty, in changing the image, in showing him that the old woman

had stumbled and was not was not killed, and to erase the terrifying conviction: the attacks of terror did not recur.

Finally I wanted to study blindness in the left eye, but Marie objected to it when she was awake, saying that she had been so since birth. It was easy to verify, by somnambulism, that she was mistaken: if we change her into a small child of five years following the known procedures, she regains the sensitivity that she had at that age and it is found that she can see very well with both eyes. It was therefore at the age of six that blindness began. On what occasion? Marie persists in saying when she is awake that she does not know anything about it. During sleepwalking and thanks to successive transformations during which I make him act out the main scenes of his life at that time, I find that blindness begins at a certain point in connection with a trivial incident. She had been forced, despite her cries, to sleep with a child of her age who had *strangles all over the left side of his face*. Marie had, some time after, plates of strangles which appeared almost identical and which sat *in the same place*; these plaques reappeared several years at the same time, then healed, but no attention was paid that from that moment on *she was anesthetic on the face on the left side and blind in the left eye*. Since then, she has always kept this anesthesia, at least not to go beyond what has been observed, at some later time that I transport it by suggestion, it still has this same anesthesia, although the rest of the body resumes at certain times his full sensitivity. Same attempt as before for healing. I bring her back with the child she detests, I make her believe that the child is very nice and does not have the strings, she is only half convinced of it. After two rehearsals of the scene, I win my case and she fearlessly caresses the imaginary child. The tenderness on the left side reappears without difficulty, and when I wake her up, Marie sees clearly with my left eye.

It has been five months since these experiments were carried out, Marie no longer presented the slightest sign of hysteria, she is doing very well and above all is getting stronger. His physical appearance has absolutely changed. I don't attach more importance to this healing than it deserves, and I don't know how long it will last, but I found this story interesting to show the importance of subconscious fixed ideas and the part which they play in certain physical illnesses as well as in moral illnesses.

Let us increase and complicate the phenomena further, suppose that this subconscious life does not manifest itself only to the astonished mind of the patient, by involuntary contractions, gestures, words repeated indiscriminately, but that it constantly acts in 'an intelligent and coordinated way. The patient notices that his arms and legs perform complicated acts unwittingly and in spite of himself, he hears his own mouth commanding or mocking him; he resists, he discusses, he fights against an individual who has formed in himself. How can he interpret his condition, what should he think of himself? Isn't it reasonable when he claims to be possessed by a spirit, persecuted by a demon who dwells within himself. How could he doubt, when this second personality, borrowing his name from the dominant superstitions, declares himself Astaroth, Leviathan or Beelzebub? The belief in possession is only the popular translation of a psychological truth.

Sometimes the two personalities live in fairly good agreement and do not persecute each other. Some women are even quite proud of this breakdown in their personality and like to consult, on all matters of life, "the little business which they believe they have in their heart or stomach and which gives them good

advice ¹”. “They have friendly talks with a revealing superintelligence who speaks through their mouths ².” Estelle, the famous patient of Dr Despine, does nothing without consulting “a good genius whom she feels forced to obey ³”. “A subject never answered questions”, said Charpignon ⁴, “certainly: I am going to consult the other.... it is the genius responsible for guiding and enlightening me.” Most of the time, the secondary spirit is not so good-natured, it torments its victim and only gives him bad advice. We know well the patient of Moreau (of Tours), so curious in his disputes with “the sovereign ⁵”, the convulsants of Saint-Médard, whom their spirits force to turn indefinitely on one foot or which they prevent from eating ⁶, and the nuns of Loudun tormented by all the evil spirits who embodied their passions ⁷. Sometimes there are several spirits in the same person, some good, some bad, who quarrel among themselves: “A child is possessed by two spirits, one bad, the other good; in his fits, his mouth changing tone, spoke successively for one and the other ⁸.”

These spirits don’t just talk, they act. Here is an account from the superior of Loudun that we were well disposed to consider as lying: “One of the spirits which was in her, Beelzebub, wanted to burn her, she did not consent, he threw her against the fire and she was found all dozed off, head almost touching the fire ⁹.” However, a similar fact happened almost before our eyes: a person, dissatisfied with the automatic writing which his hand wanted to make, took the papers written in this way and threw them into the fire; the second personality was furious and, in a convulsion, put the subject’s hand in the fire, severely burned it, then boasted of it in all his automatic communications. One of the best summaries of all these phenomena is found in the description that such a possessed person gives of his own state: “I cannot explain to you what is going on in me during this time and how this spirit unites. with mine without depriving it of knowledge or freedom, nevertheless doing like another myself and as if I had two souls, one of which is dispossessed of its body and of the use of its organs and is four by seeing the one who got in. The two spirits fight in the same field which is the body, and the soul is as it were shared; according to one part of oneself, it is the subject of diabolical impressions, and, according to the other, of the movements which are proper to it and which God gives it ¹⁰.” The various epidemics of the possessions of Loudun, Saint-Médard, Morzine, Verzegnin, Plédran, etc. ¹¹, are well known; they show us all the possible examples of these various destructions of the mental compound.

Conclusion

¹ Deleuze. *Mémoire sur la faculté de prévision*, 1836, 148.

² Bertrand. *Somnambulisme*, 233. – Cf. Mirville. *Op. cit.*, I, 65.

³ Pigeaire. *Puissance de l’électricité animale*, 1839, 269.

⁴ Charpignon. *Physiologie magnétique*, 414.

⁵ Moreau. *Haschich*, 337. – Cf. Ball. *Maladies mentales*, 91.

⁶ Gasparin. *Op. cit.*, II, 60.

⁷ Paul Richer. *La grande hystérie*, 825.

⁸ Maudsley. *Pathologie de l’esprit*, 294.

⁹ Paul Richer. *Op. cit.*, 811.

¹⁰ Déposition du père Surin, d’après Berillon. – *Dualité cérébrale*, 102.

¹¹ Cf. Regnard. *La sorcellerie*, 1887, 40, 70... *passim*.

Mental disintegration, the formation of successive and simultaneous personalities in the same individual, the automatic functioning of these various psychological groups isolated from one another are not artificial things, the bizarre result of experimental maneuvers. These are perfectly real and natural things that experience allows us to discover and study, but does not create. These things show themselves naturally in all ways and with all degrees. Sometimes a very slight separation leaves outside the mind only insignificant phenomena, incapable of acting by themselves and docile servants of conscious thought. They exaggerate, they modify the manifestations of normal thought, but they do not oppose it. Sometimes the second personality speaks for itself, takes the name of a spirit and brings its reflections to light, but only when the first personality allows it and leaves it free to act. Sometimes, finally, the abnormal group is rich enough by itself to impose itself on the subject's attention, to disturb him and take away his freedom. But, from the most insignificant subconscious act to the most terrible possessions, it is always the same psychological mechanism which gradually brings about the complete dissolution of the mind.

We have not looked for new laws in this chapter, we have simply observed numerous, and sometimes complicated, applications of old laws. Our hypotheses seemed to us to remain sufficient to explain the various facts of divination by the wand, spiritualism, impulsive madness and hallucination. This is a confirmation which has its value. But at the same time that our hypotheses were being confirmed by applying themselves to new facts, they were becoming more precise in their most delicate parts. We have seen, in fact, in the present chapter, much better than in the preceding one, the difference, and sometimes even the opposition which exists between the pure and simple automatism result of simple and old syntheses, and the current activity of the spirit which unites phenomena in new groups and units. The phenomena which are united and dependent in the first automatism may very well be separated and independent in the second. The two activities of thought are distinguished and become more and more precise.

Chapter IV. Moral weakness and strength

A phenomenon may be natural and, to a certain extent, not be absolutely normal; it may be found as an abnormal modification produced by accidental circumstances, and yet not belong, at least in this form, to the regular and average life of most men. Claude Bernard's remarks have already shown us on this subject that even sickly and exceptional phenomena are not absolutely new, that they only present a development, in one direction or another, of natural forces and remain subject to the same laws.. Before concluding, however, it is correct to investigate to what extent the automatism of which we have examined the principal forms a sickly phenomenon and to examine in what and to what degree the normal and free will, at least in appearance, differs from this mechanical and rigorously determined activity.

I. Psychological misery

Hypnotisable subjects, as well as spiritualistic mediums, since we know that they are identical, are they sick or healthy people? This issue has given rise to the most heated and embarrassing controversies. Some have seen in these automatic phenomena only the manifestation of the most marked hysterical disease, others have thought that they are compatible with the most perfect health. For these, sleepwalking is a crisis of hysteria: for others, it is a form of natural sleep. Automatic writing itself has raised the same oppositions: while some see it as a form of the impulsive idea and madness, others consider it very natural. "Some people, say the English writers, write without knowing it, as others hum a tune without paying attention to it ¹." This debate could only be settled by long medical studies and very precise statistics which we cannot present; we will only try, without speaking in a general way, to show to what intermediate position our own observations have brought us.

A first point seems absolutely indisputable to us, it is that hysterical disease is by far the most favorable ground for the development of automatic phenomena. It is even difficult to understand how some authors thought that the hysterical manifestations made the experiences difficult. Doubtless, a hysteric can interrupt a study of hypnotism by contractures or by a fit. But, on the one hand, these crises are in themselves extremely curious phenomena of automatism, and, on the other hand, it is very easy, when we know the subject's mechanism well to avoid them by a few simple precautions. In my opinion, the most beautiful studies on somnambulisms or successive existences, on suggestions, on subconscious acts or simultaneous existences, are made on hysterics, and in order to provide clear and easy-to-study examples I have hardly cited in this work only experiences with these patients. I do not think I am much wrong in saying that for most observers it is the same. Without a doubt, a certain number of scientists, I do not say all, must have made a mistake when they described the state of health of their best subjects and failed to recognize the signs of hysterical disease. "Those who believe in the hypnotism of healthy

¹ Myers. *On a telepathic explanation of some so called spiritualistic phenomena*. Proceed. S. P. R., II, 224.

subjects have as a criterion of hysteria the previous convulsive crisis, and permanent stigmata, amblyopia, anesthesia... are not sought after ¹.” One of the main reasons for this error (I can point it out all the better because I was deceived by it at the start of my research) is that induced sleepwalking replaces and therefore temporarily suppresses most of the hysterical symptoms. “We make seizures disappear when we replace them with sleepwalking”, the magnetizers were already saying ², “but only on this condition; as soon as one stops, the crises start again.” “Oddly enough”, say the moderns as well, “provoked sleepwalking makes natural sleepwalking disappear... and hysterical attacks ³.” My observations are very clear on this point: three sessions of sleepwalking completely stopped Lucie’s fits; Rose didn’t have a seizure when I hypnotized her and started them again when I stopped; better still, Leonie, after a great number of magnetizations, had lost all the symptoms of hysteria and retained only somnambulism. But the hysteria is still latent, easy to recognize almost always from sensory disturbances, in any case, ready to manifest itself strongly at the first opportunity, as it happened for Leonie at the time of menopause.

