

SOCIETY FOR PSYCHICAL RESEARCH.

PROCEEDINGS OF THE GENERAL MEETING ON

January 30, 1885.

The twelfth General Meeting of the Society was held at the Rooms of the Society of British Artists, Suffolk-street, Pall Mall, on Friday, January 30.

PROFESSOR HENRY SIDGWICK, PRESIDENT, IN THE CHAIR.

The first half of a paper by Mrs. Sidgwick, on "The Evidence, collected by the Society, for Phantasms of the Dead," was read. The paper, in its complete form, is printed further on.

I.

AUTOMATIC WRITING.—II.*

BY F. W. H. MYERS.

PART II.

In a previous paper I discussed certain forms of automatic writing which seem referable to the operation of unconscious cerebral action. I endeavoured to show that in cases where the message written fails to convey any facts which demonstrably are not known to the writer, and never have been known to him, there is no need to assume that any intelligence but his own has been concerned in the message. I maintained that this was the case even where the message took the form of an anagram, which the writer had some trouble in deciphering.†

* This paper is a continuation of my paper "On a Telepathic Explanation of certain so-called Spiritualistic Phenomena" in *Proceedings* VII. But as that title was cumbersome, I have now called these papers by the name of the phenomenon with which they mainly deal.

† To the anagrams cited in the "Clelia" case in my previous paper, two others should be added, which Mr. A. obtained at about the same time. These were *icb iov off vlc* (I go, vow belief), and *neb 18 vblly ev 86 e carf ee* (Believe by fear even! 1886). This last was an answer to the question, "How shall I believe?" and seems quite to negative the hypothesis that the anagrams were mere chance combinations of letters, which happened to be susceptible of arrangement in sentences. It should be mentioned, however, that there was an i too much in one of the anagrams previously cited.

The mentation* involved in such a case must of course be of a very unusual kind, and I shall return to its discussion later in this paper. For the present it is enough to point out that there is really no line which can be consistently laid down beforehand as demarcating self-inspired from extraneously-inspired messages, except the presence in such messages of definite pieces of information, such as in a court of justice it would be considered possible to prove that the writer or speaker could never have possessed.

But I went on to point out that there are, in fact, some trustworthy cases where the automatic message does include facts unknown to the writer. I cited a few of these, and showed that our hypothesis of Thought-transference,—of communication from one living mind to another,—would explain the cases given, although in one at least of those cases the persons concerned had felt convinced that the spirit of a dead man had intervened. I shall proceed now to give some more cases of this kind, and shall lead up to a palmary instance (the Rev. P. H. Newnham's) by some briefer cases, so arranged as to illustrate some important points.

A. In the first case there is an apparent element of *prophecy*; and I quote it in order to show how fallacious this appearance is, and how easily an ordinary mental anticipation of the future, if it in any way becomes *externalised*, may look like a revelation. Miss Summerbell's name is by this time familiar to our readers.

PLANCHETTE.—MISS SUMMERBELL'S CASE.

I have used Planchette a great deal, but the result has generally been nonsense; but I remembered two occasions when it correctly interpreted the thought of someone in the room, whose hands were *not* upon it. About a year ago, we were amusing ourselves by asking it what Christmas presents we should have. My hands were upon Planchette, and I believe Miss Lay's, but in any case it is quite certain that neither of the persons who were touching it could possibly know the answer to the question I asked. I said, "What will Miss T. have at Christmas?" Miss T. was in the room, but not near the table. Planchette immediately wrote down a rather large sum of money. I asked, "Who is to give it?" It wrote "B. and one other." Some weeks afterwards I met Miss T., who asked me if I remembered what Planchette had written. I remembered it perfectly. She said, "I have received more than that sum, but I knew about it at the time, though not the exact sum, and I believe that must have been thought-reading, for I am certain that nobody in the room knew of it, but myself." The money was given by a relative whose surname begins with B., and another person.

* This word is due, I believe, to Dr. Metcalfe-Johnson, and has been adopted by Dr. Hughlings-Jackson. It is more convenient than "mental action" both as being one word instead of two, and as avoiding the term "action", which sounds inappropriate in some cases, where a relative *passivity* is the fact to be brought out. Moreover, "mentation" seems an obvious correlative to "cerebration."

On another occasion, we asked a friend to dictate a question, the answer to which we did not know. She said, "Who is coming to breakfast to-morrow?" Miss Lay and I placed our hands upon Planchette and asked the question. It wrote "Lucas." Our friend said that was the name of the gentleman who was coming to breakfast. Neither Miss Lay nor I had ever heard of him before. Our friend said, "Ask his Christian name." We asked; it wrote "William." "Is that right?" we asked our friend. "I don't know," she answered; "I never heard his Christian name." Then somebody else, who was *not* touching Planchette, remembered that there was a song by him somewhere among the music. We looked, and at length found the song by "William Lucas"—of whom we had never heard before, nor have we heard of him since.

L. D. SUMMERBELL.

I can thoroughly endorse these statements, and could multiply instances equally curious.—J. M. LAY.

From the point of view at which we have now arrived, it will surely seem probable that the prophecy of the Christmas gift was a mere reflection of Miss T.'s anticipation—transferred telepathically to the writer's unconscious mind. With regard to predictions, as with regard to statements of existing fact, we must surely assume that any anticipation which *could* have existed in the mind either of the writer or of any other person present did in fact come from that mind, in preference to supposing a disembodied intelligence to account for it. Yet I have seen one or two promising experiments spoilt by the foolish superstition that what "Planchette says" about the future is necessarily true. Sentimental or sporting questions are asked; the secret apprehensions of the questioner externalise themselves before his (or her) astonished eyes, and the pencil is thrown aside in disgust or indignation. Or sometimes people solemnly inquire "whether it is wicked to hold communion with Planchette?" Their own brain inspires, and their own fingers write, some alarming monitory reply, and they then seriously inform one that "*Planchette itself*," (or "*Planchette herself*," as some people phrase it), has pronounced the inquiry impious. One smiles at finding Philip sober thus appealing to Philip drunk,—the waking man guiding his judgment by the capricious utterance of his own unconscious brain. But the true lesson of such an incident is the rashness of ignoring or contemning phenomena just because they look as if they made for some foolish faith, the unwisdom of leaving strange facts to become the nucleus of a superstition instead of the groundwork of a science.

As regards the Christian name "William," which Planchette gave in Miss Summerbell's narrative, we may perhaps assume that (as in the case of the word *Wem* in a previous narrative) the name printed on the song although no one consciously remembered it, had been vaguely

noticed by Mr. Lucas' friend at some previous time, and now reappeared from the stores of unconscious memory.

B. In the next case which I shall give, Mr. Allbright, of Mariemont, Birmingham, a chemical manufacturer (whose letter to me I abbreviate), asked a young lady, of whose complete ignorance of the facts of his business he feels quite sure, for the name of a waste product occurring on a large scale in his manufactory. He *meant* the answer to be "gypsum," but "chloride of calcium" was written, and this was also true; although, had he thought of this substance, he would have thought of it by its trade name of "muriate of lime." Again, he asked what was his firm's port of importation. He meant the answer to be "Gloucester," but "Wales" was written; and this again was true at the time, as he was just then importing through Cardiff. These answers startled him so disagreeably that he refused to make further experiments. But I cite the case here for the express purpose of pointing out that no insuperable difficulty is presented by the fact that the answers, while substantially known to the inquirer, were not those on which his mind was consciously fixed. The whole tendency of our argument has been to show that ideas latent in the mind may react telepathically in preference to ideas which the conscious attention is keeping uppermost. Our consciousness gives us very little clue to the real massing and proportion of the mental pictures within us. Somewhat similarly (a cynic might say), our own vivid perception of our admirable qualities gives us little clue to the aggregate impression which our character makes on our friends. But a closer parallel is to be found in the phenomena of *muscle-reading*,—another avenue into the unconscious mind. The Rev. C. H. Sugden, the successful amateur whose Note on Muscle-reading is to be found in *Proceedings* IV., says (p. 29):—

"I noticed very often that when an article had been hidden in one place and then transferred to another, my patient almost invariably took me first to the first place, and then after a short search suddenly went off to the right place. . . . Once in writing a banknote I could get nothing but two's; they were declared to be wrong,—'but,' said the patient, 'there were two's on another part of the note which I particularly noticed.' This is of interest as bearing on the well-known fact that in so-called spiritualistic revelations the things told are things which the questioner has possibly even forgotten, but which have once been in his mind."

We have yet much to learn as to what has been called the phosphorescence—or, by an exacter analogy, the fluorescence—of the brain;—the way in which excitations continue to thrill through us long after they have sunk below the threshold of consciousness, and the swell of the old wave intersects or embraces the more conspicuous agitation of the new. Or we may vary the metaphor, and say that our clearest mental

outlook is but a superposition of dissolving views, in which no scene, however vivid, is devoid of some element of its predecessor.

C. In my next case an answer is given which is in fact true, although the questioner believed it at the time to be false.

FROM MR. W. RIDDELL, Dunster, Somerset.

July, 1884.

