

VI.

ON TELEPATHIC HYPNOTISM, AND ITS RELATION TO
OTHER FORMS OF HYPNOTIC SUGGESTION.

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§ 1. The nucleus of the following paper consists of some personal observations of a remarkable hypnotic subject—observations which the kindness of Dr. Gibert and Professor Pierre Janet enabled me to make at Havre, April 20-24, 1886.

The most striking feature in this case was the *sommeil à distance*, or, if I may so term it, *telepathic hypnotism*;—the production, that is to say, of sleep and other hypnotic phenomena by the will, or mental suggestion, of a person at a distance from the subject.

This is not, of course, the first time that such a phenomenon has been observed. In *Phantasms of the Living* (Vol. I., Chap. 3; Vol. II. Supplement, Chap. 1; and Additional Chapter) will be found a collection of the more trustworthy cases; and Mr. Gurney has pointed out their analogy to the *spontaneous* cases of telepathy, of which that book furnishes many examples. But from the side of *hypnotism* no attempt whatever, so far as I know, has been made to correlate this hypnogenous¹ force or suggestion at a distance with hypnogenous agencies employed in the subject's actual presence,—hypnogenous suggestion which actually reaches his ear. The mesmerists proper, talking of their vital influence, have said, "This influence can sometimes act over great distances." And more recently the *suggestionists*, if I may so term them, have sometimes spoken of this distant command as though it were merely a form of suggestion—as if it fell under that heading with as little difficulty as the mere *deferred suggestion*, which works itself out at a distant time, instead of working itself out at the same time, but at a distant point of space.

The confusion involved in both these modes of expression is great. The mesmerists have ignored the difficulty of supposing that an effluence which they hold actually to emanate from eyes and fingers can operate through stone walls and across streets filled with the interfering influence of other men and women. And the suggestionists seem to me never to have analysed what is meant by *suggestion*—a word of indispensable convenience, but which, as I shall endeavour to show, has been used to include methods of hypnogeny which differ widely from one another.

I must adopt from the French the word *hypnogeny* for the production of hypnotic states: *hysterogeny* for the production of hysterical states; *dynamogeny* for the production of increased nervous activity; *æsthesiogen* for a substance whose contact or proximity gives rise to unexplained nervous action.

After narrating, therefore, my observations on Madame B.'s *sommeil à distance*, I felt unwilling to leave the case as a mere isolated marvel, and unwilling also to connect it with more familiar forms of hypnotism by what seem to me mere vague phrases about an extension of "the range of mesmeric influence," or of "the scope of suggestion." So I have briefly reviewed some other recent cases—Dr. Héricourt's, Dr. Dusart's, Drs. Bourru and Burot's—and have then endeavoured, in a provisional and very imperfect manner, to analyse the various forms of hypnotic suggestion, and to correlate them, in an intelligible series, with the numerous and disparate methods of experimentally inducing the hypnotic trance which have been practised by competent observers. I have been obliged to do this very briefly, and to omit any discussion of the true definition and limit of "hypnotic phenomena" themselves. This, too, needs doing on a more comprehensive plan than has been yet attempted.

§ 2. Before giving my own notes on Madame B.'s case, it will be necessary to furnish some account of M. Pierre Janet's previous observations, as recorded in his "Note sur quelques phénomènes de somnambulisme." (*Bulletins de la Société de Psychologie Physiologique*, Tome I., p. 24.)¹ Professor Janet was kind enough to allow me to peruse his notes, taken mainly at the actual moment of observation; and, although I am naturally not at liberty to print any matter as yet unpublished, I can vouch for the scrupulous care with which he has compiled his account of the case.

I had also the advantage of conversation with Dr. Gibert and his family, who are well acquainted with Madame B. Dr. Gibert is the "Doyen du Syndicat Médical de la France," and a leading physician at Havre. He has long practised hypnotism, which he has directed mainly to therapeutic ends. Madame B., while at Havre, is received into the house of a sister of Dr. Gibert's; and his family, who have access to the somnambule at all hours, confirm Professor Janet's estimate of her simplicity and honesty of character.

Of the genuineness of the induced somnambulism in this case no doubt has been felt, so far as I know, by any observer. The anæsthesia, the contractures, the variations in reflex action, &c. (as well as the woman's previous history), supply sufficient evidence on this point. But even after this fundamental fact has been proved (which in the present state of our knowledge of hypnotism is not very difficult), there remains a question, less definite indeed, but highly important, as to the temper of mind which the subject carries with her into the trance. Thus, for instance, there is, of course, no doubt as to the reality of the trance of "la nommée Wit"—whom, thanks to Dr. Féré's kindness, I have

¹ See also *Phantasms of the Living*, Vol. ii., p. 679.

observed at the Salpêtrière—the asylum, or rather the arena, of her hysterio-epileptic exploits. But “Wit-” is the very type and culmination of the hysterical diathesis, and her trickiness and love of notice are so integral a part of her that while she runs through her phases of catalepsy, lethargy, and so on, one still suspects (if I may so say) a cataleptic cunning and a lethargic vigilance as to the operator’s will.

Madame B., the subject of these researches, is of a very different type. She is a heavy, middle-aged, peasant woman, with a patient, stolid expression, and a very limited intelligence and vocabulary. She has, indeed, been more or less somnambule from childhood, and a Dr. Féron, since dead, and other persons, seem to have experimented on her long ago. But she has never made hypnotism her business; she was drawn to Havre by some medical kindness received from Dr. Gibert; and care is taken that she shall not make money out of her stay. Her trance-state is never mentioned to her in her normal state; nor does she in any way seek notice as a “sensitive”; on the contrary, she plainly dislikes being sent to sleep from a distance, and has repeatedly tried to prevent it.¹ I have seen her only in the trance-state, and I share the general impression that what she says in that state is naïvely and sincerely said, and probably gives a true account of her own feelings and actions.

I will now briefly summarise M. Janet’s principal results.

α. Induction of trance in presence or close proximity of subject.

Sleep usually induced by holding her hand. She is then only responsive to the operator. He alone can make contractures disappear, &c. Gaze from operator’s eye unnecessary. Slight pressure of thumb suffices; but no pressure (except *severe* pressure on thumb) is efficacious without mental concentration—operator’s *will* to put her to sleep. “This influence of the operator’s *thought*, extraordinary, as it may seem, is here quite preponderant; so much so that it can take the place of all other influences.” Will *without* touch induces sleep. Taking precautions to avoid suggestion, it is found that (1) M. Janet, while sitting near her, sends her to sleep when, and only when, he wills it; (2) M. Gibert from adjoining room sends her to sleep, M. Janet remaining near her, but not willing; there is evidence that the sleep is of *M. Gibert’s* induction, for she is in *rapport* with him only; whereas had sleep come from suggestion of operator’s proximity, the suggestion would probably have been derived from *M. Janet’s* close presence. Nevertheless, she did know that Dr. Gibert was in the house. (The question as to degrees of proximity will be discussed later on.)

β. Induction of trance at a distance from subject.

¹ M. Janet says (*Rev. Philosophique*, August, 1886) that Madame B., when awake, is not aware that she can be hypnotised from a distance. My remark applies to her knowledge and acts in the incipient or completed trance.

Oct. 3, 1885. M. Gibert tries to put her to sleep from distance of half-a-mile ; M. Janet finds her awake ; puts her to sleep ; she says, "I know very well that M. Gibert tried to put me to sleep, but when I felt him I looked for some water, and put my hands in cold water. I don't want people to put me to sleep in that way ; it puts me out, and makes me look silly." She had, in fact, held her hands in water at the time when M. Gibert willed her to sleep.

Oct. 9. M. Gibert succeeds in a similar attempt ; she says in trance, "Why does M. Gibert put me to sleep from his house ? I had not time to put my hands in my basin." That the sleep was of M. Gibert's induction was shown by M. Janet's inability to wake her. M. Gibert had to be sent for.

It is observable, however, that MM. Janet and Gibert can *now* (April, 1886) operate interchangeably on the subject ; her familiarity with both seems to enable either to wake her from a trance which the other has induced.

Oct. 14. Dr. Gibert again succeeded in inducing the trance, from a distance of two-thirds of a mile, at an hour suggested by a third person, and not known to M. Janet, who watched the patient.

γ. Influence exercised from a distance during trance.

On Oct. 14 she had been put to sleep at 4.15, as aforesaid. At 5, at 5.5, and at 5.10 she rose, exclaimed, "Enough, don't do that," then laughed once, and added, "You can't ; if you are the least distracted I recover myself," and fell back into deep sleep. At those moments M. Gibert had attempted to make her perform certain acts in her sleep. Similar results followed from a mental command given in her proximity during her sleep.¹

δ. Deferred mental suggestion.

On Oct. 8 M. Gibert pressed his forehead to hers, and gave a *mental* order (I omit details, precautions, &c.) to offer a glass of water at 11.30 a.m. next day to each person present. At the hour assigned she showed great agitation, took a glass, came up from the kitchen, and asked if she had been summoned, came and went often between *salon* and kitchen ; was put to sleep from a distance by M. Gibert ; said, "I had to come ; why will they make me carry glasses ? I had to say something when I came in." Two somewhat similar experiments were made October 10th and 13th.²

§ 3. Thus far M. Janet's account of the autumn experiments, postponing any description of the *stages* through which the subject

¹ Before our arrival in April, 1886, Dr. Jules Janet effected a curious transference of sensation. He went into an adjoining room and burnt his right wrist severely. Madame B. uttered piercing cries, and clasped her wrist in the same place. See *Rev. Phil.* for August, 1886, p. 222, for details.

² Some further cases are given in *Rev. Phil.* for August.

passed. In February and in April, 1886, Madame B. was again brought to Havre, and some successful experiments (tabulated below) were made before my arrival on April 20th.

I give next my own notes of experiments, April 20-24th, taken at the time in conjunction with Dr. A. T. Myers, and forming the bulk of a paper presented to the Société de Psychologie Physiologique on May 24th.

"I have been asked to write an account of some instances of somnambulic sleep induced at a distance, which I observed at Havre, through the kindness of Dr. Gibert and Professor Pierre Janet, April 20-24th, 1886. This account is founded on notes taken by me at the time, and revised on the same or following days by Dr. A. T. Myers, who was present at the experiments throughout. Other observers were Dr. Gibert, Professor Paul Janet, Professor Pierre Janet, Dr. Jules Janet, Dr. Ochorowicz, and M. Marillier, some of whom have given, or are about to give, independent accounts.

"I shall confine myself to the cases of production of sleep at a distance by mental suggestion, with one case of deferred mental suggestion of an act to be performed. In order that the phenomenon of *sommeil à distance* may be satisfactory, we have to guard against three possible sources of error, namely, fraud, accidental coincidence, and suggestion by word or gesture.

"The hypothesis of *fraud* on the part of operators or subject may here be set aside. The operators were Dr. Gibert and Professor Pierre Janet, and the detailed observations of Professor Pierre Janet, elsewhere published, sufficiently prove the genuineness of Madame B.'s somnambulic sleep. And, in fact, to anyone accustomed to hypnotic phenomena the genuine character of Madame B.'s trance is readily apparent.

"The hypothesis of *accidental coincidence* would be tenable (though not probable) did the events of April 20-24th constitute the whole of the observed series. But the number of coincidences noticed by Dr. Gibert, Professor Janet, and others has been so large that the action of mere chance seems to be quite excluded. It is to be observed that, as Professor Janet tells us, the subject has, during an observation of several weeks (maintained by Mlle. Gibert when Professor Janet is not present), only twice fallen *spontaneously* into this somnambulic sleep (when no one willed her to do so); once before our arrival, on looking at a picture of Dr. Gibert, and once on April 21st, as narrated below.¹ On the other hand, the observed cases of sleep deliberately

¹ Of the spontaneous sleep on April 21 (mentioned in *c.g.* Case i.), M. Janet writes (*Rev. Phil.*, August): "Elle se rendormit spontanément deux heures après avoir été réveillée, mais elle était dans une période où je l'endormais tous les jours plusieurs fois, et elle avait simplement été mal réveillée. D'ailleurs, pendant ces deux heures d'intervalle, elle n'avait pu ni parler ni manger: elle était donc restée malheureusement dans un état de demi-sommeil."

induced from a distance amount, I believe, to at least a dozen.¹ I exclude, of course, the very numerous occasions when sleep has been induced by an operator present with the patient, by holding her thumbs, looking at her, &c. This, however, brings us to the third source of doubt, whether the sleep may not on *all* occasions have been induced by some *suggestion*, given perhaps unconsciously, by word or gesture. It was thus that I was at first inclined to explain Cases I. and II. among those that follow, but the other cases here given seem to negative the supposition.

"I still, however, would explain by mere suggestion all the experiments which I saw made with the *magnet*. On one occasion, when I had gone into an adjoining room with the magnet, and this was known to all present, Madame B. followed me, as though attracted. She was taken back to her place, and shortly afterwards I came and sat beside her with the magnet in my pocket, no one knowing that it was there. No effect whatever was produced on the subject. I made some other experiments with the magnet, with a similarly negative result. I would strongly recommend that when magnetic experiments are made with sensitives the following precautions should be used, which our experience in the Society for Psychical Research has shown to be necessary for the exclusion of suggestion.

"1. Only electro-magnets should be employed, in order to effect sudden and noiseless transitions from the presence to the absence of magnetic force.

"2. The operator in charge of the commutator should be in a different room from the subject.

"3. Care should be taken that no indication as to the state of the magnet should be drawn from the 'magnetic click' which accompanies the magnetisation of the electro-magnet. [The subject's ears may be stopped, or the click repeated many times running, so that it is impossible to tell whether there have been an even or uneven number of clicks, and consequently whether the condition of the instrument is or is not changed.]

"It is not necessary here to go into further detail. Suffice it to say that it is not safe to trust to an apparently lethargic or anæsthetic state in the subject as a guarantee against her gathering suggestions from the words or manner of persons present. If, moreover, she be susceptible of mental suggestion, the effects of such suggestion may be mistaken for the effects of magnetic influence.

"I. I pass on to describe the first case of *sommeil à distance*, April 21st. At 5.50 p.m. (an hour which was selected by drawing lots among various suggested hours), Dr. Gibert retired to his study and endeavoured to send Madame B. to sleep in the Pavillon, at a distance of

¹ This number, as will be hereafter seen, has since been increased.

about two-thirds of a mile. She was to fall asleep in the *salon*; whereas she habitually sits in the *kitchen* of the Pavillon (a house occupied by Dr. Gibert's sister).

"It was supposed that the command would take about 10 minutes to operate, and at about six Professor Janet, Dr. Ochorowicz, M. Marillier, my brother and myself entered the Pavillon, but found that Madame B. was not in the *salon* but in the kitchen. We immediately went out again, supposing that the experiment had failed. A few minutes later Professor Janet re-entered with M. Ochorowicz, and found her asleep in the *salon*. In the somnambulic state she told us that she had been in the *salon*, and nearly asleep when our arrival startled her, and had then rushed down to the kitchen to avoid us; had returned to the *salon* and fallen asleep as soon as we left the house. These movements were attested by the *bonne*, but it of course seemed probable that it was merely our arrival which had suggested to her that she was expected to fall asleep.

"On this day she was ill and exhausted from too prolonged experiments on the previous days. In the afternoon she fell asleep of her own accord, and in the late evening (11.35 p.m.), when she had long been in bed, M. Gibert willed that her natural sleep should be transferred into somnambulic, and that she should dress and go into the garden of the Pavillon. Nothing followed on this attempt, unless an unusually prolonged sleep and complaints of unwonted headache next day were to be in any way connected herewith. On the whole, had I left after these experiments only I should have referred the phenomena to suggestion of the ordinary hypnotic kind.

"II. On the morning of the 22nd, however, we again selected by lot an hour (11 a.m.) at which M. Gibert should will, from his dispensary, (which is close to his house,) that Madame B. should go to sleep in the Pavillon. It was agreed that a rather longer time should be allowed for the process to take effect; as it had been observed (see M. Janet's previous communication,) that she sometimes struggled against the influence, and averted the effect for a time by putting her hands in cold water, &c. At 11.25 we entered the Pavillon quietly, and almost at once she descended from her room to the *salon*, profoundly asleep. Here, however, suggestion might again have been at work. We did not, of course, mention M. Gibert's attempt of the previous night. But she told us in her sleep that she had been very ill in the night, and repeatedly exclaimed: 'Pourquoi M. Gibert m'a-t-il fait souffrir? Mais j'ai lavé les mains continuellement.' This is what she does when she wishes to avoid being influenced.

"III. In the evening (22nd) we all dined at M. Gibert's, and in the evening M. Gibert made another attempt to put her to sleep at a distance from his house in the Rue Séry,—she being at the

Pavillon, Rue de la Ferme,—and to bring her to his house by an effort of will.¹ At 8.55 he retired to his study; and MM. Ochorowicz, Marillier, Janet, and A. T. Myers went to the Pavillon, and waited outside in the street, out of sight of the house. At 9.22 Dr. Myers observed Madame B. coming halfway out of the garden-gate, and again retreating. Those who saw her more closely observed that she was plainly in the somnambulic state, and was wandering about and muttering. At 9.25 she came out (with eyes persistently closed, so far as could be seen), walked quickly past MM. Janet and Marillier, without noticing them, and made for M. Gibert's house, though not by the usual or shortest route. (It appeared afterwards that the *bonne* had seen her go into the *salon* at 8.45, and issue thence asleep at 9.15: had not looked in between those times.²) She avoided lamp-posts, vehicles, &c., but crossed and re-crossed the street repeatedly. No one went in front of her or spoke to her. After eight or ten minutes she grew much more uncertain in gait, and paused as though she would fall. Dr. Myers noted the moment in the Rue Faure; it was 9.35. At about 9.40 she grew bolder, and at 9.45 reached the street in front of M. Gibert's house. There she met him, but did not notice him, and walked into his house, where she rushed hurriedly from room to room on the ground-floor. M. Gibert had to take her hand before she recognised him. She then grew calm.

“M. Gibert said that from 8.55 to 9.20 he thought intently about her; from 9.20 to 9.35 he thought more feebly; at 9.35 he gave the experiment up, and began to play billiards; but in a few minutes began to will her again. It appeared that his visit to the billiard-room had coincided with her hesitation and stumbling in the street. But this coincidence may of course have been accidental.

“IV. Later in the evening M. Gibert made to her a *mental suggestion*, by pressing his forehead against hers without other gesture or speech. The suggestion (proposed by me) was that at 11 a.m. on the morrow she should look at a photographic album in the *salon* of the Pavillon. She habitually sat in the kitchen or in her own bedroom and sewed; so this was an unlikely occupation for a morning hour.