An opposite remark which does not seem to me to be sufficiently well known is still of great importance: when hysteria cures seriously and not only in appearance, somnambulism and suggestibility disappear. Some authors notice this fact. “The best sign of the return to perfect health”, writes Despine, “is the cessation of the ability to sleepwalking ⁴.” “I must say that as the patient returned to her health, her impressionability with the means I used diminished”, says Mr. Baréty ⁵. “As health returns, remark MM. Fontan and Ségard, the subject is less and less hypnotizable ⁶.” During my first studies on Lucie, I was absolutely ignorant of this law; I sought, in the interest of the subject and for the convenience of my experiments, to make the hysterical symptoms disappear, but I fully intended to keep the somnambulism. So I was very disappointed when it was necessary to realize that my experiments were becoming impossible, because the subject no longer had any subconscious acts and could no longer be hypnotized. You cannot say that I did not know how to put her to sleep, since, for a month, I had made almost every day possible experiences with her. On the other hand, this person, accustomed to somnambulism, put the best will to let himself be hypnotized: she consented to try all the procedures to which I had recourse and however tired herself without any result. The somnambulism which was so complete and so easy had absolutely disappeared with the last hysterical symptoms. Eighteen months later, she came to complain of some nervous disorders, migraines, nightmares, etc.: the anesthesia had returned and she was hypnotized in an instant. These troubles cured in a few days and all sleepwalking disappeared again; is this not a real case of “cross-experimentation”? Well, this curious observation, I just repeated it with Marie: this subject, as I have related, remained ill for eight months and, during that entire interval, was irregularly, but frequently, hypnotized by Dr. Povilewicz or by me; he was therefore as accustomed as possible to hypnotic maneuvers. Here she is cured, at least momentarily, by the singular procedures which have been described, well, it is impossible to put her to sleep or make the slightest hypnotic suggestion to her. However, she had never heard of Lucie’s previous story and was convinced, by everything she saw or heard, that I ordered her what I wanted. If I insist on these facts, it is because they seem to me to have

¹ Gilles de la Tourette. *Hypnotisme*, 55.

² Dupau. *Lettres magnétiques*, 1826, 178.

³ Gilles de la Tourette. *Op. cit.*, 173, 285.

⁴ Despine. *Somnambulisme*, 242.

⁵ Baréty. *Magnétisme animal*, 1887, 4.

⁶ Fontan et Ségard. *Médecine suggestive*, 37.

some importance and it is right to oppose them to the authors who would like to separate too completely hysteria and hypnotism.

Another fact which it suffices to recall, for it has been constantly pointed out in this work, is the identity between all hypnotic phenomena and all hysterical accidents. Some authors have claimed to compare the hypnotic state with normal sleep; I cannot help but find this comparison forced. Without doubt, the sleepwalking subject can take on the appearance of a person asleep naturally: Leonie, if I make her believe that she is in her bed, sleeps and snores during sleepwalking in the most natural way. But what does it matter, the subject can just as easily take the appearance of a drunken man or a man with a fever, shall we say that sleepwalking is drunkenness or a fever? If we leave aside, as is natural, the drowsiness, light sleep, etc., produced by fatigue or boredom, in which we can meet suggestibility as during waking, but which have no related to the hypnotic state, somnambulism is above all an abnormal state, during which a new form of psychological existence develops with sensations, images, memories which are specific to it, capable in certain cases of persisting in the background after awakening and to continue under the first most ordinary existence. Sleep is above all rest and a more or less complete interruption of psychological existence. During sleep and in connection with this interruption, somnambulism may develop, just as, during sleepwalking, there may be rests, interruptions, sleeps, but, despite these possible coincidences, sleepwalking is not normal sleep.

On the contrary, hysterical phenomena are much more justly comparable to those of somnambulism. All crises are identical, even in their varieties and details, to this or that form of complete somnambulism; accidents after the seizure, contractures or paralysis, are comparable to post-hypnotic suggestions; all the signs, anesthetics or various defects which persist between attacks, are of the same nature as the characteristic signs of hemi-somnambulism. Seizures are, moreover, states modifiable by moral influence, just as somnambulisms themselves and post-crisis contractures are undone, just as post-hypnotic suggestions fade away. We can, by suggestion, change the nature of a seizure as we change that of sleepwalking. I replaced convulsive fits by contractures, tremors, even by fits of sweating, general; I suppressed Lucie's seizures by telling her to fall asleep as soon as she felt the aura. Instead of rolling in convulsions, she would lie down very quietly and remain still; if anyone spoke to her she would reply in a confident tone: "Don't disturb me, Mr. Janet forbade me to move." This lasted as long as the crisis would have lasted. Much better, seizures are naturally modified by imitation like sleepwalking. Three hysterics who had, as I knew, very different crises from one another, had been gathered in the same room. I was amazed to see that they had confused their symptoms and now all three had the same seizure, with the same movements and the same delirium, the same invectives against the same individual. A little more, there was forming in this room a new type of hysteria which could have been studied later as natural.

It is quite simple that we find the memory of the crisis in certain somnambulisms, and that even the crises can be completely replaced by somnambulisms, because they are absolutely the same kind of states. Ancient magnetizers often expressed a thought that is not lacking in truth: "Individuals who have seizures are imperfect sleepwalkers." And we can consider it certain that hysteria is the most favorable state for the production of all these phenomena of automatism.

Should we stop there and argue that sleepwalking is nothing more than a manifestation of hysteria? this is an opinion that would be greatly exaggerated. First of all, hysteria is something very vague, a protean disease, as has often been said, which can be found almost everywhere, and which would hardly

provide any information on the conditions of production of somnambulism. The symptoms of hysteria do not belong to a single disease, always the same in its origin and in its evolution; they are found in other quite different diseases. In typhoid fever, in anemia, in syphilis even in the secondary period, if M. Fournier¹ is to be believed, there are contractures and anesthesia. Certain poisonings such as alcoholism, lead poisoning², poisoning by carbon disulphide, according to very recent work³, lead to symptoms which can be confused with those of hysteria. There would be quite a lot of medical work to be done, and most curious, on the hysterical symptoms in common illnesses. It is true that one encounters an easy objection: these accidents only show themselves on subjects predisposed, by heredity and by their pathological antecedents, to hysteria itself, and, ultimately, alcohol or the lead only aroused the neuropathic diathesis. Nothing is more vague than this argument; M. Pitres who accepts it when it is a question of syphilis, refutes it when it is a question of alcoholism or lead poisoning, it is a little arbitrary. It would have to be shown that, in each specific case, there was hysteria prior to the present illness, otherwise one runs the risk of seeing hysteria everywhere. This is what happens, because as the field of hysteria expands, the symptoms lose their precision. It is no longer a question of crises, it is no longer contractures, but cramps; instead of blindness, it is amblyopia, and, instead of anesthesia, simple distractions. So all women would be regularly hysterical every month, and all of us would have gone through periods of indisputable hysteria.

If we try to avoid this confusion and if we restrict the name of hysteria to a set of well-characterized symptoms, then we must admit that somnambulism, suggestion and mental disintegration exist apart from frank hysteria.. A doctor who also dealt with hypnotism pointed out to me how easily most consumptives go into sleepwalking; this is very true, although not all of them have hysterical symptoms. In typhoid fever, we obtain partial catalepsy, the movements suggested, etc., with the greatest facility, and, were it not for too natural scruples, we could very quickly hypnotize the patients entirely. Waking Suggestions, Arcanum Pills, and Magnetized Plates work wonders on chlorotic maidens. Drunkenness with alcohol, as we have shown a curious example, makes a man more suggestible and more automatic than a sleepwalker. Moreau (de Tours) studies on hashish intoxication are even more precise on this point⁴. Sleep, which in itself is not a hypnotic state, can be very conducive to the suggestion and formation of sleepwalking⁵. Menstrual periods, as I have seen in Lucie and Marie, make people who were no longer hypnotizable and suggestible again. Finally, impulses and fixed ideas are indeed forms of mental disaggregation and suggestion, and they present themselves in a crowd of individuals who are not neuropaths, in the precise sense of the word⁶. These remarks make it possible to understand how certain doctors, experimenting in hospitals where usually the sick are usually found, have obtained so many examples of somnambulism on subjects which, strictly speaking, did not deserve the name of hysterics.

Should we conclude from this that somnambulism and other phenomena are normal phenomena existing during the most complete health? In any way: we could no longer understand how patients cease to be hypnotized when they are better, how so many people resist hypnotism. How many observers have

¹ Cf. Pitres. *Des anesthésies hystériques*, 151.

² Id, *ibid.*, 149.

³ Marie. *Hystérie dans l'intoxication par le sulfure de carbone*. Semaine médicale, II nov. 1888.

⁴ Moreau (de Tours). *Haschich*, 141, 117.

⁵ Cf. Back-Tuke, 159; – Moreau (de Tours), 256, 234. – Cullère. *Les frontières de la folie*, 1888, 211.

⁶ Moreau (de Tours). *Ibid.*, 106.

noticed, as Dr Despine frankly puts it, that “the effects of sleepwalking are zero in healthy people ¹.” Let us make a very simple experiment, take about twenty people, preferably men, from thirty to forty years old, in good physical and moral health, having no heredity, nor any neuropathic antecedent, and that, without tiring procedures which begin by making them ill, an attempt is made to induce in them the characteristic somnambulism or automatic writing. If we get these phenomena on only half of these people, we will surrender very willingly and we will recognize that sleepwalking is normal. But the experiment not having been made, we still have great doubts about the result. We are prepared to believe that the phenomena of automatism and disintegration depend on a state which is sickly, but which is not uniquely hysterical. This state would, on the contrary, be much larger than hysteria, it would include hysterical symptoms among its manifestations, but it would also be revealed by fixed ideas, impulses, distraction-induced anesthetics, automatic writing, and finally sleepwalking itself. “It is not hysteria which constitutes a favorable ground for hypnotism, but it is hypnotic sensitivity which constitutes a favorable ground for hysteria and for other diseases ².”

What does this disease state consist of? It is quite difficult to determine exactly; we can only have an approximate notion of it through reasoning and observation. Our studies have resulted in reducing the various phenomena of automatism to their essential conditions: most of them depend on a state of anesthesia or distraction. This state relates to the narrowing of the field of consciousness, and this narrowing itself is due to the weakness of synthesis and the breaking up of the mental compound into various groups smaller than they normally should be. These various points are easy to verify; the state of distraction, of incoherence, of disintegration, in a word, of suggestible individuals has very often been observed. “We noticed”, said Saint-Bourdin, “speaking of a hysteric, that from time to time she would interrupt her speech and start another, without remembering what had been in question before ³.” All the phenomena of impulsive madness, says Moreau (de Tours) excellently, “derive their origin from a primordial fact that can be expressed by these words: “The vagueness, the uncertainty, the incoherence, the mobility of ideas, it is a *disintegration*, a real dissolution of the intellectual compound... the separation, the isolation of the ideas and the molecules whose union formed a harmonious and complete whole ⁴.”