The way I became acquainted with "Planchette" was as follows:—A friend of my wife's is staying with us, and one day she was talking about "Planchette," and saying that she had one at her home, in London, and had seen some remarkable answers given by it when a certain young lady had her hands on it. Both my wife and I laughed at the idea, saying nothing would make us believe in it. Miss B. (my wife's friend), to prove herself right, sent for her "Planchette." In the course of a day or two it arrived, and having put it together Miss B. and I tried it, but without any result beyond a few lines up and down the paper. Then my wife put her hands on it with Miss B., and in a very short time it began to move, and on being asked answered questions very freely, some rightly and some quite wrongly. Amongst those answered rightly were the following. (I may here observe that not only did my wife and myself not believe in it, but we were antagonistic to it in feeling.) Our first question was asked by myself, my wife and Miss B. having their hands on it. I said, How many shillings has Miss B. in her purse? Ans.—"Four"; right. I then asked how many coins I had in mine. Ans.—"Five"; right. I thought I had many more. I then took a playing card from a pack in a box, looked at it, put it face down on a table, and asked for its colour. Ans.—"Red"; right. Number—"Seven"; right. Name—"Hearts"; right. This, I must confess, seemed to me very wonderful, as neither my wife nor Miss B. could possibly have known anything about the card. I then took a visiting card from the bottom of the basket, and having looked at it, placed it face downwards on the table, and asked "Planchette" for the name on it. This it seemed quite unable to give, but after a long time it wrote "clergyman," which was a wonderful answer, as the card was that of a Rev. — who was here two winters ago, helping our rector. After this we did not get anything more satisfactory.

Now, here, as no complete list of the answers has been preserved, we cannot feel sure that the answer "five," as to the number of coins in Mr. Riddell's pocket may not have been right by mere accident. But my point is that, even excluding the idea of mere chance coincidence, there is still nothing in the answer which obliges us to go beyond Mr. Riddell's own mind. For on a trivial point of fact like this, it is possible for two contradictory beliefs to exist in the mind with nearly equal intensity. A man looks, perhaps, carefully into his purse when it contains much small change, and forms a vivid mental picture of the mass of coins. He then pays away several coins without specially looking into his purse in doing so. He is asked shortly afterwards for some small change, and the mental picture of the coins in his

purse is still vivid enough to make him at once pull out his purse to get at them, although even simultaneously and in the act of doing so he remembers to have paid them away. The fact that they are actually gone seems to need verification by ocular inspection before the old picture of them can be wholly displaced. It is less trouble to look afresh into the purse than to convince oneself by reflection that there really is no silver left there. Trivial as such considerations are, they may be useful in reminding us that our mental action is a much less homogeneous thing than we are wont to imagine it; and that any picture thereof, reflected to us from other minds, will probably surprise us by its jumbled confusion.

Observe that the *seven of hearts* is told correctly at once; while in the case of the *visiting card* there is an approximation only, as if the idea had been only partially caught.

We possess a few more of these minor cases of the transmission of thought as manifested in automatic writing. And we are anxious to receive further instances of the kind, believing it to be probable that the telepathic influence may show itself thus transitorily, though genuinely, in the experience of many persons. But if our theory is to be established, we shall need something beyond these fleeting instances; we shall need a series of experiments of a more solid and prolonged order. Such a series has been communicated to us by the Rev. P. H. Newnham, Vicar of Maker, Devonport. This gentleman has for many years paid careful attention to psychical phenomena, and especially has been conscious of a frequent involuntary transmission of thought from himself to Mrs. Newnham. A striking instance of this, which occurred some 30 years ago, before their marriage, may be given here.

From REV. P. H. NEWNHAM, Member S.P.R.

In March, 1854, I was up at Oxford, keeping my last term, in lodgings. I was subject to violent neuralgic headaches, which always culminated in sleep. One evening, about 8 p.m., I had an unusually violent one; when it became unendurable, about 9 p.m., I went into my bedroom, and flung myself, without undressing, on the bed, and soon fell asleep.

I then had a singularly clear and vivid dream, all the incidents of which are still as clear to my memory as ever. I dreamed that I was stopping with the family of the lady who subsequently became my wife. All the younger ones had gone to bed, and I stopped chatting to the father and mother, standing up by the fireplace. Presently I bade them good-night, took my candle, and went off to bed. On arriving in the hall, I perceived that my *fiancée* had been detained downstairs, and was only then near the top of the staircase. I rushed upstairs, overtook her on the top step, and passed my two arms round her waist, under her arms, from behind. Although I was carrying my candle in my left hand, when I started to run upstairs, this did not, in my dream, interfere with this gesture.

On this I woke, and a clock in the house struck 10 almost immediately afterwards.

So strong was the impression of the dream that I wrote a detailed account of it next morning to my *fiancée*.

Crossing my letter, not in answer to it, I received a letter from the lady in question: "Were you thinking about me, very specially, last night, just about 10 o'clock? For, as I was going upstairs to bed, I distinctly heard your footsteps on the stairs, and felt you put your arms around my waist."

The letters in question are now destroyed, but we verified the statement made therein some years later, when we read over our old letters, previous to their destruction, and we found that our personal recollections had not varied in the least degree therefrom. The above narrative may, therefore, be accepted as absolutely accurate.

P. H. NEWNHAM.

FROM MRS. NEWNHAM.

I remember distinctly the circumstance which my husband has described as corresponding with his dream, I was on my way up to bed, as usual, about 10 o'clock, and on reaching the first landing I heard distinctly the footsteps of the gentleman to whom I was engaged, quickly mounting the stairs after me, and then I as plainly felt him put his arms around my waist. So strong an impression did this make upon me that I wrote the very next morning to the gentleman, asking if he had been particularly thinking of me at 10 o'clock the night before, and to my astonishment I received (at the same time that my letter would reach him) a letter from him describing his dream in almost the same words that I had used in describing my impression of his presence.

9th June, 1884.

M. NEWNHAM.

Mr. Newnham has made many subsequent attempts to transmit thought voluntarily to his wife, but succeeded only in the year 1871, during a period of about eight months.

During that period he made notes from day to day in a private diary, which diary he has been good enough to place in my hands. There are 40 pages of MS. notes, containing 385 automatically-written replies to questions. Mr. Newnham made the experiments purely for his own satisfaction, and without any idea of submitting them to public inspection, and consequently the questions include many references to his domestic affairs at the time, to family jokes, and other matters which, while illustrating the intimate and spontaneous character of the diary, are not suited for publication. Mr. Newnham, however, has kindly made long extracts, which I shall print below. I have carefully compared the extracts with the original diary, and consider that they give a quite fair impression of it; although the diary contains several *further* points of interest, to illustrate which I shall (with Mr. Newnham's permission) myself make a few additional extracts. I have

received a letter from Mrs. Newnham, independently corroborating her husband's account.*

It must be distinctly understood that Mrs. Newnham did not see or hear the questions which Mr. Newnham wrote down. The fact, therefore, that her answers bore any relation to the questions shows that the sense of the questions was telepathically conveyed to her. This is the leading and important fact. The *substance* of the replies written is also interesting, and Mr. Newnham has some good comments thereon. But even had the replies contained no facts which Mrs. Newnham could not have known, this would not detract from the main value of the evidence, which consists in the fact that Mrs. Newnham's hand wrote replies clearly and repeatedly answering questions which Mrs. Newnham neither heard nor saw.

EXTRACTS FROM MR. NEWNHAM'S DIARY.

It was in January, 1871, that I was first led to think of making an attempt to investigate the alleged phenomena of Planchette-writing. Having procured an instrument, I consulted carefully with my wife, as to forming a code of conditions which we would agree to bind ourselves rigidly to observe, in case she was found capable of writing.

I copy from my note-book the following preliminary statement and conditions agreed upon, which were put down in writing before any experiment had been made :—

"Being desirous of investigating accurately the phenomena of Planchette, myself and my wife have agreed to carry out a series of systematic experi-

* Mr. Newnham has procured for me two autograph letters from eye-witnesses of some of the experiments who do not, however, wish their names to be published, on account of prejudices still existing in certain quarters against the experiments as involving questionable agency. One writer says: "You wrote the question on a slip of paper and put it under one of the ornaments of the chimney-piece—no one seeing what you had written. Mrs. Newnham sat apart at a small table. I recollect you kept a book of the questions asked and answers given, as you thought some new power might be discovered, and you read me from it some of the results. I remember particularly questions and answers relating to the selection of a curate for B. My wife and her sister saw experiments conducted in this manner. Mrs. Newnham and you were sitting at different tables." Another eye-witness writes: "I and my sister were staying at —, and were present at many of the Planchette experiments of Mr. and Mrs. Newnham. Mr. and Mrs. Newnham sat at different tables some distance apart and in such a position that it was quite impossible Mrs. Newnham could see what question was written down. The subject of the questions was never mentioned even in a whisper. Mr. Newnham wrote them down in pencil and sometimes passed them to me and my sister to see, but not often. Mrs. Newnham immediately answered the questions. Though not always correct, they (the answers) always referred to the questions. Mr. Newnham copied out the pencil questions and answers verbatim each day into a diary."

ments, in order to ascertain the conditions under which the instrument is able to work. To this end the following rules are strictly observed :—

1. The question to be asked is written down before the Planchette is set in motion. This question, as a rule, is never known to the operator.
2. Whenever an evasive, or other answer is returned, necessitating one or more new questions to be put, before a clear answer can be obtained, the operator is *not* to be made aware of *any* of these questions, or even of the general subject to which they allude, until the final answer has been obtained.
3. In all cases where the operator has asked the question, or is aware of its terms, or general tenor, the question will be distinguished by prefixing an asterisk, and leaving a space between it and the marginal line. [None of these questions, except No. 313, are quoted here.]
4. Where no operator is mentioned, my wife is always meant.
5. Where no questioner is mentioned, myself is always meant."

