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The seventeenth General Meeting of this Society was held at Queen Anne's Mansions, St. James' Park, on Thursday, October 29, 1885.

PROFESSOR W. F. BARRETT, VICE-PRESIDENT, IN THE CHAIR.

The following paper was read:

Ι

HUMAN PERSONALITY IN THE LIGHT OF HYPNOTIC SUGGESTION.

By FREDERIC W. H. MYERS.

Είλετο δε ράβδον, τη τὰνδρῶν ὅμματα θελγει ΄Ων εθέλει, τοὺς δ' αὐτε καὶ ὑπνώοντας εγείρει.

The facts and inferences contained in the present paper will be novel, and even startling, to many of my readers. Whatever may be thought of the success of my argument, I shall hope at least to deserve some credit for candour. Being deeply interested in a particular method in matters psychological, and believing that this method ultimately leads to certain positive results which I hold to be of the utmost value, I am nevertheless about to show that this very method leads in the first place to certain negative results, which so far as they go—and that is very far—do at least appear directly to contravene those very conclusions which I hold as so uniquely important.

The method to which I refer is that of experimental psychology in its strictest sense—the attempt to attack the great problems of our being not by metaphysical argument, nor by merely introspective analysis, but by a study, as detailed and exact as in any other natural science, of all such phenomena of life as have both a psychical and a physical aspect. Pre-eminently important for such a science is the study of abnormal, and, I may add, of supernormal, mental and physical conditions of all kinds. First come the spontaneous states; sleep and dreams, somnambulism, trance, hysteria, automatism, alternating consciousness, epilepsy, insanity, death and dissolution. Then parallel with these spontaneous states runs another series of induced states; narcotism, hypnotic catalepsy, hypnotic somnambulism, and the like, which

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afford, as though by a painless and harmless psychical vivisection, an unequalled insight into the mysteries of man. Then, again, after studying the machinery thus thrown slightly out of gear, after isolating and exaggerating one process after another for more convenient scrutiny, we may return to those normal states which lie open to our habitual introspection, having gained a new power of disentangling each particular thread in the complex of mentation, as when the microscopist stains his object with a dye that affects one tissue only among several which are indiscernibly intermixed.

This method, though not absolutely novel, is relatively novel. In its germ, indeed, it is at least as old as Aristotle, to say nothing of those obvious speculations on sleep and dreams which everywhere form the rudiments of psychological inquiry. But it is now being revived, after pretty general neglect, in a manner far more systematic than was ever possible before, for the simple reason that the advance of physiology during the last century has supplied an unprecedented quantity of raw material for the psychologist to work up.

The few men who, like Wundt, are both physiologists and philosophers, have naturally a leading part in such a task as this. But there is much to be done which such men as M. Taine and M. Ribot, not themselves practical physiologists, are better fitted to accomplish than the professed alienist or the practising physician. There is need even of special knowledge in directions other than biological, as the tractate of Professor Liégeois, presently to be mentioned, will sufficiently show. And, in fine, any student who honestly endeavours to assimilate the facts which lie ready to his hand, and to make experiments which are within the reach of ordinary intelligence and care, has at this juncture a fair prospect of attaining results of permanent value.

Such, then, is the method of inquiry which will be attempted. Next, as to the conclusions to be demonstrated—conclusions which, as I have implied, I should deeply regret to have to accept as complete or final. My own conviction is that we possess—and can nearly prove it—some kind of soul, or spirit, or transcendental self, which even in this life occasionally manifests powers beyond the powers of our physical organism, and which very probably survives the grave. Thus much I am bound in candour to say, lest in what follows I should seem to be mystifying the reader, or sailing under colours not my own. But I am not going to attempt to prove these opinions here: on the contrary, I am going to try to show that certain strong, almost universal preposses-

The reader interested in this topic is referred to an article on "Automatic Writing," in Part viii. of the Proceedings of the S.P.R., and to the forthcoming book entitled Phantasms of the Living.

sions, which make for my own creed, are in fact unfounded. I believe that I have a true and permanent self, but I shall here maintain that if I have such a self, I am certainly not conscious of him, and that, whatever he may be, he is at any rate not what I take him for. In other words, the old empirical conception of human personality must be analysed into its constituent elements before the basis of a scientific doctrine of human personality can safely be laid.

It is plain that if a question of such magnitude as this is to be dealt with in a short paper, it must be simplified in all possible ways, though at the cost of omitting many points, and of leaving many points so stated as to be open to easy attack. And first of all we want some kind of definition to start from as embodying the ordinary accepted notion of man's personality. Were this a systematic treatise, it would be necessary to discuss definitions of the Ego or Self advanced at different times by such various authors as Hume, Mill, Spencer, Kant, Schopenhauer, Maine de Biran, Wundt, &c., and to indicate the relation which the views here expressed bear to their different theories. But this task must be postponed; for the first thing needful is to present certain novel facts, with the singular conclusions to which they point, in as clear a light as possible. And we need to throw these facts into relief, as it were, upon some definition of man's personality which shall be expressed with care and precision, yet shall not bear too marked an impress of any one philosophical school. Such a definition I find in what is called the Common-sense philosophy of Reid. The passage (from the essay on the Intellectual Powers of Man) was published a century ago, but it will still, I imagine, express the views of the great bulk of my readers.

"The conviction which every man has of his identity, as far back as his memory reaches, needs no aid of philosophy to strengthen it; and no philosophy can weaken it without first producing some degree of insanity. . . . My personal identity, therefore, implies the continued existence of that indivisible thing which I call myself. Whatever this self may be, it is something which thinks, and deliberates, and resolves, and acts, and suffers. I am not thought, I am not action, I am not feeling: I am something that thinks, and acts, and suffers. My thoughts and actions and feelings change every moment; they have no continued, but a successive existence; but that self or I, to which they belong, is permanent, and has the same relation to all the succeeding thoughts, actions, and feelings which I call mine. . . . The identity of a person is a perfect identity; wherever it is real it admits of no degrees; and it is impossible that a person should be in part the same and in part different, because a person is a monad, and is not divisible into parts. Identity, when applied to persons, has no ambiguity, and admits not of degrees, or of more and less. It is the foundation of all rights and obligations, and of all accountableness; and the notion of it is fixed and precise."

This seems a fair statement of the obvious verdict of introspection, of the conclusion to which we come when we regard ourselves as complete articles, as the child looks at her doll. But suppose that instead of taking ourselves for granted as ready-made articles, we look at ourselves not with the child's but with the dollmaker's eyes, and consider how we could most cheaply be turned out. What are the lowest elements, the simplest methods, from which we could educe this apparent psychical unity?