But this author seems to me to express himself badly when he connects this state of disintegration itself to a state of excitement. “To explain madness, you need an *excitement*, a primitive fact, generator of all the phenomena of delirium and the molecular *disintegration* of intelligence ⁵.” It’s just a matter of words, but I believe it matters: Breaking up is not arousal, it’s depression and weakness. It is a natural illusion; hearing a madman scream and a hysterical babble, than to believe them excited. But this rapidity of their ideas comes from their inability to coordinate them, from the weakness with which they indulge in all impressions, and let express all the images that the automatic play of association brings successively into their mind. It is a weakness of psychological synthesis which allows ideas to disintegrate and cluster

¹ Despine. *Somnambulisme*, 131.

² Ochorovicz, *Suggestion mentale*, 255.

³ Saint-Bourdin. *Catalepsie*, 93.

⁴ Moreau (de Tours). *Haschich*, 36. – This author already uses in this sense the word disintegration which we have borrowed from him.

⁵ Id., *ibid.*, 96.

around several different centers. A few observations, unfortunately few in number, show us the existence of a similar weakness in automatic individuals: these people manifest their weakness in a visible manner, when it exists physically as well as morally. "Father Faria already noticed that weakness plays a role (in magnetic sleep) and that the extraction of a certain quantity of blood made epoptes (sommambulists) those who had no previous disposition to become so ¹." The first authors who described hysteria remarked that it is often produced by very copious bloodletting ², and Dr. Gibert has told me precisely of a very clear case in which profuse haemorrhages led to a convulsive hysteria which did not exist before. We can say with M. Féré "that hysterics are in a permanent state of fatigue, of psychic paralysis ³". It is then easier to understand that phthisis, typhoid fever, the secondary period of syphilis and even certain intoxications lead to anesthesia, somnambulism and automatism, not by injuring a particular nerve, but by depressing the individual, from the psychological point of view as well as from the physical point of view, and by rendering him incapable of sufficiently synthesizing his psychological phenomena.

Perhaps we would find an inverse verification of this supposition in the phenomena which bring about the cure of certain automatic states. To cure hysteria and somnambulism, it is often enough to feed the subject and put him to sleep. We know that hysterics, like anemic, do not eat and do not assimilate; as in those vicious pathological circles which are frequent, this is both the principle and the consequence of their evil. But if, by indirect processes, we manage to make them eat and sleep, we metamorphose them. Rose, anesthetic, paraplegic, having several attacks every day, was in the last degree of disintegration and moral weakening. I had noticed that prolonged hypnotic sleep had a good effect on her. "Hypnotic sleep is in itself very restorative", said Mr. Beaunis ⁴. "Magnetic drowsiness has indisputable sedative effects", wrote Mr. Despine ⁵. I then leave this subject asleep for four and a half days with the order to move only to eat and to eat a lot. The first day, she still had seizures, in spite of the somnambulism, but without waking up; the second, she was very calm, the third, she recovered the movement of the legs and part of the sensitivity. When I woke her up, she seemed almost cured: unfortunately this added strength only lasted a few days, and the subject fell ill again, but less strongly. From these arguments and observations, we can therefore conclude that there is a particular moral weakness consisting in the inability of the weak subject to unite, to condense his psychological phenomena, to *assimilate them*, and, to even a weakness of assimilation of the same kind has received the name of physiological misery, we propose to call this moral evil psychological misery.

This state of psychological misery can exist in two forms. Sometimes it is constant and lasting at least for a certain period of life: the moral strength of the individual is not in proportion to his age, to the number of sensations he experiences and the number of images that his memory contains, it is a child's spirit in a woman's body. But the child's little thought was enough to coordinate his small number of sensations and memories; he was small, but not incoherent. The idiot also retained the psychic strength of a child, but he also retained a small number of sensations and images; it is weak, but it is quite orderly and regular. He is a very mediocre administrator, but to whom he has not been entrusted with much

¹ Gilles de la Tourette. *Op. cit.*, 20.

² Cullerre. *Nervosisme et névrose*, 1887, 61.

³ Féré. *Sensation et mouvement*, 21.

⁴ Beaunis. *Somnambulisme*, 211.

⁵ Despine. *Somnambulisme*, 251.

capital, and who can hardly do any great silliness. The hysteric has subtle senses which are constantly exercised and a rich memory, in which all the images of the past and all the psychological systems, formerly organized, live indefinitely, but she has only a current ordering power analogous to that of the child and the idiot: so she doesn't know what to do with her fortune. She forgets, she throws sensations and memories at random and lets them act as they please; it is the same very mediocre administrator, at the head of a large factory, who forgets his functions and who leaves the employees and the machines to have fun and panic unattended. In such a psychological state, all the accidents which we have described, and which are the consequence of the automatism of psychological elements, become possible and frequent. But they have a special character; they are extremely changeable. The same state of psychological misery, lasting unceasingly, allows the automatic play of the elements to take all forms. Another characteristic fact is that it is very easy to artificially modify the nature of the accidents or the form that the automatism takes at such and such a moment, because, owing to its weakness, the subject's mind is weak *extraordinary plasticity*.

To suppress the personal existence that the subject has at the moment and replace it with another is not a very difficult thing, since this form of existence is only a very unstable centralization of a small number of people. 'elements taken almost at random from among a large number of others just waiting to act and manifest. One can produce this second existence or somnambulism in two ways: 1st by suppressing by any fatigue the first current psychic combination; sleep, the chloroform state, the fatigue caused by prolonged fixation will be good opportunities for the other elements, which until now have been inconsistent, to centralize themselves a little in their turn and to gain the advantage; 2nd one can also, much more simply, in subjects who have already had a second existence in any form, dream, crisis or somnambulism, one of the elements of this new state which exists below the current consciousness can be excited. It was enough to speak of a viper to Louis V., or of frogs to a patient of Dr. Pitres, to bring about the crisis of hysteria; it suffices to put Lucie's arms in the posture of terror to provoke the great crisis of hystero-epilepsy. This last example is all the more curious since Lucie, who is anesthetic, does not consciously feel this position of her arms, and it is indeed the unconscious alone which is awakened and excited. It suffices to squeeze the hysterogenic points, that is to say to provoke a determined sensation belonging to the psychological phenomena of the crisis, to bring about the access of convulsions. Likewise, it is enough to call some of the subjects, which have been described, by the name I gave them during sleepwalking, to bring about first a state of hemi-somnambulism, then complete sleepwalking. Finally, when we want, we will in turn awaken the elements that formed the normal vigil, and the individual will thus pass from one existence to another.

Thanks to this easy access into the subconscious parts of the mind, one can modify at pleasure all the accidents of these automatic individuals. Is this a way to heal them? Yes, in a way; for suppressing a contracture, destroying a paralysis are, in some cases, relatively easy things. But has this eliminated the state of psychological misery which was the starting point of accidents and which, in a few months, in a few days perhaps, will lead to others? I do not believe that. The best proof that this state still exists is sleepwalking itself and suggestibility. As long as you can cure the subject by suggestion, he is still sick. What is the reason for this constant psychological misery that should be achieved? Very often at heredity; it is not only in psychology that wealth and poverty are inherited. Perhaps to a condition of accidental physical weakness, as in the convalescence of certain illnesses. Maybe to other moral causes that we don't know about. Except in very rare cases, it does not seem to me that we can succeed in curing by suggestion the very state of psychological misery which is an essential condition for the execution of suggestions.

But the progress of medicine and psychology united henceforth will perhaps make it possible to better understand and better treat this disease state.

This state of psychological misery, the starting point for disintegration and fixed ideas, can appear in another way and bring about slightly different results. This state, instead of being constitutional and permanent, can be accidental and transient. A woman can be normally strong and sane, and at times fall into a state of irritable weakness with characteristic distraction, systemized anesthetics, and suggestibility. A man, who ordinarily would resist any misconception, may take on a narrow and suggestible mind, in a state of fatigue, sleep or intoxication. The exhaustion resulting from great efforts of attention, from prolonged intellectual labors, often has this result. One of the most curious and most frequent causes of momentary psychological misery is also emotion, the nature of which is still so poorly understood. Emotion, as we know, makes people distracted; moreover, it sometimes renders them anesthetic either temporarily or permanently. Hack Tuke repeatedly quotes individuals who have become blind or deaf as a result of strong emotion ¹. I myself have observed that, in hysterics on the road to recovery, any sudden emotion brings back anesthesia. In short, emotion has a dissolving action on the mind, diminishes its synthesis and makes it miserable for a moment.

What will be the results of this accidental misery? They are very different according to the circumstances: if, during this unhappy period, the patient was not impressed by any abnormal sensation, if he was not struck by any precise and dangerous idea, he will recover without any difficulty, will retain little or no recollection of this accidental state and will remain, for the rest of his life, perfectly free and reasonable. How many people have had such opportunities to go mad that they have not taken advantage of. But if, unfortunately, a new, characteristic and dangerous impulse is made on the mind at this moment when it is unable to resist, it takes root in a group of abnormal phenomena, it develops there and no longer fades away.. It is in vain that the unfortunate circumstances disappear and the mind tries to regain its accustomed power, the fixed idea, like an unhealthy virus, has been sown in him and is developing in a place of his person that he does not know, can no longer reach, it acts subconsciously, disturbs the conscious mind, and causes all the accidents of hysteria or madness. A seventeen-year-old girl was brought to the hospital who began to have terror attacks because she was followed at night in the streets by a stranger at the time of her times; it was at the same time that Marie made the stupidities which left such a strong mark on her life; there are countless examples of this kind. Here are some more rare ones: “A forty-year-old clergyman, tells Erasmus Darwin, one day found himself in company and he drank wine... Being completely drunk, he swallowed the seal of a letter. One of the guests said to him jokingly: “You will have the guts sealed”; from this moment he became melancholy and, after two days, he refused to take any solid or liquid food. He replied that nothing could pass and he died as a result of this misconception ².” Likewise, the impulse to cut his throat with a razor, which he had never thought of before, came to the young man of whom I have spoken, when, in a fit of disintegration and moral weakness, he had the misfortune of touch a razor. This is why the fixed ideas of these unfortunate people are linked to their profession, to the books they have the opportunity to read, to the words they hear in their moments of weakness. “It is the news that decides the forms of madness, because it is the current

¹ Hack-Tuke. *Le corps et l'esprit*, 109.

² Erasme Darwin. *Zoonomie*, IV, 77.

circumstances that provoke them, but these ideas neither create madness nor a predisposition to madness, they do not explain this nervous state, this physical and moral hyperesthesia that heredity has deposited in the depths of their being and which ends sooner or later by taking away both reason and conscience ¹.” No one in fact expressed better than Moreau (de Tours) the need for this primordial state of momentary psychic weakness to explain the invasion of madness. “The fixed idea, he repeats over and over again in every way, does not arise without reason, it is the result of a deep, radical modification of the whole intelligence. It is an enormous mistake of psychology to confuse it with error... The madman is not mistaken, he acts in an intellectual sphere different from ours that one cannot correct more than *the day before cannot correct dreams... Fixed ideas are the detached parts of a dream state that continues in the waking... It is a partial dream... 2*” “*The fixed idea is the result of this intellectual decomposition, a result which persists, even though in many respects this decomposition has ceased and intelligence has in a way been recomposed, it is the main idea of a dream that survives and engendered the dream 3*.” It is impossible to express better what seems to us to be the truth, and we only wish, by our studies on mental disintegration and on the persistence of ideas in the subconscious state, to have helped to clarify and strengthen the theories of the great psychologist alienist.