Although not provided for in writing, (as our mutual *bona fides* was, of course, taken for granted), I may add that my wife always sat at a small low table, in a low chair, leaning backwards. I sat about eight feet distant, at a rather high table, and with my back towards her while writing down the questions. It was absolutely impossible that any gesture, or play of features, on my part, could have been visible or intelligible to her. As a rule, she kept her eyes shut; but never became in the slightest degree hypnotic, or even naturally drowsy.

Under these conditions we carried on experiments for about eight months, and I have 309 questions and answers recorded in my note-book, spread over this time.* But the experiments were found very exhaustive of nerve-power, and as my wife's health was delicate, and the fact of thought-transmission had been abundantly proved, we thought it best to abandon the pursuit.

I now proceed to give a sample of some of these questions and answers. The numbers prefixed are those in my note-book.

I may mention that the Planchette began to move instantly, with my wife. The answer was often half written before I had completed the question.

On first finding that it would write easily, I asked three simple questions which were known to the operator; then three others, unknown to her, relating to my own private concerns. All six having been instantly answered in a manner to show complete intelligence, I proceeded to ask,

7. Write down the lowest temperature here this winter.

A. 8.

Now, this reply at once arrested my interest. The actual lowest temperature had been 7.6° so that 8 was the nearest whole degree; but my

* The remainder of the 385 questions and answers in this book belong to a different series, where the question was *known* to the operator.

wife said at once that, if she had been asked the question, she would have written 7, and not 8; as she had forgotten the decimal, but remembered my having said that the temperature had been down to 7 *something*.

I simply quote this, as a good instance, at the very outset, of perfect transmission of thought, coupled with a perfectly independent reply; the answer being correct, in itself, but different from the impression on the *conscious intelligence of both parties*.

Naturally our first desire was to see if we could obtain any information concerning the nature of the intelligence which was operating through the Planchette, and of the method by which it produced the written results. We repeated questions on this subject again and again; and I will copy down the principal questions and answers in the connection.

January 29th.

13. Is it the operator's brain, or some external force, that moves the Planchette? Answer "brain" or "force."
A. Will.
14. Is it the will of a living person, or of an immaterial spirit, distinct from that person? Answer "person" or "spirit."
A. Wife.
15. Give first the wife's Christian name; then, my favourite name for her. (This was accurately done.)
27. What is your own name?
A. Only you.
28. We are not quite sure of the meaning of the answer. Explain.
A. Wife.

Failing to get more than this, at the outset, we returned to the same thought after question 114; when, having been closely pressed on another subject, we received the curt reply—"Told all I know."

February 18th.

117. Who are you that writes, and has told all you know?
A. Wife.
118. But does no one tell wife what to write? If so, who?
A. Spirit.
119. Whose spirit?
A. Wife's brain.
120. But how does wife's brain know (certain) secrets?
A. Wife's spirit unconsciously guides.
121. But how does wife's spirit know things it has never been told?
A. No external influence.
122. But by what *internal* influence does it know (these) secrets?
A. You cannot know.

March 15th.

132. Who, then, makes the impressions upon her?
A. Many strange things.

133. What sort of strange things ?
A. Things beyond your knowledge.
134. Do, then, things beyond our knowledge make impressions upon wife ?
A. Influences which no man understands or knows.
136. Are these influences which we cannot understand external to wife ?
A. External—invisible.
137. Does a spirit, or do spirits, exercise those influences ?
A. No, never (written very large and emphatically).
138. Then from whom, or from whence, do the external influences come ?
A. Yes ; you will never know.
139. What do you mean by writing “yes” in the last answer ?
A. That I really meant never.

March 19th.

142. By what means are (unknown) secrets conveyed to wife's brain ?
A. What you call mesmeric influence.
144. What do you mean by “what you call” ? What do you call it ?
A. Electro-biology.
145. By whom, or by what, is the electro-biologic force set in motion ?
A. I told you you could not know more than you did.
146. Can wife answer a question the reply to which I do not know ?
A. Why do you try to make me say what I won't ?
147. Simply because I desire knowledge. *Why* will not you tell ?
A. Wife could tell if someone else, with a very strong will, in the room knew.

March 26th.

179. Can you foresee the future ?
A. No.

April 10th.

190. Why are not you always influenced by what I think ?
A. Wife knows sometimes what you think.
191. How does wife know it ?
A. When her brain is excited and has not been much tried before.
192. But by what means are my thoughts conveyed to her brain ?
A. Electro-biology.
193. What is electro-biology ?
A. No one knows.
194. But do not you know ?
A. No. Wife does not know.
195. What makes you always call her “wife” ?
A. You always think of wife.
196. But I never call her “wife.” Why do you ?
A. I am nothing without wife.
200. That is no answer. *Why* do you call her so ?
A. Because she is all a wife.

My object in quoting this large number of questions and replies has not been merely to show the instantaneous and unfailling transmission of thought from questioner to operator ; but, more especially, to call attention to a remarkable characteristic of the answers given. These answers, consistent and invariable in their tenor from first to last, *did not correspond with the opinions or expectations of either myself or my wife.* Something which takes the appearance of a source of intelligence *distinct from the conscious intelligence of either of us*, was clearly perceptible from the very first. Assuming, at the outset, that if her source of percipience could grasp my questions, it would be equally willing to reply in accordance with my request, in the first two questions I suggested the form of answer ; but of this not the slightest notice was taken ! Neither myself nor my wife had ever taken part in any form of (so-called) "spiritual" manifestations before this time ; nor had we any decided opinion as to the agency by which phenomena of this kind were brought about. But for such answers as those numbered 14, 27, 137, 144, 192, and 194, we were both of us totally unprepared ; and I may add that, so far as we were prepossessed by any opinions whatever, these replies were distinctly opposed to such opinions. In a word, it is simply impossible that these replies should have been either suggested or composed by the *conscious* intelligence of either of us.

One isolated but very interesting experiment deserves to be recorded here.

I had a young man reading with me as a private pupil at this time. On February 12th he returned from his vacation ; and, on being told of our experiments, expressed his incredulity very strongly. I offered any proof that he liked to insist upon, only stipulating that I should see the question asked. Accordingly, Mrs. Newnham took her accustomed chair in my study, while we went out into the hall, *and shut the door behind us.* He then wrote down on a piece of paper :—

87. What is the Christian name of my eldest sister ?

We at once returned to the study, and found the answer already waiting for us :—

A. Mina.

(This name was the family abbreviation of Wilhelmina : and I should add that it was unknown to myself.)

I need make no comments upon such a case as this.

I must now go on to speak of a series of other experiments, of a very remarkable kind.

We soon found that my wife was perfectly unable to follow the motions of the Planchette. Often she only touched it with a single finger ; but even with all her fingers resting on the board she never had the slightest idea of what words were being traced out. This is important to remember, in view of the fact that five or six questions were often asked consecutively without her being told of the subject that was being pursued. (Rule 2.)

It struck me that it would be a good thing to take advantage of this peculiarity on her part, to ask questions upon subjects that it was impossible for her to know anything about. It will be noticed that in some of the

questions quoted above (142, 120, 122), a word is inserted between brackets. I must now explain that in the original note-book, the words between brackets are always replaced by the word "Masonic." I had taken a deep interest in Masonic archæology. and I now questioned Planchette on some subjects connected therewith.

February 14th.

92. What is the English of the Great Word of the R.A. ?
 After an interruption, of which I shall speak hereafter, one great word of the Degree, but not the one I meant, was written, very slowly and clearly.
97. Is the word truly genuine, or is it a made-up one ?
 A. Tried to tell : can't.
98. By whom was the word first used ?
 A. Too hard work for wife.

February 18th.

112. What is the translation of the Great Triple Word ?
 A. (The first syllable of the word in question was written correctly, and then it proceeded.) The end unknown. Three languages. Greece. Egypt. Syriac.
113. What part of the word is Greek ?
 A. Meaning unknown.
114. When was the word first invented ?
 A. Told all I know.
115. Who are you that know ?
 (Answer scrawled and illegible.)
116. Please repeat same answer legibly ?
 Manifestation triune person.

(Here follow questions 117—122, as above.)

March 15th.

- 125, 126. What are the three languages of which the Great R.A. Word is composed ?
 A. Answered all I could before.
127. You said one part of the word was Greek. Which is it ?
 A. Greek, I think.
128. Which syllable do you think is Greek ?
 A. The last.
129. What is the English translation of it ?
 A. Can't explain it.
130. If the last syllable be Greek, which is Egyptian, as you said ?
 A. I cannot tell you more than you know.
131. But why, then, do you say that that syllable is Greek which I think Egyptian ?
 A. Wife can't always receive impressions.

(Here follow 132—139, as above.)

March 26th.

166. Of what language is the first syllable of the Great Triple R.A. Word ?
A. Don't know.
167. Yes, you do. What are the three languages of which the word is composed ?
A. Greek, Egypt, Syriac first syllable (*correctly given*), rest unknown.
168. Write the syllable which is Syriac.
A. (First syllable correctly written.)
169. Write the syllable which is Egyptian.
A. Second.
170. Can you not write the syllable itself ?
A. Third Greek.
174. Write down the word itself.
A. First three and last two letters were written correctly, but four incorrect letters, *partly borrowed from another word of the same degree*, came in the middle.
176. Why do you write a word of which I know nothing ?
A. Wife tried hard to tell the word, but could not quite catch it.
177. Catch it from whom ?
A. Not quite sure.
178. Not quite sure of what ?
A. I know nothing. Wife doesn't quite know.