“On April 23rd, MM. Marillier and Ochorowicz went to the Pavillon before 11 and ensconced themselves in a room opposite the *salon*. At 11 Madame B. entered the *salon* and wandered about with an anxious, preoccupied air. Professor Janet, Dr.

¹ It will be seen from the synopsis of experiments given below that the afternoon and not the evening, was the time of day usually chosen.

² It was not unusual for her to sit in the *salon* in the evening, after the day's occupations were over.

Myers, and I entered the Pavillon at 11.10 and found her obviously entranced ; eyes open, but fixed ; anxious ; wandering.

"She continued thus till 11.25. We remained in a room where she could not see us, though, by looking through the partially-opened door, we could see her. At 11.25 she began to handle some photographic albums on the table of the *salon* ; and at 11.30 was seated on the sofa fixedly looking at one of these albums, open on her lap, and rapidly sinking into lethargic sleep. As soon as the talkative phase of her slumber came round she said, 'M. Gibert m'a tourmentée, parce qu'il m'a recommandée—il m'a fait trembler.'

"I believe that this was a genuine instance of deferred mental suggestion. But where a suggestion is known to so many persons as was the case here, it is hard to feel sure that no word has been uttered by any one which could give a clue to its nature.

"V. On this same day, 23rd, M. Janet, who had woke her up and left her awake, lunched in our company, and retired to his own house at 4.30 (a time chosen by lot) to try to put her to sleep from thence. At 5.5 we all entered the *salon* of the Pavillon, and found her asleep with shut eyes, but sewing vigorously (being in that stage in which movements once suggested are automatically continued). Passing into the talkative state, she said to M. Janet, 'C'est vous qui m'avez fait dormir à quatre heures et demi.' The impression as to the hour may have been a suggestion received from M. Janet's mind. We tried to make her believe that it was M. Gibert who had sent her to sleep, but she maintained that she had felt that it was M. Janet.¹

"VI. On April 24th the whole party chanced to meet at M. Janet's house at 3 p.m., and he then, at my suggestion, entered his study to will that Madame B. should sleep. We waited in his garden, and at 3.20 proceeded together to the Pavillon, which I entered first at 3.30, and found Madame B. profoundly sleeping over her sewing, having ceased to sew. Becoming talkative, she said to M. Janet, 'C'est vous qui m'avez commandée.' She said that she fell asleep at 3.5 p.m.²

Professor Janet's paper in the *Revue Philosophique* for August, 1886, enables me to give a conspectus of the experiments on *sommeil à distance* made with Madame B. up to the end of May. M. Janet makes his total 22 trials, 16 successes, but he seems to have omitted the experiments of October, 1885. The distance was in each case between $\frac{1}{4}$ mile and 1 mile.

¹ M. Gibert was not with us ; but M. Janet often came to see her after M. Gibert had hypnotised her.

² On these two occasions (V. and VI.) no one actually saw her asleep before we entered the Pavillon, since we desired Mlle. Gibert not to watch her, for fear that she might guess that an experiment was going on.

NO. OF EXPERI- MENTS.	DATE.	OPERATOR	HOOR WHEN GIVEN.	REMARKS.	SUCCESS OR FAILURE.
1	1885. Oct. 3	Gibert	11.30 a.m.	She washes hands and wards off trance.	$\frac{1}{2}$
2	„ 9	do.	11.40 a.m.	Found entranced 11.45.	1
3	„ 14	do.	4.15 p.m.	Found entranced 4.30: had been asleep about 15 minutes	1
4	1886. Feb. 22	Janet		She washes hands and wards off trance.	
5	„ 25	do.	5 p.m.	Asleep at once.	1
6	„ 26	do.		Mere discomfort observed.	0
7	March 1	do.		do. do.	0
8	„ 2	do.	3 p.m.	Found asleep at 4: has slept about an hour.	1
9	„ 4	do.		Will interrupted: trance coin- cident but incomplete.	1
10	„ 5	do.	5-5.10 p.m.	Found asleep a few minutes afterwards.	1
11	„ 6	Gibert	8 p.m.	Found asleep 8.3.	1
12	„ 10	do.		Success—no details.	1
13	„ 14	Janet	3 p.m.	Success—no details.	1
14	„ 16	Gibert	9 p.m.	Brings her to his house: she leaves her house a few minutes after 9.	1
15	April 18	Janet		Found asleep in 10 minutes.	1
16	„ 19	Gibert	4 p.m.	Found asleep 4.15.	1
17	„ 20	do.	8 p.m.	Made to come to his house.	1
18	„ 21	do.	5.50 p.m.	My case I.: trance too tardy.	0
19	„ 21	do.	11.35 p.m.	Attempt at trance during sleep: see my case I.	0
20	„ 22	do.	11 a.m.	Asleep 11.25: trance too tardy: my case II.: count as failure.	0
21	„ 22	do.	9 p.m.	Comes to his house: leaves her house 9.15: my case III.	1
22	„ 23	Janet	4.30 p.m.	Found asleep 5.5, says she has slept since 4.30: my case IV.	1
23	„ 24	do.	3 p.m.	Found asleep 3.30, says she has slept since 3.5: my case V.	1
24	May 5	do.		Success—no details.	1
25	„ 6	do.		Success—no details.	1
					19

We have thus 19 coincidences and 6 failures¹—the failures all more or less explicable by special circumstances. During Madame B.'s visits to Havre, about 2 months in all, she once fell into ordinary sleep during the day, and twice (as already mentioned) became spontaneously entranced, one of these times being on April 21, a day of illness and failure. She never left the house in the evening except on the three

¹ Cases 1 and 4 were practically successes, but I have counted them as one success and one failure.

occasions on which she was willed to do so (experiments 14, 17, 21). Trials of this kind had to be made after dark, for fear her aspect should attract notice. The hours of the other experiments were generally chosen at the moment, to suit the operators' convenience; sometimes, as I have said above, they were chosen by lot.

§ 4. I pass on to a brief analysis of a similar case contributed by Dr. Héricourt to the Société de Psychologie Physiologique, November 30th, 1885 (*Bulletins*, Tome I., p. 35.)¹

α. Induction of trance in presence or proximity of subject. M. Héricourt obtained trance by holding Madame's D.'s hand, then by touching her hand, then by willing alone. Passes or grasp of hand had no effect unless accompanied by will. He induces trance without visible suggestion, from one end of the room to the other, by sudden effort of will while she is talking, &c.; if he relaxes his will she recovers herself.

β. Induction of trance at a distance. One day he tries to send her to sleep from his own house, at Perpignan (say 300 yards off), at 3 p.m.; then forgets her; then at 5 p.m. wills to wake her. She tells him spontaneously that at 3 she fell asleep (quite unusual with her during the day); servant came in; could not wake her; shook her; made her partly conscious, with violent headache, which suddenly disappeared at 5 p.m. Experiment tried from adjoining room in a way to avoid expectant attention. Success.

γ. Influence exercised from a distance.

M. Héricourt could impress no definite suggestion from a distance, but when he thought fixedly of Madame D. she experienced severe pain in the præcordial region. This gradually increased, and led to cessation of the experiments. [Compare cases where an abortive epileptic attack is replaced by epileptiform migraine.]

§ 5. The next case which I shall notice is perhaps the most remarkable of all. I quote it from a paper presented, December 28th, 1885, to the Société de Psychologie Physiologique, by Dr. Gley, the well-known physiologist.² But the case is Dr. Dusart's, recorded by him in the *Tribune Médicale*, May 16th and 30th, 1875. Dr. Gley knows Dr. Dusart; and assures me that the account is compiled from careful notes taken at the time.

α. Induction of trance in presence or proximity of subject.

Dr. Dusart induces trance on Mlle. J. by passes: observes that they are ineffectual without his *will*: tries will alone: succeeds more than 100 times: never fails.

β. Induction of trance at a distance. M. Dusart forgot one day to order Mlle. J. to sleep till a certain hour on the morrow, which he usually did.

¹ See also *Phantasms*, &c., Vol. ii., p. 683.

² See also *Phantasms*, &c., Vol. ii., p. 685

At a distance of 700 metres from her house he remembers the omission ; gives order mentally to sleep till 8 : finds her asleep next morning. "How is it that you are asleep?" "I am obeying you." "You mistake ; I left you without giving any order." "True ; but 5 minutes afterwards I perfectly heard you tell me to sleep till 8 o'clock." To test this Dr. Dusart leaves her asleep, telling her to sleep till he gives order : gives mental order two miles away, at 2 p.m. : she wakes at 2 p.m. Experiment successfully repeated several times : once he keeps her awake by mental order, from a distance, while her father tries to induce trance ; she is aware that his influence is at work.

§ 6. These cases, and others like them, seem, then, to enforce on us the conclusion that telepathic hypnotism is a fact—that certain of the phenomena commonly described as hypnotic are occasionally produced by the influence of an operator at a distance, under such conditions that no previous suggestion could have been given.

We must return, in fact, to the conclusion arrived at by the committee of the French Academy of Medicine which sat, as is well-known, from 1826 to 1831, and reported through M. Husson. The fifteenth section of that Report runs as follows :—

"Lorsqu'on a fait tomber une fois une personne dans le sommeil magnétique, on n'a pas toujours besoin de recourir au contact et aux passes pour la magnétiser de nouveau. Le regard du magnétiseur, sa volonté seule, ont sur elle la même influence. Dans ce cas, on peut non-seulement agir sur le magnétisé, mais encore le mettre complètement en somnambulisme et l'en faire sortir à son insu, hors de sa vue, à une certaine distance et au travers des portes fermées."

This, however, is a statement which, taken by itself, would not be likely to obtain effective lodgment in the mind. That it may become truly credible, it must be co-ordinated with cognate facts ; it must be presented, not as a mere isolated anomaly, but as an item in some wider group of phenomena. It suggests two inquiries ; first, whether other non-hypnotic cases of telepathy exist ; and secondly, whether the hypnotic agencies already recognised can be so arranged as that this telepathic agency, this hypnotisation from a distance, should be presented as the culminant phenomenon in a continuous series. Now to the first of these questions, our whole work on *Phantasms of the Living* supplies the answer. There do in fact exist (we maintain) so many cases and classes of telepathic influence that this hypnotic class falls naturally into its place as a species which we should have felt bound to look for on merely analogical grounds. To the *second* question (as I have already said) no answer, so far as I know, has been yet attempted. I do not recall any attempt to correlate this telepathic hypnotism with the other methods of hypnotisation on which different experimenters have relied. The elder English school of *Mesmerists*—

believers, I mean, in a specific, vital effluence or influence—(as opposed to the *Hypnotists* proper, or believers in a mechanical agency alone in the induction of trance),—the mesmerists, I repeat, have altogether missed the distinction between the exercise of vital influence in the presence of immediate proximity of the subject, and its exercise at a distance, say, of half-a-mile. When they have had cases of this distant kind to record they have mentioned them as mere extensions of the specific vital power, without even attempting to show how it can be that an effluence emanating from one man's nervous system, and pervading another man's nervous system by some sort of actual diffusion, can operate in precisely the same manner at distances across which no physiological activity (with the one exception of the skunk's) has been known to project itself.

And the difficulty which is thus ignored by Elliotson and Townshend is consciously dismissed as insoluble by the more cautious observers whom I have been quoting in this paper. For convenience' sake they use the analogy of *suggestion* and speak of "suggestion at a distance"; but they make no attempt to connect this *distant* suggestion with that suggestion in the subject's actual *presence* with the efficacy of which we are now so abundantly familiar.

And I need hardly say that in my own view, also, no complete solution of the problem is possible. We are entirely ignorant of the nature of the force which may be supposed to be operative in the production of telepathic phenomena,—to impel or facilitate the passage of thoughts or sensations from one mind to another without the intervention of the recognised organs of sense.

§ 7. Yet it seems to me that there is something which it is possible to attempt; something which must needs be now attempted, in however fragmentary and provisional a manner, if there is to be any unity, any sense of *ensemble* in hypnotic experimentation; if the results which different observers obtain in such different ways are to throw upon each other the light which they are capable of affording. Some attempt, I repeat, must be made to show the possibility of a transition from the merely mechanical hypnogeny which the majority of modern writers admit, to the vital or mesmeric hypnogeny which Mr. Gurney and I (in accordance with Cuvier, Esdaile, Elliotson, &c.) have defended in these *Proceedings*, and which now again (apart from our directer arguments) is receiving a kind of reflected or inferential probability from these well-accredited cases of "*sommeil à distance*." And, furthermore, such an attempt should show also what kind of connection is empirically found between this *vital* hypnogeny and the *telepathic* hypnogeny with which this paper is mainly concerned—between the effect, that is to say, of the operator on the subject in the subject's presence, and his effect at a distance. And in order to get any clearness into our notions, we must

attack at once the extremely difficult question: What do we mean by *suggestion*? When we say that a subject is hypnotized by *suggestion*, what is the nature, what are the analogies of the force which we suppose to be brought to bear upon him?¹

First, then, we must observe that the word *suggestion*, as a cause of the hypnotic trance, may have at least four different meanings, viz., (1) verbal suggestion, (2) self-suggestion, (3) mental suggestion from a person present, (4) mental suggestion from a person absent.

Ordinary *verbal suggestion* is, of course, a method of inducing the trance as to which all are agreed. No one accustomed to these experiments is surprised if when an operator says "Sleep!" to a subject whom he has often previously hypnotized, that subject falls into the trance. Very little attempt, however, has been made to co-ordinate this method of hypnogeny with the other methods generally admitted (viz., monotonous stimulation and similar mechanical processes), and confusion is frequently introduced at this point by mixing up psychical with neural terms—by talking in the same breath of "inhibition of nerve-centres" and of "expectant attention." But when we come to consider any of the wider problems—such as whether or not mechanical stimulation is the sole originator of hypnotic phenomena—we find ourselves obliged to reduce our terms to a common denominator, and (however vaguely or hypothetically) to form some conception of the *neural* side of each operation.

Such an inquiry of course takes us on to very insecure ground. We know next to nothing of the neural correlates of ideas or states of mind so complex as some of those which occur in the hypnotic state. We are dealing with a problem which bristles with unknown quantities,—where the physiological correlate of "will," if I may so say, is x , and of "consciousness" y , and of "attention" z . But the hopeful peculiarity of hypnotic phenomena is that in them the unknown $x y z$ are mixed up and interchanged in all kinds of ways with—I do not say known,—but less completely unknown—elements, namely with sensory stimuli of various kinds, familiar and unfamiliar, which form a sort of $a b c$,—quantities indefinite indeed, but varying only within certain assignable limits. And though no complete solution to our equations is possible, we may so manipulate them as to get a rather better notion of what $x y z$ are likely to be than if, (as the pure metaphysician seems sometimes to do), we merely arranged and rearranged the unknown symbols

¹ The chapter on "Sujets et Procédés" in Dr. Culler's *Magnétisme et Hypnotisme* (Paris, 1886) may serve as an example of the *incoherence* of our present knowledge of hypnogenous processes. Dr. Culler has taken pains to collect a good many recent experiments, but he arranges them in a confessedly empirical—almost haphazard—fashion. [See, however, Dr. Chambard's scheme in my Addendum.]

as fancy prompts. If, however, we try to use only terms of *neural* action, we incur a new danger—the danger of using words, originally definite, in such a way as to imply more knowledge than we really possess. The use that has been made of the word “inhibition” has often, I think, landed us in quite as much vagueness as the “expectant attention” which is the common *psychical* attempt to give the *mot de l'énigme*. For myself I hold that the enigma of hypnotism has no single answer which solves it. I do not believe that the methods by which hypnotic phenomena can be induced—any more than those phenomena themselves—form a *distinct class*, or can be altogether separated from other modes of acting on the nervous system. And I shall therefore prefer myself to use a quite general expression, and to speak throughout of “stimulation of nervous tracts.” For all these nervous changes involve, at any rate to begin with, some sort of stimulation, and it is presumable that few or none of them affect the whole brain, or the whole nervous system, in an identical manner throughout. But after making these explicit reservations I must ask the reader to bear them in mind once for all,—since their repetition in every paragraph would render this paper, already cumbrous, altogether unreadable.

Once more. In the remarks which follow I shall class as “hypnotic” or as “quasi-hypnotic” certain phenomena which may seem to have little connection with the familiar phases of the hypnotic trance—to be more plausibly referable to the all-embracing category of *hysteria*. In a survey such as I am attempting, some such laxity of demarcation is, I think, unavoidable. I am not going to attempt a formal definition either of hysteria or of hypnotism—an attempt from which those writers have abstained most carefully who have had the widest acquaintance with both affections. The word hysteria, as has been often remarked, designates a mere congeries of nervous symptoms. We cannot deduce these symptoms the one from the other; we cannot present them as radiating from a central lesion. And as regards hypnotism we are scarcely more advanced. We have not reached—we shall probably be long in reaching—any physiological conception which can co-ordinate its Protean phenomena. From the view which would class the “*névrose hypnotique*” as a mere branch of hysteria I dissent strongly and altogether. I hold emphatically that hypnotic changes are primarily physiological rather than pathological;—supernormal, let me say, rather than abnormal; that while on the one hand they may gradate imperceptibly into hysterical and epileptic instabilities, yet on the other hand they may resemble, or even surpass, the beneficent and developmental changes which follow a judicious moral and physical regimen.

But while thus repudiating a conception of hypnotism which seems to me to result from a too exclusive practice among subjects already

diseased, I admit, and even maintain, that the French hospital experiments of the last few years have thrown much additional light on the connection between hypnotism and various abnormal states. They have shown us intermediate cases, interchangeable symptoms, unsuspected transitions of every kind. As the briefest way of illustrating what I mean I will describe a single case of Dr. Pitres'—a case which seems to stand just halfway between what is definitely hysterical and what is definitely hypnotic.

Albertine M., one of Dr. Pitres' best hysterical subjects,¹ is liable, beyond the ordinary hysterical accidents, to a rarer affection of her own. Every now and then she irresistibly falls asleep. Her sleep is perfectly placid, her pulse and respiration normal. Closer inspection reveals two singularities. Her eyelids constantly tremble. A limb raised into the air remains in the attitude where it is placed. Both of these are characteristically hypnotic symptoms. And yet more conclusive characteristics remain. Speak to her, and she will reply. Suggest hallucinations, and she will adopt them. Blow on her eyes, and she will awake.