We start, then, with the single cell of protoplasm, endowed with reflex irritability. We attempt a more complex organism by dint of mere juxtaposition, attaining first to what is styled a "colonial consciousness," where the group of organisms is for locomotive purposes a single complexly acting individual, though when united action is not required each polyp in the colony is master of his simple self. Hence we advance to something like a common brain for the whole aggregate, though intellectual errors will at first occur, and the head will eat its own tail if it unfortunately comes in its way. We have got here to a state like that of the mad John Henry, who alternately boxes his right ear, saying that John is a ruffian, and his left, saying that Henry is a fool. We rise higher; and the organism is definitely at unity with But the unity is still a unity of co-ordination, not of creation; it is a unity aggregated from multiplicity, and which contains no element deeper than the struggle for existence has evolved in it. cells of my body are mine in the sense that, for their own comfort and security, they have agreed to do a great many things at the bidding of my brain. But they are servants with a life of their own; they can get themselves hypertrophied, so to speak, in the kitchen, without my being able to stop them. Does my consciousness testify that I am a single entity? This only means that a stable canesthesia exists in me just now; a sufficient number of my nervous centres are acting in unison; I am being governed by a good working majority. Give me a. blow on the head which silences some leading centres, and the rest will split up into "parliamentary groups," and brawl in delirium or madness. Does memory prove that I was the same man last year as now? only means that my circulation has continued steady; the brain's nutrition has reproduced the modifications impressed on it by stimuli in the past. My organism is the real basis of my personality; I am still but a colony of cells, and the unconscious or unknowable from which my thoughts and feelings draw their unity is below my consciousness and not above it; it is my protoplasmic substructure, not my transcendental goal.

Such, in rough outline, is the theory of human personality towards which psycho-physical inquiry seems at present to point. A metaphor may perhaps help us to picture to ourselves these two alternatives, and

the kind of arguments which may be sought to prove or disprove either of them.

Let us suppose that we are looking at a *light*, a luminous appearance which we cannot closely approach, and that we are discussing whether the light proceeds from an incandescent solid body, or whether it is a mere shifting luminosity of marsh-gases, a will-o'-the-wisp.

Our first impression is that the light proceeds from a solid body, for the following reasons:—

- (1) The light is brilliant, and has a definite central glow. That is to say, in the parable, that our sense of personality is strong, and our controlling will an unmistakable and definite authority.
- (2) The light is continuous, with certain brief regular intermissions only, which we take to be caused by the supply of fresh fuel. That is to say, our memory seems a continuous thread, with only the regular intermission of sleep, during which we may suppose that fresh energy is being gained, without any real break in the personal continuity.
- (3) The light is *stationary*, and while it lasts its general aspect remains much the same, subject to a gradual steady growth when first kindled, and ultimately to decline and extinction.

That is to say, our tastes and character remain pretty much the same. The special capacities for pleasure and pain, action and perception, which characterise each of us, do not change suddenly and arbitrarily, but grow with our growth, and slowly alter with our decay.

Now let us see how far these three elements of human personality, viz., central will, continuous memory, homogeneous character, retain their definiteness when subjected to analytic experiment. And I shall here consider one form of experiment alone. I shall treat only of the hypnotic state, a condition which affords us (in Professor Beaunis' words), "une véritable vivisection morale," but a vivisection, as I have already said, which is absolutely painless and harmless—nay, is often accompanied by direct benefit to its subject. By thus throwing the psychical machinery a little out of gear, by sending all the energy of

This view of hypnotism, as above all things a method of psychological experiment (rather than as a mere physiological curiosity, or as a therapeutic agency) pervades all that Mr. Gurney and I have written on the subject, and was distinctly formulated in an article in the National Review for July, 1885, also printed in S.P.R. Proceedings, Part ix. The modern French school of psycho-physicists have also (M. Richet especially) been tending for some time towards this view, and Professor Beaunis has given it explicit expression in an article in the Revue Philosophique for July, 1885. Baron Du Prel, in his Philosophie der Mystik (Leipzig, 1885,) has insisted, with much ingenuity and detail, on the lessons derivable from hypnotic or spontaneous displacements of the threshold of consciousness.

the engine through a few looms arbitrarily selected out of the myriads which are habitually at work, we can watch the effects of inhibition and exaggeration as applied to limited centres of psychical energy which we have no other way of isolating from the confused complexity of normal life. Hypnotism¹ is in its infancy; but any psychology which neglects it is superannuated already.

One further word is necessary before I come to the experiments themselves. It may be asked whether the French experiments which I am about to mention are altogether trustworthy; whether there has not been simulation on the part of the subjects who are credited with such extraordinary performances. I will briefly give my reasons for crediting the cases which I shall cite. In the first place, I have myself at various times obtained results, on subjects well known to me, which were altogether analogous to these French cases, though less striking and conspicuous. I must recommend this practical method of gaining conviction, above all others, to any serious inquirer. In the second place, various groups of experiments carefully performed by committees of the Society for Psychical Research, in which I took part, and recorded in our Proceedings, give results which are also in harmony with the results of Messrs. Bernheim, Beaunis, &c. And in the third place I have through the kindness of Drs. Charcot, Féré, Bernheim, and Liébeault, myself witnessed typical experiments at the Salpêtrière in Paris, in the Hôpital Civil at Nancy, and in Dr. Liébeault's private practice; have been allowed myself to perform experiments (with the aid of Mr. Gurney and Dr. A. T. Myers) on the principal subjects whose cases are recorded; and have in other ways satisfied myself that the cases vouched for by Drs. Beaunis, Bernheim, Féré, Liébeault, Paul Richer, Charles Richet, and Professor Liégeois, have been recorded with

¹ I have used the term "hypnotism" throughout this paper, but I do not concede that the hypnotic phenomena are always produced by mere monotonous stimulation or other mechanical causes. I still hold to the view of Cuvier, that there is in some cases a specific action of one organism on another, of a kind as vet unknown. This theory is generally connoted by the term "mesmerism." Since the days of Braid there has been a tendency to exclude it as unnecessary and even fantastic. Mr. Gurney and I (with Dr. Despine, in France) stand almost alone among recent writers in adhering to it. Our contention has steadily been that no one has as yet advanced experiments numerous or careful enough to disprove the specific influence in question, and that certain of our own experiments, of Esdaile's, &c., come very near to proving it. It is worthy of note that Dr. Liébeault, of Nancy, the most experienced of all living hypnotizers, after practising hypnotism for twenty-five years on several thousand persons, and writing a treatise against the theory of specific influence, has recently convinced himself by still further experiment that such specific influence does in some cases exist. (Etude sur le Zoomagnétisme, par A. Dollard by CTOOTIC Liébeault, 1883.)

the candour and accuracy for which the reputation of these savants is in itself no small guarantee.1

I may add that although the validity of the cases has been assailed from an à priori point of view by several writers, I cannot find that any competent person who has actually witnessed the experiments has expressed any doubt as to their trustworthiness. I am anxious that wider attention should be directed to these singular results, and further criticisms made. But in the meantime I think that the reasons given above justify me in treating them as veritable acquisitions to science.²

I begin, then, with the question of the light thrown by hypnotic experiments on human free-will. The reader will naturally dread the revival of so well-worn a controversy. But I venture to promise him something really new, namely a distinct experimental proof that my sensation of free choice in the performance of an action is perfectly consistent with the absolute foreknowledge of my action on the part of another person, and even with his distinct imposition of that action upon me. I begin intentionally with the smallest and most trivial cases. And first I take an experiment so common and rudimentary that probably many of my readers have seen it tried, though its full significance has hardly been realised.