In the above series of answers we have, it seems to me, a very remarkable combination of knowledge and ignorance. There is a perfect appreciation of my thoughts, in the queries ; but a strange, persistent, almost dogged, incapability of seeing my thoughts, in the replies. Especially in the answer to 116, and in some other answers (which are not given), there is a reference to an opinion which was published by Dr. Oliver, whose works I had been carefully reading about four months before, but with whose theory, in this case, I most strongly disagreed. So that here was an opinion intimated which it was impossible that the operator could have been aware of, and which the questioner had absolutely rejected as untenable !

How can we account for such a case as this ? If it were merely the questioner's brain which transmitted the thoughts, or which (so to speak) could be read like an open book by some clairvoyance on the part of the operator—why should not the expected reply impress itself upon the operator as rapidly and as lucidly as did the questions ?

Still more forcibly are such perplexities as these brought before us by the following experiment :—

182. Write out the prayer used at the advancement of a Mark Master Mason.
- A. Almighty Ruler of the Universe and Architect of all worlds, we beseech Thee to accept this, our brother, whom we have this day received into our most honourable Company of Mark Master Masons. Grant him to be a worthy member of our brotherhood ; and may he be in his own person a perfect mirror of all Masonic virtues. Grant that all our doings may be to Thy honour and glory, and to the welfare of all mankind.

This prayer was written off instantaneously and very rapidly. It is a very remarkable production indeed. For the benefit of those who are not members of the craft, I may say that no prayer in the slightest degree resembling it is made use of in the Ritual of any Masonic degree; and yet it contains more than one strictly accurate technicality connected with the degree of Mark Mason. My wife has never seen any Masonic prayers, whether in "Carlile," or any other real or spurious Ritual of the Masonic Order.

Here, then, assuredly, was a formula composed by some intelligence totally distinct from the conscious intelligence of either of the persons engaged in the experiment.

I proceeded to inquire as follows :—

183. I do not know this prayer. Where is it to be found?
 A. Old American Ritual.
184. Where can I get one?
 A. Most likely none in England.
185. Can you not write the prayer that I make use of in my own Lodge?
 A. No, I don't know it.

In these last answers we see a new moral element introduced. There is evasion, or subterfuge, of a more or less ingenious kind; and totally foreign to the whole character and natural disposition of the operator. A similar attempt at deliberate invention, rather than plead guilty to total ignorance, is contained in the following answers :—

May 7th.

255. In what Masonic degree was the Triple Word first used?
 A. Wife does not know.
256. Cannot you tell her?
 A. How can wife know what no one else does?
257. Does *no* one, then, know the answer to this?
 A. No one knows now.
258. What do you mean by "now"? Did anyone once know?
 A. The last one who knew died at least 20 years ago.
259. What was his name?
 A. In America; don't know name.

And again, *May 21st.*

280. Can you write the Triple R.A. Word to-night?
 A. Abracadabra.
281. Wrong word. Try again.
 A. Wife can't write secret words.
282. Then why did you profess to write it, the other day?
 A. I only wrote what wife knew.
283. But if she knows it why do you not write it to-night?
 A. You told her.
284. What did I tell her?
 A. One day when your influence over her was very strong.

(N.B. The answer to 284 is a case of "arrested" reply; i.e., it is a continuation of the reply to 283, without reference to question 284 at all.)

285. Then why does she not write it now ?
 A. Wife can't understand.
286. Is it my question, or the answer to it, that she can't understand ?
 A. Don't know.
287. What is the matter with you to-night ?
 A. You are tired and so is wife.

I have spoken of the introduction of an apparently "new moral element" into some of the foregoing replies. I am inclined to emphasise this point. The existence of a reciprocal intelligence is clear enough ; and so long as this intelligence only varies in depth or rapidity of perception, we have only to note occasional differences of degree or quantity, so to speak. But the question becomes greatly complicated by the appearance of a low tone of moral feeling, and a total indifference to truth for its own sake, coupled with what looks like a morbid dread of seeming to be ignorant of the reply to the question. The differences now become matters of *quality* rather than of *quantity*. I wish to invite very careful consideration of this phenomenon, of which I will now adduce a few more instances.

It was during the time of the Franco-German war ; and two young Frenchmen, former pupils of mine, had been called out for service. In order to test the intelligence, I asked as follows :—

January 29th.

29. Where is A. H. now ?
 A. Safe.
 (This reply was afterwards found to be correct, although my friend was wounded subsequently.)
30. And L. D. ?
 A. From home.
31. Is he in the war ?
 A. No.
32. Has he been engaged in the war ?
 A. Yes.
33. In what country is he living ?
 A. Prisoner.

The curious evasion of the answer here is all the more to be noticed, as the ultimate reply was correct.

Subsequently, March 19th, I asked :—

156. Who told you that L. D. was prisoner ?
 A. He will only get a slight punishment.
157. Please answer my last question.
 A. They liked his sermon very much.

Here is a deliberate evasion of a question which there was no wish to answer. Being pressed the subject is closed.

158. How did you find out that L. D. was a prisoner ?
 A. Wife's brain getting bewildered.

Later on in the year (in October) I asked—the operator being aware of the question :—

313. Whence did wife's brain gather the answers to 29 and 30 ?

A. Wife's brain knew it, for she knew their characters.

In order to test the possibility of prescience in this intelligence, I had frequently pressed it rather hard as to the probable date of an event which I expected to happen to myself, sooner or later, but had no notion of how long it would be first. In reply to questions 4, 5, 6, the date of Christmas, 1871, had been fixed for this event to happen. In 152 I recurred to the same subject ; and after two answers, referring back to previous questions on other matters, I again got the answer "Very likely Christmas." I represented that circumstances rendered this simply impossible, and the reply came :—

152. A. Christmas is your free time.

And on my urging that the event expected never took place at Christmas, it simply said :—

153. A. There will be this year.

On May 7th, I asked :—

267. What will do to-morrow night ?

A. I don't know.

268. Can you never foresee what is going to happen ?

A. No, I can't.

269. Then, how do you know what I am going to do next Christmas ?

A. That is settled now : it is not to be settled in the future.

270. Who has settled it, and when was it settled ?

A. Why do you want to know ?

271. That I may verify your statment when the time comes.

A. — settled it about three months ago.

272. Who proposed it ?

A. M. and P. (names written at full of two persons who were the most probable ones to have been concerned in the matter.)

Now the whole of these replies evince an attempt to keep up consistency, and every one of them was pure and absolute fiction, and the readiness with which every query was met was fully equalled by the audacious unscrupulousness of the inventive art which persisted in defending an absolutely impossible position to which the first answers stood committed, some months before.

Of ingenious evasion pure and simple the following are good examples :—

18. What is the matter with old J. ? (an aged parishioner of mine, who was ill at the time.)

An "arrested" answer was given ; being the last half of the answer to 17.

19. Please answer my question as to Mr. J. ?

A. No.

20. Can you not, or will you not?
A. Don (the pencil then slipped off the paper).
21. Question repeated.
A. Don't know.
22. Will he get better? Do you know?
A. Yes.
23. Is it "Yes" to the first question, or to the second? Answer one or two.
A. Two.
24. Is it wrong in me to ask?
A. No.
25. Then will Mr. J. die in this illness, or no?
A. Soon. (This was not the case: he lived several years.)
26. In how many weeks? Answer in figures.
A. I won't tell.

In the autumn a friend who was staying with me had made a big find of some (apparently) "chipped flints," on the Dorsetshire downs. I was doubtful myself of their true character, and my friend proposed to ask Planchette. Accordingly I inquired:—

September 3rd.

305. What are the flints which William found to-day?
A. You do not expect me to know things so far back.

I have referred above to "arrested" or "retarded" answers. I use these terms to denote two modes in which a curious dogged pertinacity was manifested. Sometimes the pencil would come to its usual dead stop, and, the sense being apparently complete, a new question would be asked; but Planchette at once went on with an expansion of its previous reply. This is the "arrested" answer. The "retarded" answer is when the intelligence at work seems as though it were obliged to relieve itself of some previous impression, before it could turn its attention to a new line of thought.

The following are interesting cases of the "retarded" answer:—

January 30th.

A friend and his wife were present and asked to put questions. The gentleman was not merely incredulous, but rather unpleasantly so. His question was one the answer to which I did not know, namely:—

40. What were the names given to Mrs. E.'s baby?
The answer was quite unintelligible.
41. The answer is illegible. Please repeat it.
A. Ellen Theresa.

This reply is very curious. It was quite wrong, neither of these names having been given; but both of them are family names of the near relations of the querist's wife, who was sitting by.

42. Please give the names of Mrs. E.'s baby.
A. I can't tell.

43. Can you give the name of Mrs. P.'s last baby but one?
A. Too many people.

It was plain that some disturbing influence was at work; and the experiment was abandoned.

Two days later—February 1st—we commenced again:—

47. Give the names of Mrs. P.'s baby, who is my godson.

Although myself and wife were alone as usual, the instrument absolutely refused to move. After waiting a long time, I thought it best to break into a new line, and asked:—

48. What name shall we give to our new dog?

The reply came at once.

- A. Yesterday was not a fair trial.

This is the more noticeable as it was not "yesterday," but the day before, that the failure had taken place, which was evidently weighing on Planchette's intelligence.

I asked:—

49. Why was not yesterday a fair trial?

- A. Dog.

(Here is an endeavour to catch up the idea of question 48.)

50. Why was not yesterday a fair trial?

- A. Want strength.

51. Who wants strength?

- A. Yes.

52. Who is it that wants strength? You, or wife?

- A. Wife.