This seems the description of a spontaneous hypnotic trance. And when we learn further that Albertine can in fact be hypnotized by ordinary means, and that in the induced hypnotic trance and in this spontaneous trance she presents certain phenomena both of anæsthesia and of sensibility to metals which she presents in no other state, the identity of the two trances may seem established.

Yet Albertine's history shows us that the "attaque de sommeil" is in reality the survival or residue of hystero-epileptic attacks of the ordinary kind, which have disappeared under treatment. When she first came under Dr. Pitres' care she suffered several times a day from such attacks, preceded by a complex aura, and including a *phase épileptoïde*, a *phase de convulsions cloniques*, and a *phase délirante*. In the *phase délirante*, (like many similar sufferers,) she maintained the attitude imposed on her, and could reply to questions, and was susceptible of provoked hallucination. And gradually the attacks have dwindled down, so to say, into the *phase délirante* without the delirium,—into the state of gentle sleep, which has never yet spontaneously terminated, in which I first described her. The prodromic aura remains recognisable; but this too has suffered transformation; it has assumed a more prolonged, a more psychical character; it is diluting itself, if I may so say, into a mood of mind.

I have thought that this concrete example might best illustrate the points of contact between hysterical and hypnotic states. In what

¹ See his two tractates, *Des suggestions hypnotiques* (1884); *Des zones hystérogènes* (1885).

follows I shall keep as far as possible to what must be deemed hypnotic, avoiding, at any rate, the distinctly *morbid* causes, the distinctly *degenerative* phenomena, to which the name hysterical is with least question to be applied.

§ 8. Let us try, then, to arrange the various modes of hypnogeny in the order of their simplicity.

As simplest of all I should place mere *massive* stimulation.¹ I suppose that most animals and most men are capable of being "thunder-struck"—of being thrown into a state which our ancestors called *sideration*, and which we now call *cataplexy*.²

It has been pointed out that it is probably in some state of this kind that animals really are when they are supposed to be "shamming dead," the shock of terror having exhausted for the time their nervous energy, and rendered them incapable of motion.

This is the condition so often induced at the Salpêtrière, where the sudden sound of a gong, or a bright light suddenly introduced, will throw many of the hystero-epileptics into a quasi-cataleptic state. The *Iconographie de la Salpêtrière*, and Dr. Paul Richer's treatise on *La Grande Hystérie*, contain striking pictures of this sudden conversion of the excited woman into the senseless statue. A crash of a brass band, the bark of a dog, will sometimes check the fierce volubility as if a spring had snapped. As in Virgil's battle of the bees,

Hi motus animorum atque hæc certamina tanta
Pulveris exigui jactu compressa quiescunt.

This instantaneous inhibition may be made useful in various ways.

One of Dr. Paul Richer's plates represents a whole string of women assembled to be photographed, and then immobilised in attitudes of astonishment and terror by a sudden stroke of the gong. On one occasion a thief was accidentally detected by this method. Her hand was in a drawer when a gong sounded, and she was found some time afterwards dumbly and fixedly grasping the pilfered goods.

Madame B., I may add, was herself susceptible to this form of massive stimulation. On April 24th, while she was in the sleep-talking state, a clap of thunder was heard, and immediately induced in her

¹ In opposing massive to localised or to specialised stimulation, we shall of course remember that all stimulation is more or less local and more or less special in character. Under massive stimulation I place the cases where the *quantity* seems more operative than the *quality* of the stimulus applied. With some subjects shock of any strong kind seems equally effective; others will respond to feeble stimulations of special kinds, but are unaffected by the loud noises, bright lights, &c., which are here ranked as massive stimuli.

² This word was coined, I believe, by Preyer, and applied to the condition of hens staring at a chalk line; but it is now more commonly used for sudden nervous shock which immobilises the subject.

violent convulsions and marked opisthotonos of the usual hysterical kind.

These experiments on the cataplectic effect of massive stimulation have naturally been made for the most part either on animals or on hysterical subjects, who can be thus impressed by shocks which (like the gong's sound or the electric flash) are in themselves insignificant, and leave no injurious results. To apply the requisite degree of shock to a healthy subject would be quite indefensible. But occasions of terror and astonishment will sometimes spontaneously arise; and real life offers many an intermediate stage between the minute of stunned bewilderment and the *stupor attonitus* of the asylums, where one overwhelming moment seems to have paralyzed the mind for ever after.

Shocks of this generalised kind can admittedly initiate almost any amount of visceral, circulatory, vaso-motor disturbance. It is, therefore, antecedently probable that other hypnogenous methods—being, as it were, secondary or specialised forms of general shock—will be able to exercise a powerful influence of this same kind. Remembering (say) the effects of fright on a rabbit, we need not be surprised that in Dr. Liébeault's practice on the impressionable poor of Nancy hypnotic *suggestion* should be found a cheap and easy substitute for cathartics. Remembering that a startling disgrace may set up diabetes, we need not think it incredible that slight temporary bleeding or blistering should follow the command impressed on a previously-sensitised subject. On purely analogical grounds it is, I think, probable that every constitutional disturbance (and some such disturbances result in good, and not in evil) which sudden shock can produce, will be capable of being reproduced or adumbrated among the results of technically hypnotic methods—of methods, that is to say, which by concentration and specialisation *economize* the amount of shock necessary to affect the system. And here it may be well to point out that I am classing the effect of sudden shock as *hypnotic*, although such shock does not, perhaps, directly produce the most interesting phase of hypnotism,—namely, the sleep-waking, or somnambule state.¹ It *directly* produces the two phases known as catalepsy and lethargy,² and some-

¹ Despine (*Etude Scientifique sur le somnambulisme*, p. 205) cites a case where a fright induced first “*léthargie lucide*” then “*somnambulisme*.”

² See Richer, *La Grande Hystérie*, p. 524, sqq. I may say here that though on some important points I cannot bring myself into accord with the school of the Salpêtrière, I recognise in the fullest manner that theirs is the leading collection of instances; that Dr. Richer's book embodies a greater mass of skilled observation of these abnormal states than is contained in any other single volume. Dr. Féré's numerous and important observations have issued from the same school. [As this paper passes through the press Dr. Bernheim's new and larger book on Suggestion takes a foremost place among works dealing with the *therapeutic* aspect of hypnotism.]

times a state of wandering dream. And this (with M. Richer) I consider amply enough to rank sudden shock among hypnogenous agencies. No one can feel more strongly than I the primary interest of the somnambule state. But it is not a *constant* element in the hypnotism produced by any method whatever. There is, in fact, no one symptom which by itself can be taken as essential to a hypnotic case. As the results of shock we have cataleptic retention of attitudes impressed on the limbs, open and fixed eyes, anæsthesia, suggestion from gesture, contractures, increased muscular irritability,—all these in various combinations, suddenly checked by means which dissipate hypnotic states, and leaving no trace in the memory. This is enough, I think, to justify us in treating the effect of *shock* as a kind of rude primary type of hypnotic change.

§ 9. Next in order to general shock, or the change or exhaustion produced by *massive* stimulation, may be placed *monotonous* stimulation, as from the tick of a watch, &c. This is usually alleged to be much the same thing—the exhaustion being now effected by repeated small stimuli, instead of by a single stimulus of excessive strength.¹ The process is an interesting one, though it has not often been successfully applied. It is noticeable that Dr. P. Richer dismisses it in a few lines when he is discussing the various methods in use at the Salpêtrière.² Yet *monotonous* stimulation is frequently spoken of as if it were the accepted type of hypnotic procedure. What is the reason of this? The reason, as I take it, is a curious and complicated one; namely, that two common modes of procedure have been classed under *monotonous* stimulation, whereas this phrase is an inadequate description of one of them and a misleading description of the other. The two modes of procedure to which I refer are Braid's upward and inward squint, and the "passes" of the ordinary mesmerist.

And first as to Braid's method of the fixation of the gaze on a point above and between the eyes. It is at once obvious to anyone who tries the experiment that the sensation thus induced is totally different from the sensation of hearing a watch tick. The ordinary person will not be hypnotized by either the one or the other, but, while he will very soon become unconscious of the watch's tick, he will feel a constantly growing and very peculiar fatigue as he continues the upward convergent gaze. This fatigue is, of course, in part merely muscular, from the strain put simultaneously on the two internal *recti* muscles, but there is

¹ I do not myself feel sure that the exhaustion usually alleged in such cases actually exists. I think that the ticking is very likely a mere form of suggestion. Life is full of *monotonous* stimuli (the movement of the screw in a steamer, &c.) which very many people have attended to for long periods, without any record of trance thus induced.

² *La Grande Hystérie*, p. 530.

also an ache which can be imitated by sharp pressure with thumb and finger on each side of the root of the nose, and which partly results, as I conceive, from the actual pressure of the ball of the eye against the nerves of the orbit—when the eye is, as it were, *jammed* into the position into which it normally sinks gently in sleep. And the correctness of this interpretation is sustained by two facts,—one well-known, and the other a personal observation of my own, which I doubt not that many other persons have made before me. The first fact is that mere pressure on the ball of the eye (*pression des globes oculaires*) is a frequent method in France for inducing hypnotic trance,¹ especially in hysterical subjects. The second fact is that a pinch applied to the root of the nose, or a strong pressure between the eyes, is often similarly effective in the mesmerisation of healthy subjects,—more effective than the “passes,” whose monotony is sometimes deemed so essential.²

And passing on from these closely-analogous pressures, we come next to Richer's pressure of the vertex (first advocated by Dr. Richer in 1878), which he finds to produce hypnotic trance and contracture; and the pressure on the heads of hens, which the practical henwife employs before any operation of minor surgery on her restless brood. The jealously-concealed *attouchements* of Rarey,—perhaps even the cruder practice of dropping leaden plugs down the ears of horses,³—belong to the same category. And these lead us on to Pitres' and Charcot's doctrine of “hypnogenous zones,”—special points, that is to say, which are found (symmetrically arranged or otherwise) on the

¹ M. Lasègue is cited as the originator of this method.—Richer, *op. cit.*, p. 524.

² The precise mechanism and effects of the upward and inward squint have never been satisfactorily worked out. Professor Macalister has kindly promised to make certain *post-mortem* experiments bearing on these points, and to communicate the results to the Society. Pending an exacter inquiry, he thinks it possible that the forced upward gaze involves a strain on the capsule of Tenon, and consequent drag on the sclerotic, with intra-ocular tension of the vitreous chamber;—as well as intra-orbital pressure on certain branches of the fifth nerve. If this be so, Braid's squint would *combine* the intra-ocular tension of the French pressure of the eyeball, with the pressure on the fifth nerve which is effected by squeezing the root of the nose. I find that this squeeze is used empirically for checking hysterical attacks, quite apart from any belief in “zones hystéro-frénatrices.” It is a familiar fact that the same pressure arrests a sneeze.

³ Of course the stupifying effect of sudden deafness is operative here; but see Dr. Taguet's case (*Ann. Médico-Psych.*, Vol. xi., 1884, p. 328), where the “occlusion du conduit auditif à l'aide d'une boulette de colon,” finds its place as a hypnogenous agency along with “la compression digitale des opercules,” and the “pression sur l'ovaire droite,”—this last a typical instance of ordinary action on a hysterogenous or hypnogenous zone.

surface of many patients, of such a nature that pressure on them induces hypnotic trance.¹ Braid's squint, therefore, is, I think, best defined as a pressure on a rudimentary hypnogenous zone of wide diffusion,—a region, that is to say, which is in many persons endowed with that peculiar sensitiveness which sets up a sudden, and suddenly-removable, nervous disturbance of a pervasive kind. As we shall see later on, this amounts to saying that Braid's squint is a form of *localised*, rather than of *monotonous*, stimulation.

Secondly, as to the passes of the ordinary mesmerist. Here, as it seems to me, there has been a curious antagonism of theories, extreme on one or the other side, which has obscured the actual phenomena encountered in practice. On the one side the ardent believers in a "vital effluence" have often exaggerated the importance of "passes"; have often spoken as though every detail of manipulation produced a separate specific effect. And, on the other side, opponents of Mesmer's theory have sometimes been anxious rather to explain away the effect

¹ I cannot go into the elaborate experiments which Charcot, Richer, Pitres, &c., have made on these "zones hypnogènes, hystérogènes," &c. But a few words may indicate the connection thus established between hysterical and hypnotic phenomena. There have been few observations of the kind in England, where hystero-epilepsy is comparatively rare, and in the following sentences I shall mainly follow Dr. Pitres. If a hystero-epileptic patient be carefully examined it will almost always be found that there are one or more points or tracts pressure on which either provokes or arrests the hysterical attack. Among these points are often the top of the head, the ball of the eye, the orbital region; just the points with pressure on which we are so familiar in hypnotic experiment. That these points are not merely imagined by or suggested to the patient is shown by such incidents as the fall of hair growing thereon, or by their accidental discovery while the patient is unconscious. [See also Ch. Féré in the *Progrès Médical*, 1882, p. 42.] They disappear temporarily under the influence of electricity, local anæmia, &c., and have sometimes been permanently abolished by *suggestion* in the hypnotic trance,—another indication of their kinship with hypnotic changes. Patients possessing these zones are also frequently exposed to attacks on hearing some word which recalls a particular set of memories,—the specialised suggestion having the same effect as the localised pressure. [See Pitres, *Des zones hystérogènes*, p. 30.] Furthermore, on the same or other patients points are frequently found, pressure on which will not produce a hysterical attack, but will produce a sleep of the nature ordinarily classed as hypnotic, or will modify the phases of such a sleep, or will awaken into ordinary life patients previously hypnotized by other means. [These last points are styled *hypno-frénatrices*; for they check, instead of generating, the hypnotic trance; but I shall avoid all terms not absolutely needful.] Sometimes a *slight* pressure on a certain point induces a hypnotic trance (which can be conducted through its characteristic phases), while a *violent* pressure on the same point induces hysterical convulsions. Galvanism, local anæmia, hypodermic injections, &c., are found to abolish for a time the hystero-genous zones but to leave the hypnogenous unaltered. On the whole, it would seem that the hypnotic effects are not indeed a mere branch or a mere commencement of the hysterical effects, but are nevertheless related thereto in a manner as yet unknown.

of such passes than to explain it, rather to show that no vital effluence was proved thereby than to determine by experiments of their own how much of truth might lurk in those enthusiastic assertions. And since these mesmeric passes were of the nature of slight stimuli to sight, touch, or hearing, many times repeated, it seemed that *monotonous stimulation* was an obvious and sufficient cause for the effect produced.

Yet I venture to say that persons who have themselves practised this form of hypnotization will be inclined to ascribe its effect to any one of several causes rather than to the monotony of the procedure. As commonly practised now, by Dr. Liébeault, for instance, who has mesmerised some thousands of persons during the last 20 years, the passes and touches made are brief and variable, and although Dr. Liébeault was till lately a strong opponent of Mesmer's theory, his actual experience prevented him from crediting the results of his procedure to monotonous stimulation, and he ascribed them rather to *suggestion*, to the concentration of the subject's mind on the idea of going to sleep.¹

§ 10. And, in fact (as I have implied above in speaking of the value of pressure between the eyes), there would often be much more reason to attribute the effect of mesmeric manipulation not to mere "passes" but to pressure on a *hypnogenous zone*, of which I have already spoken, and which, under the heading of *localised stimulation*, I would place next to the massive and the monotonous stimulation which we have already considered. For here we have a pressure applied to certain points or tracts, empirically discovered and varying in each case, which serve, as it were, as the trains of gunpowder to fire, if a nervous explosion is to be induced. I speak of a nervous explosion, because these specially-endowed points are more often hysterogenous than hypnogenous,—that is to say, it is oftener possible to induce a hysterogenic attack by localised pressure than to induce a mere hypnotic trance.

"I have shown," said Brown-Séquard,² who was one of the first to draw effective attention to these zones, "that certain points in the cerebro-spinal centres are able to cause the disappearance of the properties of other parts of the nervous system; and that the same or other points are endowed with another property not yet studied, by virtue of which irritative lesions of these points can augment the activities, or intensify the properties, of more or less distant parts. The influence thus manifested is *dynamogenic*."

As an instance of well-defined inhibitory points, I will cite the case of Louis V——. In him, as in most cases of hysterical

¹ *Du sommeil et des états analogues*, p. 18, &c.

² *Comptes Rendus de l'Académie des Sciences*, March 29th, 1880. See also *Comptes Rendus* for 1879, pp. 657, 888.

hemiplegia, the inhibitory points vary symmetrically with the transference of the hemiplegia from the one to the other side. When he is in his state of dextral hemianæsthesia and hemiplegia, a finger (query, also a stick or other neutral substance?) applied to his left forehead produces "the immediate and complete arrest of the functions of the life of relation";—of all perception on the patient's part of the world outside him. So long as the finger remains pressed to the forehead he is senseless and motionless,—"*suspendu et inhibé*" altogether.¹

Here then, by a localised pressure of the simplest kind can be induced at once the very maximum of inhibition. And here again, as in the case of massive stimulation, I would point out that we may well expect that a number of minor phenomena and earlier stages of sleep may in other cases be produced by a method which, in one case at least, is so profoundly effective.²

The subject of localised stimulations is one of wide importance in these studies. I must refer the reader to the researches of Brown-Séquard, Pitres, and Paul Richer, and will merely observe that we have here a *specialised hyperæsthesia* of a very significant kind. It appears that the peripheral terminations of various nerves, without inducing any modification of the surface which is obvious to ordinary inspection, have acquired the power, when pressure is applied to them, of setting on foot definite and varied processes of systemic change. The effect produced by touching some of these inhibitory points can only be compared to the effect of an electric shock.

§ 11. And this brings me to the fourth head of my enumeration of hypnogenous agencies.

We have discussed the *massive* stimulation of the whole nervous system; *monotonous* stimulation, tactile, auditory, or visual, and *localised* stimulation of specially sensitive points, any one of which methods may induce in appropriate subjects the state of trance.

And now we come to a class of cases where the agencies—still testifying by the suddenness, vigour, and specificity of their effects to the existence of certain internal tracts of supernormal sensibility—gradually come to indicate something as yet unreached. They gradually cease to be mere exaggerations of influences felt by ordinary persons,—they show powers of affecting the organism possessed by substances which we have

¹ Dr. Brullard, of Nancy, has met with a case where the mere closure of the subject's eyes, apparently by any person, induced somnambulism.—Brullard, *Considérations générales sur l'état hypnotique*, p. 84, (Nancy, 1886).