I partially hypnotize a subject and say to him, "Now you can't open your eyes!" He keeps his eyes shut. "Now laugh!" He laughs. "Now your name is Nebuchadnezzar. What is your name?" "Nebuchadnezzar." I wake him him up and say, "You were hypnotized; you could not help obeying my suggestions." "Not at all," he replies. "I did exactly what I pleased. I shut my eyes because I was tired of looking at you. I laughed at your absurd belief in your own powers. I called myself Nebuchadnezzar merely in order to answer you according to your folly." "Very good; you have had your joke, but now the joke is over; you are not to adopt my suggestions if you can possibly

- ¹ I ought to add that neither Mr. Gurney nor I can always concur with these savants as to the exact interpretation to be placed on the observed phenomena; but this is a different and a more technical matter, which need not here be discussed.
- ² The experiments on which this paper is largely based will be found mainly in the following works:—Beaunis: Recherches Expérimentales, &c., ii., Paris, Baillière, 1886. Bernheim: De la suggestion dans l'état hypnotique et dans l'état de veille (1884). Liébeault: Du sommeil et des états analogues (1886). Liégeois: De la suggestion hypnotique dans ses rapports avec le droit civil et le droit criminel (1884). Paul Richer: Traité de l'hystéro-épilepsie (2nd Edn., 1885). Charles Richet: L'homme et l'intelligence (1883). Proceedings S.P.R., Vols. i. and ii. (Trübner, 1883, 1885). Dr. Pitres and the Bordeaux School have obtained precisely analogous phenomena, though I have not mentioned them here; wishing to confine this paper to cases of which I have some personal knowledge. Prof. Bernheim's new book, "De la suggestion et de ses applications à la thérapeutique," Paris, 1886, contains a great many fresh cases.

help it." "Agreed." I make some more passes and again ask him his name. He is silent, and I press the question. "Nebuchadnezzar," he slowly and hesitatingly replies. I wake him up and ask him why he said this. "Oh, when the time came," he says, "I thought that I might as well call myself Nebuchadnezzar as anything else." Here we have a confusion of will; the subject could not in reality help making the suggested reply; he felt the hypnotizer's will obsessing him, but yet was just able to maintain a kind of awkward half-belief in his own spontaneity. My next example shall be a transitional case, extremely trivial, but interesting because the subject was able to describe with exactness the mode of upspringing of the impulse in her mind. I may remark that it is usually more difficult to implant these suggestions in a mind which has been well educated and is accustomed to self-control. A suggestion which will take effect in a heedless, vacant mind will often be crushed in its birth by a habit of repressing inopportune impulses. The subject of the present experiment had been many times hypnotized by me and was susceptible to suggestions, but she opposed so much sub-conscious resistance to doing anything outré or unusual that it was hard to hit on a suggestion of just the depth of absurdity which her unconscious mind would tolerate.

One day when she was in the hypnotic trance I suggested to her that soon after waking she would continue a task on which she was engaged with another lady, of colouring a large sketch which included some brickwork, and that she would paint the bricks blue. I repeated once or twice, "Blue is the prettiest colour for bricks; you will paint them blue." I then woke her, and, as usual, she remembered nothing which had been said to her in the trance. Very soon she began to paint the diagram, and when she came to the bricks she hesitated awhile, and then said to the other lady, "I suppose it would never do to paint these bricks blue?" "Why blue?" was the rejoinder. "Oh!" was the rather shame-faced explanation, "it only occurred to me that it would look rather nice." She was then told the true origin of this impulse, and she stated that the words "Blue bricks! blue bricks!" had been running in her head, and that the absurd notion of how well the colour would look had got such hold of her that she could not help making the childish proposal to use the blue paint. Here we have a vanishing trace of obsession, a subject feeling an apparently spontaneous impulse to perform the act suggested, yet just aware of an oddness in the way in which the impulse came. Next to this come the cases of complete illusion of freewill, where the subject in performing the suggested act is urged by an impulse which seems to him quite self-originated, and which he justifies, if called on to do so, by some imaginary reason of his own. I again intentionally select a case where the suggestion is of an absolutely trivial kind. Dalling to Google

Dr. Bernheim suggested to a hypnotized subject in the Nancy hospital that when he awoke he would take Dr. X.'s umbrella, open it, and walk twice up and down the covered gallery. He woke, took the umbrella, and walked as suggested, though with the umbrella shut. Asked why he was walking in the gallery, he answered, "C'est une idée! je me promène parfois." "But why have you taken Dr. X.'s umbrella?" "Oh, I thought it was my own; I will replace it." I have seen many experiments of this sort, and it is hard to persuade the subjects that any mind but their own has started the trivial act.

The advantage of these trivial cases is, that they exhibit the power of suggestion pure and simple, without any kind of accompanying emotional shock. The idea is placed in the mind as quietly as a seed in the ground, and it works itself upwards into visible fulfilment at the appointed time with the same tranquil regularity as the springing blade in its season. But the infused ideamay be of a more startling kind. A good subject may be made to do almost anything, and to justify the act on any trivial ground which occurs to him at the moment. Nor is this influence confined to the period of trance. In favourable subjects the command is executed even after the subject has been awakened, and appears perfectly normal. Professor Liégeois, whose speciality is medical jurisprudence, has taken much pains to induce Dr. Liébeault's patients to commit a number of crimes—as murder, theft, perjury, &c., and has made them give him receipts for large sums of money which he has never really lent them. I abridge a passage from his careful and conscientious tractate.

"I have spoken of my friend M. P., a former magistrate. I must accuse myself of having endeavoured to get him murdered, and this moreover in the presence of the Commissaire Central of Nancy, who witnessed the occurrence.

"I provided myself with a revolver and several cartridges. In order to prevent the subject, whom I selected at random from among the five or six somnambules who happened to be at M. Liébeault's house on that day, from supposing that the thing was a joke, I charged one of the barrels and fired it off in the garden, showing a card which the ball had pierced. In less than a quarter of a minute I suggested to Mme. G. the idea of killing M. P. by a pistol-shot. With perfect docility Mme. G. advanced on M. P. and fired at him with the revolver. Interrogated immediately by the Commissaire Central, she avowed her crime with entire indifference. 'She had killed M. P. because she did not like him. She knew the consequences. If her life was taken, she would go to the next world, like her victim, whom she saw (by hallucination) lying before her, bathed in blood.' She was asked whether it was not I who had suggested to her the idea of the murder. She declared that it was not so-that she alone was guilty, and that she would take the consequences." [It had not been suggested to her that her act was due to suggestion.]