A similar case occurred again on February 14th. A friend and his sister were present, and were inclined to ridicule the whole matter. My friend asked, "Of whom am I thinking?" Planchette made two very probable, but mistaken, guesses. He then asked to be told the population of his parish, and the answer was 310; whereas the correct figures were 510; and, as my wife showed signs of exhaustion, the questions were abandoned.

In the evening I recommenced my Masonic test questions; and asked (92) "What is the English of the Great Word of the R.A.?" and was much amused when the reply began: "Miss B." (my friend's sister) and there was arrested. I proceeded.

93. Please explain your answer.

- A. Fidgets wife.

The completion of the "arrested" answer perfects the "retarded" answer. Planchette was evidently still full of the last strong impression of the afternoon's failure, and was obliged to offer an explanation before it would proceed to other business.

An excellent case of totally independent answering, coupled with a sense of humour, was manifested on the following occasion.

April 16th.

We had all been a good deal worried about several matters, and on asking the first question of the evening, the Planchette refused to write words, but after some lines of unintelligible scribble, drew the profile of a hideous face. I went on :—

201. Answer unintelligible.
A. Can't see the question. (Then it drew a facsimile of the previous face.)
202. Why do you draw that face at the end ?
A. A little amusement.
203. Is the face a portrait of any one ?
A. Wife would like to amuse you.
204. Is the face intended to be a portrait ?
A. Of course.
205. Of whom, then, is it a portrait ?
A. When people are sad they should be amused.
206. Of whom is the face a portrait ?
A. You know quite well.
207. I don't. Please answer.
A. Possibly I know better.
208. I daresay, but please answer.
(Only unintelligible flourishes made.)
209. Question repeated.
A. What you need. (This, I imagine, is the arrested conclusion of 207.)

Later on, after much evasion to other questions, I said :—

221. Answer my question, and don't talk rubbish.
A. Don't be cross.

A few minutes later, in reply to question 230, Planchette drew a wavy line, and then wrote "pretty little man."

231. Please explain, and don't chaff.
(It drew the same profile as in reply to 201.)
232. Please reply.
(It drew something like a wall and battlemented tower.)
233. Don't be ridiculous, and answer.
A. D.'s likeness (my wife's sister).
234. Either answer my question, or say you will not.
A. You don't understand fun.
235. Yes, I do ; but I don't want fun now. Please answer.
A. It is much better to be silly sometimes than wise always.
236. I quite agree with you. Nevertheless, answer my question.
A. Too much work and no play makes Jack a dull boy.
237. Will you answer, or no ?
A. You are sleepy.
238. Answer my question.
(Reply too faint to be read.)
239. Please repeat, distinctly.
A. It is time to go to sleep—go to bed.

May 10th.

Planchette again gave us an example of its sense of the humorous.

I had been obliged at short notice to provide a substitute for my curate at a small lonely parish in the Dorset hills, several miles away from my own house. I had to engage a clergyman who was not a favourable specimen of his profession, as I could procure no one else in time to get the Sunday's work done. He was much amused with Planchette, and desired to ask :—

277. How should a bachelor live in this neighbourhood ?

(The answer was illegible.)

278. Please repeat answer.

A. Three months.

(Planchette evidently did not catch the exact query.)

279. I did not ask *how long*, but *how* ?

A. Eating and drinking and sleeping and smoking.

That clergyman never consulted Planchette again.

I will conclude with a very pretty instance of a mistake instantly corrected. It was on the same evening, May 10th ; I had to preach on the following Whit-Monday, on the occasion of laying a foundation stone with Masonic ceremonial, so I asked :—

275. Give me a text for Whit-Monday's sermon ?

A. If I go not away, the Comforter will not come to you.

The selection of a subject suitable for *Whituntide* is plainly the first idea caught by the intelligence ; so I proceeded :—

276. That will not do for my subject. I want a text for the *Monday's* sermon.

A. Let brotherly love continue.

I have had a twofold object in quoting the foregoing large number of questions and answers, which, *in themselves*, are often trivial and worthless.

I. My first aim has been to prove incontestably the possibility of absolutely perfect and instantaneous transmission of thought from one brain to another, although the recipient brain was in a normal state, and entirely apart from any so-called "magnetic," mesmeric, or other hypnotic influences. I am not aware of any exactly parallel experiments having as yet been carefully registered and recorded.

II. But it is impossible for me to close this paper without again very urgently calling attention to what I have termed the low "moral" character of the re-acting intelligence.

We are all familiar with this phenomenon in the average experience of so-called "*spiritual controls*," but in these cases the "*controlled*" medium is more or less hypnotic and unconscious. And I think that the recurrence of the same phenomenon in the case of a person in perfect health, and in the enjoyment of full consciousness, is worthy of very serious consideration.

"*Hypotheses non fingo*" is an absolutely necessary rule for psychical inquirers at the present time. Our work is to amass facts for some master-mind of a future generation to piece together. Most assuredly I shall offer no theory to explain this curious appearance of what looks like the presence of a "third centre of intelligence," distinct from the *conscious* intelligence

and character of either of the two parties engaged in the experiments. But I should like to suggest two questions, which appear to me to be well worth the careful consideration of biologists and psychologists.

1. Is this "third intelligence" analogous to the "dual state," the existence of which, in a few extreme and most interesting cases, is now well established? Is there a latent potentiality of a "dual state" existing in every brain, and are the few very striking phenomena which have as yet been noticed and published only the exceptional developments of a state which is inherent in most, or even in all, brains?

2. Is it possible that this "dual state" arises from the fact that we habitually use only one of the cerebral hemispheres for the transaction of our ordinary brain-work; leaving the other, so to speak, untrained and undisciplined? and so, 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. The percipient powers of such a child may be astonishingly acute, and the depth of its intuitive remarks and replies will often astonish everybody that associates with it. Neither will it be habitually deceptive, or otherwise immoral; but its morality is simply a matter of convenience. It cannot bear to be put in the wrong, and will never acknowledge itself to have been wrong. It will lie persistently; not for the sake of deceiving, but in order to prove itself to have been in the right, and to claim the position of a martyr, if punished. We are all familiar with such characters; especially in young girls at a critical period of life; when it has been said that for a year or two many girls have "no conscience whatever." In such cases no doubt physical causes are sufficient to hold the moral training of childhood in abeyance, for a time, and to produce the appearance of a morality far below what the same person evinced a few years before, or will evince a few years later. May not the "untrained half" of the organ of mind, even in the most pure and truthful characters, be capable of manifesting similar tendencies, and of producing, at all events, the appearance of moral deficiencies which are totally foreign to the well-trained and disciplined portion of the brain which is ordinarily made use of?

P. H. NEWNHAM.

Before proceeding to further comment, I will make one or two additional citations from the diary before me.

We have had a case where a thermometrical reading was given with substantial correctness, but not as either Mr. or Mrs. N. would have given it. Here is a case where a barometrical reading is given *incorrectly*, but as either Mr. or Mrs. N. might have *guessed* it to be.

85. Write in figures the lowest barometrical reading here last month.

A. 21 (last figure doubtful; then stopped).

86. Answer incomplete. Please repeat.

A. 29. 35. Tired.

"The addition of tired, of its own accord," says Mr. Newnham, "seems to plead for pardon, if wrong." That is to say that towards the end of a sitting the answers generally become vaguer, and fatigue is alleged as an excuse.

In fact, the transmission of thought, as already observed, was not always effective. Sometimes the Planchette persisted in expressing some idea of its own; sometimes it only gradually came to the knowledge of the subject of the question.

48. What name shall we give to our new dog?

A. Yesterday was not a fair trial.

49. Why was not yesterday a fair trial?

A. Dog.

And again :—

108. What do I mean by chaffing C. about a lilac tree?

A. Temper and imagination.

109. You are thinking of somebody else. Please reply to my question.

A. Lilacs.

Mr. Newnham, in his notes, is careful to state that in the case of question 108 Mrs. Newnham "knew that there was some chaff in the question, but did not know against whom the chaff was." The vague answer, "temper and imagination," was, therefore, just such as her conscious mind alone might have produced.* But the answer to 109 shows that her unconscious mind was beginning to get hold of the question, in just the fragmentary manner in which "dog" was given before.

It will have been observed that the replies throughout show very little *originality* from the side of the *writer's* brain. They are for the most part reflections of the questioner's thoughts, helped out by poor jokes and evasions. I will conclude these quotations with one answer which seems to show an independent originative effort on the writer's side.

59. What name shall we give to our new dog? *Nipen*.

"The name of *Nipen*," adds Mr. Newnham, "from *Feats on the Fiord*, shot into the operator's brain just as the question was asked."

Now Mr. Newnham had been thinking of another name, and the choice of the name of the tricky Norwegian sprite came, as far as we can tell, wholly from the operator's mind. Possibly some unusual vivacity in the suggestion carried it over the threshold,—from the writer's unconscious into her conscious mind,—as she was in the act of writing it down. It will be remembered, of course, that she had no conscious knowledge as to what was the question asked.

But what, it may fairly be asked at this point, do I mean by "the unconscious mind"? Is this a mere synonym for the "complex unconscious cerebration" of which I spoke in my first paper? or am I postulating some distinct focus of psychical action,—co-ordinate, in some sense, with the *conscious* mind?

* "I should add," says Mr. Newnham, in a letter to me, "that these two words formed part of habitual family 'chaff' among ourselves."