² Madame B.'s two thumbs are hypnogenous points. Pressure on them (by whomsoever exerted) induces trance, sometimes accompanied by convulsions. This was so, at least, when Dr. Myers and I saw her, but one would desire always to trace such cases from the *beginning*, to make sure that *suggestion* has nowhere intervened.

been accustomed to regard as inert, or as operating only in other ways. Here, then, the interest centres rather on the specialisation *without* the subject than on the specialisation *within* him;—we can more easily hope (that is to say) to detect or classify the “æsthesiogens” which affect the organism thus supernormally than to detect or classify the centres of internal susceptibility whose ready response disturbs the subject’s nervous equilibrium.

And here, too, recent experiments are to some extent bridging over a gulf which at first appeared insurmountable. The effect of *medicamentous* substances, in mere contact, is so extending our conception of hyperæsthesia that the effect of *metals* in contact is not so absolutely isolated a conception as when it was first observed that the touch of gold or iron induced or removed spasmodic rigidity.

I must confess that in this region I depend entirely on the experiments of others. I have seen nothing myself of a nature to persuade me that the external application of a substance habitually inert when thus exhibited can have any effect upon the nervous system. Nor can I here enter fully into the evidence which has nearly convinced me that such is the case.¹ It must suffice to say that the advocates of these specific influences (almost all of them French medical men) seem to me to be at present in possession of the field; and that the palmary case

¹ The question as to the possibility of proving the influence of metals, &c., seems to stand somewhat as follows.

On the affirmative side it is necessary to show that,—

1. Definite æsthesiogens have produced definite and constant effects, while other substances have produced no effects.
2. The subject has not been aware (either by permission or by fraud) of what the substance under trial was.
3. There has been no suggestion, by any word or gesture of the operator, that any given result was expected. To this it is desirable to add a fourth condition, namely,
4. That the operator himself has no expectancy of the result attained. This last proviso is meant to guard against thought-transference. Unless, indeed, there is some independent evidence of thought-transference between the operator and subject, this explanation can hardly be *pressed*; but I suspect, nevertheless, that thought-transference has vitiated many experiments.

On the negative side it has sometimes been shown :—

1. That on some subjects any substance indifferently produces the supposed effect (*e.g.*, *mustard*, Dr. Adler, of Berlin, in “A contribution to the Study of the Bilateral Functions,” &c., in *British Medical Journal*, Vol. i. of 1879).
2. That many cases depend on suggestion only; *e.g.*, Dr. Hughes Bennett, *British Medical Journal*, Vol. ii. of 1878., p. 759 [only *one* case cited]. Dr. Carpenter, *British Medical Journal*, Vol. ii. of 1871, p. 867. Dr. Reynolds, *Lancet*, Vol. i. of 1877, p. 728.

There have, no doubt, also been instances of fraud, though I cannot find any case cited in detail. [Mr. Wakley’s so-called exposure of the Okeys, still cited

of Louis V——, reported upon concordantly by at least four physicians, must be taken into account in any future discussion of this subject.

Hypnotic or quasi-hypnotic phenomena can be induced in Louis V—— by certain metals, by certain medicaments (other than metals), by magnets, and by electricity.¹

I must not enter into the details of the elaborate experiments which have now been made on him and on other subjects by MM. Bourru, Burot, Mabilie, Richet, &c.

There are two points only which I need notice here. One is the confirmation which certain earlier experiments—English, French, and German—say, for instance, those recorded in the *Zoist*—afford to these more recent and exact observations. Mr. Gurney and I have elsewhere pointed out (*Proceedings*, Vol. III.) the reservations with which Dr. Elliotson's evidence in the *Zoist* should be taken—his eagerness to ascribe any improvements in his patient's health to mesmerism ; his impatient neglect of the precautions necessary to establish a real connection of cause and effect. But though he had the faults of a headstrong temperament, there was no doubt either as to his capacity

in 1877 by the *Lancet* in an editorial (Vol. ii. of 1877, p. 646) as valid, was altogether inconclusive.]

It must be remembered that suggestion is undoubtedly a *vera causa* of effects of this kind. In some cases the metals may be really inert, and the suggestion may produce all the effects. In other cases the metals, &c., may be operative, but suggestion may either exaggerate or counteract their operation. The question is whether there are or are not cases where suggestion is excluded, and I think that there is a sufficient residue of such cases to justify a provisional belief. Without going exhaustively into the subject, it may be enough to give the following references in support of this view. Report of Committee of Société de Biologie (Charcot, Luys, Dumontpallier) in *Gazette Médicale*, April 28th, 1877 ; Dumontpallier and Magnin, *Comptes Rendus, Société de Biologie*, 1881, p. 349 ; 1882, p. 147 ; Charcot's lectures, translated in *Lancet*, Vol. i. of 1878, pp. 81, 158, 302, 393 ; Wilks, *British Medical Journal*, Vol. ii. of 1878, p. 102 ; McCall Anderson, *Lancet*, Vol. ii. 1879, p. 41, Vol. ii., 1880, p. 207 ; Stone, *St. Thomas' Hospital Reports*, Vol. ii., 1880 (cited *Proceedings Society for Psychical Research*, Vol. ii., p. 59) ; Landouzy and others cited by Chambard, *Dictionnaire Encyclopédique des Sciences Médicales*, third series, Vol. x., p. 367 ("Influence of Magnet"), and especially Bourru and Burot's case, above cited. As regards the transference of hemi-anæsthesia by magnets (the form of æsthesiogeny which has been most debated) the reader should especially consult Féré's *L'Hypnotisme chez les Hystériques* (*Revue Philosophique*, Vol. xix., p. 1). See also Vigouroux, "*Métalloscopie, métallothérapie, esthésiogènes*" (*Archives de Neurologie*, 1881), and for transference in healthy subjects, Rumpf, *Archives de Neurologie*, January, 1885.

¹ Phosphorised water, for instance, produces sleep and hallucinations ; jaborandi produces catalepsy ; and these and other states can be made to pass into a typical hypnotic somnambulism, in which, and in which alone, the memory of the states induced by the æsthesiogens is retained. (Berjon, *La Grande Hystérie chez l'homme*, Paris : Baillière, 1886, p. 65, &c.)

or his good faith, and his scattered observations on the effect of the contact of gold, iron, &c., on his patients—observations which are not pressed into the support of his own therapeutic theories—still possess, I think, a serious importance.¹

My second reflection is obvious enough, though I do not remember to have seen it in print. It is that if these specific influences of a long range of substances, some of them previously supposed to be inert (as here applied) in reference to the human organism, be admitted, then it becomes far more readily conceivable that the human organism itself is not inert in reference to another human organism ;—that there *is* some specific vital influence such as the mesmerists have claimed.

In Dr. Berjon's tractate we find records of the influence on Louis V—, and on a female patient, of the following substances or forces. With contact : Copper, platinum, gold, hydrogen, sulphate of copper, potassium bromide, potassium iodide, sulphur, antimony, ammonium, chloride, carbonic acid, electricity (dynamic and static) ; magnet : human hand. Without actual contact : Gold, mercury, hydrogen, chloride of gold, acid nitrate of mercury, cyanide of mercury, sulphate of iron, perchloride of iron, iodine, opium, chloral, and other narcotics ; tartar emetic, &c. ; scammony and podophyllin ; champagne, and other alcoholic drinks ; valerian, cantharides, camphor, jaborandi, pilocarpin ; magnet ; or a human hand held near the body.

¹ See, for instance, his paper on " A Cure of Convulsive and Rigid Fits," *Zoist*, Vol. ix.

² Among the actions of medicaments at a distance which Dr. Berjon records there is one which is all the more curious, inasmuch as the physicians concerned do not appear to have been aware of its special oddity.

Among the medicaments which were held in stoppered (not sealed) bottles, at about 3 inches from the back of the neck of Louis V— and a female subject were laurel-water and nitro-benzol ("*essence de mirbane*"). Now these are very odorous substances, and we cannot exclude the supposition that the subject smelt them, and was led by the mere suggestion to act in a certain definite manner, when he or she smelt that special odour. But there is a difficulty here. Nitro-benzol is to ordinary senses pretty nearly identical in smell with laurel-water,—and is, in fact, habitually used in the cheap confectionery and other trades as an inexpensive substitute for oil of bitter almonds, the scent of prussic acid being precisely reproduced. But these two subjects, the Jewess and Louis V—, invariably distinguished nitro-benzol from laurel-water, and acted consistently in each case. There was a remarkable hyperæsthesia of some kind, and, considering the effects of the non-odorous substances, it is far from clear that the sense of *smell* was even in this case primarily concerned.

Dilute nitro-benzol provoked convulsive shocks of the arms, and movements as though of drawing with a pencil. Laurel-water with Louis V— gives rise to convulsive movements of the chest, hiccough, salivation, and tingling of the chest.

With the Jewess it gives rise to a religious ecstasy which takes about a quarter of an hour to run its course. Her eyes are upturned and fill with tears ; her arms and hands are raised heavenwards ; her face expresses beatific

A further and fuller account of these experiments is still expected. I may here give a few samples of the results obtained. The first experiments were made with metals, which were applied to the skin, to see whether transference of the hemiplegia could thus be produced. Lead, zinc, and silver produced no effect. Copper produced a temporary return of sensibility, and a temporary vaso-motor modification, so that a prick on the skin which had not previously bled, bled while a sheet of copper was superposed. Platinum produced an itching sensation, but no transference. Steel produced transference. Gold produced transference, but along with the transference it produced severe pain. The objective character of this influence of gold was shown by a curious incident. Dr. Mabile one day supported Louis V—during a “crise,” and the doctor’s gold ring touched the patient’s hand for several minutes. When the epileptic recovered consciousness he complained of pain in that spot, a “brûlure” appeared there, and the redness lasted for several weeks. “Les phénomènes physiques persistants,” says Dr.

vision. She then prostrates herself in adoration and weeps with her head on the ground. Finally she throws herself backwards, with convulsive movements of chest and diaphragm and an expression of grief. This ends in sleep, and she can be thrown into somnambulism and questioned on what she has seen. She says that she has seen the Blessed Virgin in a blue dress starred with gold ; that “malheureusement elle n’est pas de sa religion,” (for she is not a *converted Jewess*), and that the Virgin has reproached her with her misdoings (which exist, in fact, independently of any form of creed), and has thrown her down on the ground as a sinner. When awakened to ordinary consciousness, “elle se moque des personnes qui lui parlent de la Vierge.”

By varying the substance applied, the experimenters have discovered that it is the essential oil of laurel which produces the ecstacy, while the hydrocyanic acid produces the convulsions.

Now I need hardly remind my readers of the prominence of the *laurel* in the descriptions of the procedure of the Pythoness at Delphi. The *δάφνη*, indeed, generally means the bay or *laurus nobilis*, but in such vague traditional descriptions as we have in Plutarch (*Pyth. Orac.* 6) of the *burning* of laurel leaves before vaticination, or in Lucian (*Bis. Accusat.* 1) of the Pythia’s *chewing* the laurel leaf, it is impossible to be sure what genus is meant. [For vaticinatory dreams generated by laurel, see Bötticher, *Baumkultus der Hellenen*, p. 346.] The *prunus lauro-cerasus*, or cherry laurel, may perhaps have grown along with the bay, γνάλοις ὑπο Παρνησσῶο. And it becomes, surely, a very possible supposition that some early Pythia was accidentally susceptible to something of the same specific influence as these hysterical patients at Rochefort ; and that some part at least of the tremors and ecstasies of later prophetesses consisted in a repetition by suggestion or tradition of the excitement which in some πρωτόμαντις was genuine and uncontrollable. We should thus have a *hysterical succession*, such as that which (if we are to trust the comments of the rival school of Nancy) “la nommée Wit—” is likely to found among many generations of patients in the hystero-epileptic wards at the Salpêtrière. [As this paper passes through the press, similar instances of the effect of magnets and medicaments at a distance are given by Dr. Dufour ; *Ann. Méd.-Psych.*, Sept., 1886.]

Berjon, (*Op. cit.*, p. 19) “rendaient toute simulation inadmissible.” The next step was the discovery that gold would act at a distance. “Il suffit d’approcher un objet d’or, une montre, une pièce de vingt francs à 10 centimètres, pour que le sujet, qui n’a pas vu ce qu’on lui présente, accuse une vive douleur.” Mercury, acting through the glass bulb of the thermometer, was similarly painful. Hydrogen, on the other hand, produced a quite different effect. “Une éprouvette contenant du gaz hydrogène est mise au contact de la main ; le malade manifeste une vive satisfaction et il rit ; le rire est continu et spasmodique :—aucun phénomène de transfert ne se produisit.”

The medicaments were for the most part held in stoppered (not sealed) bottles, wrapped in paper, a few inches from the back of the subject’s neck. The effects produced were curiously connected with hypnotism by the fact that though they often constituted a crisis which left no waking memory, and could not, at its height, be suspended by hypnotization, yet when the effect of the drug was declining it was possible to throw the subject into the somnambule state, and then to obtain from him an account of the sensations which the drug had produced. The effects of the several drugs were roughly analogous to their known effects, but presented some new and constant features. It is claimed that these characteristic effects were produced when the experimenter was not aware what drug he was holding in his hand ; nay, even that when the experimenter was mistaken as to what drug he held in his hand, the phenomena were still such as the drug actually presented should induce.

These experiments are still under discussion ; nor have I myself seen any effects of this kind which might not have been due to suggestion. Nevertheless, as already implied, the evidence for the specific effect of contact with *gold*, for instance, on certain subjects seems to me very strong ; and I therefore recur to the point urged above ; namely, that it seems not unreasonable to suppose that if a human body is so abnormally sensitive as to enter into contracture at the touch of gold, and to distinguish gold by contact alone, or by proximity alone, from other metals, it may not be altogether insensitive to the touch of another human body—another centre, that is to say, of forces and perceptions like its own.¹

¹ Between susceptibility to metals, &c., and susceptibility to the influence of *living* bodies, susceptibility to the proximity of *dead* bodies would occupy an intermediate place. Perhaps we may thus explain the following narrative sent to us as a “ghost story” of unusual type and good attestation. It comes from Mrs. Wheeler, 106, High-street, Oxford, who is known to Mr. Podmore.

“In the summer of 1874 we moved into the house we now occupy, 106, High street, Oxford. We had the house on lease for some years, but had never lived in it, having let the upper part of it.

We took as our bedroom the lower of two rooms built over an archway at

Rather it seems probable that just as the hypnotic effect of mere massive or mere monotonous stimulation may be connected by the intervening link of localised stimulation, with the hypnotic and other neural effects of the contact or even the proximity of specific inanimate substances or specific non-vital forces, viz., magnetism and electricity, even so may these specific effects be themselves connected with the specific effects of *vital* contact, *vital* proximity.

the side of the house. On the first night that we slept there I woke up just at 12.45 (I heard a church clock striking the quarters), with a feeling that there was something terrible up in the roof. I don't know what it was, but I lay awake with this feeling for nearly an hour, and then I woke my husband and told him of it, and he fetched me some brandy.

I found, however, that I could not shake off the feeling and go to sleep again. I could not even stop in the room, but came out into the sitting-room, and sat up there until 5 a.m., when I went back to bed. I did not have the horrid feeling at all when I was out of the room.

The next night I woke again at 12.45 a.m., with the same dreadful feeling, though not quite so bad as the first night. The same thing happened night after night for some weeks, and I woke up at the same time with the same feeling of something horrible up in the roof. I did not sleep any night, I believe, from the time I awoke—12.45—till after 5 o'clock.

Once, I remember that I went up into the passage over our room, and tried to get at the space under the roof, but found that I could not do so; and once, in the day-time, I tried to get into the space under the rafters, through the bedroom, where there had once been a means of communication, but I found that it was built up, and that I could not get there.

At last my health would not stand it any longer, and I went away on a visit to a brother at Cambridge. Whilst there, I heard that the roof over the two bedrooms had fallen in, and forced a bedstead through the floor of the upper room into our own bedroom. That I took as a sufficient explanation of my feeling of horror.

It was not for some weeks afterwards that I learnt by accident (my husband had purposely concealed the fact from me, fearing the effect on me in my weak state of health), that the dead body of a child had been found, hidden under the rafters of the roof, over our bedroom. The body was dried up like a mummy, and the head was twisted round. It was evidently the body of a new-born child that had been murdered and placed there for concealment.

ELLEN M. WHEELER."

"Mr. Wheeler fully confirmed his wife's account of the incident, and assured me that he recollected distinctly his wife's distress of mind, and her saying that she felt sure that there was something wrong up above their heads.

"F. PODMORE.

"May 24th, 1884."

The following corroboration is extracted from a local paper:—

"*Oxford Times*," Saturday, 26th September, 1874.

"A SKELETON IN THE ROOF.—Yesterday week (*i.e.*, the 18th) the decayed rafters of a corner of the roof of premises in the occupation of Mrs. Wheeler, bookseller, High-street, suddenly fell in, when the skeleton of a child was dis-

§ 12. But here let us pause ; for we have arrived at a point where we may hope to get some insight into the mechanism of *suggestion*; that is to say, of the first of the four forms of suggestion which I distinguished earlier in this paper—the verbal suggestion of a person present with the subject.

And first let us try to realize exactly what verbal suggestion will do.

covered, which appeared from its condition to have been secreted there for a number of years.”

Somewhat similar is another case, received from a lady well known to me, who prefers not to give her name.

“ June 11th, 1883.

“ In the summer of 1872, my father occupied a rectory house not far from Blisworth, in Northamptonshire, for a few weeks, and I went down to spend three days with him and my mother at Whitsuntide ; my two children and their nurse being already there. The room given to me was over the dining-room ; next door to it was the night nursery, in which my nurse and children slept, the rest of the inmates of the house being quite at the other end of a rather long passage. I hardly slept at all the first (Saturday) night, being possessed with the belief that some one was in my room whom I should shortly see. I heard nothing, and I saw nothing. The next morning, Sunday, I did not go to church, but betook myself to the dining-room with a book. It was, I remember, a perfectly lovely June morning. Before I had been a quarter-of-an-hour in the room, and whilst wholly interested in the book, I was seized with a dread, of what I did not know ; but in spite of the sunshine and the servants moving about the house, I found it more intolerable to sit there than it had been to remain in the room above the night before, and so, after a struggle, and feeling not a little ashamed, I left the room and went to the garden. Sunday night was a repetition of Saturday. I slept not at all, but remained in what I can only describe as a state of expectation till dawn, and very thankfully I left on the Monday afternoon. To my father and mother I said nothing of my two bad nights. The nurse and children remained behind for another week. I noticed that the nurse looked gloomy when I left her, and I put it down to her finding the country dull, after London. When she returned she told me that she hoped she would never have to go to stay in that house again, for she had not been able to sleep there during the fortnight, being each night the prey of fears, for which she could not account in any way. My father left this rectory at the end of the summer ; and some time afterwards he was talking of the place to me, and mentioned laughingly that before he entered it the rector had ‘ thought it right to let him know that that end of the house in which I and my children were put up was said to be haunted, my room especially, and that several of his visitors—his sister in particular—had been much troubled by this room being apparently entered, and steps and movements heard in the dead of night. I do not like to let you come in,’ he added, ‘ without telling you this, though my own belief in it is small.’ Within, I think, a year or 18 months at most of my father’s leaving, the house had to undergo considerable repair, and amongst others, a new floor had to be laid in the dining-room. On taking up the old boards four or five (I forget which) skeletons were found close under the boarding in a row, and also close to the hearth-stone.”