Another characteristic of these fixed ideas, the result of a non-permanent but temporary disintegration, is that they are much more difficult to reach and to modify. You do whatever you want with the consciousness of a hysteric, because she is *currently* in the state of psychological misery which makes her manageable. You do not modify an insane person in the same way, because you usually only study him in the period when his delirium is organized and when the intelligence has returned to a state of stable equilibrium that cannot be disturbed. We would have to find out whether we could not bring the individual back to the psychological state in which the delirium took its origin. Thus, I would have tried to intoxicate the patient of Erasmus Darwin a second time, in order to find out whether one could not, in a new intoxication, have more power over the fixed idea. We could also sometimes expect periodic states which would bring back the initial conditions of delirium. But we understand that, in any case, we find ourselves in the presence of all other difficulties. I still believe, however, that pathological psychology, which has taken its first steps in recent years, reserves unexpected help for the relief of the insane.

We wondered, after all our studies on automatism, if these phenomena were absolutely created by the disease. We can answer now that they do not belong to any particular disease and in some way specific, that they are quite simply the result of a kind of weakness which we have called *psychological misery*. Let these individuals manifest their disease in a thousand different ways; whether they make the tables speak and evoke the soul of Gutenberg, whether they open a hospital for sick dogs, or give lectures against vivisection, whether they contract: their limbs or contort them anyway in a sort of muscle delirium; all this does not change their illness and does not create new psychological phenomena. It is always because of the same weakness, the same fatigue, that they abandon themselves without resistance and allow this or that group of sensations and images to develop indefinitely.

¹ Moreau (de Tours). *Psychologie morbide*, 126.

² Moreau (de Tours). *Haschich*, 123.

³ Moreau (de Tours). *Haschich*, 98.

II. Lower forms of normal activity

If the phenomena of automatism are solely due to weakness, they must exist in normal man as in the patient: but, instead of being alone as in the latter, they are in the former masked and surpassed by other more complex phenomena. The rich already have the bread and water of the poor, but they have something else besides, the healthy man has the automatism of the sick, although he has in addition to other superior faculties. Let us quickly seek in normal life facts analogous to those which we have studied and which seem to be subject to the same laws.

Although the field of consciousness is usually quite wide and allows us to unite in a single personal perception a fairly large number of conscious phenomena, there are nevertheless times when it is restricted to the point of putting us in a state analogous to that of the suggestible and hallucinable individual. As the mind goes through a period of natural and inevitable shrinkage, as it disappears into complete sleep, or when it reforms itself after sleep. It is the moment of *dreams*: each image which is born in isolation in consciousness becomes somewhat precise, not yet enough to manifest itself by a very complete movement in a man who is not accustomed to moving his limbs by images of this kind, but enough to appear outward and objective like hallucinations. No more than the suggestible somnambulist, the dreamer is not surprised, does not doubt what he is thinking; he undergoes without resistance the automatism of the elements to which his mind is reduced. A slight noise, a glow, a fold in the sheet, a state of the body provoke the suggestion; the arrangement of the organs in such or such a manner suitable for expressing an emotion or a passion, gives the dream its general direction, and everything takes place as in a regular automatism. We also have, even during normal wakefulness, psychological phenomena which escape us entirely. One could count, among these acts which take place outside personal perception, the physiological functions of which no one disputes the intelligence, although it is not well understood to which being we must attribute this intelligence of the organs. Perhaps there is, as Liébault said, “an unconscious remembrance for each vital function, the heart has learned to beat and the lungs to breathe ¹”. “Perhaps there are in us a great number of spinal or ganglionic souls susceptible of habits and education which direct each physiological function ².” “There may be in the marrow of man’s backbone real beings of greater spiritual value than the soul of the frog ³.” But, although these assumptions appear probable to us, they go far enough beyond the scope of the observations which we have made, that we avoid discussing them in a work of experimental psychology. We will content ourselves with pointing out the more well-known facts which the personal conscience abandons to their automatic development; these are the phenomena of *distraction, those of instinct, habit and passion*.

We say that a man is distracted when he does not see or hear something that he should see or hear, and then when he unknowingly performs things that he would not have consented to do, he had known them completely.

¹ Liébault. *Du sommeil*, 137.

² Dr Philips. *Cours de braidisme*, 104.

³ Lotze. *Psychologie physiologique*, 144. – Cf. Lewes, Maine de Biran, *Œuvres inédites*, II, 13. – Hartmann. *Inconscient*, I, 75. – Colsenet. *Inconscient*, 141, etc.

A preoccupied man will chase a fly from his forehead without feeling it, answer questions he has not heard, or, like Biren, Duke of Courland, who used to put pieces of parchment to his mouth, destroy an important commercial treaty without seeing it ¹. Who has not heard of the exploits of these characters who, when they talk at the table, pour water endlessly until the guests are flooded or continue to put sugar in their cup until it is full? anecdotes like this are endless.

These are the two characteristics, systematic anesthesia and the subconscious act, which we have pointed out in patients. Only the distraction can arise in the healthy man for different reasons: sometimes it is due, as in the patient, to a narrowing of the field of consciousness due to fatigue or to half-sleep: “A day of misery and hardship. ‘extreme despondency,’ writes Maine de Biran in this curious journal in which he studies experimental psychology on himself, ‘I dined with the Chancellor, I found myself in a state of confusion, embarrassment, and *momentary deafness*... I am *like a sleepwalker* in the midst of this cheerful and light world, dissatisfied with others because I am dissatisfied with myself ².” But the same distraction could be due to an excessive concentration of thought, on the other hand, to a great power of attention which *without narrowing the thought really* shifts the field of consciousness. “I am almost always”, writes the same author again, “as M. Deleuze says when speaking of somnambulism, in relation to myself and I see too much inside to see well outside ³.” But in either case a certain number of psychological phenomena are left to themselves and develop according to the laws of their own automatism.

As soon as the phenomena are thus isolated, either by extreme attention or by distraction, they bring about reverie, sometimes even hallucination. We hear chanted words in the sound of the bells, we see the characters we are thinking of, or we make sudden gestures and speak out loud. All these psychic reflexes have been studied elsewhere when they were isolated and magnified; it suffices to recall that they also play a considerable role in the attitude and physiognomy of the most normal man. It is with activities of this kind that we must link the instinctive acts which are quite rare in man, while they play an important role in animals. It is impossible to suppress consciousness in instinct and make it a pure mechanism, but neither can it be made an intelligent and voluntary act. It’s good, as Mr. Lemoine said ⁴, something intermediate between the movement of raw matter and that of the human will. Instinct is entirely similar to acts obtained by suggestion and, just as these were only the manifestation of a phenomenon of perception, we can say that instinct is the activity directed by distinct perceptions, conscious in animals and even forming the whole of their mind, almost always subconscious in humans whose mind is filled with higher phenomena ⁵.

Automatic activity has been concentrated in man in the phenomena of *habit or memory*. We do not seek, as we have already pointed out, if our memories always subsist in us in a conscious way, which is not implausible, but what exceeds our experiences ⁶. Let us only recognize that our habits and our

¹ Garnier. *Facultés de l’âme*, I, 325.

² Maine de Biran. *Journal intime*, 242.

³ Maine de Biran. *Journal intime*, 145. – Cf. Ribot. *Psychologie de l’attention*, 115.

⁴ Lemoine. *Habitude et instinct*, 137, 150.

⁵ Cf. Espinas. *L’évolution mentale chez les animaux*, Revue philosophique, 1888, I, 20.

⁶ Cf. Colsenet. *Inconscient*, 229.

memories lead to acts, links of ideas that we see more than we actually produce, which are often outside our consciousness and always outside our will. Conscious phenomena are not suppressed, for we can regain consciousness of things that we keep in memory, or that we do out of habit, but it is neglected, as if these sufficiently exercised phenomena could be left to themselves without inconvenience.. “Habit seems to dull the organ, Jouffroy said very well, or it sharpens it; the point is, it neither sharpens nor blunts it. The organ remains the same, the same sensations are reproduced there, but when these sensations are interesting for the soul, it applies itself to it and accustoms itself to disentangling them; when they are not, she gets used to neglecting them and does not disentangle them ¹.” These ideas entrusted to memory and habit are sometimes sharper than those of consciousness itself, and in order to find the spelling of a word that we do not know, we let our pen write automatically, much like the medium questions his sound mind. This forgetting of the phenomena delivered to automatic memory allows us to consciously think of something else while they are happening on their own with perfect regularity. “I remember”, writes Erasme Darwin, “having seen this young and pretty actress who rehearsed her singing part, accompanying herself on the fortepiano under the eyes of her master, with great taste and delicacy; I saw in his face an emotion of which I could not define the cause; at the end, she burst into tears; I saw then that, during all the time she had spent singing, she had contemplated her canary which she loved very much, which seemed to be in pain and which, at that moment, fell dead in her cage ².” So many simultaneous intelligent actions; I do not count, as the author does, the beating of the heart and the movements of the breathing which continued during this time, but this person was singing, accompanying himself on the piano; played probably different notes with both hands and yet employed all his conscious intelligence in following the phases of his canary’s agony; the mediums, nor the somnambulists, showed us nothing more complicated. This facility which habit gives us to accomplish intelligent acts without personal perception enables us to make further progress and to use our intelligence for higher works: this psychological automatism is the condition of our progress.

The study of habit leads so naturally to the notion of automatic and subconscious acts, that many authors can only describe it by using the hypothesis of two simultaneous personalities. The description given by Condillac is especially interesting for us. “So”, he said, “there are in a way two selves in every man: the usual self and the reflective self; it is the first who touches, who sees, it is he who directs all the animal faculties, his object is to guide the body, to protect it from any accident, to constantly watch over its conservation. The second, leaving him all these details, goes to other objects. He takes care of the care of adding to our happiness, his successes multiplying his desires... This one is held in action by the objects whose impressions reproduce in the soul the ideas, the needs, the desires, which determine in the body of the corresponding movements necessary for the preservation of the animal. He is excited by all things which, by giving us curiosity, lead us to increase our needs. But, although they each tend towards a particular goal, they often act together. When a surveyor, for example, is busy solving a problem, objects still continue to act on his senses. The ego usually obeys their impressions: it is he who crosses Paris, who avoids embarrassment, while the ego of reflection is entirely concerned with the solution that it seeks... needs that are absolutely necessary for the conservation of the animal... The measure of reflection that we have beyond our habits is what constitutes our reason ³.” This description undoubtedly has here only the truth of a metaphor, for the conscious phenomena which develop automatically in habit are not in normal

¹ Jouffroy. *Mélanges philosophiques*, 229.