At the risk of tediousness, I must endeavour to answer this question as fully as possible. For in no subject is it more necessary than in psychical research to define the meaning of new terms, or terms used in a new sense, as soon as they are introduced. In no subject is there a greater danger of the illicit extension of established scientific phraseology. A metaphor, used at first avowedly as a metaphor, and then insensibly sliding into an assertion of fact, may give a spurious look of orthodoxy to what is really no more than an unverified hypothesis. The name, for instance, of "animal magnetism," suggested at first by some real, though probably superficial analogies, has been the source of many a page of wild theory and prepossessed observation. It is better to give the new thing a new name,—descriptive like "hypnotism," historical like "mesmerism," or even purely arbitrary like "odhic force," and then to leave its reality to be established by independent observation and argument.

To apply this principle to the present case. In the discussion on "Clelia," in my last paper, I certainly pushed the phrase, "unconscious cerebration," as far as it can, with any fairness, be made to go. The accepted writers on unconscious cerebration (of whom Dr. Carpenter may be taken as the principal English representative) treat this unconscious action of the brain as a process which, though distinct from, is *subsidiary* to, consciousness, as a subaqueous agitation which stirs the conscious surface, not as a stream which meets the stream of consciousness, still less as an earthquake-wave, which is capable of effacing and overwhelming it. But in "Clelia" we saw produced, for the first time, perhaps, in psycho-physical discussions, an instance of a sane and waking man holding a colloquy, so to speak, with his own dream; an instance, that is to say, where the unconscious cerebral action was not subordinated to the conscious,—did not depend for its manifestation on the direction of the conscious attention elsewhere, but presented itself as co-ordinate with the conscious action, and as able to force itself upon the attention of the waking mind. How different this is from the stock examples will be seen at a glance. When Gauss answers the servant-maid who announces that his wife is dying, with, "Tell her to wait till I come," it is because the absorption of his conscious attention—his highest centres*—in a train of abstract reasoning, leaves certain lower

* I use the term "highest centres" as the best-authorised expression for the cerebral correlative of conscious (or at least complex) mentation. See, for instance, Hughlings-Jackson ("Croonian Lectures," 1894, p. 4.) "The triple conclusion come to is that the highest centres, which are the climax of nervous evolution, and which make up the 'organ of mind' (or physical basis of consciousness), are the least organised, the most complex, and the most voluntary." The term "unconscious mentation" is used deliberately; but I must defer its defence till a future occasion, and the reader who demurs to it may substitute "cerebration" without injury to the present argument.

centres free to shape, unchecked, the *coherent*, but not altogether *appropriate*, reply. Even when the somnambulist solves in sleep the problem which baffled him when waking, the high centres which thus act automatically are enabled to do so only because the habitual conscious mentation is temporarily checked by profound sleep. If Gauss had given his full attention to what the maid-servant said, he would have made some more logical answer. And, conversely, if the somnambulist had woken up while he was writing out the problem, he would have been at a loss as to the next step. In either case the manifestation, whether more or less intelligent, of the unconscious mentation depends on the inhibition, or the diversion, of the conscious mentation. But in the "Clelia" case, the unconscious mentation flowed on intercurrently with the conscious. It asserted for itself a kind of co-ordinate position, and employed the waking hand to write anagrams which the waking brain found a difficulty in solving.

It must be confessed, therefore, that in advancing this case I am already overpassing very considerably the recognised limits of unconscious cerebration. And, moreover, I do not even advance the "Clelia" case as in my view an altogether *exceptional* one. I conceive, rather, that this kind of active duality of mentation—this kind of colloquy between a conscious and an unconscious self—is not a rare, but a fairly common phenomenon. I believe that I have personally witnessed it, in slightly different forms, in at least 12 cases during the past 12 years. Most of the cases, however, of which I speak, are not suitable for quotation here, for they would not in themselves have proved the active duality of the mind, since they did not contain—what the "Clelia" case *did* contain—internal proof of that duality inherent in the very nature of the messages written. I have preferred, therefore, to leave it to my readers to repeat the experiment for themselves, or with trusted friends, and thus to acquire that *subjective* certainty which the automatist soon feels, that his *conscious* mentation is not supplying the written answers which flow from his pen.

I must, however, interrupt my argument to add one more case, precisely parallel with "Clelia," with which Professor Sidgwick has furnished me, from his own experience with an intimate friend.

The experiences which I mentioned to you as similar to those described in your paper—so far as the mere effects of unconscious cerebration are concerned—occurred about 20 years ago. An intimate friend of mine who had interested himself somewhat in Spiritualism, and had read Kardec's book, discovered almost by accident that his hand could write, without any conscious volition on his part, words conveying an intelligible meaning—in fact, what purported to be communications of departed spirits. He asked me to come and stay with him, in order to investigate the phenomenon; he had been rather struck by some things in Kardec's book, and was quite dis-

posed to entertain the hypothesis that the writing might be due to something more than unconscious cerebration, if it should turn out that it could give accurate information on facts unknown to him. The experiments, however, that we made in order to test this always failed to show anything in the statements written down that might not have been due to the working of his own brain; and at the end of my visit we were both agreed that there was no ground for attributing the phenomenon to any other cause but unconscious cerebration. At the same time we were continually surprised by evidences of the extent to which his unconscious self was able to puzzle his conscious mind. As a rule, he knew what he was writing, though he wrote involuntarily; but from time to time he used to form words or conjunctions of letters which we were unable to make out at first, though they had a meaning which we ultimately discovered. Thus one evening, just as we were about to break up, the capital letters K H A I R E T E were written; their meaning will not be obscure to you, but it so happened that it did not at first occur to us that K H represented the Greek χ , so that we had no idea what the letters meant, and tried various solutions till the true signification ("Farewell") suddenly flashed upon my mind. On another occasion I asked a question of the supposed communicating intelligence, and requested that the answer might be given in German, a language which my friend was unable to read or write, though he had learnt to speak one or two words while travelling in the country. His hand proceeded to write what was apparently one long word, which seemed to him absolutely without meaning; but when I came to read it I could see that it was composed of a number of German words, though put together without proper grammatical terminations; and that these words *suggested*—though they could hardly be said to *convey*—what would have been a proper and significant answer to my question. The words were all common words, such as he might have heard in conversation; and when I had separated them, and told him their meaning, he seemed faintly to recognise some of them.

Sometimes, again, when we tried to get correct information as to facts unknown to either of us, the result was curious as showing an apparently elaborate attempt on the part of my friend's unconscious self to deceive his conscious self. I remember (*e.g.*) that one night we got written down what purported to be the first sentence in a leading article of the *Times* that had just been written and would appear next morning. The sentence was in the familiar style of Printing House Square; but I need not say that when we came down to breakfast next morning we did not find it in the printed columns. My friend immediately placed his hand on a piece of paper; and there came, involuntarily written in the usual way, a long rigmorole of explanation: to the effect that the article originally written, containing the sentence that we had got the night before, had been cancelled at the last moment by the editor in consequence of some unexpected political exigency, and another article hastily substituted. And similarly in other cases when statements involuntarily written were ascertained to be false, explanations were written exhibiting the kind of ingenuity which a fairly inventive hoaxer might show when driven into a corner.

If I had not had absolute reliance on my friend's *bona fides*, I might have supposed that he was mystifying me; but I could not doubt that his curiosity

as to the result of the experiments was greater than mine, and that he had no conscious desire to make me believe that the phenomenon was anything more than the result of unconscious cerebration.

I am sorry that the notes I took at the time have been destroyed ; but I have no doubt that what I have just written is accurately remembered.

I have said that the writer usually knew what he was writing. This was not the case in his first trials, when the writing came in an abrupt, jerky, and irregular way, and he rarely knew what he had written till he looked at it. But after the first few trials, the flow of unconscious action became even and steady, like that of ordinary conscious handwriting ; and then he generally—though not always—knew just before each word was written what it would be ; so that when the statements made were entirely contrary to our expectation—as was often the case—his surprise used to come just before the word was actually written.

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I repeat, then, that in my view such cases as this are not exceptional, not extreme ; that they represent a degree of dual action to which perhaps one person in a hundred could by persistent effort attain.

It must be repeated, then, that this conclusion is already far enough from the accredited view as to the extent of the brain's unconscious operation. A *secondary self*—if I may coin the phrase—is thus gradually postulated,—a latent capacity, at any rate, in an appreciable fraction of mankind, of developing or manifesting a second focus of cerebral energy which is apparently neither fugitive nor incidental merely—a delirium or a dream—but may possess, for a time at least, a kind of continuous individuality, a purposive activity of its own.*

But, of course, a still further step away from physiological orthodoxy is made when Mr. Newnham's case is set before the reader. For here we have, in fact, two innovations together; blended, indeed, at first sight into one, but manifest on inspection as separate marvels which assuredly *complicate*, though they may ultimately help to *explain* one another.

For, first, in Mr. Newnham's case, we have the telepathic communication of one mind with another, the transmission of thought without the agency of the senses, on which, in other forms of experiment, we have so often insisted, but which has not yet been generally accepted by the scientific world. And, secondly, we have the prolonged

* While this paper is passing through the press I have received Hellenbach's just published "Geburt und Tod" (Vienna, 1885), in which conclusions much resembling these are advocated, with some singular, even verbal, coincidences with an article on "Automatic Writing" which I published in the *Contemporary Review* for February last, and which Herr Hellenbach cannot possibly have seen. That two persons should independently hit on so *bizarre* a metaphor as "a blue and a yellow consciousness," might seem an impossible chance ; but see *Contemporary Review*, 1885, p. 234 ; "Geburt und Tod," p. 66. Baron du Prel's "Philosophie der Mystik" (Leipzig, 1885) moves on somewhat the same line of argument, which has, of course, been advanced, with more or less distinctness, by many previous writers.

manifestation of a *secondary or inner self*, which is, as it would seem, no mere fragment or reflection of the primary self, but an entity thus far, at least, independent that it can acquire knowledge which the primary self has no means of reaching. It is the *secondary self*, that is to say, which receives or recognises the telepathic impact, which in some way or other knows what questions Mr. Newnham is writing, and in some way or other furnishes an intelligent reply.