Some analogous cases are recorded by Stilling and other writers. This physical explanation would apply only to a small proportion of the narratives sent to us as indicating the continued operation of deceased persons.

Here again we may most conveniently begin with its most advanced or conspicuous effects,—cases where the mere utterance by a casual bystander of one special but apparently harmless word, like “frogs” or “telegram,”¹ throws the subject instantly into the convulsions, delirium, and insensibility of a hystero-epileptic attack. At first sight this might seem the strangest of all effects of verbal suggestion; yet it is soon seen to be a mere intensification of familiar phenomena,—an exaggeration of the brain’s reflex irritability quite in keeping with the other *exaggerations* which characterise the hysterical state.

We are all familiar with the extraordinary sensitiveness which a particular group of memories may acquire in healthy minds,—the mother’s sudden start, at her child’s wail, from the slumber which her husband’s snoring has left undisturbed,—the access of blinding unconsciousness to the surrounding scene which follows on the casual mention of some secretly-loved or secretly-dreaded name. Here, then, the touch, so to say, which falls on a definite region within the brain,—the region occupied by that hypersensitive group of memories,—produces an effect analogous to the effect produced by a touch on some hypersensitive peripheral tract,—say the drum of the ear or the scar of an old wound. And just as this natural or traumatic sensitiveness of particular points on the surface is (so to say) parodied and exaggerated by the morbid and arbitrary sensitiveness of the hysterogenous zone, and the patient is thrown into convulsions by a touch which would merely have tickled the healthy subject, even so the instinctive or acquired sensitiveness which certain groups of memories in most of us possess is parodied and exaggerated by the morbid and arbitrary sensitiveness of the girl who because her companions once put frogs in her bed cannot hear the word “frogs” without a hystero-epileptic attack.

If then we can thus compare the hysterogenous suggestion to the pressure on a hysterogenous zone, may we compare the *hypnogenous* suggestion, which more directly concerns us, to pressure on a *hypnogenous* zone? To a great extent I think that we may. Note in the first place that hypnogenous suggestion is not really so simple and easy a thing as is sometimes represented. I doubt whether it is ever the case that *non-hysterical* patients can be hypnotized for the *first time* by a mere verbal command, without the *gaze or touch or will* of the operator. I think that all that we can fairly say is that when a subject has been previously hypnotized by other means, or has previously undergone hysterical attacks which involve, or at least predispose to hypnotic changes, that subject can often be hypnotized again by the mere verbal revivification of that group of organic memories which have been originated by the previous trance. If this be so, the hypnogenous suggestion

¹ Pitres, *Des Zones Hystérogènes*, p. 30

would be allied to the hysterogenous suggestions somewhat as the pressure on the one class of zones was allied to the pressure on the other,—the lesser and more definite effect not being, indeed, a mere branch or commencement of the larger and more confused effect, but being related thereto,—say somewhat in the way in which the act of pressing the foot on the pedal of a piano is related to the act of sitting on its keyboard.

But the hypnotic suggestions with which we have to deal comprise many other suggestions besides that of falling asleep. They comprise the definite hallucinations, the definite commands, of which we have of late had so many examples. But here again it would be a mistake to assume that induced hallucinations, for instance, are a mere outcome or incident of the hypnotic state. Rather we may say that even as pressure on the pedal modifies the loudness and continuity of the sounds produced by striking each individual note, so (and in a much greater degree) do the general nervous changes of the hypnotic trance increase the definiteness, isolation, persistency, of the faint instinctive impulse to belief which follows when we hear a statement confidently made.¹ Hallucinations, though more easily induced in hypnotized persons, can often be induced in persons in the waking state, who have previously been hypnotized, and sometimes on persons who have never been hypnotized at all. I have myself repeatedly made a certain subject believe for a minute or two that she both saw and smelt a hole singed in her dress by an imaginary coal, although I could not hypnotize her, nor had she ever been hypnotized by anyone. The sight of children, or the remembrance of one's own early childhood, is enough to explain this state of mind. I can remember my own feelings at four years old, when a respected elderly friend stated that he was a bear, and simulated to some slight extent the movements of that quadruped. I knew all the time that it was Mr. S. ; but the idea of bears, pre-existing in my mind, was so strongly stimulated that I was paralyzed with terror. It was an incomplete hallucination, induced not in a hypnotized but in an immature brain by a definitely-localised stimulation—by a touch on a group of exciting mental pictures which experience had not yet sufficiently partitioned off from the milder scenes involving only old gentlemen and sofas.

The susceptibility to suggestion, then, which characterises the hypnotic trance, involves in effect an exaggeration of the sensibility of groups of images within the brain, which—in the absence of control from inhibitory or co-ordinative centres—develop with greater readiness into hallucinatory perception, impulsive acts. Observe, however, that with hardly any subject are all suggestions equally efficacious.

¹ See Bernheim "*De la suggestion dans l'état hypnotique et dans l'état de veille*," (Paris, 1884), on this topic.

Even when the operator seems to have obtained complete control—to be able to prompt a well-bred subject to theft and murder—he may still be unable to prompt to rudeness or indecorum. The explanation of this odd fact I take to be that the nexus of habit which opposes the infraction of rules which we constantly obey, though constantly in a position where we could break them, is stronger than the nexus of habit which opposes an act which we theoretically disapprove, but have never been within measurable distance of committing.¹

Somewhat similarly, we find that hypnogenous zones generally occur in seldom-touched parts of the body, where the habitual link between sensation and responsive action is not strongly established.

I venture, then, to suggest that were the whole plexus of brain-operations unrolled before us, we should see the specific sensibility gaining one ideational centre after another, as suggestion is repeated, very much as one point after another on the periphery may become modified into a hypnogenous zone. And the stimulus of appropriate suggestion,—still in the first place peripheral, as given by voice or gesture, through ear or eye,—touches, as I conceive, a hypnogenous tract within the brain, and though no longer massive like the gong, makes up in precision for what it lacks in volume and intensity.

Thus far I am supposing that the subject will accept the suggestion to sleep, or other suggestions, with equal readiness at anyone's command. But this is not universally the case,—with healthy English subjects is almost never the case. Far more frequently there is a further specialisation,—again a specialisation *without* the subject superadded to the specialisation *within* him,—and we find that he can only be entranced by certain definite persons,—possibly by one person alone among very many who make the attempt. On what does this difference depend? What are the qualities in that complex entity, the human

¹ Different subjects vary greatly in this particular, affording sometimes, as Professor Beaunis has observed, a singular insight into the relative vigour of their inward motives. Some experiments of Mr. Langley's on animals, interesting in this connection, are described in his paper "On the Physiological Aspect of Mesmerism," read before the Royal Institution, March 14th, 1884. "In man," he says, "the phenomena of mesmerism are of a very much more striking character than they are in the lower animals. Speaking generally, this seems to be due to a greater interdependence of the various parts of the nervous system in the lower animals. In these, when any one centre is stirred up by exciting impulses, an irradiation of exciting impulses is apt to take place to all other centres, and the mesmeric state is in consequence apt to be broken. And, on the other hand, when a centre is inhibited, an irradiation of inhibitory impulses is apt to take place, and the whole nervous system is in consequence apt to be inhibited. Hence the activity, or suppression of activity, of particular parts of the central nervous system, which forms so conspicuous a feature of mesmerism in man, can be only partially produced in the lower vertebrates."

operator, whose presence or absence involves these differing degrees of hypnogenous efficacy?

Heidenhain has suggested that differences in warmth or moisture between the *hands* of various operators are enough to account for these variations in power. To say nothing of other objections to this view, it is disproved by the fact that the touch or immediate proximity of the operator's hands is by no means an essential part of the mesmeric process. Again, this apparent *electivity* has been explained by suggestion of the ordinary kind—as though when A can entrance a subject and B and C cannot, this were because the subject had an idea to begin with that A alone could entrance him. But this view also has been, I think, sufficiently disproved by experiments on unconscious persons, on sleepers, and on young children.

And if previous suggestion—preconceived idea—cannot explain the fact of entrancement by one special person rather than another, then neither can it explain the incidents of the *rapport* which continues to exist during (or even after) the trance between the subject and the operator thus elected. That *rapport* shows itself in various ways. There may be a special sensitiveness to the operator's *voice*, so that his mere whisper is heard and recognised amid a Babel of other sounds. There may be, as in Dr. Taguet's case and in several of Elliotson's cases, a special sensitiveness to the *scent* of the operator, recalling the dog's power of discovering articles which his master has touched. There may be a vaguer sensitiveness to his presence,—or even, as I am inclined to hold, to his mere approach,—till the perception verges into what can no longer be called hyperæsthesia, but rather a clairvoyance or clairaudience, which does not strictly follow the lines of any special sense, but specialises itself in what seem arbitrary and unexpected ways, and detects qualities which have never before proved so directly discernible.

And, moreover, besides these sensory (or supersensory) elements in the mesmeric *rapport*, there is commonly what is called a psychical connection as well, an obedience of the subject to the operator's will, and his will only—a concentration of the enthralled attention into that single channel.

Various as are these phenomena, and impossible as it at present is to co-ordinate them adequately, I may perhaps venture to give to all of them alike the title of “selective hyperæsthesia,”—implying that the sensitised organism of the subject responds to one particular class of stimuli with more than normal readiness, and in other than normal ways. And I should compare the special sensitiveness to the operator's scent or voice to Louis V——'s sensitiveness, say, to opium in mere external contact; while the subject's sensitiveness to obscurer facts concerning the operator (as his mere approach or his maladies) may be

paralleled with the sensitiveness of other subjects to the touch or proximity of gold, or of other substances which, when thus exhibited, are ordinarily inert.

§ 14. May not this notion of selective hyperæsthesia, when carefully dwelt upon, suggest to us that the “mesmeric *rapport*,” the “vital effluence” of which Elliotson, &c., were wont to speak as of a single force or entity, may in reality be a varying complex of different elements? and that among these elements may be something which is neither “will-power” nor “character” in any psychical sense, but simply the specific effect of the proximity of certain living organic compounds? The subject feels Brown’s “influence” and not Jones’s, or feels Brown’s influence soothing and Jones’s distressing. But Brown and Jones, whatever else they may be, are at any rate aggregates of organic compounds, and it is possible that to these hyper-sensitive perceptions, Brown may differ as much from Jones as podophyllin from jaborandi.¹

And thus we gradually find ourselves led up to the conception of a vital influence or effluence by a method which does not present this vital effluence as a unique, isolated, incomparable force, but rather as an advanced term in a series of influences, each one of which needs to be discovered by direct experiment, while the discovery of any one of them corroborates the efficacy of the rest. It is in this way, perhaps, by gradually fitting together a number of results obtained at separate points of a far-reaching line, that modern science has the best chance of confirming whatever may be sound in the interesting but enigmatical experiments of Reichenbach,—experiments which the writers in these *Proceedings* have never consented to set aside as illusory, though we have thus far found them almost impossible to repeat.

Returning to the special inquiry on which we are now engaged,—as to the true *modus operandi* of hypnotic suggestions of various kinds, let us note the results now reached. We have seen that suggestion in its simplest form—the verbal suggestion of any person taken at random—is analogous to the *localised stimulation*,—stimulation of a simple kind, but applied to particular nervous tracts,—which in some patients induces hypnotic or hysterical phenomena. And we have seen, again, that suggestion somewhat more differentiated,—the verbal suggestion of some one person who is alone capable of reaching the subject’s attention,—is analogous to the *specialised stimulation*, as from metals or drugs

¹ Dr. Despine maintains (*Etude Scientifique sur le Somnambulisme*, pp. 134, sqq.) that “convulsive epidemics” are propagated by actual infection,—without sight or other suggestion of an ordinary kind. His instances seem to me inconclusive; but the point needs attention. (See *Ann. Méd.-Psych.*, 1879, Vol. ii., p. 141.)

exhibited in a manner which would ordinarily leave them inert, which in certain patients is followed by results of such a singular kind.

§ 15. We come now to the third class of suggestion which we mentioned at the outset, namely *self-suggestion*; giving this name to cases where the trance does not, so far as we can tell, follow on any hint supplied to the patient by another mind, or on any external stimulus whatever,—where the subject does not suppose that anyone orders him, or desires him, or expects him to fall into the abnormal condition, but falls into it, as we say, “of himself.”

This self-suggestion is one of the most difficult, and one of the least explored, branches of our subject. It involves, in fact, the whole connection between what we call *spontaneous* and what we call *induced* nervous changes; and moreover, as is commonly the case when the word *spontaneous* is introduced, the chief of all dilemmas—*free-will or necessity*?—looms in the background of the inquiry.

First, let us consider what are the cases which we have to explain. Under what circumstances do hypnotic or quasi-hypnotic nervous states appear without manifest external stimulus? I am bound to add the word “quasi-hypnotic,” for I have insisted on the close connection between hypnotism and certain hysterical states, such as Albertine’s “attaques de sommeil”; so that I must face the difficulty of *their* origination as well.

We find, then, that there are a few cases where subjects can throw themselves into trance by a mere effort of will. There are a few cases where subjects can maintain themselves in the trance by a mere effort of will; and there is a case where a subject in a state of complete inhibition originates phenomena otherwise producible only by the strongest hypnotic suggestion.

Again, we find that there are cases where there is no question of deliberate choice on the subject’s part; where the special nervous condition is hereditary, as in a famous family where “the sons in their nightly discursions ran against and awakened each other”; or where the trance appears as an idiopathic symptom in an otherwise normal person, as is so often the case with ordinary somnambulism; or where a tendency to trance and similar conditions follows upon some definite injury.

Now I think that most of these instances may be shown to be analogous to the “deferred suggestion” of recent hypnotic experiments,—nay, I hold that the perception of that analogy is essential to our comprehension of the experimental “deferred suggestion” itself. Thus much, therefore, I am bound to try to show. But I suspect that this is not the only analogy involved. I suspect that in some of the cases of self-suggestion where the element of *will* is markedly present, we have an analogy to another mode of hypnogeny, namely, to the induction of

trance by an actual "vital effluence" from operator to subject. At any rate, whether this be so or no, I feel sure that we shall not get at the root of the matter without trying to realise what would be meant by such an hypothesis.

First, then, let us try to understand deferred suggestion, and its connection with heredity. We start with the fact, which to us is at present ultimate, that living matter has a tendency not only to respond to a stimulus A, but to be so modified by that stimulus that it thereafter responds in a rather different manner to A, when A recurs—and sometimes also to other stimuli, B, C, D. This is rudimentary or unconscious memory. As we get higher in the scale consciousness is superadded, and the memory of A persists while B, C, and D are occurring, even if it does not actually modify them. Suppose a physician says to me at dinner, "You have heart disease; you must go upstairs very slowly or you may die." This is a deferred suggestion to me to move slowly when the time comes for me to go upstairs. I *need* not think of it till that moment comes. But it impresses my mind so much that I continue to think of it while I am merely sitting at dinner—the consciousness of A persists through B, C, and D, though it will only modify my action when the cognate moment recurs—the going upstairs, which is a sort of A' if the physician's warning were A. Here we have a deferred suggestion, consciously received, and consciously borne in mind till the time to work it out in action arrived.

But neither of these intrusions of consciousness is necessary to the efficacy of a deferred suggestion. In the first place, we know from common experience that the brain receives many impressions which do not at once rise into consciousness, but do so when a favourable opportunity offers itself. Only a small proportion of the impressions which certain powerful stimuli (as incipient asphyxiation or certain forms of fever) can summon into retrospective consciousness do actually rise into consciousness at the moment when they are received. These are deferred suggestions, not consciously received. Take the most trivial and familiar case. I glance down a list of books to see if a book by *Helmholtz* is in it. It is not, and I remember absolutely nothing of the list. Some time afterwards I see a book by *Herzen* advertised. I at once feel that I knew that there was an author of that name. His name, in fact, was on that former list, and I unconsciously received the deferred suggestion—only capable of revival by seeing the word *Herzen* again—that there was a scientific author of that name. Now deferred suggestion in the hypnotic state offers an exaggeration of such a case as this. I suggest to the hypnotized subject that when he leaves my room (after an hour of waking life) he will perceive that his hat is blue instead of black, or that he will send a telegram to tell me that it is a fine day. (For my present argument there is no difference

between the suggestion of a hallucinatory percept or of an unmotivated action.) When the fixed moment comes—the moment whose arrival is as A' to my suggestion A,—that suggestion recurs and works itself out, though during B, C, and D, the events of the intermediate hour, no knowledge of A was present nor could be summoned into the conscious mind.

Yet between this absurd act and my forgetfulness of the name *Herzen* there is only a difference of degree. In the hypnotic subject's case one loom (so to say) in the vast manufactory within him has been disconnected from the general system of driving-gear, attached to driving-gear of its own, and set to turn out a special pattern, independently of the orders executed by the remaining looms in the factory. And similarly in my case the little bobbin (so to say) with the name *Herzen* inscribed on it, went on spinning by itself without connection with my general scheme of memories. Only it was so small an item that its disconnected action and its subsequent attachment to the main system attracted no notice, or, at least, excited no surprise. *Deferred* hypnotic suggestion, in fact, like the *immediate* hypnotic suggestion of which I have already spoken, is an advantage taken of the increased dissociability of mental elements which results from the inhibition of certain co-ordinative mental centres or activities in the hypnotic trance.

There are other conditions also in which suggestion can take a hold of the mind which the co-ordinative centres cannot check. I have spoken already of the excessive sensitiveness of certain groups of memories in childhood; for instance, the idea of bears. Well, this sensitiveness, prior to the age of co-ordination, may be taken advantage of to effect a deferred as well as an immediate suggestion. Just as my friend who told me that he was a bear, gave me for the moment something approaching to a hallucinatory percept of himself as a bear, so do some nurses talk to children about ghosts in a way which implants a deferred suggestion of horror in traversing churchyards, which no adult reason can overcome.