² Erasme Darwin. *Zoonomie*, I, 332.

³ Condillac. *Traité des animaux*. Œuvres complètes, 1798, III, 553.

man grouped and synthesized so as to form a second self, as in hemi-somnambulism; but our previous discussions, which it is impossible to resume here, teach us that, despite this exaggeration, there is, in this description, more truth than in the most banal opinion which makes automatic and habitual phenomena simple physiological movements.

The most curious manifestation of psychological automatism in normal man is the passion that resembles much more than is generally imagined, on suggestion and on impulse and which, for a while, belittles our pride by putting us at the level of fools. Passion properly so called, that which draws a man in spite of himself, quite resembles madness, as much in its origin as in its development and in its mechanism. Everyone knows that passion does not depend on the will and does not start when we want; to take an example, it is not enough to want it to fall in love. On the contrary, the voluntary effort that one would try to make, the reflection and the analysis to which one would indulge, far from bringing about love itself irresistible and blind, would infallibly keep us away and only give birth to completely opposite feelings. Likewise, it is in vain that one would arouse oneself to ambition or to jealousy; no matter how useful or necessary these passions are, they cannot be felt. Another characteristic that seems to me less known and less analyzed by psychologists is that passion can only begin in us at certain times, when we are in a particular situation. It is commonly said that love is a passion to which man is always exposed and which can surprise him at any time in his life, from fifteen years to seventy-five. This does not seem correct to me and the man is not all his life, at all times, susceptible to falling in love. When a man is in good physical and moral health, that he has easy and complete possession of all his ideas, he can expose himself to circumstances most capable of arousing a passion in him, but he does not. will not experience. Desires will be reasoned and voluntary, dragging man only as far as he wants to go and disappearing as soon as he wants to be rid of it. On the contrary, whether a man is mentally ill, whether as a result of physical fatigue or excessive intellectual work, or else after violent tremors and prolonged griefs, he is exhausted, sad, distracted, timid, unable to unite his ideas, depressed in a nutshell, and he will fall in love or take the germ of some passion at the first and most futile occasion. The novelists, when they are psychologists, have understood this well: it is not in a moment of gaiety, boldness and moral health that love begins, it is in an instant of sadness, languor and weakness. The smallest thing then suffices; the sight of any face, a gesture, a word which would have left us completely indifferent the previous moment, strikes us and becomes the starting point of a long love illness. Much better, an object, which had made no impression on us, at a time when our healthier mind was not inoculable, left an insignificant memory which reappears in a moment of morbid receptivity. This is enough, the germ is now sown in favorable soil, it will develop and grow.

First, as in any virulent disease, there is an incubation period; the new idea passes over and over again in the vague reveries of the weakened consciousness, then seems, for a few days, to disappear and allow the mind to recover from its temporary disturbance. But it has done underground work, it has become powerful enough to shake the body and cause movements that do not originate in personal consciousness. What is the surprise of a witty man when he finds himself pitifully under the windows of his beauty where his wandering steps have transported him without his suspecting it, when in the middle of his work he hears her mouth whisper always a name always the same! Let us add that every idea brings about expressive modifications throughout the body which are not always appreciable for strangers, but which the tactile and muscular senses transmit to consciousness; what then must be the nervousness of a mind,

which feels at every moment its rebellious organism beginning acts which have not been commanded to it! Such is real passion, not idealized by fanciful descriptions, but reduced to its essential psychological characteristics.

We find in fact these same characteristics in all kinds of passion; to have more freedom in the description, let's take a very particular and well-known passion, that of fear. Are you in good health, intelligent and cheerful, you are not afraid and the things that one tells, the dangers which surround us are appreciated by you with calm and coolness, you defend yourself, you take precautions: this is reasoning and not fear. But you're weakened, sad and sick, and lo and behold you feel your legs starting to leak, your heart pounding, your face freezing, you find yourself, like the famous Toppfer coward, staring under your bed or to close the lock for the twentieth time; it is then that you feel the agonies of fear and an invincible dread. If we can talk about another much more minimal passion, passion tobacco in a smoker, we find in an article Delboeuf a confession that the whole value of a psychological paper: "The pot tobacco is at some distance from me in its usual place, I can feel it attracting me. Suddenly, I get up and unconsciously walk towards him. I realize my weakness, I sit down and resume my reading. My hand automatically plunges into my pocket and pulls out the cigarette book. Irritated with me, I violently put the notebook in its place ¹, etc." No more than suggestion, fixed idea or impulsive madness, passion is not an error; for an error exists entirely in the personal mind and can be combated and destroyed by it, while passion has its origin outside the personal mind and cannot be suppressed by reasoning. It may be in vain to demonstrate to us in an irrefutable way that this love is absurd, that this fear is ridiculous, we will be convinced of it, but we will always be in love and afraid. Passion is sometimes cured by its satisfaction, when the fixed idea has definitively brought about the act to which it corresponds, and disappears by exhaustion; it can also be cured by a new shock which further upsets the layers of consciousness and allows us to regain possession of emancipated ideas.

Is not this rapid description of passion the exact reproduction of what we have observed so many times in the madman or in the hysteric who has received a suggestion? In them, too, a momentary state of weakness of consciousness made it possible to sow a foreign idea which is not integrated into their judgments and their will; this idea develops without them, in spite of themselves, and makes them perform acts which they sometimes ignore, which they accept in other circumstances and continue, which they can perhaps resist more or less, but which are always theirs foreigners. We really don't need to take hashish as Moreau (de Tours) did to know for ourselves what madness is: who can boast of never having been mad?

This subconscious action of certain ideas during passion is so true and so easy to notice that it has given rise to a number of moral expressions known in all times: the struggle of "the two men" who share our hearts has been described in all religions and in all philosophies. But a charming author, in the moments of rest that his great "Voyage around his room" leaves him, has drawn such a perfect description of the "system of the soul and the beast" that I cannot resist the pleasure of it call back. "I have noticed", he said, "by various observations, that man is made up of a soul and a beast. – These two beings are absolutely distinct, but so nested one in the other, or one on the other, that the soul must have a certain superiority over the beast to be in a state of make the distinction... One day last summer, I was on my way

¹ Delbœuf. *Le sentiment de l'effort*. Revue philosophique, 1882, II, 516.

to court. I had painted all morning, and my soul, enjoying meditating on the painting, left it to the beast to transport me to the king's palace. That painting is a sublime art, thought my soul, happy he whom the spectacle of nature has touched... While my soul was making these reflections, *the other* was going its train, and God knows where it was going! – Instead of going to court, as she had been ordered to do, she drifted so far to the left that when my soul caught up with her, she was at Madame de Hautcastel's door, half a mile away, mile from the royal palace. I leave the reader to think what would have happened if she had entered the house of such a beautiful lady by herself... I usually give my animal the care of preparing my lunch; she is the one who toasts my bread and slices it. She makes the coffee wonderfully and even takes it very often without my soul getting involved, unless this one has fun watching her work... I had laid my tongs on the embers to grill my bread; and, some time later, while my soul was traveling, there was a flaming stump rolling over the hearth. – My poor beast put his hand to the tweezers and I burned my fingers.” It would be necessary to quote again the whole episode of the portrait of Madame de Hautcastel: “There, my hand mechanically took hold of Madame de Hautcastel's portrait and *the other* was amused by removing the dust that covered it. This occupation gave her a quiet pleasure, and this pleasure was felt in my soul, although it was lost in the vast openings of the sky ... The whole figure seemed to be reborn and to emerge from nothing. My soul rushed from the sky like a falling star – it found the other in a lovely ecstasy and managed to increase it by sharing it ...” And elsewhere still: “Mr. Joanetti (his servant) is a perfect honest man. He is accustomed to the frequent journeys of my soul, and never laughs at the other's inconsistencies; he even directs it sometimes when it is alone: so that one could say then that it is led by two souls. When she's getting dressed, for example, he warns me with a sign that she's about to put on her stockings inside out, or her coat before her jacket. My soul has often amused itself to see poor Joanetti running after the madwoman under the cradles of the citadel, to warn her that she had forgotten her hat, another time her handkerchief or her sword.” What better summary could I have made of the automatism of our thoughts in distraction, habit or passion? To describe these phenomena further would be to renew studies already carried out, so close are they to the facts studied during illnesses and somnambulism.

III. Judgment and will

What separates the normal man from these weak-minded individuals is that he has another activity added to this automatic activity that he has in common with them. Automatism forms all life of suggestible persons in a state of psychological misery, it only exists with us in certain inferior acts, habitual or passionate; it is now completed and surpassed by the will. We do not have to study in itself the higher or voluntary activity, we only have to show its existence and show how it differs from previous activities.

It is very difficult, I do not even say to explain the nature of the will, but even to recognize and describe a voluntary act, because psychologists are far from agreeing on the signs which characterize it. A first very simple definition is frequently repeated. “The difference between voluntary movement and involuntary movement of the leg, Spencer said, is that, while involuntary movement occurs without any prior awareness of the movement to be made, voluntary movement occurs only afterwards it has been

represented in consciousness...¹” “The subjective characteristic that we have of voluntary movement”, writes Wundt, “is that it is preceded, in our consciousness, by some sensation which seems to us to be the internal cause of the movement².” It is in the same sense that many physiologists, like Bastian, say that a voluntary act is simply preceded by the idea or the representation of the kind of movement to be performed. If we accept this definition, all the possible movements executed by a living being will be voluntary movements: as all our studies have shown, there is no action even in somnambulists, even in cataleptics, which does not exist, either preceded or better accompanied by the representation of the act to be performed, because it is precisely this representation which brings about the action and the movements.

Will we say, like M. Romanes in his work on the intelligence of animals, or like M. Delboeuf³, that there is, between the idea and the act that follows it, a greater time interval when it is a voluntary act than when it is an automatic act, and will we make the will consist solely in hesitation? It suffices to notice then that certain frankly automatic acts, like those which one suggested to the somnambulists, can be carried out very slowly, because of the resistances which they meet. The hesitation arises simply from the struggle of several ideas which oppose each other before the strongest has triumphed, and this struggle can exist in mechanical actions as in others.

Most psychologists then made use of the well-known theory of the feeling of effort: there is, they say, in us a particular feeling, that of the effort which exists in voluntary action and which does not exist in any other. “If it was a foreign cause”, said Rey Régis already in the eighteenth century, “which gave movement to my arm ... I would not feel more *influence or effort* from my soul than if someone, with my consent amused himself by stirring it. Now, I am appealing to experience, if someone moves my arm or if I move it myself, don’t I feel something quite different, especially if I hold a heavy body in my hand⁴?” We know that Maine de Biran and, later, a very large number of philosophers founded a whole philosophy on this particular sensation of effort. I do not believe, for my part, that there is still reason to discuss this theory, after the studies of Mr. William James (The feeling of effort), which did not seem to me to have been refuted. The particular feeling that Rey Régis talks about is a set of muscular sensations that exist in all movements, whether voluntary or not, but which are very particular when we ourselves carry the weight of our arm and especially when we load it with an object.