Now this second marvel, or problem, is easily seen to be a problem quite separate from the first. It is quite possible to imagine telepathy without assuming an unconscious self. It is quite possible, for instance, to conceive of a "brain-wave," subtler, indeed, than the air-wave which carries the voice, even than the ether-wave which carries the glance—but carrying an impression which is caught in the same way as voice or glance by the percipient's voluntary attention and conscious strain. And it is quite possible, on the other hand, to imagine an unconscious self behind the self that we know, without including telepathy among the attributes of that unconscious self at all. From the metaphysical point of view, I need hardly say, every supposition that can well be made about the self has been made again and again before telepathy was heard of. And if there be more of novelty in this psycho-physical conception of a secondary self possessing our brains, as it were, in a kind of sleeping co-partnership, and utilising our members when it pleases him, for his private ends, yet this conception, with all its *bizarrierie*, by no means involves the assumption that the sleeping partner is in the habit of receiving telegrams which his more conspicuous coadjutor is unable to open or interpret.

Yet it is to some such assumption as this that Mr. Newnham's case, if steadily looked at, is seen to have led us. And it was to some such complexity of problems as this that I looked forward when, at the beginning of these papers, I spoke of the attractiveness of automatic writing as a subject for inquiry as largely derived from its direct bearing on the relation of *consciousness* to telepathy.

For I am not without hope that this very complication of the unknown telepathic impact with the unknown secondary self, may admit of being so handled as to throw some light on the nature of the problems involved in both the one and the other.

Our object, let us say, is to possess ourselves of a message, couched in we know not what tongue and conveyed by we know not what agency. We learn only that the message will be received at a certain house where we see an indecipherable inscription over the door. We know then that this house, (which in our parable represents the unconscious self), whatever else it may be, is an office for the receipt of messages. And our next duty will be to puzzle out, by all the analogies at our command, to what family of languages the inscription over the door belongs.

If we can find this out we shall get some notion as to the tongue and probable mode of conveyance of the message which we seek.

If then we fix our gaze steadily on these two problems together—the problem of telepathic action and the problem of the unconscious self—we shall recognise in the first place that there is nothing in the reception of telepathic influence, as we know it, which connects such reception with conscious effort, or conscious adjustment. Even in our cases of the transference of numbers, names, &c., where the percipient's whole attention is given to the experiment, no conscious effort on his part is effective unless it be the effort *not* to think, *not* to guess, to leave his field of inward vision clear for the flashing upon it of images from a camera whose illumination he can invite but not control.

A parallel case will make my meaning clearer. If we wish to recollect (say) the address of a friend we may make many conscious efforts in vain. First, we appeal directly to memory by an act of concentration; then we try to get at the street by roundabout suggestions, reflecting *whereabouts* it was, *how long* the name was, &c. Ultimately we feel that our only chance is to let our brain bring up the name of itself. We walk on in as blank a frame of mind as possible, and suddenly the required name swims up from below the threshold of consciousness, and automatic cerebration has done for us what will and effort could not do.

Whatever, in short, the precise mechanism of telepathy may be, the analogies which its mode of operation suggests are less often to the sudden excitations of peripheral stimuli, sight, hearing, and the like, than to the vaguer organic impressions, such as hunger, which gradually become perceptible from within.

And this is, to a great extent, true, even with regard to another large class of telepathic incidents which we have considered at length elsewhere. Our readers know that we have explained as telepathic impressions many "phantasms of the living"—apparitions, voices, &c., purporting to represent friends undergoing some crisis at a distance, which would ordinarily, if credited at all, have been classed as real objective manifestations, perceived by the organs of sight or sound. We believe that we have shown ground for supposing that these phantasms are by no means always such sudden or external things; that they also are apt to begin as indefinite—even *systemic*—affections, specialising themselves into emotion or sensation after a latency more or less prolonged; * rising, perhaps, into the percipient's consciousness in

* We have observed something like this period of latency even in the direct experiments on thought-transference;—the percipient sometimes guessing the *last* card or word after we had proceeded to think of another,—of course without indicating the previous one. Compare the *deferred* imitations of the operator's movements sometimes noticed in the hypnotic trance.

moments of drowsiness, or waking him with an accumulated energy which has developed itself in sleep.

These considerations will perhaps prepare us for the enunciation of three propositions, which are offered—not, assuredly, as established scientific conclusions, but as hypotheses more or less novel and disputable, yet sufficiently justified by observed facts to afford a convenient basis for further reasoning.

I. Coincidentally with our normal or primary self there is within us a potential secondary self, or second focus of cerebration and mentation, which is not a mere metaphysical abstraction, but manifests itself occasionally by certain supernormal physiological or psychical activities.*

II. Telepathy is among the supernormal activities in which we have reason to suspect the operation of the unconscious or secondary self.

III. It may be expected that supernormal vital phenomena will manifest themselves as far as possible through the same channels as abnormal or morbid vital phenomena.

To illustrate the meaning of this third theorem, I may refer to a remark already made by Mr. Gurney and myself in dealing with "Phantasms of the Living," or veridical hallucinations, generated (as we have maintained), not by a morbid state of the percipient's brain, but by a telepathic impact from an agent at a distance. We have observed that if a hallucination—a subjective image—is to be excited by this distant energy, it will probably be most readily excited in somewhat the same manner as the morbid hallucination which follows on a cerebral injury. We have urged that this is *likely* to be the case—we have shown ground for supposing that it *is* the case—both as regards the mode of evolution of the phantasm in the percipient's brain, and the mode in which it seems to present itself to his senses.

And here I should wish to give a much wider generality to this principle, and to argue that if there be within us a secondary self aiming at manifestation by physiological means, it seems probable that its readiest *path of externalisation*—its readiest outlet of visible action,—may often lie along some track which has already been shown to be a line of low resistance by the disintegrating processes of disease. Or,

* I have ventured to coin the word "supernormal" to be applied to phenomena which are *beyond what usually happens*—*beyond*, that is, in the sense of suggesting unknown psychical laws. It is thus formed on the analogy of *abnormal*. When we speak of an abnormal phenomenon we do not mean one which *contravenes* natural laws, but one which exhibits them in an unusual or inexplicable form. Similarly by a supernormal phenomenon I mean, not one which *overrides* natural laws, for I believe no such phenomenon to exist, but one which exhibits the action of laws higher, in a psychical aspect, than are discerned in action in everyday life. By *higher* (either in a psychical or a physiological sense) I mean "apparently belonging to a more advanced stage of evolution."

varying the metaphor, we may anticipate that the partition of the primary and the secondary self will lie along some plane of cleavage which the *morbid* dissociations of our psychical synergies have already shown themselves disposed to follow. If epilepsy, madness, &c., tend to *split up* our faculties in certain ways, automatism is likely to split them up in ways somewhat resembling these.

This argument might be illustrated by various physical analogies. Let us choose as a simple one a musical instrument of limited range. The consummate musician can get effects out of this instrument which the ordinary player cannot rival. But he does this at the risk of evoking occasional sounds such as only the most blundering of beginners is wont to produce.

Savages take epilepsy for inspiration. They are thus far right, that epilepsy is (so to speak) the temporary destruction of the personality in consequence of its own instability, whereas inspiration was assumed to be the temporary subjugation of the personality by invasion from without. The one case, (if I may use the metaphor,) was a spontaneous combustion; the other an enkindlement by heavenly fire. In less metaphorical language, explosion and exhaustion of the highest nervous centres must have somewhat the same look, whatever may have been the nature of the stimulus which overcame their stability.

But in what way then, it will be asked, do you distinguish the supernormal from the merely abnormal? Why assume that in these aberrant states there is anything besides hysteria, besides epilepsy, besides insanity?

The answer to this question would need to be a long one. Perhaps it may be best for present purposes if I ask the reader to anticipate a thesis which I shall hope to develop on some future occasion, and to regard all psychical, as well as all physiological activities as necessarily either developmental or degenerative, tending to evolution or to dissolution. And further, whilst altogether waiving any teleological speculation, I will ask him hypothetically to suppose that an evolutionary *nisus*, something which we may represent as an effort towards self-development, self-adaptation, self-renewal, is discernible especially on the psychical side of at any rate the higher forms of life. Our question, Supernormal or abnormal?—may then be phrased, Evolutive or dissolutive? And in studying each psychical phenomenon in turn we shall have to inquire whether it indicates a mere degeneration of powers already acquired, or, on the other hand, the “promise and potency,” if not the actual possession, of powers as yet unrecognised or unknown.