“Trunken müssen wir alle sein;
Jugend ist Trunkenheit ohne Wein,”

says the poet. And just as youth, with its strong irreflective impulses, its organic exhilaration, resembles the state of incipient intoxication, so does childhood, with its ready receptivity and want of co-ordinative power, resemble the hypnotic or sleep-waking condition. By hypnotizing the adult we restore to him the trustfulness of childhood, much as by slightly intoxicating the elderly we restore to them (as Plato has it) the vigour and enterprise of youth.

There is, however, a state in which we are even more susceptible to suggestion, have even less of co-ordinating faculty, of resisting power,

than either in childhood or in the hypnotic trance. I allude to our condition before we are born—to the period at which the various looms are actually being placed in our manufactory, in rough accordance with the arrangement of similar looms in the factories of ancestral minds. And we most of us know to our cost that although we may improve the working of these looms in detail we have little power to modify their general type, or the principal driving-gear which connects them. And, to take the defect with which we are now concerned, some original weakness in that driving-gear may subject us to hystero-epileptic attacks, with their concomitant hypnotic phenomena.

I have perhaps said enough to explain what I mean by extending the analogy of deferred suggestion to this wide range of hereditary and (so-called) spontaneous manifestations of hypnotic phenomena. The impulse, as I hold, which ultimately induces those phenomena, has been already given to the organism,—either in that organism's first inception, or during the course of life,—in much the same way as the hypnotizer can communicate the impulse to sleep, or to perform some act, at a future moment which he determines by his own choice.

It is probable that many of those who accept this analogy at all may consider that it covers the whole extent of self-suggestive phenomena. They may think that *spontaneous* cases include *voluntary* cases, as a mere sub-division distinguished by the concomitance of a purely subjective sensation of *choice*. They may say that the pre-existent conditions of the organism determine in every case—in the so-called voluntary cases as fully as in the involuntary—the phenomena which that organism proceeds to manifest.

I do not here directly controvert this view ; but I cannot help suspecting that there *is* a difference between hypnotic phenomena which occur spontaneously and those which seem self-induced by a direct effort of will ;—or at any rate that this second class, in the apparent mode of their operation, afford an analogy with the influence which the “silent will” of an operator can sometimes—as our experiments have gone to show—exert on a sensitive subject.

I am not sure, however, that such words as *will*, *mental effort*, and *attention*, are the right words to use in such a connection. I think that we must not take for granted that this influence is necessarily accompanied with ordinary consciousness on the agent's part. It appears, for example, that a person himself in the sleep-waking state can mesmerise another person,—exerting apparently the same kind of influence, and the same kind of volition in directing it, as a normally-waking man can exert. Yet, in the case to which I specially allude, when the sleep-waker “came to himself” he was quite unconscious that he had mesmerised—and had for a long time refused to demesmerise—the

other subject. It would seem then that in considering the genesis of hypnotic phenomena which are apparently *self-induced*, yet not precisely spontaneous, (as hereditary hysteria is spontaneous,)—we shall do well to consider phenomena originated in various nervous conditions besides that of normal wakefulness.

I shall cite three cases. In the first the subject was in a state of general “suspension and inhibition” profounder than any ordinary phase of the hypnotic trance. In the second the subject was already hypnotized. In the third the subject was in the normal state.

The first of these three cases may seem from one point of view to be eminently *involuntary*,—eminently a case where the previous history of the organism determined the recrudescence of an impressive scene. But—as will be seen—it has some puzzling features. Oddly enough we have here, and here alone, an actual suggestion made in so many words by a man to himself;—and here, too, we have the remarkable production, without external stimulus, of those vaso-motor disturbances which form at present the extreme limit of the hypnotizer’s power over the subject’s physical organism. Who could expect the somnambule to direct his spontaneous energy to the production of hæmorrhage or vesication? Yet the history of Louis V——, one of the most important documents which Nature has ever submitted to the psychologist, affords an example of self-suggestion pushed to this almost incredible length.

In the first place it must be explained that, according to the testimony of four physicians who have tried experiments with Louis V—— at two separate asylums,¹ hæmorrhage and bleeding stigmata can be evoked in him by *external* suggestion. The first recorded experiment of the kind was as follows. The patient being in the somnambule state, one of the doctors said to him: “At four o’clock you will fall asleep, come into my study, sit on that chair with your arms crossed, and bleed at the nose.” The crossing of the arms was, of course, to prevent his touching his nose. When four o’clock came he fell into the hypnotic trance, went and sat in the chair with his arms crossed, and after a few moments began to bleed at the nose.

Again, the doctor traced the subject’s name on his two fore-arms with a blunt instrument, and told him, in the somnambule state, “At four o’clock you will go to sleep and bleed on the lines which I have traced on your arms.”² Shortly before four o’clock he was

See Drs. Bourru and Burot, *Comptes Rendus de la Société de biologie*, 12 juillet, 1885, for experiments at Rochefort, and Dr. Mabilly, *Progrès Médical*, 29 août, 1885, for experiments at La Rochelle. See also Berjon, *op. cit.*, p. 36, sqq.

² The fact that the arm was *touched*, though with a blunt instrument, may suggest that the subsequent redness and even bleeding were the mere effect of

examined, and his arms were then without marks. At four he fell asleep, and on his left (non-paralysed) arm the tracings stood out in red relief, and a few small drops of blood oozed from them. On the right, or paralysed, side, there was nothing apparent.

And this leads us to the phenomenon of self-suggestion on which I wish to dwell. I translate from Dr. Mabilles's paper, read at the Congrès scientifique de Grenoble, 1885, and reprinted in the *Progrès Médical*, as already cited. "On August 5, 1885, at my visit, about 8.30 a.m., in presence of Dr. Ramadier, assistant physician of the asylum of Lafond (La Rochelle), and of M. Chauvelot, house-physician, I plunged V—— into somnambulism, and, anxious to check his sleeplessness, I said to him: 'This evening, at eight, you will say to the attendant, Ernest: "Ernest, come and help me to bed, I want to sleep." Then you will go to bed and you will sleep till five in the morning. During your sleep you will hear nothing, see nothing, feel nothing. You understand me, V——?' 'Yes, sir.'

"At about 7.57 p.m., V——, who was walking in the court-yard, stood still with a fixed gaze, underwent some slight convulsions of the face, as is usual with him when the moment fixed for a suggestion draws nigh,

contact. We do not, in fact, know how far vaso-motor reflex excitability may go in the production of phenomena analogous to the so-called "*tache cérébrale*," or red mark produced by pressure on the skin in many morbid conditions. It would have been more satisfactory had Dr. Mabilles, &c., explicitly taken account of this possibility. Nevertheless, it certainly appears:—

1. That Louis V—— was so frequently touched in various ways that any tendency to *tache cérébrale*, or subcutaneous hæmorrhage, must have been observed; and if the marks lasted for *months* (as is recorded of the marks on the arm, Berjon, p. 36), he must have been covered with such marks.
2. That precautions were taken (p. 36) to prevent his touching himself for "some minutes" before the bleeding appeared. The *tache cérébrale*, so far as I know, appears within two or three minutes after the touch, if at all.
3. Professor Beaunis' experiments (*Recherches Expérimentales*, &c., Paris, Baillière, 1886, p. 29) on the production of redness and cutaneous congestion on Mlle. A. E. by suggestion, are confirmatory of Dr. Mabilles's. Here also Professor Beaunis does not state that he tried whether other points touched without suggestion would become equally red, no doubt considering that it was obvious that Mlle. A. E., who leads an active life, was not thus affected. Fortunately, on Sept. 3, 1885, I had myself an opportunity of trying the experiment on this same subject. I quote from Mr. Gurney's note made on the same day:—

"Mlle. A., hypnotized by M. Liébeault in about three seconds, and immediately afterwards *most severely* pinched by E. G. on the arm, without giving the slightest sign of sensation. Liébeault slightly pricked the knuckle of the middle finger of the right hand, and told her that a patch of redness about the size of a 50-centime piece would form there; and also that a similar patch would form on the corresponding

and fell into the sleep, or rather into that intermediate state which M. Dumontpallier has described. His hyperæsthesia of the left side disappeared. He repeated to his attendants the words previously cited, and at 8 p.m. precisely slept profoundly. From that moment onwards, while I was unable to wake him, for he saw, heard, felt nothing, and the pressure of his hysterogenous zones had no effect, V—— spontaneously renewed this series of experiments to which he had been previously submitted. Thus, he pressed with his fingers on the balls of his eyes, as if to be thrown into lethargy, opened his eyelids to pass into catalepsy, rubbed the top of his head to pass into somnambulism, and entered on the following dialogue, putting the questions and making the answers himself.

“Q. You hear me? A. Yes, sir.

“Q. Give me your arm. A. Yes, sir.

“Q. V——, a quarter of an hour after you wake there will be a V on your arm at the place which I mark (here he marked a place on his arm), and it will bleed. You understand, I wish it to bleed. A. Yes, sir.

“Q. V——, count to ten and awake at *seven*.

part of the other hand. The other hand was not pricked or touched in any way. F. W. H. M. also gave her a scratch on the arm, in order to see whether this would also become red after a short interval. She was then woke, and in about 15 minutes the patches had formed as predicted; that on the left hand being a little less red and distinct than that on the right. Half an hour after this both marks had completely disappeared. There was no redness where the scratch had been given. Mlle. A.'s hands were not under the strictest scrutiny throughout, but she was close to us, and talking during the whole time that elapsed between her waking and observation of the patches, and anything like continuous rubbing must, we think, have been noticed. M. Liébeault has complete confidence in her integrity, and all his experience of her goes to show that she retains no memory on waking of what has passed during her hypnotic sleep.”

The following rules, I think, should be observed in experiments of this kind:—

1. Before asserting that a result is obtained by *suggestion alone*, repeat the experiment on the same subject with all the other circumstances, but without the suggestion.
2. Before asserting that a result is due to a *particular process alone* (as shutting or opening the subject's eyes, rubbing the top of the head, or special points on the head, &c.), let that process be repeated on a subject who does not know what to expect by an operator who has no theory on the subject whatever.

The rigid application of these rules might, I fear, reduce certain well-rounded theories to a somewhat lean and scrappy condition.

Professor Delbœuf (*Revue Philosophique*, August, 1886) has amusingly shown how readily one subject will imitate while entranced the hypnotic phenomena which he has observed in another.

"V—— counts 1, 2, 3, 4, 5, 6, 7, seems to wake from his sleep; then continues to count 8, 9, 10 and stops. Loud snores then indicate that he is asleep. Then, about a quarter of an hour after this dialogue V—— was seized with the crisis which we usually observe in him when the stigmata have been suggested to him. At the end of this crisis we examined his arm and we saw a V, and the V was covered with blood. This bloody effusion was produced at a place where a V had been suggested by me on August 3, in the presence of Drs. Barth and Delarue, of La Rochelle, according to the method of Drs. Bourru and Burot.

"The same phenomena were twice produced during the same night, in the same place, and by the same procedure. V—— then awoke exactly at 5 a.m., without knowing that he had been asleep, and with the conviction that he had just been picking flowers in the garden of the asylum. We have here, then, a hæmorrhage produced during induced somnambulism, without any external agency, in the place of the pre-existing stigmata, by what I think I may call *auto-suggestion*. And this auto-suggestion (as well as all the other phenomena which I observed during the night of August 5-6 in the presence of Dr. Ramadier and M. Chauvelot) was of *cortical origin*, since the initiation of peripheral impressions was for the time suppressed. It was like the awakening and exteriorisation of sensations already stored up in the organism."

Here at last, I may observe incidentally, is the true explanatory parallel to the case of Louise Lateau. Here is a case where there is no pretence of miracle and no possibility of fraud; a case where the very mechanism of stigmatisation is laid bare from beginning to end, and the asylum-patient retraces the doctor's visit with the same reality of starting drops of blood with which the pious ecstatic renews the story of the Crucifixion.¹

Passing from this exceptional state of profound entrancement to the commoner phases of hypnotism, I will next cite a remarkable case

¹ The difficulty of keeping abreast of modern experiment,—and the danger of confident negations,—are illustrated by the following passage from a little book of Dr. Maudsley's, entitled *Natural Causes and Supernatural Seemings*, (London, 1886).

"There is not on record," he says (p. 261), "a single well-authenticated case, nor is there any sound argument to justify the preposterous opinion, which has been broached by some quasi-scientific authors, that these stigmatic bleedings might be produced naturally by the exceeding and specific intensity of the imagination acting upon the particular areas affected. The supposition that the zinc [in a well-known case of fraud] was perforated by the intensity of the imagination, would be scarcely less preposterous." Whether an idea is "preposterous" or not is a subjective question, and depends on what goes before and what behind it in the speaker's mind. But "quasi-scientific" is a more objective term; and Dr. Maudsley's use of it here seems to prove that he has not had time to acquaint himself with the experiments of Drs. Bourru and Burot, nor with those of Professor Beaunis, contained in the *Recherches Expérimentales*

of Dr. Pitres'¹, where the subject, in the somnambulic state, was able to suggest to herself that it was impossible to awaken her.

Dr. Pitres' subject, "Albertine," (already mentioned,) is liable to accesses of hysterical aphasia, which she greatly dislikes. One day Dr. Pitres suggested to her, in the hypnotic trance, that she would be unable to speak when she awoke, and would continue aphasic for 24 hours. The suggestion succeeded; all that day she could not speak. Some time afterwards Dr. Pitres again hypnotized her, and made the same suggestion. But she rebelled, and said that if he persisted in giving her this order she would not let herself be awakened. He did not believe that she could prevent him from waking her, and blew on her eyes and tried other accustomed means. Nothing would wake her, and he was obliged at last to promise that she should only be aphasic for five minutes. Then he woke her without difficulty. The experiment was repeated many times.

Here, then, we have a well-marked case of self-suggestion in the hypnotic trance itself. M. Pitres does not state whether Albertine can hypnotize herself, by a mere effort of will, in the waking state. From the account given, it rather appears that the trance itself has facilitated the self-suggestion,—that the same condition of supernatural susceptibility which renders her subject to the commands of her hypnotizer renders her subject also to a command of her own. And I would point out that this accords with my hypothesis that in self-suggestion the subject may be exercising on himself, from within, a force or influence truly analogous to the force or influence which the hypnotizer exercises on him from without.

Passing on, again, from the self-suggestion of the subject already hypnotized to the self-suggestion which throws the waking subject into trance, we find ourselves on a path of "yogism" and mysticism which would lead us far from the present discussion. I shall cite one case only, where the act of will is strongly marked,—the waking choice even determining the hallucinations which are to adorn the self-induced trance.

Dr. Liébeault² was acquainted with a "somnambule naïf,"—a deaf-mute of the name of Loué, who apparently, even before the scene which I am about to relate, was able to entrance himself by an effort of will. Dr. Liébeault told this man that the dead could appear to the living, and that, if he concentrated his mind on his father, his deceased

already cited. Applied to Drs. Bourru and Burot, such an epithet would be unwarrantably discourteous. Applied by Dr. Maudsley to Professor Beaunis, it would provoke a smile. But I repeat that it would be unjust to charge any such intention on Dr. Maudsley,—who wrote, it is clear, in mere ignorance of the recorded facts.

¹ Pitres, *Des suggestions hypnotiques*, Bordeaux, 1884, p. 54.

² *Du sommeil et des états analogues*, pp. 259, 282.

father would probably appear, and that he (Loué) would remember the interview. "Le somnambule," says Dr. Liébeault, "se mit aussitôt à baisser la tête ; sa respiration devint bruyante, sa figure prit une expression sérieuse, et au bout de quelques minutes il se leva, l'œil fixe, et se dirigea vers la porte de l'appartement. Les témoins de son rêve et moi nous le vîmes tendre la main, déposer un baiser dans le vide,"—and, in fact, he went through the scene of an interview with the phantom of his evocation.¹ From that date he frequently repeated the process, firmly believing that it was veritably the dead who came. He profited also by his new-found power to procure himself imaginary interviews with living personages of a less sacred character. These interviews, though they also seemed real at the time, he always knew to have been mere hallucinations. But as regards the interviews with the dead, the kindly doctor, kinder than those unwelcome friends of Horace's *halluciné*,—allowed the poor man to rest in a belief whose destruction would have robbed him of his most valued joy.

‘ Pol me occidistis, amici,
Non servastis,’ ait, ‘ cui sic extorta voluptas
Et demptus per vim mentis gratissimus error.’

Cases like this,—where choice and effort seem so deeply engaged, do certainly take us far away from the mere ‘attaques de sommeil,’ for instance, of the congenitally-unstable Albertine. They bring us face to face with the question : Is this *will* or *attention* of the subject's, which he uses to induce the trance, a new force introduced amongst the forces of his organism from some source independent of or pre-existent to that organism ? This, of course, leads us at once to the old problem as to the existence or non-existence of anything which may be properly termed a *soul*, independent of the known physical organism.

But, nevertheless, without directly grappling with such a problem as this, we can, I think, discern an instructive difference between this direct self-suggestion and the mere accidental stirring or gradual maturation of external excitations received in the past.

¹ A parallel instance of self-suggestion will be found in the *Archivio Italiano per le Malattie Nervose* for 1883, Part 4: thus summarized in *Ann. Méd.-Psych.*, 1884, Vol. ii., p. 467. "Une fillette de dix-sept ans, à demi idiote, est, quelque- heures avant la mort de son père prise d'un sommeil magnétique ; hallucinations célestes (?). On arrive plus tard à l'hypnotiser ; les mêmes scènes se reproduisent, mais on cesse les expériences, la malade ayant tenté à la suite de l'une d'elles à se suicider. Actuellement cette jeune fille se met elle-même en état d'hypnotisme, et s'en tire par les méthodes connues qu'elle pratique spontanément, tant l'extase lui est devenue agréable. On est obligé de l'en déshabituer."

Dr. Charles Despine's patient, Estelle L.—, could also induce and modify trance at will.—*Observations de Médecine Pratique*, p. 62, &c. (Anneci, 1838.).

First, let us suppose that when Dr. Liébeault's deaf-mute Loué, for instance, throws himself into a trance by an effort of will, without any mechanical stimulus, that effort is really a new force, cognisable by us only on the psychical side, and imported into the sum of forces previously manifest. In that case the new force will be a vital force exercised by himself on himself ; and its nearest apparent analogy will be to the assumed vital force which Dr. Liébeault can exercise on him.