But, they say, this effort is necessary before the act. “No matter how sincerely I want my arm to move, no matter how much I repeat my volition, however sincere and strong it is, my arm will remain inaction until I apply it myself the driving force by a particular effort⁵.” This amounts to saying: each individual sets his arm in motion by particular images, muscular in one, visual in the other; if he succeeds, in a manner which moreover always remains rather vague, in representing the movement of his limbs with other images, there will be no real movement at least in the limb he is thinking of. A hysteric, who can only move her legs by the image of the kinesthetic sense, is paralyzed when she loses these images; if

¹ Spencer. *Psychologie*, 1, 539.

² Wundt. *Psychologie physiologique*, I, 23.

³ *Revue philosophique*, 1881, II, 516.

⁴ D’après Paul Janet. *Revue philosophique*, 1882, II, 370.

⁵ Rey Régis. *Revue philosophique*, 1882, II, 372.

she represents this movement in visual images, she will have movements of the eyelids, eyes, chest or arms, etc., but not of the leg. In a word, let the idea of a movement be represented in a precise way and by the appropriate images, and this movement will be performed in the same way, whether it is a voluntary act or an automatic act.

Since the voluntary act cannot be inserted between the idea and the movement, which are always indissolubly united, it is in the idea itself, in the intellectual phenomenon proper that it must be sought. “What makes it possible to establish, between the forms of will, graspable differences, is the undisputed fact of their correspondence with the forms of representation; these are much more distinct than those, or rather they are the only ones distinct: it is they which give their color to centrifugal acts which are themselves indeterminate ¹.” Automatic acts have presented us with two degrees of perfection corresponding to two degrees in intellectual phenomena, either they were the expression of simple sensations or isolated images, or they correspond to perceptions already more complex and more variables. In order for there to be acts elevated above these latter automatic acts, there must be, in the intelligence, phenomena of knowledge superior to perceptions themselves.

We are disposed to believe, for our part, that *judgments or ideas of relations* are, in the intelligence, phenomena different from sensations, images and perceptions, which are only groups of images associated with one another. The idea of resemblance, for example, is not a sensation, nor an image, for it is neither red, nor blue, nor warm, nor sound; nor is it a group of images, for an addition of this kind would form a new image and the resemblance cannot in any way be represented. This idea arises in relation to terms presented by the senses or represented successively by association and memory, but it does not seem to be of the same nature. The likeness I think of when I see Peter and Paul is not the same as either Peter or Paul; truth, beauty, morality are, in my mind, something different from the objects themselves about which I have these conceptions: aesthetic judgment is not the same as a mosaic of pleasant sensations juxtaposed. We call these new phenomena reflections, as Maine de Biran ² does, or apperceptions, as Wundt calls them after Leibniz, or simply judgments, it does not matter, as long as they are not confused with quite different psychological phenomena. Undoubtedly, I do not pretend to treat here incidentally the theory of judgment which forms, in my opinion, the capital point of contemporary psychology, the one which most separates psychologists today. I am only repeating the conclusions brilliantly supported by several authors and in particular by M. Rabier. But I only notice that if we erase this distinction between judgment and image, we thereby eliminate any possible separation between voluntary acts and automatic acts, for voluntary acts are precisely those which are determined by judgments and report ideas.

We perform daily acts absolutely identical to those which we made our somnambulists perform by suggestion, and yet we say that our acts are voluntary and theirs automatic: it is that there was in our mind something more than in theirs at the time of the performance of the act. Like them, we have, in our thoughts, the representative image of the act to be performed, but they perform it only because they have the image in mind, and we perform it because we *judge* in addition. whether it is *useful or necessary*. The subject automatically copies the movement of my arm and I voluntarily copy a drawing: it is because the

¹ Espinas. *L'évolution mentale chez les animaux*, Revue philosophique, 1888, 1, 20.

² Maine de Biran. *Ceuvres inédites*, II, 225.

subject does the act only because he thinks of the image of this act and without judging that he is doing an act similar to mine; I copy while thinking of the *resemblance* and because of it. “Instead of acting similarly in similar cases”, said M. Fouillée, “by pure automatism without any awareness of similitude like the beast, he will act similarly in similar cases with awareness of similitude, that is, say with a sense of resemblance strong enough to be reflected on and seen ¹.” The subject utters such words simply because they cross his mind without thinking of anything else; we speak like this because we believe it to be true. In short, without worrying about the nature of judgments or how they determine action, we are only saying that there is voluntary activity only when they occur.

How does judgment determine activity? Is it in the same way as images and perceptions, necessarily translating to the outside by a particular movement? It hardly seems intelligible. The idea of resemblance, beauty, or truth is not linked in reality with any determined movement. Indeed, it should not be said too easily, like some authors, that the idea of a relation is linked with the movements of articulation of a certain word. If this were so, an idea of relation could never provoke other acts than words, and we know that it can determine any act. Besides, the words are determined by the visual or auditory images of the word “resemblance” and not by the idea of relation that it expresses. It seems to me more correct to say that the ideas of relation are not motive in themselves, but that they stop and unite in the mind, in a word, that they synthesize in a new way a certain number of things. ‘real images which themselves have the driving power. The voluntary effort would consist precisely in this systematization, around the same relationship, of images and memories which will then be expressed automatically. The weakness of synthesis which we had recognized in patients does not even completely allow them the elementary syntheses which form personal perceptions, and all the more so, does it not allow them these higher syntheses which are necessary for voluntary activity. The authors who have made such a complete study of the mechanism by which attention is developed and preserved have perhaps not insisted sufficiently on this role of judgment in attention: for it is its intervention which, to our opinion, characterizes true voluntary attention. In short, it does not seem to us that it is necessary to establish any great differences between voluntary activity and voluntary belief. On both sides, intelligent judgment serves to keep in the mind, because it strongly unites them, different images which will then be expressed in one case by deeds, in the other by simple words.

Whatever the case may be with this mechanism of voluntary activity determined by judgment, it has particular characteristics. It first presents a unity and a much greater harmony than the automatic activity: the latter, in fact, coming from a rather weak synthesis which brings together only a small number of images, does not last long in the same sense, it manifests a perception, then another which has no relation to the first, it seems as a whole very incoordinated and variable. Has anyone ever given a somnambulist a suggestion, the execution of which continued continuously for fifteen days? On the contrary, it is nothing more common than a voluntary resolution, that of making a book or carrying out a business that will last for years. Moreover, one of the main judgments is that of unity that we apply, rightly or wrongly, to our own psychological phenomena. We notice our unity and we increase it, because we have noticed it. While automatic activity leads man through several different psychological existences, voluntary activity tends

¹ Fouillée. *Sensation et pensée*, Revue des Deux-Mondes, 15 juillet 1887, 409.

to make unity reign in our mind and tends to make real the ideal of the philosophers, the one and the same soul.

As long as the action is determined only by images, it is necessarily individual and self-interested, because a perception, an image is always a determined, individual phenomenon which has no existence or value outside of himself. The one who gives in “to the vertigo of representation ¹” has an action of the same narrow and personal nature, like the very sensation which gives it birth. But the ideas of relations are of a different nature: they alone are susceptible of generality, for they can remain the same and nevertheless apply to numerous and different terms. The activity determined by such ideas widens: although composed of elements which, in themselves, are particular phenomena, it has in the form, in the common direction imposed on all these movements, a meaning and a general scope. Just as each syllable uttered by an orator is a particular phenomenon, but its sentence is a universal conception, so the action which brings about a scientific discovery, which realizes a work of art, participates in something in the universal.. An automatic act has no value outside of itself, a voluntary act can become beautiful, true and moral, and “in its highest degree, as one of our great philosophers says, be confused with the will of ‘universal and with morality ².’”

Finally, the automatic act is rigorously determined, because it is the brutal expression, without any modification, of the phenomena which currently exist in the mind of the subject. Whether it depends on a single isolated image or whether it is the result of a large number of phenomena, of a whole psychological situation, it has a different degree of complexity, but it is just as determined and can be just as easily calculated. But when it is the consequence of a judgment and of a general idea, it acquires a real independence. Without doubt, it is always the translation of the judgment itself, for a movement is never independent of the idea, since they are two identical things, or better, the same thing considered from different points of view. But this judgment itself was not contained in the previous images and in the given psychological situation. There is a new and unexpected phenomenon, like consciousness itself, appearing in the midst of the phenomena of mechanical movement, and, in relation to them, it is something indeterminate and free. It is because the act is intelligent and moral that it becomes free. There is nothing more free, I do not say in an absolute way what means nothing, but in relation to reason and human science, than what cannot be foreseen, than what the forecast is incomprehensible to us.

A great scientific discovery which would upset science cannot be foreseen by current science, since, by definition, it is its negation. A discovery of this kind is something original, new, which did not exist before. It is, if not in its material, but at least in its form and in the new synthesis imposed on the elements, a real creation *ex nihilo*. Now this idea only exists when it is realized in the book, in the work of art, or in the moral act. It is an illusion of weak minds to believe that they feel at the bottom of their heart sublime ideas which they cannot realize. If their idea was determined, if it really existed, their members would move on their own to execute it. Isn't the act of a man of genius the most free in the world? Insofar as man is capable of conceiving for himself a personal idea which is not given in the sensations he receives, and in the associations previously made, he approaches genius and freedom.

¹ Renouvier. *Psychologie*, II, 360.

² Fouillée. *Liberté*, 228.

Conclusion

How could a psychologist like Moreau (de Tours) write this astonishing sentence: “By becoming an idiot, a subject goes through a psycho-cerebral state which, by continuing to develop, should make him a man of genius ¹.” How could he believe that diseases of the nervous system and even madness powerfully favored the development of intelligence ²? It is probably because of this word “excitement” that he constantly uses to designate madness. No, whatever the analogies in the external circumstances, madness and genius are the two extreme and opposite terms of all psychological development. The whole story of madness, as argued by Baillarger and after him many alienists, is only the description of the psychological automatism left to itself, and this automatism, in all its manifestations, depends on the present synthetic weakness which is moral weakness itself, psychological misery. Genius, on the contrary, is a power of synthesis capable of forming entirely new ideas that no previous science had been able to foresee; it is the last degree of moral power. Ordinary men oscillate between these two extremes. The more determined automatons and the weaker their moral strength, the more worthy of being considered as free and moral beings as the small moral strength they have in them and whose nature we ignore grows.

¹ Moreau (de Tours). *Psychologie morbide*, 71.

² Id. *Ibid.*, 463.