Similarly Mlle. A. E. (a very amiable young person) was made by

Professor Liégeois to fire on her own mother with a pistol which she had no means of knowing to be unloaded. She was also made to accuse herself before a juge d'instruction of having assassinated an intimate friend with a knife. When she thus accused herself she appeared to be in a perfectly normal waking state. And even the most bizarre actions, performed under suggestion, look perfectly spontaneous when the subject carries them out. The action may be deferred for hours or days after the suggestion is given. Professor Liégeois gave to M. N. a paper of white powder, informing him that it was arsenic, and that on his return home he must dissolve it in a glass of water and give it to his aunt. In the evening a note from the aunt arrived as follows: "Madame M. has the honour to inform M Liégeois that the experiment has completely succeeded. Her nephew duly presented her with the poison."

In this case the culprit entirely forgot his action, and was unwilling to believe that he had endeavoured to poison a relative to whom he was much attached.

Experiments like these will produce in the minds of many readers a feeling of moral shock and alarm. In the first place, they may naturally fear that a power like this may be abused for evil purposes, and the subject induced to commit real as well as imaginary crimes. And in the second place, they may suspect that even if no actual crime is committed, the mere fact of the subjection of the will to temptation must leave some stain on the moral nature of the subject who has thus acted out a guilty dream. I do not account the first of these apprehensions as chimerical, nor the second as squeamish; nay, I consider on the other hand that the advocate of hypnotic experiment is bound in candour to exhibit as fully as I have done the grounds for moral demur.

But speaking from the experience of those best qualified to judge, I feel justified in replying that there is little fear that cases like these will ever be more than the harmless curiosities of the lecture-room. As regards the danger of the suggestion of real acts of crime, it must be remembered in the first place that Professor Liégeois' subjects were the picked specimens of a sensitive nation, and that among thousands of English men and women perhaps not one case of similar susceptibility would be found. Again, there is a simple precaution which the French experimenters recommend as effectual. If a subject feels that he is becoming too sensitive, let him get some trustworthy friend to hypnotize him, and to suggest to him that no one else will be able to do so. This suggestion, it appears, fulfils itself like the rest, and the bane works its own antidote without further trouble.

For my part, especially where a female subject was concerned, I should recommend the still further precaution of not allowing any one except a trustworthy friend to hypnotize her at all. As to the second ground of apprehension, the possible tarnishing of the noral sense, or

weakening of the moral fibre, by the mere performance, in however abnormal a state, of immoral acts, the requisite precautions are, I think, very easy to take. In the first place, the subject, unless told to remember the acts, will absolutely forget them-always when they are performed in the hypnotic trance, and generally when (like the poisoning of the aunt) they are performed by the subject after he has been awakened from the trance, and in a condition apparently normal. They remain no more in the subject's mind than if he had read them in a book and forgotten them. Certain precautions, nevertheless, may well be taken. I should avoid, for instance, making any suggestion which at all resembled a possible temptation of the subject's waking state. I should not myself like to dream of injuring some real personal enemy, but should feel no compunction if I dreamt that I had killed the Emperor of China. Now when the dutiful and affectionate Mile. A. E. shot at her mother, it was not like a dream of yielding to a temptation, it was like the purely fantastic dream which has no root in the moral nature.

Professor Liégeois justly urges that his experiments have a practical value as showing that in the case of a person charged with some odd and motiveless offence, it is worth while to find out by experiment whether the act may not have been performed in a somnambulic state. In two cases already, persons thus accused have been hypnotized on a physician's suggestion, and it has been proved to the satisfaction of the judge that they were irresponsible for the acts ascribed to them, which had been performed, without waking intention, in a state of spontaneous trance.¹

In fine, then, the hypnotic trance, like alcohol, chloroform, and other means of acting on the nervous system, can conceivably be employed by bad men for bad ends. But this evil is not hard to avert, and we shall see, on the other hand, that the trance has, in good hands, a moralising efficacy of great value—that it is a means not only to the advancement of knowledge, but to the improvement of character.

For the present I must return to the remark briefly made above that the fulfilment of the hypnotic suggestion can be postponed at pleasure for days, even for months, after the date when it is made. I abridge a characteristic case of Professor Bernheim's: "In the month of August I asked S. (an old soldier), during the trance, 'On what day in the first week of October will you be at liberty?' 'On the Wednesday.' 'Well, on that day you will call on Dr. Liebeault; you will find in his room the President of the Republic, who will present you with a

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¹ Annales Médico-psychologiques, 1881, p. 468. Revue Scientifique, December, 1883.

² De la suggestion, p. 29.

medal and a pension.' I said nothing more to him on the matter, and on awakening he remembered nothing. On October 3, Dr. Liébeault wrote to me as follows: 'S. has just called at my house; he walked straight to my bookcase, and made a respectful salute; then I heard him utter the word "Excellence!" Soon he held out his right hand, and answered, "Merci, Excellence." I asked him to whom he was speaking. "Mais, au Président de la République!" He turned again to the bookcase and saluted, then went away. The witnesses of the scene naturally asked me what that madman was doing. I answered that he was not mad, but as reasonable as they or I, only another person was acting in him.'"

"I can say," says Professor Beaunis, "to a hypnotized subject during his sleep, 'In ten days you will do such a thing at such an hour,' and I can write in a sealed letter what I have told him to do. At the appointed hour the subject executes the suggestion exactly, convinced that he acts thus because he chooses, and that he could have acted differently; and yet, if I make him open the letter, he finds the deed which he has just done prescribed for him ten days beforehand."

I can hardly suppose that the mere perusal of a string of anecdotes like these will produce much effect on persons who have never themselves seen anything of the kind. But when one has become practically familiar with the course of the illusion, when one has seen the look of alert interest which accompanies the emergence of the suggested idea, in its due time, into waking consciousness, the look of eager decision with which the subject carries out the notion which he supposes to be so entirely his own, one cannot help feeling that the distinction between reflex and voluntary action has become dubious indeed. "A voluntary act," one is inclined to say, in Ribot's words, "is only a reflex act of the whole organism."

Far down at the beginnings of life comes the scrap of protoplasm with its power of re-acting to certain stimuli—a power which at first seems hardly to suggest anything more than a mere special complexity of molecular arrangement. Gradually the power of reaction becomes more and more subtle, yet for a long time no one suggests conscious will. Then with the higher animals we have the controversy whether they are automata or no,—whether they have a consciousness comparable to our own. Yet, even assuming that they have consciousness, it by no means follows that they have the sensation of free choice. It is even doubtful how far children and savages have this sensation. Anyone who remembers his early childhood clearly will probably recall occasions when he was performing what might have seemed an act of choice, but where the subjective sensation was merely of a bewildered waiting for some suggestion or impulse from without or within. The act of choice, even with many adults, is little more than a pause which gives the

organism time to respond with an action which is almost as manifestly reflex as the knee-jerk after a blow below the patella.¹ The sense that we are *choosing* rests, perhaps, on nothing more than the degree of attention which the inevitable act requires; and the so-called choice, to use M. Ribot's phrase once more, is the mere verdict of a jury which only declares on which side the preponderating arguments lie, without itself adding force to any of them.