Next, let us suppose that he does *not*, by this act of will, import any fresh force from an unknown plane of being. Nevertheless he effects, by unknown means, some kind of change in a previously-existing vital equilibrium. He transforms some kind of latent capacity into a force which, after intermediate steps unknown to us, ends by throwing him into that special condition into which the "vital influence" of an external operator can also throw him. May we not, then, here again conjecture, as the simplest way of correlating the two phenomena, that the self-suggestion which sends the subject into sudden trance, at the bidding of his mere caprice of the moment, may involve some disengagement within him of the same force which, when exercised upon him from without, is that very "vital influence" or "effluence," in whose real existence we have independent grounds for believing ?

A few more words may make my meaning clearer. In most cases of successful hypnotism there is some amount of voluntary attention on the subject's part. He co-operates with the operator by "fixing his mind" on the process ; and, in fact, some theorists have thought that his fixation of his mind was the sole cause of the effects which follow. But what makes him fix his mind ? He *chooses* to do so ; that is all we can say. And it is this apparent act of choice, this voluntary direction of the attention to a particular idea, which is the stronghold of those who maintain that there are mental processes within us which are not inevitably determined by physical antecedents. I am not arguing either for or against this view ; I am only reminding the reader that this voluntary attention of the subject's is something separate from the mere reflex psychical response to the operator's suggestion, and that it is an element which enters in varying degrees into all inductions of hypnotic trance, except those effected by sudden shocks, or upon sleeping, unconscious, infant, or insane persons or animals. And the question is whether we can get a little deeper than this mere statement, whether we can detect an analogy between this idiosyncratic impulse, this "*réaction personnelle*," and any hypnogenous agency which a man can exert upon others than himself.

And to this question I tentatively reply that perhaps when I *attend* to a thing, or *will* a thing, I am directing upon my own nervous system actually that same force which, when I direct it on another man's

nervous system, is the "vital influence" of mesmerists, or the "telepathic impact" of which Mr. Gurney and I have said so much. And when I say "directing the force on my own nervous system," I am not speaking of myself as a kind of *angelus rector* without and above my organism. How the force is generated is an open question in the case of the suggestion which I exert *within* myself as in the case of that which I exert *without* myself. But whether the essence of those acts of will, or of attention, be an illation and infusion of forces which do *not* pre-exist in my organism, or a concentration or conversion of forces which *do* so pre-exist, I urge that that essential element may be the same in the one case as in the other.

§ 17. Whatever, then, the precise explanation of this form of self-suggestion may be, it forms a step between mere mechanical hypnogeny and that "vital influence," which in its turn serves as the starting point for so many fresh perplexities.

For no sooner do we fix our attention on what we have defined as the *third class* of suggestions—suggestions made *mentally* by persons in the presence or proximity of the subject—than we recognise that the theory of vital influence, already assailed on one side by the advocates of a merely *mechanical* hypnogeny, is assailable also, on the side *further* from ordinary experience, by anyone who should choose to maintain that the true agency which travels from man to man is a cause unconnected with corporeal proximity—that is to say, that it is never the "pass," or the gaze of the eyes, or the touch of the fingers which sends the subject into trance, but always an agency of that unknown "psychical" kind which our evidence shows sometimes to accompany the exercise of intense *thought* or *will*.

The cases which bring this question into prominence are especially those where the influence of the mesmerist (as in Dr. Esdaile's mesmerisation of a blind man) has been exercised from the distance of some yards, by gazing steadily at the subject.

Are we to suppose that there was here a real ἀμμάτω ἀπορροή—a veritable efflux of nervous energy from Dr. Esdaile's eyes, which impinged in some physical manner on the blind and unsuspecting subject? Or was the transfer of a purely telepathic kind? and was the direction of Esdaile's eyes on the subject a mere aid to concentration of thought or will?

Mesmer would have said that a real efflux from the eyes was here the efficient cause. The writers in the *Zoist* (including Esdaile himself), so far as they faced the problem distinctly, would have made the same reply. And recently Dr. Baréty (*Force Neurique Rayonnante*, 1882) has attempted to show that actual "neuric rays" are emitted by eyes and fingers, which are susceptible of reflection from mirrors, concentration by lenses, &c. "Nous croyons," he says (p. 37), "qu'il n'y a aucune

témérité à conclure . . . que la force neurique . . . n'est qu'un mode particulier de mouvement . . . qu'elle agit par l'intermédiaire de cette matière subtile . . . que les physiiciens appellent *éther*."

I think that there is temerity in such a conclusion, and I do not like to see the *ether*—the *deus ex machina* of a certain school of modern theorists—dragged in, if I may so say, by the head and shoulders, to explain anything, whether physical or psychical, which particularly puzzles us. Yet I think that Dr. Baréty's experiments should be repeated, and I am quite sure that we can have no *à priori* certainty that such rays as he alleges do not exist.

On the other hand Professor Janet's experiments with Madame B. (and many older experiments,) seem to show that the action of thought or wish may overbear the influence of proximity, even when operator and subject are sitting side by side.

"Cette influence de la pensée de l'opérateur," he says,¹ "quelque extraordinaire que cela paraisse, est ici tout à fait prépondérante, à un tel point qu'elle peut remplacer toutes les autres. Si on presse la main de Madame B. sans songer à l'endormir, on n'arrive pas à provoquer le sommeil ; au contraire, si l'on songe à l'endormir sans lui presser la main, on y réussit parfaitement."

Professor Janet is, of course, alive to the danger of mere *suggestion* in such a case ; and (as already mentioned) he goes on to say that he thinks that this supposition is met in several ways, especially by the fact that in sleep thus induced by *will*, Madame B. was under the influence of the person who had really willed her from the next room—not of the person who had been placed near her, and to whom, if mere *suggestion* induced the sleep, that suggestion might naturally have pointed.

Again, in the experiments in which we obtained localised anæsthesia, of a single finger only, and in a manner which seemed to exclude both monotonous stimulation and expectant attention as operating causes,² it nevertheless appeared that it was necessary for Mr. Smith to concentrate his attention on the subject's finger, as well as to point his own fingers towards it. But the concentration of attention did not suffice without the physical approach of the fingers as well.

The approach of Mr. Smith's fingers, it will be remembered, was concealed from any ordinary cognizance of the subject's senses. But before we can be sure of a specific vital influence we have to guard ourselves against possible *hyperæsthesia* of the ordinary senses ;—and this is difficult to do while the operator, however hidden, is himself present with his subject. We must desire cases where his influence shall in

¹ *Bulletins de la Société de Psychologie Physiologique*, Vol. i., p. 27. (Paris, Alcan.)

² See *Proceedings*, S.P.R., Vols. i., iii., reff. in Index.

some way persist after his own removal, or become embodied in some substance otherwise inert.

§ 18. The most direct way, therefore, of testing the reality of "vital effluence" would certainly seem to be the so-called "mesmerisation of objects." Personally, I have witnessed very few experiments of this kind which led to any positive result;¹ but (as Mr. Gurney and I have elsewhere insisted,) the testimony of Esdaile and others in the matter is too strong to be set aside without diligent attempts to imitate their proceedings. Yet even here new ambiguities present themselves as our knowledge of *deferred* and of *telepathic* suggestion increases.

Professor Beaunis, of Nancy,² gave some counters to Mlle. A. (already often mentioned) in her waking state, and said: "If you at any time put one of these counters into a glass of *eau sucrée* and drink it, you will go to sleep." Mlle. A. forgot the liquid thus ordered. She tried wine, water, wine and water, in vain; at last she tried putting the counter into a glass of *eau sucrée*, drank it, and went to sleep at once. The suggestion, that is to say, which had disappeared from conscious memory was still operative below the threshold of consciousness. But if a case like this had occurred before the efficacy of deferred suggestions was understood, it would probably have been thought by the mesmerists of the day that the counter had been mesmerised by Professor Beaunis' contact, and that the *eau sucrée*, for some inscrutable reason, was a liquid peculiarly qualified to draw that counter's mesmeric virtues out.

So much for the possible confusion between *deferred suggestion* and *vital effluence*. And if we introduce the hypothesis of mental or *telepathic suggestion*, such as Dr. Gibert's mental suggestion to Madame B., that she should look at a certain book at a certain hour, a fresh source of ambiguity is introduced. Suppose that Professor Beaunis had *mentally suggested* to Mlle. A. that when she put the counter into *eau sucrée* and drank it she would go to sleep; and that this suggested result had actually occurred. It would then look precisely as though the *eau sucrée* had undergone some mysterious change; whereas the only change would have been that telepathically impressed on Mlle. A.'s mind by the mental suggestion previously made.

It would, of course, be easy so to arrange the experiment as to avoid possibilities of this kind; but it is important that they should be recognised; for experimenters who have been fortunate enough to encounter the rarer phenomena of mesmerism, have often overlooked the precautions which are needful if any conclusive proof of one or other hypnogenous agency is to be acquired.

§ 19. It is plain that we have here arrived at one of the hardest

¹ See *Proceedings*, S.P.R., Vol. i., reff. in Index.

² *Recherches Expérimentales*, ii., p. 89. (Paris, Baillière, 1886.)

knots in the whole inquiry. It resolves itself into this : Is there one and only one form of influence which is not communicated by the ordinary channels of sense? Or is there an influence which is felt by a percipient only when the agent is very near him? and another influence which the percipient feels equally when the agent is at an indefinite distance? Readers of *Phantasms of the Living* will see that this problem—there dealt with on its psychical side alone—presents itself in an urgent manner when we attempt to establish an analogy between our experimental results in thought-transference and those spontaneously-arising impressions or apparitions which sometimes coincide with the death or crisis of a distant friend. Our parallel halts in so far that we have not yet succeeded in experimentally obtaining (in the sense of the direct communication of a thought, image, or sensation from one person to another,) thought-transference otherwise than between persons in close proximity. In *Phantasms of the Living* this difficulty has been pointed out, but no complete solution has been attempted.¹ Speaking for myself only, I am inclined provisionally to accept the hypothesis that more than one form of force, or at least more than one form of receptivity, is concerned in the phenomena.

The action of medicaments at a distance—at a distance measured by inches—on Louis V—— and others, has led MM. Bourru and Burot to suggest, in a tentative manner, that there may be a zone, immediately surrounding the person of a hyperæsthetic patient, to which his hyperæsthesia extends ; so that certain objects, when placed within that zone, exercise a direct effect on his nervous system.

Hypotheses somewhat similar have been suggested by various other experiments, and analogy seems to me to point (though not decisively) in this direction. On the other hand one obvious objection to the view, namely the complexity which it introduces into the conception of telepathic action, does not seem to me to be important. We have given the name telepathy to a mass of phenomena which have in common only the fact that they involve transmission of thoughts or feelings from one mind to another, without the agency of the recognised organs of sense. But it would be rash to go beyond this, and to assume that we have at once lit on a single, simply-acting force or energy. So long as we can detect forces only by their influence on *ourselves*, not on registering instruments, we are likely not only to ignore what may be the most characteristic action of each force, but to confuse together disparate forces which exert on *us* something of the same effect.

§ 20. But here, I repeat, we come to one of the most difficult points in the whole inquiry. What is the relation between the supersensory transmission of thoughts and feelings in close proximity, and a similar

¹ See Vol. i., pp. 96-97. Note the case of Mr. S. H. B.

transmission between persons separated by the whole diameter of the planet?

In order to answer this question we ought to be able to compare very many cases of telepathy at varying distances. *Phantasms of the Living* contains, I think, almost all the cases on which reliance can be placed, and they are not yet enough to admit of an assured comparison between the phenomena which occur (1) between persons in contact; (2) between persons in the same room; (3) between persons in adjoining rooms; (4) between persons at a distance of less than a mile; (5) between persons many miles distant from one another. We do not know where the breaks, if any, occur in this chain; we do not know what is the effect, on the one hand, of a material obstacle such as a wall, or, on the other hand, of what I may call a psychical *rapprochement*, as, for instance, a previous familiarity on the agent's part with the scene where the percipient sits. But (speaking in a guarded and provisional manner) we may note the following points:—

- (1) Contact seems generally to facilitate transmission of thought and feeling, and the induction of the hypnotic trance.¹
- (2) Presence in the same room seems to be essential to most of our definite experiments in thought-transference, and to the induction (in the first instance) of the hypnotic trance.
- (3) Presence in an adjoining room has occasionally sufficed for a direct experiment in thought-transference; and occasionally for the reproduction of the hypnotic trance when it has been previously induced by the same operator.
- (4) *Perhaps* hypnotisation at a distance is easier when the distance is (say) of one mile rather than ten. Perhaps, too, there is a certain difference in the quality of the subject's sensations when the mesmeriser is at a distance. Thus Mme. B. (in this resembling one at least of Mr. H. S. Thompson's subjects²) always professed, not only to feel who it was that was thus influencing her, but to have a vague sense as of that operator's *presence* in the room. This I heard her say repeatedly in the hypnotic trance (in which she seems always to tell the truth as to her own sensations), nor has she, as I understand, been ever mistaken as to whether it was M. Gibert or M. Janet who had sent her to sleep from a distance.
- (5) Lastly, when the telepathic influence is exerted over long distances we have very much less of direct experiment, but

¹ I need hardly repeat here that cases in which contact is permitted are not in themselves a proof of anything beyond unconscious muscular pressure, if the image or action be such as any form of pressure can suggest.

² *Phantasms of the Living*, Vol. i., page 99, and see note.

very much more of spontaneous apparition. Our distant cases include, as we have often pointed out, all varieties of objectivation, from the mere sense of presence, or the "mind's-eye" view, to the actual phantom in apparent bodily form. But though these distant cases offer many phenomena not hitherto observed in experimental or contiguous cases, they present also many points of contact. Sometimes, for instance, it seems to be the *will* of the distant agent which impresses his phantasm on the percipient—sometimes the death of a distant friend seems to produce a quasi-hypnotic effect on the percipient, which, in one case, at least, seems to have amounted to a sort of agitated trance.¹

Now there is, of course, a temptation to simplify the problem by assuming that in all these cases of supersensory transmission a force is acting which in the first place is identical, cognate, or correlated with known forces, and in the second place is the same for all supersensory action whether in contiguity or at great distances. Such expressions as "brain-waves" (Knowles), "mentiferous ether" (Maudsley), "force neurique rayonnante" (Baréty), "ondulationnisme" (Perronet)—to which many others will doubtless ere long be added—testify to this natural, though premature, desire to ticket or identify a force which (in the opinion at least, as I think I may say, of those who have expended most pains on tracing its effects) cannot at present be correlated with nerve-force, or with magnetism, or with ethereal vibrations of any kind, by any true physical demonstration.

And here, again, there is a temptation to the attainment of something of apparent simplicity by a just opposite road. We may say that telepathy is a *psychical* agency, and that there is an impassable gulf between all agencies which can be classed as *physical* on the one hand, and on the other hand, all agencies, whether apparently operating in proximity or at a distance, which we can as yet cognise on the psychical side alone.

But this view seems to me to involve a metaphysical, as those other views involved a physical assumption. I do not like to assume that any effect perceptible to human senses is without a physical cause of some kind—a cause, that is to say, which intelligences of adequate elevation could cognise objectively and deal with mathematically, as we deal with those forms of matter and force which our minds can at present embrace. Such physical cause or basis may no doubt be so remote from our ordinary physical conceptions that the philosopher may be justified in leaving it altogether out of the question, and in dealing with the interrelations of thought and emotion exclusively on the

¹ *Phantasms of the Living*, Vol. ii., p. 42.

psychical side; but it seems to me that telepathy forces us into a position where it is no longer safe to assume any sharply-defined distinction of mind and matter,—where we must rid ourselves of every metaphysical preconception and look to experiment and observation alone.

We must remember that it is only quite recently that we have frankly accepted a physical basis or concomitant for all the operations which go on within our own minds. It was in this century that Lord Jeffrey maintained that “there is not the smallest reason for supposing that the mind ever operates through the agency of any material organs, except in its perception of material objects, or in the spontaneous movements of the body which it inhabits.” And even Mill, as is well known, regarded the concomitance of a neural change with *all* mental changes as an open question. We are now pretty well agreed that such concomitance does always and inevitably subsist within us; but we still speak of the interaction of thought and emotion—of the “world of mind”—as of a realm, or of operations, where no physical basis must be assumed. I think it possible that the facts of telepathy may compel us to extend our conceptions of physico-psychical concomitance, and to face the supposition that though forces may exist, and agencies operate, which the ordinary materialistic view altogether denies, yet these also may be correlated—though above the limit of our intelligence—with the force and matter with which our mathematical science already deals.

It will, of course, be apparent from the line of argument here adopted that I do not consider that the problem of the relation of *near* to *distant* supersensory transference admits at present of even approximate solution. Our recorded instances must receive many in addition,—nay, our notions of matter and of mind must pass through many a phase as yet unimagined,—before we can tell in what degree the mesmerist's gaze across the room resembles that strange and mighty impulse which carries the dying father's image across seas and continents to his unexpectant child. All that I have suggested is that there is a presumption in favour of *some* connection, *some* continuity; that the mingled similarity and dissimilarity of the phenomena at differing distances is such as may lead us to conjecture the joint action of cognate causes in varying proportion—of causes cognate but not identical, implying no single capacity of percipience, no single energy of communication.

§ 21. I can but note these points, on which fuller knowledge may come in time. For the present it must suffice to have endeavoured, in the *first* place, to supply additional evidence of the existence of telepathic hypnotism, or hypnotic suggestion at a distance; and, in the *second* place, to trace a kind of series or gradation—often interrupted, indeed, and largely hypothetical—between the simplest and commonest, and the rarest and strangest modes of hypnotic influence,

Some of the hypotheses which I have thus advanced may be *erroneous*, but they cannot justly be said to be *gratuitous*. For they are advanced in order to correlate certain actually-observed phenomena, which must bear *some* relation to each other, and whose relation can only be properly discussed if some tolerably clear scheme is set forth as a basis for such discussion. I have cast, therefore, the suggestions of the preceding pages into a tabular form.