Conclusion

We encounter very special difficulties and we expose ourselves to great dangers when we try to draw general conclusions from these long experimental studies. The strange facts that we have reviewed, the alluring theories that we have glimpsed about this or that problem, seem to engage us in the most adventurous hypotheses of philosophy. The speculations of the ancient Hylozoist authors on universal life and consciousness which are widespread everywhere, the more modern theories on the persistence of ideas in memory and on the indestructibility of thought, do they not relate very closely to our experiences with catalepsy, therapeutic suggestion and subconscious acts? But to approach these assumptions, however attractive they may be, would be to depart entirely from the method that we are committed to follow and to pass, as the old logic said, from one genre to another. One of the great merits of these new studies of psychology, although it seems singular, is that they are susceptible to error. We can demonstrate rigorously, and we will no doubt do for many of these studies, the involuntary inaccuracy of this or that observation, the error of this or that interpretation. This is a merit and an advantage: there is a satisfaction for the spirit to note that one is wrong on one point, because it gives the hope of having been able or of being able, on some other, glimpse the truth. The general assumptions of philosophy are not susceptible to error. Who has refuted or will ever be able to refute spiritualism or pantheism so as to make the hypothesis disappear as useless? This is why we should not engage in these theories which are by their nature above and outside any precise discussion.

However, synthesis being, as we have seen, the main merit of intellectual work, it is necessary to synthesize all the studies contained in this book. General hypotheses are simple summaries, symbols which more or less represent the momentary state of a question and the degree to which one stops in the interpretation of phenomena. Although the few propositions which we are going to explain seem plausible to us, they should only be considered as hypotheses, perhaps momentary and transitory.

At the beginning of the work of psychology, the philosophers insisted on a remark, correct in general, perhaps necessary the radical separation of the mind and the body. This conception, which had its *raison d'être*, was very useful at a certain time and contributed powerfully to the foundation of the studies of psychology; but it also had its exaggerations and its dangers. The drawbacks of this hypothesis first manifested themselves in metaphysics, and the difficulty of explaining the reciprocal action of soul and body forced philosophers to construct the most bizarre systems. Faced with the difficulties and sometimes the absurdities of these theories, philosophy gradually modified its primitive conception and, under the influence of Leibniz, then under that of Kant, singularly brought together the two natures which it had believed to be irreconcilable. This movement is quite natural and is perfectly linked to the general laws of intelligence. To understand things, we have to start by separating them: *discrimination* is the first step of science; but to separate is not to understand, it is then necessary to unite, to synthesize the different terms that have been distinguished and to establish this unity in diversity, which is properly the work of the human mind.

This progress, which has been effected more or less in the metaphysics of soul and matter, does not seem to me to have been so complete so far in the science of mind and body. In science, in fact, the separation had been as complete between the two categories of psychological and physiological phenomena as it had been between the two species of beings distinguished by the metaphysicians. This separation had taken a particular form, it was the antagonism between ideas, feelings, on the one hand, and the physical movement of organs, on the other, instead of being the opposition between thought and the extent. Difficulties, however, did not take long to arise and had forced psychologists, as previously the Cartesian philosophers, to invent all kinds of intermediaries between the facts that had been separated. The theories of the motor faculty, of muscular effort, and even of the will seem to me, in science, to be absolutely parallel assumptions to the famous hypotheses of the plastic mediator, of occasional causes or of pre-established harmony, in metaphysics. These intermediaries, however, were not sufficient and, more and more, we see the role of activity and even movement in thought, and reciprocally the role of thought in movement. Can we present today a theory of physical activity, instinctive, habitual or voluntary, without perpetually mixing all the theories of intelligence? Can we talk about intelligence, perception and attention, without constantly mixing up the notion of bodily movements? A theory of pure intelligence, independent of organism and movement, is no longer possible today, and soon a theory of purely mechanical organism without the intervention of consciousness will also be untenable. We can no longer consider psychology and physiology as independent, we cannot make one an insignificant appendage to the other; we must admit that there are, between these two sciences, particular relations which do not exist between any other, and that, from different points of view, they both make parallel descriptions of one and same thing.

By restricting this general question, by studying not all the organs, but only the movements of the limbs, of the relation organs, we have made our contribution to the establishment of this modern theory; we have tried to show the complete union, the absolute inseparability of the phenomena of feeling and thought and of the phenomena of physical movement in organized beings. On the one hand, we have shown that any movement of the limbs in a living being, however simple this movement may be, was accompanied by a phenomenon of consciousness. Whether it is the poses of the limbs, attitudes, convulsions in certain states of crisis or illness, when the subject seems insensitive and reduced to the state of a machine, or whether it is involuntary movements, of persistent contracture in a subject who is currently conscious of something else and who claims not to know them, we can always legitimately suppose and sometimes demonstrate the existence of phenomena of consciousness, simple no doubt, but real, even lasting as long as the movement itself. On the other hand, we believe we have shown that, if we cause any psychological phenomenon whatsoever, a sensation, a hallucination, a belief, a simple or complex perception to be born in a person's mind, one infallibly provokes a corresponding bodily movement which varies in complexity like the psychological phenomenon itself.

Conversely, if we examine or if we produce various suppressions of the movement, when the subject, for example, becomes incapable of doing such a determined act or of saying such a word, or when he is affected by a complete paralysis, we find that there is, at the same time, in the consciousness, a particular void, the loss of an image or an amnesia, the loss of a sensation or an anesthesia. Finally, whatever modifications the exterior movement seems to experience, whether it becomes precise or vague, complex or incoördinate, regular or very variable, there is always a corresponding modification in the mind. Instinctive activity corresponds to sensations and perceptions, habitual activity should not be separated from memory, voluntary activity does not exist without judgment. In a word, from whatever point of view

we take, there are not two faculties, one, that of thought, the other, that of activity, there is, at each moment, that one and the same phenomenon always manifesting itself in two different ways.

How is this unity, despite the apparent diversity of the two things, possible? I believe that current theories of knowledge and science easily give us the reason for this. It is the same thing that is known and studied in two different ways. A phenomenon which I consider externally, thanks to my sense organs, and which I interpret by the rules and habits of my thought, cannot have the same aspect as if I consider it in myself by the consciousness. The difference in points of view, in procedures, in methods of investigation is so great that it suffices to explain the apparent differences which had led us astray. These differences should not be suppressed, no doubt, since they result from a real opposition between our processes of knowledge, and the physiological study of the external movement should not be identified with the psychological study of the thought which accompanies it.; each of these studies has its role and its importance, and, depending on the points considered, one or the other of these sciences has the most lead. Who will think of making the psychological theory of digestion or the physiological theory of the syllogism? But this does not prevent these sciences from being parallel and from having relations with each other that no other science can have, because they study the same object from two different points of view. The knowledge of man, it is certain, would be complete, in an ideal science, only if each psychological law found its counterpart in a physiological law. In the march towards this ideal, the two sciences help each other and, depending on whether it is more advanced on a point, one of the two sciences gives indications and directions to the other. In the study which occupies us, that of the movements of relation, it seems that today it is, for a moment, the psychology which has the pre-eminence, and the physiologists themselves, it should be noted as an important fact, believed they could explain the acts of the somnambulists they observed only by appealing to psychological laws.

Let us therefore put aside the physical phenomena, let us pass to pure psychology and seek in its laws the explanation of the particular and automatic activity which we wanted to study. Things seem to happen as if there were in the mind two different activities which sometimes complement each other and sometimes hinder each other: let's consider each of these activities separately.

As the ancient philosophers said, to be is to act and create, and consciousness, which is in the supreme degree a reality, is thereby an active activity. This activity, if we seek to represent to ourselves its nature, is above all an activity of synthesis which brings together more or less numerous given phenomena in a new phenomenon different from the elements. This is a real creation, for, from whatever point of view one takes, "multiplicity does not contain the reason for unity ¹," and the act by which heterogeneous elements are brought together in a new form is not given in the elements. When, for the first time, a rudimentary being brings together phenomena to form the vague sensation of pain, there was a real creation in the world. This creation is repeated for each new being who succeeds in forming a consciousness of this kind, because, strictly speaking, the consciousness of this being who has just been born did not exist in the world and seems to come out of nothing. Consciousness is therefore by itself, from its beginnings, an activity of synthesis.

¹ Boutroux. *De la contingence des lois de la nature*, 1874, 9.

It is impossible to say which are the first elements which are thus combined by consciousness. Just as physiology finds organization in all the elements of the organized body, so psychology already finds an organization and a synthesis in all the elements of consciousness to which it can trace. But what is certain is that there are increasingly complex degrees of organization and synthesis. The little elementary syntheses which are constantly repeated become the elements of other superior syntheses. Being more complex, these new syntheses are much more varied than the previous ones; although always remaining units, they are units which have different qualities from each other. Just as beings composed of a single cell are all the same and beings composed of several cells begin to take on distinct forms, vague consciousnesses of pleasure and pain gradually become determined sensations of different kinds. Each sensation is thus a whole, a compound, in which elements of consciousness corresponding themselves to very simple movements have been combined. It should not be said that a child learns to feel such a sensation, that he then learns to do the corresponding complex movement – he learned both things at the same time, and the coordination of movements was done at the same time, than the organization of the elements of sensation.

These sensations in their turn organize themselves into more complex states which may be called general emotions; these unify and form, at each moment, a particular unity called the idea of personality, while other combinations will form the different perceptions of the outside world.

Some minds go further, still synthesizing these perceptions in judgments, general ideas, artistic, moral or scientific conceptions. Without doubt, we are then struck by the creative activity of the mind; we do not believe that the high scientific syntheses made by some men of genius were given to them in the elements furnished by the sensations. We know well that generations of men have possessed these same facts, these same elements, and have failed to coordinate them and we say that genius is creator. But the nature of consciousness is always the same and the child who, for the first time, had built in himself the weakest artistic or religious emotions, had also made a discovery and a creation on his own account. “Perception is not something different from association”, said M. Fouillée; “it is always the introduction of a superior current of irresistible force which subordinates everything else and carries everything in its own circle...¹” How, by what slow progress, does consciousness carry out such syntheses, in what order does it pass from one to the other? These are things we did not look for in this book, because we always assumed that this first activity had already done its work, and we have always studied the consequences of its work.

There is, in fact, in the human mind, a second activity which I cannot better designate than by calling it a *conservative* activity. Syntheses, once built, cannot be destroyed; they last, they keep their unity, they keep their elements arranged in the order they were once. As soon as one places oneself in the favorable circumstances, one sees the sensations or the emotions prolonging themselves with all their characteristics as long as possible. Much better, if the synthesis previously accomplished is not given completely, if only a few of its elements still exist in the mind, this conservative activity will complete it, will add the missing elements in order, and in the manner necessary to remake the whole primitive. Just as the previous activity tended to create, this one tends to conserve, to repeat. The greatest manifestation of the former was synthesis, the great characteristic of it is the association of ideas and memory. “It is the mental

¹ Fouillée. *Sensation et pensée*. Revue des Deux-Mondes, 15 juillet 1884, 47.

counterpart of the great law of mechanism, the conservation of force. This law, in fact, dictates that every mobile should persevere in its movement, as long as another force does not turn it aside, and that it always follows the line of least resistance. A first experience brought together, in the child's mind, the flame burn, and thus produced a certain direction of thought at the same time as of action; we thus have in favor of the flame-burn direction a positive force and no other in the opposite direction ¹.”