Now, in hypnotic suggestion, we actually supply the arguments which go to the subject's inward jury; we actually implant the impulses which, sometimes at once, sometimes after a long period of incubation, work themselves out inevitably in the appropriate acts. Just in proportion to the vigour and distinctness of our suggestion is the eagerness and accuracy of the fulfilment on which we can count. "Fixed fate, free-will, foreknowledge absolute," have been debated, if we may believe the poets, with somewhat abstract arguments, by men and devils since the epoch of the war in Heaven. The experiments above alluded to may not be altogether acceptable to human or demonic pride, but they do certainly infuse into the time-worn discussion a little freshness and fact.

I pass on to the light which our experiments throw on the nature of memory. And here, perhaps, more strongly than anywhere, is experimental psychology upsetting the old metaphysical views. How many pages have been written to show that the persistence of the one thread of memory through all changes is a proof of the true personality of man! And it used to seem reasonable to admit that there was in fact such a continuity of memory—that is, if we ignore the years before a man has gained his memory and, sometimes, after he has lost it, and agree to pass over the fact that he ever either sleep or dreams. But here again, hypnotism has brought into prominence a class of facts which used to be cited only as rare curiosities. The phenomena of alternating memory—formerly observed only in a few cases of accident or disease—are now commonly produced in normal persons, with every variety of relation between the new memory and the old.

My limits forbid me to enter on this complex topic, on which much has been already written.² The principal novelty which the skill and good fortune of the school of Nancy has enabled them to illustrate is the curious state of passage from one train of memory to another—the fading away of all recollection of a "suggested" action, though that

¹ I am speaking here of ordinary life; I am not discussing what kind of contra-impulsive power we can bring to bear in a moral crisis.

² See Proceedings S.P.R., Vol. i., p. 222 sqq., 287 sqq.; Vol. ii., p. 66 sqq., 282 sqq., &c.

action may have been carried out in apparently complete wakefulness. I give an instance from Professor Beaunis¹:—

"Mlle. A. E. had just arrived at Professor Liébeault's. As soon as she came in I said: 'In one minute you will go and change the places of the two busts (Thiers and Béranger) which are on that bracket.' At the suggested moment she performed the action, and had entirely forgotten it the moment after. Mme. H. A., who had come with her, said: 'I am sure that I should not have acted like that.' 'Very well,' I said, 'in one minute you will take a sou from my waistcoat pocket and put it in your pocket.' When the minute was over, after a moment of hesitation, Mme. H. A. rose, put her hand into my waistcoat pocket, took out a sou, and pocketed it. Shortly afterwards I said to her, 'Empty your pocket.' She looked at me with surprise, but did so, and in spreading out the contents found the sou, which she looked at for a moment, and then put in her purse. 'That sou is not yours,' said a bystander, 'You have just taken it from M. Beaunis.' She could remember nothing about this, and was by no means convinced that the sou was not her own."

Most persons have observed how easily a dream slips from the mind. We wake from an amusing dream, and resolve to repeat it at breakfast, but in a few minutes every trace of it has disappeared. The case given above is precisely similar. The act performed in obedience to suggestion did not in reality belong to the train of waking memories, and affected no permanent lodgment among them. Although the subject looked perfectly normal, and was normal in all other respects, both when the act was suggested and when it was performed, that special act was originated by nervous centres still affected (in some way at present inexplicable) by previous hypnotization. It would be remembered no doubt in a subsequent trance, though rejected by the waking current of memory.

I tried myself an experiment of this sort on Madame H. A., Dr. Liébeault having hypnotized her, on August 31st, 1885. I requested him to tell her that at seven o'clock that evening she would see me enter her salon, that I would pay her a few compliments, and ask to be introduced to M. A. if he were present. She was then awoke, and remembered nothing that had been said. On September 1st, Dr. Liébeault's servant was sent on some pretext to call on Madame A., who immediately said to her that one of the English gentlemen (describing me) had called on her the previous evening at seven. On September 2nd Madame A. came to Dr. Liébeault's again. I alluded to my imaginary visit, at which she looked much astonished, and said that she had certainly not seen me. We then asked whether she remembered the servant's visit on September 1st, but though this visit had lasted some time, and had been marked by one or two trifling incidents,

it had all but entirely faded from Madame A.'s mind. It was still, as it were, a prolongation of the dream; the conversation which had kept her thoughts on the hallucinatory incident belonged, in fact, rather to the hypnotic than to the normal stream of her existence. I then myself hypnotized Madame A., and asked, "Have you seen me since I met you last at Dr. Liébeault's?" "Certainly; you called on me at seven on August 31st." "Did anyone show me into or out of the room?" No, you walked in alone." [No servant or other person had been ordered to appear in the hallucination, so my figure alone was seen.] "Was M. A. present?" "No, I was alone." [This was unfortunate, as Madame A. would certainly have introduced the plantasmal visitor to her husband had he been there.] "What did I say?" "You thanked me very politely for coming to Dr. Liébeault's." "Do you know that you just now denied that I had called?" "Impossible; I remember your visit perfectly well."

The hallucinatory visit, it will be observed, was suggested in the trance state, though realised in the midst of waking life. It therefore belonged properly to the trance-memory, and soon faded from the waking memory, like a dream.

If, however, the hallucination is very strongly impressed, and remains long dormant before realisation, it acquires lodgment enough in the mind to place it in the train of waking memory.

I abridge a report made by Professor Beaunis to the lately founded "Société de Psychologie Physiologique," of which Dr. Charcot is President 1:—

"On July 14th, 1884, having hypnotised Mlle. A. E., I made to her the following suggestion, which I transcribe from my note made at the time:— 'On January 1st, 1885, at 10 a.m., you will see me. I shall wish you a happy new year, and then disappear.'

"On January 1st, 1885, I was in Paris. I had not spoken to any one of this suggestion. On that same day Mlle. A. E., at Nancy, related to a friend (she has since narrated it to Dr. Liébeault and myself) the following experience. At 10 a.m. she was in her room, when she heard a knock at the door. She said, 'Come in,' and to her great surprise saw me come in, and heard me wish her a happy new year. I went out again almost instantly, and though she looked out of the window to watch me go, she could not see me. She remarked also, to her astonishment, that I was in a suit of summer clothes—the same, in fact, which I had worn when I had made the suggestion which thus worked itself out after an interval of 172 days."

I was anxious to know how far Mile. A. E.'s memory of the imaginary visit had resisted the proof that it had never taken place. I asked her on September 2nd, "Do you still imagine that Professor Beaunis called on you on January 1st?" "He certainly called on me

on that morning." "But you know quite well that he gives you hallucinations, and that this was one of them—that he was not even in Nancy at the time?" "He certainly called on me," was again the reply; "that time it was no imagination." I might as well have argued with the heroine of We are Seven. The hallucinatory idea had persisted through so long a period of incubation that the waking brain had, if I may so say, ended by adopting and assimilating it.