There are, indeed, several items in this scheme as to which the evidence seems to me at present inadequate. But I include these phenomena simply because the authority of competent physicians on the whole supports them. And by competent physicians I mean not men who, though competent in other lines, have made few or no hypnotic experiments, but men who having shown medical or physiological ability of a more general kind, have also taken real pains to experiment for themselves in this special direction. I am sorry to quote so small a proportion of English names; but the fact is that during the last ten years this inquiry has been very eagerly pursued by French *savants*, with some success also by Germans and Italians, but by Englishmen hardly at all. I have no controversial aim; and I desire to see the experiments of the French schools repeated and analysed by as many English men of science as possible.¹ But until such experiments are actually made, and reason shown for explaining the results otherwise than as the school of the Salpêtrière (for instance) explains them, I feel bound to disregard the mere *à priori* negations of men who have done little work of the kind themselves, and are not always familiar with the work done elsewhere. The difference in this matter between England and France is one which a few years will probably do much to remove. In England a practising physician is even now half ashamed of knowing much about hypnotism; the savour of charlatanism still hangs about the topic; and if he writes a book in which he has to allude to it, he shows more anxiety to disclaim error than to discover truth. Much the same was the case in France, till Charcot, Richet, Beaunis, and a few other well-known men took the subject up,—and in Germany, till Heidenhain took it up. The fashion has now changed, and the danger in France is now rather of over-eagerness to register new extensions of the fascinating inquiry. Under such circumstances, it seems plainly the duty of an English student to set forth the outlines of the subject as it stands at present, not vouching hastily for results as yet unconfirmed, but illustrating them whenever he can by some observation or reflection of his own. Such is the course which I have tried to follow; and the more pains which my

¹ The schools of Nancy, Bordeaux, the Salpêtrière, and the Pitié are on many points strongly opposed to each other. I consider such opposition as a necessary and advantageous characteristic of this stage of the inquiry.

instructed readers may take to demolish my "provisional scheme," the more light will there be thrown on a subject which greatly needs it.

§ 22. PROVISIONAL SCHEME OF MODES OF INDUCTION OF HYPNOTIC PHENOMENA.

I. <i>Massive nervous stimulation.</i>	Sudden danger ; cataplexy of insects ; fascination of birds, &c. Sudden noise or light ; esp. with hystero-epileptics. Sudden grief : "stupor attonitus." Tactile ; fanning and perhaps manual passes.
II. <i>Monotonous stimulation.</i>	Auditory ; tick of watch, &c. Visual ; prolonged gaze on bright object ; or human gaze.
III. <i>Localised stimulation ; i.e., stimulation of ordinary kinds, but applied to abnormally sensitive points.</i>	Mere touch on unaccustomed parts ; holding heads of hens, &c. Braid's upward and inward squint (a kind of strain, or intra-orbital pressure.¹)
IV. <i>Verbal suggestion ; i.e., localised stimulation of special tracts of a brain rendered previously sensitive as a whole, or locally.</i>	Pressure on hypnogenous points or zones, esp. in hystero-epileptics. Command of operator, in waking-life, in trance, or in "veille somnambulique." Deferred commands : (suggestions à longue échéance).
V. <i>Specialised stimulation ; i.e., from inanimate substances, in contact, but not normally active in this manner ; and from non-vital forces.</i>	Medicamentous substances in contact. Metals in contact. Magnets. Electricity : (unless the rare hypnogenous effect of an electric shock falls under Class I.).
VI. <i>Self-suggestion, i.e., determination by causes inherent in the organism.</i>	Hereditary hysteria, &c., as it were the deferred suggestion of ancestors. Idiopathic somnambulism.
VII. <i>Specialised stimulation from inanimate substances in proximity.</i>	Self-induced or self-prolonged trance. Experiments of MM. Bourru, Burot, Mabilie, Richet. Medicaments and metals without contact.
VIII. <i>Vital or mesmeric stimulation.</i>	Touch, of all or certain persons, not necessarily on hypnogenous zones.² Passes without contact, or mere proximity or human gaze.² Mesmerised objects.
IX. <i>Mental suggestion without contact, or telepathy ; perhaps in more than one form.</i>	Exercise of will without touch or gaze, in the same or adjoining room, or at longer distances. Tendency to feel presence and to see phantasm of distant operator ; link with quasi-percepts telepathically originated by death or crisis of distant agent.

¹ This must be *prolonged*, so comes also under Class II.

² Both these methods appear also in Class II.

I must once more remind the reader that the above scheme is expressly intended to be *criticised*, not to be accepted as definitive. Truth, as we know, emerges more readily from error than from confusion, and it may be useful thus to substitute even the rudest ground-plan for the unmapped wilderness of modern hypnotic experiment. All the phenomena which I cite are phenomena which have received strong attestation. If they do not exist, let them be disproved in detail. If they do exist they must bear some relation to each other ; they must be capable of some sort of logical arrangement. I shall be grateful for any hints which may enable me to improve this first rough sketch. In the meantime I may at least hope that the "*sommeil à distance*," with which this paper primarily deals, no longer appeals to the reader as an entirely *isolated* hypnotic marvel. It has been connected—by questionable and imperfect links, it may be—but still connected with a great number of other scattered hypnotic experiments, which were themselves, when taken alone, scarcely less strange and incomprehensible.

§ 23. Before concluding this paper I must briefly describe certain other phenomena which I witnessed in the case of Madame B. Besides the fact of their occurrence in the same subject they have thus much of connection with the topics on which I have so far dwelt, that they tend to show how premature at present is any attempt to define the limit of hypnotic phenomena. For the attempt to restrict the nervous changes induced to catalepsy, lethargy, and somnambulism, is, as I hold, equally misleading with the attempt to restrict the methods of hypnogeny to monotonous stimulation and sudden shock.

Madame B. exhibits a phenomenon which is curious enough, even if it be a mere reflection from the mesmeriser's expectation ; while if (as M. Janet holds) it is entirely spontaneous, the interest attaching to it is very great indeed. When hypnotised she falls, like most subjects, into a deep lethargic sleep, but, even if left undisturbed, she does not remain long in that condition. She passes through a kind of circular series of changes, sometimes more and sometimes less distinct, which bring her back again into lethargy, only to renew the series once more.

M. Janet has since described these phenomena at length in the *Revue Scientifique*, May, 1886.¹ I will not attempt to reproduce his article, but will give, in a slightly expanded form, the notes taken at the time by Dr. Myers and myself, adopting M. Janet's schematism as our basis. The remarks within square brackets show the degree of confirmation which each point received in our presence. Her first state is—

1. *Léthargie (vraie)*.

Sight, hearing, and sense of pain absent.

¹ See also M. Richet in *Revue Scientifique*, June 12.

[This appeared to be so, but I did not think it needful to ask for severe tests of anæsthesia.]

Firm pressure on different parts of arm induces contraction of muscles of hand and arm, removed by friction. [Yes.]

If a magnet is applied (say) to contracted left arm, contraction is transferred to right side; and this dextral contraction can then only be removed by stroking the *left* arm, viz., the arm originally contracted. [Yes, but this variety of the familiar experiments of Charcot, &c., in transference of hemianæsthesia, is of course liable to the usual suspicion of being a mere result of *suggestion*.] In one experiment of this kind in our presence the little finger of one contracted hand was not relaxed by the magnet; and, correspondingly, the little finger of the hand to which the contraction was transferred was not stiffened.

2. *Léthargie cataleptique*. Persistence of attitudes impressed from without, and slight contracture of muscle on deep pressure. [This state resembles spontaneous idiopathic catalepsy more closely than do the next two.]

3. *Catalepsie léthargique*. Persistence of *movements* externally initiated. [Simple movements of arm persisted; not so a less familiar movement of foot. I doubt whether this stage can be fitly classed separately.]

4. *Catalepsie, (vraie, ou catalepsie de Charcot.)* Eyes fully open and staring: suggestion of some familiar action (as folding of hands in prayer, raising of finger in command) carried out automatically through various stages, habitual behaviour in church, &c. In this state she was subject to the “*prise du regard*,” i.e., if M. Janet looked at her steadily, and then moved his head, she followed with her eyes. She did not follow the eyes of other persons. But M. Janet believes that if he touches a neutral person,—or if he touches A and A touches B, and B touches C, and C gazes on the subject, then the subject’s eyes follow C’s so long as M. Janet is touching A. [We tried this repeatedly, but the result was doubtful—the subject could not be kept long enough in the required state to eliminate chance.]

5. *Catalepsie somnambulique*. Susceptibility to hallucinations, (subject agitated when told that there are parrots before her), but no power of speech. [Another state as to whose separable individuality I feel much doubt.]

6. *Somnambulisme cataleptique*. Susceptibility to hallucination. M. Janet holds her hand and tells her that there are birds; she calls “*Petit! petit!*” Here again M. Janet believes that she only sees the birds when he holds her hand, or forms one of a chain. [The hallucinations provoked were so slight that I could not be sure of this. The word “*cataleptique*” hardly seems in place here.]

7. *Somnambulisme (lucide)*. In this stage her eyes are shut, but her

demeanour is alert and lively. She talks spontaneously, exhibiting a childlike character and freedom from shyness not seen in her normal state, and contrasting oddly with the patient, stolid cast of her features.

8. *Somnambulisme léthargique*. In this state contracture is evoked by superficial friction. Suggestions are still possible, but there is apparent sleep instead of apparent waking.

9. *Léthargie somnambulique*. In this state she dreams aloud; imagines that she visits distant places, &c.; and M. Janet loses control over her. From this condition she relapses into the "true lethargy" with which we began.

§ 24. The order in which I have given these states is that in which we saw them follow each other. I perceive that M. Janet in his article (*Revue Scientifique*) gives them in the opposite order; and says, "the pressure of the thumb makes the subject pass through all the states, proceeding from lethargy to catalepsy, while blowing on the eyes makes her pass through them in the direction of catalepsy to lethargy."

Such a distinction as that, I am inclined to think, must be in great measure accidental; some slight association, once set up, probably tends to repeat itself more and more readily. And with regard to all these variations, it certainly seemed to Dr. Myers and myself that they must not be insisted on in detail; that the only fact of clear importance was the subject's tendency to pass spontaneously through a cycle of nervous changes, which was no sooner ended than it began again. A similar tendency to recurrent states has been observed and systematised by Charcot and P. Richer among the hystero-epileptics at the Salpêtrière.¹

§ 25. M. Janet concludes his description of Madame B.'s phases by some reflections which I will here summarise. "Some observers accord great importance to the phases of hypnotism, and consider them as states entirely distinct; others see in them only insignificant phenomena produced artificially by the operator. Madame B.'s case shows us that the three primitive states (*i.e.*, lethargy, catalepsy, somnambulism) are not of fundamental importance, since other states can be induced, in number as yet undetermined, which are equally definite and durable. On the other hand, I cannot regard these phases as mere accidents; they arise too naturally and recur too regularly for such a supposition. I consider them as stages of sleep (*degrés de sommeil*) through which the subject passes in going to sleep and waking up,—stages at which it is sometimes possible to arrest her. At each different stage, perhaps, different parts of the brain are excited or paralyzed. During lethargy the brain seems entirely paralyzed, and the contractures of this period seem to be mere exaggerated spinal reflex movements; then the different cerebral centres seem to awake gradually

¹ *La Grande Hystérie*, Dr. Paul Richer, second edition, Paris, 1885. See page 147, &c.

during the succeeding phases ; the muscular sense, touch, sight, hearing, —then, during the somnambulism, the regions which preside over intelligence and will. Thus all the phases of hypnotism, or even of [spontaneous] somnambulism which have yet been observed, may merely represent different stages of this sleep at which different subjects happen to be arrested."

I concur with the general drift of these remarks,—more philosophical, as it seems to me, than any attempt to fit the constantly-varying phenomena of hypnotism into one Procrustean scheme. Still, in my view, we need to go much further still. We need to free ourselves altogether from the notion that the stages which a hypnotized subject passes through are necessarily *degrés de sommeil*,—that his changes are changes undergone *en s'endormant et en se réveillant*,—or even that there is likely to be between stage and stage any familiar connection, any discernible filiation at all.

But with this hint I must conclude. As I have here tried to analyse some of the methods of hypnogeny, so also I should have liked to try to analyse some of the hypnotic phenomena thus induced. But this paper is already full enough of disputable matter. My hope must be that it may stimulate other observers to fresh experiment,—though they, like myself, may spell out but a few words of the ciphered message in which hypnotism writes for us the secret of the psychical mechanism of man.

ADDENDUM.

Since this paper was in print, I have come across a scheme of hypnogenous agencies in Dr. Chambard's tractate, *Du Somnambulisme en général*, Paris, 1881. Dr. Chambard has since been selected to write the article on "Somnambulism" in the new *Dictionnaire des Sciences Médicales*, and even in his "thèse" of 1881 he speaks from a good deal of experience in several hospitals. I translate his scheme below. As compared with the scheme which has been suggested in this paper both its concordances and its variations may afford us some instructive hints.

Chambard's Scheme of hypnogenous processes.

- A. Empirical or mixed processes, termed magnetic.
- B. Analytical or simple processes.

1. Psychical action.

α. Affective. Faith. Expectant attention. (Carpenter.) Moral emotions and expressions. Expressive gaze.

β. Intellectual. Mental inertia. Fatigue of the attention.

2. Sensorial action.

α. Suppression of sensorial excitations. Simple closure of eyes. (Lasègue.)

β. Monotonous sensorial excitations, feeble and repeated.

a. Of sight. Fixed gaze on an object, brilliant or not.

b. Of hearing. Musical tone or noise. Watch (Weinholt,) diapason, &c.

c. Of touch. Contact. Pressure. Temperature. Frictions. Shocks. (Heidenhain.)

d. Cutaneous excitation determined by passes. (Heidenhain.)

e. Excitation of erogenous regions; ovarian pressure.

3. Mechanical action.

α. Modification of intra-ocular pressure.

a. By convergence of the optic axes.

b. By compression of the eyeball.

4. Physical actions. Action of magnet. (Landouzy.) Metallic plates. Static electricity.

5. Toxic action.

α. Anæsthetics; Ether, chloroform, &c.

β. Inebriants; Alcohol, haschisch, &c.

Now on this scheme I have to remark as follows:—

A.—A number of empirical methods are avowedly left unexplained.

B. 1.—I object, as already explained, to classing “psychical action” separately, as if it were altogether disparate from other effects produced on the nervous system. Such a word as “Faith” tells us nothing, in this connection. Moreover, I do not believe that “mental inertia” produces the hypnotic state at all. And “fatigue of the attention” should surely come under “monotonous excitations of hearing,” if, as I suppose, Dr. Chambard means the kind of fatigue which is induced by prolonged listening to the ticks of a watch.

B. 2. α.—“Simple closure of eyes” surely does not produce the hypnotic trance on subjects who have never been previously hypnotized. I should rank it as one of the suggestions which succeed only when *recognised as suggestions*, not as in itself an efficient cause of trance.

B. 2. β. a and b.—Massive stimulations are here confounded with monotonous stimulations. The gaze at an electric light, or the sound of a gong, is not a *feeble* stimulus, and need not be *repeated*.

B. 2. β. c.—*Pressure*, again, is not necessarily a “feeble” or “repeated” form of excitation. Some of Dr. Chambard’s own

cases (Appendix to his tractate) strikingly illustrate the effect of a single touch on abnormally sensitive regions in a hysterical patient. I doubt the hypnogenous effect of changes of *temperature*. A cold wind will often *wake* a subject, (Esdaile, Elliotson,) but I do not know any cases where a mere rise or fall of external temperature has induced trance.

- B. 2. β . *d*.—I have already maintained that on whatever cause the efficacy of “passes” may depend it is certainly not on *monotony* alone. The “passes” may often be varied and interrupted without appreciable detriment. I believe their efficacy to depend partly on the “vital influence” of the old mesmerists, partly on suggestion, and partly on pressure upon hypnogenous zones. Of course, monotonous movement, darkness, silence, and the mere effluxion of time, may contribute to sending the subject to *sleep*. But something more than monotony will generally be needed to cause that sleep to merge into hypnotic trance.
- B. 2. β . *e*.—This sub-class is plainly referable not to monotonous excitations but to pressure on specially-sensitive zones.
- B. 3.—I agree with Chambard that the fatigue induced by convergence of axes resembles the pain felt on compression of the eyeball. I should class both under the heading of hypnogenous zones. Heidenhain’s view that Braid’s squint operates by altering the cerebral circulation, (which I shall not here presume to contest,) is not inconsistent with this classification. It is perfectly possible that some or all of these localised pressures act by means of a mechanical influence on the circulatory system as well as by an influence of unknown character on the nervous system.
- B. 4.—Chambard’s “actions physiques” are included in my class of “specialised stimulations.” I do not like his term; for his “sensorial” and “mechanical” actions are physical too. A fresh term is plainly needed to express such actions on the human frame as that of magnets and those of metals in contact (beyond mere effects of weight, temperature, &c.). Pending the suggestion of a more suitable term I should call such actions *supernormal*, as being unusual, but indicative of a more penetrating—not a diseased—sensitiveness on the subject’s part.
- B. 5.—I entirely agree that the effect of these toxic agencies is *analogous* to the hypnotic trance. But I do not think that trance dependent on *chemical* changes (deficient aëration of blood, diffusion of volatile ethers, &c.) should be classed as *coördinate* with the trance induced by the hypnogenous agencies

already discussed. In all of those classes the nervous change has been induced without the introduction of any material substance into the body; and though it is very difficult to define what agencies are to be called hypnotic, it seems plain that here at least a line can be drawn, and that changes dependent on wounds or poisoning—on mechanical rupture or toxic alteration of the tissues or fluids of the body—cannot be classed as hypnotic without making the word too vague to be of any real service.¹

Finally, it will be observed that Chambard, while decisively admitting several non-telepathic agencies which I have noted as questionable, (magnet, electricity, &c.), has, of course, nothing to say as to telepathic influences. His scheme, therefore, is in my view inadequate to cover the cases adduced in this paper.

I must, therefore, consider Dr. Chambard's arrangement as *shallow* (in his want of coördination of psychical and physical agencies); as *confused* (in his cross divisions, as I have indicated, of the agencies which he does adduce;) and as *incomplete* (in his entire omission of hypnotization at a distance). But I say this with all respect for what seems to me to have been nevertheless a serviceable forward step. If my own classification is thought to be in any degree an improvement, this is due to the rapid advance in hypnotic experiment which the last five years have seen, and more especially to new light thrown, (as I venture to claim,) on all these topics by the establishment of telepathy as an actual and efficient cause. If my proposed scheme should so far subserve precision of thought as to lead to its own speedy supersession by some truer conspectus, its object will have been sufficiently attained.

¹ I may perhaps protest here against an occasional use of the word "hypnotic," both in French and English medical writings, as a mere equivalent for "soporific" or "anæsthetic," in speaking of drugs, &c. This is to obliterate the whole distinctiveness of a word to which it should be our aim to give all the precision possible.