It is the consequences of this general law of conservation and reproduction that we have examined in this work. We have seen the sensations last and maintain the elements which constitute them, we have seen the emotions reproduce themselves and maintain the movements and expressions of the physiognomy which were the constituent parts. One element of a particular memory and complex personality given, all memory and all personality reproduced. Depending on whether the elements of this or that synthesis previously constituted were thus brought in, consciousnesses and personal existences were alternated. Finally, when the subject had learned the meaning of the words and understood the language, one caused, by using the syntheses carried out in the past, all the acts, all the thoughts, one gave birth to all the psychological phenomena in a regular and easy to predict order. Those who want to see only one side of the mind can obviously stop at this automatism which we have described in detail, but, for us, this automatism is only the consequence of another quite different activity, which, acting in the past, made it possible today and which, moreover, still accompanies it almost always.

In fact, these two activities usually subsist together as long as the being is alive; the health of the body and the harmony of the spirit depend on their good harmony and balance. Just as in a political state, innovative activity and conservative activity must regulate and limit each other, likewise, in the mind, the current activity, capable of understanding new syntheses and adapting to new conditions, must balance this automatic force that wants to keep the emotions and perceptions of the past immutable. When the mind is normal, it abandons to automatism only certain lower acts which, the conditions having remained the same, can be repeated without inconvenience, but it is always active in carrying out new combinations at every moment of life. which are incessantly necessary to keep in balance with the changes of the environment. This union of the two activities is then the condition of freedom and progress.

But if the creative activity of the mind, after working at the beginning of life and accumulating a quantity of automatic tendencies, suddenly ceases to act and rests before the end, the mind is then entirely unbalanced and delivered without counterweight to the action of a single force. The phenomena that arise are no longer united in new syntheses, they are no longer seized to form the personal consciousness of the individual at every moment of life; they then naturally return to their old groups and automatically bring about the combinations which had their reasons for existing in the past. Doubtless, if a mind of this kind is kept with precaution in an artificial and invariable environment, if, by suppressing the change of circumstances, one saves it the trouble of thinking, it will be able to remain for some time weak and distracted. But whether the environment changes, whether misfortunes, accidents, or simply changes, require an effort of adaptation and new synthesis, it will fall into the most complete disorder.

It is all these small or large disorders resulting from the predominance of ancient automatism over a very weak present synthetic activity that we have studied in the last part of this work. We have seen that

¹ Fouillée. *Op. cit.*, 417.

the strangest disturbances can be boiled down to a few simple laws and that psychology is not powerless to explain them.

The general ideas that we have just exposed and which moreover are found in part in the work of several philosophers today, seemed to us a simple way of summarizing, of synthesizing the phenomena that we have described. They should only be considered as probable conjectures. Their imperfection or even their falsity would not alter the accuracy of some particular laws and some facts which are always in our eyes the essential in this essay on experimental psychology.

Appendix

We give in the appendix a small number of indications on the disease and the main characteristic of some subjects who have played an important role in this work. We do not think it necessary to insist much; the sickly characters of these subjects are usually of the same kind, and they have almost always been recalled when an observation was described on such and such a person.

Be. Young woman of twenty-five. A healthy father, a nervous irritable mother without precise accidents, an insane maternal uncle. Around the age of fifteen, she had various hysterical accidents, some fairly severe attacks with loss of memory, contractures, accidents of pseudo-peritonitis; was hypnotized at this time quite frequently. But since then she has not had well-characterized nervous accidents and has not been put into sleepwalking. Today she is in good health and does not present *any kind* of anesthesia; on the contrary, when one examines each of her senses separately, she has an extremely fine sensitivity everywhere. The only abnormal characteristic is a very strong distraction, a very visible narrowing of the field of consciousness which prevents it from following two things at the same time. She has been studied only, from one point of view, that of suggestibility in the waking state which is quite extraordinary with her.

Blanche. Eighteen year old girl. A healthy mother, a nervous, bizarre father, an insane maternal aunt. She is the last of fifteen children, nine of whom died in infancy, all before the age of three, and whose survivors are quite well. In her childhood up to three years, she had frequent seizures of epileptic appearance which were almost exclusively on the left. It has remained in all respects very backward, almost stupid, very small, weak, not yet settled. She has a real bulimia, steals food and especially bread when she can and eats until she suffocates. She then again has a seizure similar to that of her childhood, with convulsions limited to the left side and foam in the mouth, but this accident is now very rare. Sensitivity is roughly normal on the right side, although reduced, but almost nil on the left side. Obscure intelligence, although she has received some education. Studied from the same point of view as the previous one for the suggestibility in the waking state and the automatism that it presents to the highest degree.

D. Young man of twenty-four, case of impulsive madness, the observation of which was reported above.

G. Seventeen-year-old girl. Mother hysterical, no information about the father. For several years now, she has had attacks of minor hysteria which are very frequent for periods of two weeks to a month, then disappear for a while. Quite variable anesthesia on the left side, which disappears in moments of health. Studied in the state of hypnotic sleep which, with her, quite easily replaces the seizures and suppresses them momentarily.

H. Young man of twenty-eight. Healthy father, hysterical mother (convulsions and paraplegia). He exhibits no characteristic of hysteria and has all sensibilities intact although he is distracted and emotional. He is easily put into a state of little hypnotism with forgetfulness on awakening, but, rather

singularly, he almost always recalls the memory of hypnotism the next day, after a normal night's sleep; it presents a particular sensitivity to the magnet which contractures it.

Lem. Young man of nineteen. Healthy father, hysterical mother, hysterical maternal aunt. For two years, he has had fairly spaced attacks of hystero-epilepsy. Complete, tactile and muscular anesthesia, except in the right leg. Had hysterical contracture of the muscles of the abdomen and chest for six weeks following shock. Very hypnotizable.

Leonie. Forty-five-year-old woman, who has already been described and studied many times. Healthy mother, epileptic father and paternal grandfather, other paternal relatives probably insane. Has had seizures since early childhood, but has been extremely altered by magnetizers who have studied sleepwalking on her. It no longer exhibited any distinct hysterical features a few years ago when I first studied it with Dr. Gibert; but since last year, following violent hysterical crises occurring at the time of menopause, she has retained complete and invariable anesthesia on the left side. The story of this very curious woman should be told in more detail and I would try to do so if I could bring together the notes of Dr Perrier, the doctor from Caen who studied her for over ten years..

Lucy. A twenty-year-old young woman whose observations I have already given several times in articles published in the *Revue philosophique*. Healthy mother, hystero-epileptic father, died in crisis. She had convulsions in her childhood, an attack of blindness probably nervous around the age of nine years: following a fright experienced around this same time, she resumed very specific hysterical crises which, at first very short, grew little by little and lasted, when I knew her, at least five hours; she was a total anesthetic, had significantly impaired hearing and sight.

The induced sleepwalking suppressed the hysterical attacks within a few days, then, after a month, all other symptoms of hysteria disappeared and then disappeared in turn. Lucie remained in good health without any accident for eighteen months. Then she was resumed from nightmares, and natural sleepwalking. A few sessions of hypnotism made these symptoms disappear, then became impossible, because the subject again ceased to be hypnotized. Lucie then remained a year without any accident, then she again had a few slight seizures which were further suppressed by a sleepwalking session.

M. Twenty-three year old woman. Healthy father, hysterical mother as well as maternal grandmother and aunt. Rather rare attacks of small hysteria, incomplete anesthesia on the left side.

Marie. Nineteen year old girl. Nervous irritable mother, no information about the father. From her childhood she presented real tantrums followed by suffocation. We have related in what singular circumstances she lost her sight in her left eye at the age of six, and how an imprudence committed at the time of her first epoch led much later to fits, convulsions and delusions. She now seems fully recovered and can no longer be hypnotized.

M. Seventeen year old girl. Seizures of small hysteria, irregular patches of anesthesia.

N. Thirty-year-old woman. Rather rare attacks of small hysteria, anesthesia on the left side. The sleepwalking of this subject has been described above.

P. Forty-year-old man. Taken to the hospital for an attack of subacute alcoholic delirium, presented towards the end of this attack a great suggestibility.

R. Young man of twenty, dismissed from the regiment because he has seizures which are considered to be epilepsy. Anesthesia on the left side, easily induced hypnotic sleep.

Rose. A woman of thirty-two, belonging to a family in which almost all the members of the maternal side, maternal grandfather, mother, aunt, nephews, are convulsive hysterics; his brother is also, probably, hystero-epileptic. She has presented herself, since her childhood, all the accidents of the most serious hysteria: persistent anesthetics and contractures for several months, from the age of eight, hysterical blindness at fifteen, periods of great crises of lethargy for several days, etc. Settled at only twenty, she had eight children, all of whom died in infancy in the first months.

A year ago, following her last childbirth, she had an attack of false hysterical peritonitis, then, when this disappeared, a contracture of both legs in extension. Complete anesthesia in the lower limbs, soon spreading over the whole body, complete dyschromatopsia of both eyes. Moreover, the state of sensitivity in this subject often varied during his long stay of seven months in the hospital. Some of these variations have been described.

This woman exhibited, when hypnotized, many varieties of cataleptic or somnambulist states, and in some of these states when she recovered sensibility she could move her legs freely. The cure of the contractures has been extremely difficult, but has been obtained, however, in an apparently complete manner by suggestions made under certain conditions and by prolonged somnambulisms. However all the hysterical signs were not gone, and, in particular, the hypnotic sensitivity and the state of suggestibility were still strong when this person left the hospital. Healing did not last more than two or three months and now the paraplegia and contractures have recovered in about the same way.

V. Twenty-eight year old woman. Parents who had no nervous accident. *V.* is the youngest of twelve children and was born a twin. She always remained weak and frail. As a result of intellectual work for examinations, she had, at the age of fifteen, delusions or natural somnambulisms, during which she constantly recited her History of France; Well for ten years, she had at twenty-six a single great attack of hysteria following an emotion, and, during this crisis, began again to recite the chapters of her History of France. At twenty-seven, she suffered a stroke of natural catalepsy caused by a thunderbolt. When she was twenty-eight, she had a sore throat and had to stay in bed, but when the illness was over she found herself paralyzed in both legs. The patient's history, the current state of almost general anesthesia, the existence of ovarian pain and numerous hysterogenic points prevent the belief in the existence of diphtheria paralysis. The study that I was able to do then of this very curious subject is recalled elsewhere. I could not destroy the paralysis first, because *V.*, even put into sleepwalking, claimed that it was impossible. After convincing her of my power by making her see different shows by hallucination, I could easily restore the movement of the legs. I then suggested that she sleep motionless all night long and the next day she had no anesthesia or hysterogenic points. The symptoms of hysteria have not returned for a year.

These few observations, which were obligingly communicated to me by the doctors who treated these patients, are doubtless far from being complete, but they may provide some useful information on the subjects which have been studied in this work to other viewpoints.