These brief hints must suffice for the present to indicate that memory, as we know it, cannot prove the personality of man. "Memory's record" is not a book on clean paper, which we print as we go. It is a parchment palimpsest, on which one recent text is fairly legible, but which may show all forms of unknown scripture when the right re-agents are applied.

It is, perhaps, not strictly logical to discuss character under a separate heading from will and memory. Our character is a collection of habits of choice, determined partly by what we are hereditarily inclined to do, and partly by what we recollect of the results of previous actions. The required modifications of our brain represent the up-stored memories; our idiosyncratic reactions to special stimuli form, as we have seen, the organic basis of what we call our will. Any change in the contents of our memory, or in the sensibility of our organism, will be a change in our character too. But the effect of hypnotization in the formation of character needs to be dwelt on as a point, no longer of mere speculation, but of practical importance.

The civilised character differs, as we know, from the savage character in the gradual triumph of the higher centres of cerebration over the lower—of the centres which co-ordinate many ideas and memories, with a view to things abstract or remote, over the centres which respond to immediate excitations, with a view to the present moment's ease or enjoyment. The moralising process—the $\alpha \nu i \chi \sigma \nu = i \pi i \chi \sigma \nu$ of the Stoic—is therefore a process of continually strengthened inhibitions; the higher centres learn to "bear and forbear" when the lower centres would fain snatch or rebel.

Now hypnotism, like education, is mainly a process of *inhibition*. Can we get the processes to coincide, and make people virtuous by hypnotic suggestion?

I believe that, to a great extent, we can do this; I believe that we can strengthen the brain's inhibitive power by hypnotism, much as we can weaken it by opium or alcohol.

And before going further, I must distinctly affirm that the hypnotic state is not per se a morbid phenomenon. It is no more morbid than sleep is morbid, and I hope to show elsewhere that it is in some ways even higher than the common sleeping or waking states. We must put on one side, moreover, the grotesque anecdotes which I have given

as showing how far hypnotic susceptibility may go. These things are but the experiments made with a new drug, to show its dangers and determine its dose, before it is introduced into ordinary clinical practice.

Putting all these bizarreries, then, out of the question, let us first observe what is the moral tone of the somnambule when left to himself, as far as possible, without suggestions. In some important points it is the precise opposite of the drunken condition. Alcohol, apparently by paralyzing first the higher inhibitory centres, makes men boastful, impure, and quarrelsome. Hypnotization, apparently by a tendency to paralyze lower appetitive centres, produces a contrary effect. The increased refinement and the increased cheerfulness of the developed somnambule is constantly noticed. It is a moot point whether any "sleep-waker" has ever told an untruth; and, so far as I know, no angry or impure gesture has ever shown itself spontaneously in the hypnotic state.

We start then, as it seems, from a favourable moral diathesis; and we have next to inquire as to the result—(1) Of often repeated hyperinterior (2) Of definite suggestion of a moralising kind.

The first of these questions is complicated by the effects of hypnotization on bodily health, on which I cannot enter here. I will merely remark that Mlle. A. E., so often alluded to, has probably been hypnotized oftener than almost anyone living, and that the effect on her character seems to have been unmixedly good. I can answer for her being now a particularly sensible, cheerful, and kindly person; whereas she is said to have been moody and frivolous before the course of hypnotism began. Here, however, there has been coincident recovery of health (also ascribed to hypnotism); and it is not easy to discriminate between the moral and the physical improvement.

More definitely provable are the benefits resulting from direct suggestion—from the persistence, after waking, of some impulse or aversion inspired in the hypnotic state. It is especially in checking the abuse of stimulants that this treatment has proved useful. Charpignon³ long ago recorded a case of a woman thus cured of a habit of over-indulgence in coffee. Alcohol is, of course, a more serious matter, and unfortunately chronic alcoholism renders its victim very hard to hypnotize. On the other hand, certain cases where cerebral shock has

¹ See Professor Beaunis in Revue Philosophique, July, 1885.

³ It was long ago remarked by Elliotson and others that the attraction sometimes felt by a female subject for her hypnotizer is invariably the feeling of a *child*, not of a *woman*. Dr. Perronet, of Lyons, who has seen striking instances of this attraction, holds that it is a mere reflection of the hypnotizer's own self-love. "Il jouait mimiquement et phoniquement le drame qui se déroulait au fond de mon inconscient, et dont le principal acteur était l'amour de moimême."—Du Magnétisme Animal, p. 20.

³ Physiologie du Magnétisme, p. 238.

altered the relation of the system to alcohol, afford a favourable augury. Thus one of the incidents in the extraordinary life-history of Louis V.——1 is the alternating inclination or dislike for alcohol after attacks of hystero-epilepsy. We need not, then, be surprised, if the effect which may be produced, as it were, accidentally, roughly, and unstably, by the shock of disease should also be produced, more gently and permanently, by repeated hypnotic suggestion. Professor Beaunis vouches, from his own observation, for the following case 2:—

M. D. was a great smoker, and at the same time a great beer-drinker. His health was seriously menaced. Dr. Liébeault hypnotised him, and suggested to him that he would smoke no more and drink no more beer. The subject followed with docility the programme thus traced, and thus attained the result which his family's remonstrances and his own efforts had failed to secure. A few hypnotizations and suggestions had been enough to effect it.

Dr. Perronet 3 has had a similar case, when he inspired an habitual drunkard with a loathing for spirits which had persisted for some months at the date of writing. Such suggestions, however, will probably require occasional renewal, and Dr. Liébeault gives two cases which illustrate this need. A physician, addicted to drink, was induced by hypnotic suggestion to abstain for three months; but the taste for drink returned, and he did not visit M. Liébeault again. On another occasion an idle boy was taken to this potent moraliser, and it was suggested to him that he would henceforth be a model of diligence. The boy did actually work hard for some months, by an impulsion which he could neither understand nor resist, and rose rapidly to the top of his class. But the suggestion wore off, and then he obstinately refused to be hypnotized again, having by no means relished his involuntary rôle. His mother was weak enough to let him alone.

This young recalcitrant against hypnotic moralisation (if I may coin the phrase) no doubt said to his mother that it was a great shame to make a fellow diligent against his will, and that there was no good in learning things just because you could not help it. And other persons, who "would rather see an Englishman free than see him sober," may be inclined to side with the boy. They will say that you cannot get virtue into any man's head "by a surgical operation," and that where there is no moral effort there is no improvement worth wishing for. I partly agree with this principle; but we are here among the rudiments of

¹ Annales Médico-psychologiques, Jan., 1882. Revue Philosophique, Oct., 1885. See also the article on "Telepathic Hypnotism" in this volume.

² Revue Philosophique, July, 1885, p. 25. Dr. Richet has successfully used suggestion to give appetite to an invalid.—L'Homme et l'Intelligence, p. 193. Dr. Despine quotes some similar cases.

³ Du Magnétisme Animal, p. 40.

morality, and we need not fear that we shall lead our subject on unto perfection without his knowing it. His moral effort will have plenty of worlds to conquer even when he is no longer tempted to get drunk.

In its scientific aspect, at any rate, this power of touching the part of the brain desired is a forward step of just the kind that we are always looking for. We are gradually learning to localise and specialise our curative methods; we inspect and inject, if I may so say, with arms of precision; we hit a definite point instead of hurling our boluses vaguely at "the system."

Well, here we have a method of cerebral localisation, which—whether or not it gives us anatomical indications—is at least on the psychical side self-acting and almost infallible. The suggestion once made to the hypnotized brain, the brain itself picks out the centres which it is desired to stimulate or to inhibit. After what I have witnessed of suggestion, I hesitate to impose a limit to this power. I do not despair (for instance) of isolating or suspending at pleasure the different classes of sensibility—sensory, thermic, tactile, dolorous, or even classes more specialised than these. I do not despair of dissociating the intellectual from the nutritive—perhaps even from the emotional—current of our being, and hushing into the absorption of an Archimedes the stomach and spirit of a Carlyle. We hold the wand of Hermes, which we have not yet learnt to sway.

There is, however, no need for prophecy. What has been done and is doing is enough to show that here as everywhere the real advantage lies in knowing the facts. If we are multiplex beings, let us get the advantage of our multiplicity. If we are modifiable by circumstance, let us learn to modify ourselves. So long as we proclaim ourselves incompressible atoms, we shall not discover how to deal with our molecular structure. Until we confess what we are, we shall never become what we may be.

The task assigned to this paper has now, though briefly and inadequately, been performed. It has been shown that hypnotic experiments throw new light on the intimate nature of man's will, memory, character; that the flame of personality (to recur to our first metaphor), is found on inspection to be neither definite, permanent, nor stationary; but rather that the sense of free-will is shifting and illusory, and memory multiplex and discontinuous, and character a function of these two variables, and directly modifiable by purely physiological means. We have thus, indeed, the consolation of finding that hypnotism can not only dissect, but to some extent amend us; yet this will seem to most minds a paltry counterpoise to the depressing view of man's dignity and destiny which this train of argument implies.

I cannot here enter on the reasons which, as already stated, con-

vince me that this method of experimental psychology, when carried farther, will conduct us not to negative but to positive results of the most hopeful kind. It must suffice to say-still in terms of our metaphor-that I believe that there is an incandescent solid, but that that solid is beneath our line of sight. This fact can only be recognised when the visible flames are examined not only with the telescope but with the spectroscope; that is to say when the phenomena of abnormal states are so scrutinised as to discover whether any of them are in fact supernormal, transcending the powers of man as hitherto unknown to us, and pointing to a higher stage of evolution. One such discovery, that of telepathy, or the transference of thought and sensation from mind to mind without the agency of the recognised organs of sense, has, as I hold, been already achieved. This is in itself enough to revolutionise the whole aspect of the problem, and to suggest that if so transcendent a capacity be indeed lurking among the obscurer and rarer vital phenomena, then the shifting phosphorescence which we feared might hang above decay, may in truth resemble rather that blaze of turbulent vapours which hides and bears witness of the sun. The proof of this, if it comes, must be slow in coming. But it has ever been men's error to lack patience when their highest interests were at stake. We hope too proudly, despair too decisively, from the halfconscious feeling that questions of primary importance must needs be settled one way or the other. For my part, I believe that many questions which the religious world deems to be already closed in one sense and the materialistic world in the other, are really only just beginning to come within the purview of science. I maintain that we are just learning to understand the first elements of problems which so many preachers have solved with a peroration, so many philosophers with a formula, so many physiologists with a smile or a sneer. It is, as I hold, to experimental psychology, to an analysis whose growing power we can as yet hardly realise, that we must look for a slow but incontrovertible decision as to whether man be but the transitory crown of earth's fauna, between ice-age and ice-age, between fire and sea; or whether it may truly be that his evolution is not a terrestrial evolution alone, not bounded by polar solitudes, nor measured by the sun's march through Heaven, but making for a vaster future, by inheritance from a remoter past. FREDERIC W. H. MYERS.

APPENDIX.

Since this paper was read to the S.P.R. (October 29th, 1885), very great activity has been shown in France in the direction of hypnotic research. The "Bulletins de la Société de Psychologie Physiologique, 1885" (published by Félix Alcan, Paris, 1886), contain various cases

of high importance. It must suffice here to say that the experiments detailed in this paper have been repeated and improved upon in many ways. An account of some experiments at Havre will be found elsewhere in this present part of the S.P.R. *Proceedings*.

And it seems desirable to add here a brief notice of the later development of the case of Louis V——, which I gave to the General Meeting of March 6th, 1886. A full account of Louis V——'s case, compiled by Dr. A. T. Myers, will be found in the Journal of Mental Science for January, 1886. Louis V—— is no longer at La Rochelle, and, with improving health, has ceased to exhibit these changes of personality.

At the end of 1885, however, he was in the asylum at La Rochelle, and the account here given represents his then state, as described by Drs. Bourru, Burot, and Berjon. I retain the present tense, for clearness' sake, though I have altered a few expressions.

Louis V—— is now in the asylum at La Rochelle, and has six personalities. I speak here only of the transition from State I. to State II. In what is now classed as State I. (though it was not the patient's earliest condition), he is paralyzed and insensible on the right side. He is talkative, violent, and arrogant. His language is coarse, and he addresses everyone with rough and impudent familiarity, giving nicknames, and making bad jokes. He is a Radical in politics, and an atheist in religion. He is extremely fond of holding forth on these topics, but his speech is indistinct and defective. Of his past life he remembers only certain portions, more or less akin to his present state. Among the six states, this is the only one in which there is right hemiplegia; and it is the only one in which the character is violent and bad. Whenever the left brain predominates, Louis V——'s disposition is good, though there are many variations in his intelligence and his memory, linked with variations in his motor and sensory systems.

Now let a bar of steel be placed on his right arm. His respiration becomes quick, his expression anxious; in about a minute the paralysis and the ansesthesia are transferred from the right side to the left. At the same time the difficulty of speech disappears, and the patient's pronunciation becomes easy and clear. Thus far, though the case is remarkable, it is not quite unique. But now comes the unique point. Together with the sensory and motor changes there is a change in memory and a change in character. He is now gentle, well-mannered, and modest. He speaks respectfully to the physicians whom a couple of minutes before he has been calling by abusive nicknames. Asked his opinion on politics or religion, he prefers to leave those matters to wiser heads than his own. He is obedient to discipline, and his expression of countenance is gentle and sympathetic. His memory embraces part of his stay at Sainte Anne, and at Bicêtre, at which latter asylum he imagines himself still to be.

And now I may point out a curious connection between this case and certain phenomena of automatic writing, previously discussed in these *Proceedings*. It will be remembered that Mr. Newnham, puzzled to account

for the freakish and non-moral character of some of the replies written by Mrs. Newnham's hand, suggested, as a possible hypothesis, that " if the untrained side of the brain be suddenly stimulated to action, its behaviour is apt to resemble that of a child whose education has not been properly attended to." In commenting on this and other cases, I endeavoured to show that there was reason to suppose that the right, or less-used, hemisphere was concerned in supernormal mentation; and I traced especially analogies between aphasia and cerebral automatism; the inference being that in each case work was thrown on dextro-cerebral centres which was habitually performed by sinistro-cerebral. I summed up (p. 60) by saying that "although I hold that the right hemisphere has much to do with Mrs. Newnham's replies, . . . I cannot find any well-recognised doctrine of cerebral localisation which authorises us to draw any conclusion as to the way in which a temporary predominance of dextro-cerebral centres might affect the manifestation of moral character; . . and I should of course be unwilling in such a matter to go a step beyond the consensus of the best scientific opinion. So far as the questions at issue are purely physiological, I can aim at nothing more than attentive study of the labours of others." I do not regret the caution of the tone here used, for I hold it eminently important that we who are thus speculating in a novel realm should not improvise a fancy physiology to suit our own ideas—that we should cite chapter and verse for any physiological fact or theory, on which we base further deductions. But now I find that the suggestion which I hesitated to accept in full, although all my own arguments pointed directly that way, simply for lack of a recorded case where right hemiplegia had involved a moral tone different from that involved in left hemiplegia in the same subject. - I find. I say, this very suggestion of the moral difference of the two hemispheres put forth and endorsed—though of course not as yet in a very confident tone by physicians of eminence, apropos of a case² on which no theory of the kind had been founded at the time when my paper was written. Corroborative instances, of course, are still needed, for the coarse organic injuries of the brain which are most commonly met with do not show themselves in mances of character.

But it is to be observed that the most crucial test which could have been devised for the theory in question would have been one where (as in Louis V——'s case) the functions of the two hemispheres were subject to so profound a disassociation that there was actually a co-exclusive alternation of memories according as one or the other hemisphere assumed the predominance. Suppose that in an ordinary case of hysterical hemiplegia the hemiplegia is transferred by metallic contact, suggestion, or otherwise, from the right side to the left. Suppose, further, that the patient exhibits more

¹ Proceedings, Vol. iii., p. 22.

² M. Jules Voisin writes in the Archives de Neurologie, September, 1885, and Ann. Méd. Psych., January, 1886. The opinion of MM. Bourru and Burot is given (with complete adhesion) by Dr. Berjon in his tractate La Grand Hystérie chez l'Homme (Paris: Baillière, 1886), p. 53. I need hardly say that the transfer of activity between the two hemispheres is almost certainly not the only alteration of cerebral action which occurs in these changes of state. See Proceedings iii., p. 43.

irritability, &c., when paralyzed on the right than on the left side. Such a case would hardly afford a presumption that the highest ideational and emotional centres were directly affected by the transfer of the paralysis; the change in temper might merely depend on the greater or less malaise caused by some change in the affection of lower centres; for, of course, we cannot assume that a hysterical hemiplegia, whose external signs may be symmetrical whether it affects the right or left side, is in reality symmetrical in its internal or subjective manifestation.

But in Louis V——'s case the character, as it were, starts fresh with the transfer of the hemiplegia; it can exhibit itself untrammelled by any continuity of memory with the previous state; we can judge it de noro, and, so to say, from top to bottom. And we find that the predominance of the right hemisphere comports a marked reversion to savage characteristics, a marked emotional explosiveness and ideational crudity.

Let us see how this view coheres with what we already know of the difference between the two hemispheres. We start, of course, from the notorious fact that our right hands are more "dexterous" than our left; that is, that the sinistro-cerebral hand-governing centres are superior in development to the dextro-cerebral hand-governing centres. There has been some controversy as to how far this is the result of education in the individual, or how far it depends on some asymmetry of the circulatory system. I cannot, of course, give any opinion as to the original anatomical reason for the selection of the right as the dominant hand, but I can hardly doubt that the superiority in the sinistro-cerebral centres concerned is now a hereditary thing,—does not depend merely on the education of the individual child.

Going one step higher, it is now pretty generally admitted that the sinistro-cerebral speech-centres are more evolved than the dextro-cerebral. And here we come very near to an actual difference in the power of summing up ideas or emotions. For signs are so closely connected with thinking that it would surprise us to see an aphasic patient retaining for long the same mental clearness as before his affliction. And our emotions themselves are greatly modified by the expression which we give to them. An aphasic (for instance) who can express disagreement only by an oath is likely to lose his sense of controversial deference and courtesy. Well, what is now contended is, that just as there may be a right hemiplegia which does not involve aphasia, and, again, a right hemiplegia so far involving the higher centres that aphasia accompanies it, so also in this case of a dissociation almost unique in its profundity between the activities of the two hemispheres, there was made manifest a difference in stage of evolution between the highest sinistro-cerebral and dextro-cerebral centres—those which preside over emotion and ideation. And I go farther, and conjecture that this difference may exist in all of us, and that just as certain of our visceral arrangements retain the traces of our pre-human ancestry, and just as our dextro-cerebral speech-centres are often stammering, childish, or wholly inefficient, so also our dextro-cerebral "character-forming" centres-the centres which on that side of the brain sum up or represent our highest activities-may retain, in their inferior evolution, traces of that savage ancestry which forms the sombre background of the refinements and felicities of civilised man. matured by GOOGIC

And, furthermore, I suggest that while we habitually use our sinistrocerebral character-centres with the same unconscious choice as leads us, for instance, to catch a rope flung at us with our right hand and not with our left, there are nevertheless certain states—supernormal as well as abnormal—in which our Ego (whatever that may be) expresses itself more readily through the dextro-cerebral centres, and assumes, therefore, a comparatively savage character.

If this be so, much light will be thrown on almost all that class of Spiritualistic manifestations which have been ascribed to diabolic agency. And if we are not ashamed of possessing a digestive system which includes the rudimentary "vermiform appendix,"—a motor system which includes the comparatively defective motor innervation of our left hands,—then surely we need not be ashamed of possessing an emotional and ideational system which includes dextro-cerebral elements some twenty generations or so in arrear of the epoch to which our brain, taken as a whole, entitles us to belong. For those who believe that our evolution has no assignable limit, there may even be something pleasing in such a token as this of the rapidity with which we are mounting on the endless way.

PROCEEDINGS OF THE GENERAL MEETING ON

Saturday, January 2, 1886.

The eighteenth General Meeting of the Society was held at the Rooms of the Society of British Artists, Suffolk Street, Pall Mall, on Saturday, January 2, 1886.

PROFESSOR SIDGWICK, VICE-PRESIDENT, IN THE CHAIR.

Mr. E. Gurney read part of a paper on "Collective Hallucinations," since embodied in *Phantasms of the Living*.