Thus, for instance, Telepathy is surely a step in *evolution*.* To

*To avoid misconception, I may point out that this view in no way negatives the possibility that telepathy (or its correlative telergy) may be in some of its aspects commoner, or more powerful, among savages than among ourselves.

learn the thoughts of other minds without the mediation of the special senses manifestly indicates the possibility of a vast extension of psychical powers. And any knowledge which we can amass as to the conditions under which telepathic action takes place, will form a valuable starting point for an inquiry as to the evolutive or dissolutive character of unfamiliar psychical states.*

Thus, for instance, we may learn from our knowledge of telepathy that the superficial aspect of certain stages of psychical evolution, like the superficial aspect of certain stages of physiological evolution, may resemble mere *inhibition*, or mere *perturbation*. The hypnotised subject may pass through a lethargic stage before he wakes into a state in which he has gained *community of sensation* with the operator; somewhat as the silkworm (to use the oldest and the most suggestive of all illustrations) passes through the apparent torpor of the cocoon-stage before evolving into the moth. Again, the automatist's hand, (as we have seen, for instance, in Professor Sidgwick's narrative,) is apt to pass through a stage of inco-ordinated movements, which might almost be taken for choreic, before it acquires the power of ready and intelligent writing. Similarly the development, for instance, of a tooth may be preceded by a stage of indefinite aching, which might be ascribed to the formation of an abscess, did not the new tooth ultimately show itself. And still more striking cases of a *perturbation which masks evolution* might be drawn from the history of the human organism as it develops into its own maturity, or prepares for the appearance of the fresh human organism which is to succeed it.

Analogy, therefore, both physiological and psychical, warns us not to conclude that any given psychosis is merely degenerative until we have examined its results closely enough to satisfy ourselves whether they tend to bring about any enlargement of human powers, to open

Evolutionary processes are not necessarily *continuous*. The acquirement by our lowly-organised ancestors of the sense of *smell* (for instance) was a step in evolution. But the sense of smell probably reached its highest energy in races earlier than man; and it has perceptibly declined even in the short space which separates civilised man from existing savages. Yet if, with some change in our environment, the sense of smell again became useful, and we re-acquired it, this would be none the less an evolutionary process because the evolution had been interrupted.

* I do not wish to assert that *all* unfamiliar psychical states are necessarily evolutive or dissolutive in any assignable manner. I should prefer to suppose that there are states which may better be styled *allotropic*;—modifications of the arrangements of nervous elements on which our conscious identity depends, but with no more conspicuous *superiority* of the one state over the other than (for instance,) charcoal possesses over graphite or graphite over charcoal. But there may also be states in which the (metaphorical) carbon becomes *diamond*;—with so much at least of *advance* on previous states as is involved in the substitution of the crystalline for the amorphous structure.

any new inlet to the reception of objective truth. If such there prove to be, then, with whatever morbid activities the psychosis may have been intertwined, it contains indications of an evolutionary *nisus* as well.

I must not pursue this subject here. But I must guard myself in passing against the possible supposition that I am in some way justifying morbid states, or recommending their induction, on the plea that they may contain what I term evolutionary elements, and may be the avenue to new knowledge. The fact is quite the contrary. With regard to our right of inflicting pain either on our fellow-creatures or on animals for the sake of obtaining knowledge, my views are, perhaps, narrower than the dominant school of physiologists would be willing to endorse. And if the injury to be inflicted be *psychical* injury, it seems to me obvious that our standard of admissibility should be stricter still.

But for my own part, although knowledge *per se* is no doubt a primary aim, I am aiming also, with no less directness of intention, at explicitly sanative, explicitly ethical ends. I know enough of the mischief which is being done to the minds of men and women, in America especially, by the unquestioning reception of these spurious self-generated revelations through pencil and planchette, to feel that, though it may be but a small element in the mass of human error, it is, nevertheless, worth a considerable effort to set right. And, while I sympathise with the moral purpose of various physiologists who have attempted this task, I feel that they have gone to work in not the most effective manner. In such a case it is useless to scoff or to sermonise, you must understand and explain. If a man tells you that the spirit of Shelley writes through him, and recommends free-love, it is of no use to answer that it is all nonsense and very wrong. The man simply thinks that you know nothing about it, and sticks to his Shelley and his free-love more triumphantly than ever.

To prevent graphic automatism from being a source of mental danger, it is necessary, not that it should be repressed and sneered at, but that it should be openly practised and understood. When thus treated, there is, so far as I know, no cause for grave anxiety of any kind in connection with any of that group of phenomena which we are now discussing.* Here indeed, as in all psychical inquiries, there is need for prudence and caution; and it will have been observed that in

* Those who are disposed to take an anxious view as to experiments on the nervous system should read Dr. Bernheim's book, "De la Suggestion dans l'Etat Hypnotique et dans l'Etat de Veille." (Paris, 1884.) Practices at which the hair of the Faculty would have stood on end a very few years ago, are now matters of course in the hospital of Nancy; while, nevertheless, (like the monks of Rheims after a celebrated anathema), "nobody seems one penny the worse."

Mrs. Newnham's case there was enough of fatigue to render advisable the gradual discontinuance of the experiments. Fatigue like this frequently follows on automatic writing. It seems in no way persistent or dangerous, but rather resembles the fatigue felt after writing an exercise in some new language, or making some other effort to which the brain is unaccustomed.

And having thus returned from a more general argument to the phenomenon of automatic writing, which was our point of departure, it seems fitting here to inquire, from the new point of view which we have meantime reached, what are the analogies between this *supernormal* phenomenon and such *abnormal* phenomena already observed as may seem most closely akin to it? This inquiry lies in the main track of our argument; for in discussing the spiritual or telepathic or merely subjective origin of automatic messages, it is important to know all that we can, not only as to their contents, but as to their mode of communication.

On the present occasion, however, I must, for the sake of brevity and clearness, confine myself to one branch only of the widely-ramifying analogies which gradually suggest themselves to the student of graphic automatism. I will take the analogy which may or may not be the most *direct*, but which at any rate is in one sense the most *conspicuous*,—the analogy, namely, between this automatic writing,—emanating, as has been maintained, from some second, habitually latent, focus of cerebral energy,—and the writing performed by patients who have, as most pathologists tell us, only the partially untrained half of the brain to rely on,—those centres which habitually initiate the graphic energy having been destroyed or rendered temporarily useless by accident or disease.* I allude, of course, to the subjects of *agraphy*,†—one of the most significant results of those delicate processes of dissection which disease performs for us among the complex capacities of the brain.

Agraphy, strictly so termed, forms one of four affections of

* I must guard myself from being supposed to assert that the connection between sinistro-cerebral lesions and asemic troubles in right-handed men is an *invariable* one. Many pathologists hold that it is *not* so; but it is quite enough for my purpose that the connection should be recognised as *generally* subsisting. As will be seen later, I expressly hold that in my "supernormal" cases there will be *more* exceptions to all such rules than in cases of ordinary asemia.

† The word "agraphia," re-invented by Dr. William Ogle (in his admirable monograph, "On Aphasia and Agraphia," St. George's Hospital Reports, 1867, Vol. II.), seems to have existed in old Greek, (Stephani Thesaurus), though, to judge from the analogy of ἀγραφα μέταλλα, ἀγραφίον γραφή, it probably meant not "inability to write," but "defect of registration." The point is worth mentioning, as raising the question, which frequently recurs in any new scientific inquiry, whether words may be adapted from the Greek in a sense other than that which they can be shown to have borne. I am decidedly in favour of such adaptation, which I do not regard as a debasement of the Greek language, but rather as a prolongation of its vitality under altered conditions.

As the word "agraphia" has as yet been comparatively little used, I have

speech (Störungen der Sprache) which are logically distinguishable *à priori*, and which have quite recently been all of them definitely distinguished and (with one possible exception) found to exist sometimes independently.* These four affections are massed together under the title *aphasia*,† which was at first given to the most conspicuous of these phenomena—that of speechlessness—but (from sheer lack of a more comprehensive term) has been stretched to include them all.‡

In order to make full use of any given word we have to perform four separate operations. We have to recognise it when we hear it

ventured to anglicise its termination. I think that this should be done wherever some already accredited English word with similar termination exists, (as in this case *telegraphy*), so that the new word has not too singular an appearance. Thus, had not *aphasia* become rooted in our tongue, I could have wished to say *aphasy*, on the analogy of *euphrasy*; while, on the other hand, I would not venture to anglicise *aphemia* into *aphemy*, on account of the lack of similar English word-endings. We have, indeed, *blasphemy* and *euphemy*, but usage has shortened their penultimate syllables, so that they form an added difficulty in the way of introducing *aphemy*,—whose penultimate we could scarcely shorten (so to speak) in cold blood, and with no usage to help us over the false quantity.

* It will not, of course, be expected that I should attempt to indicate the precise part taken by each observer in establishing the facts to which I shall have occasion briefly to refer. One main source of recent progress in the knowledge of aphasia consists of Dr. Charcot's lectures of 1883. These lectures have not as yet been published in full, except in an Italian translation of Dr. Rummo's, ("Differenti Forme d'Afasia," &c., Milano, 1884.) But they have inspired many articles and treatises, among which I acknowledge special obligations to "Considérations sur l'Agraphie," by Dr. A. Pitres, (*Revue de Médecine*, November 10th, 1884); and to a treatise, "De l'Aphasie et deses Diverses Formes," by Dr. Bernard, (Paris, 1885). This last work is at present, perhaps, the most complete treatise on the subject, (more complete on some points even than Kussmaul's), and I have drawn my references mainly from its large collection. Bérillon's "Hypnotisme Expérimental—La Dualité Cérébrale" (Paris, 1884) belongs to the same school, and contains much pertinent matter. In English I have already referred to Dr. William Ogle's paper. Many articles of merit have been published since that early monograph. But my own obligations are mainly due to Dr. Hughlings-Jackson, whose scattered papers on this and kindred subjects, especially the articles on "Affections of Speech" in Vols. I., II., III. of *Brain*, and the Croonian Lectures (1884), on "The Evolution and Dissolution of the Nervous System," are indispensable to any student of these subjects.

† It is an odd thing that "the Greek Chrysaphis" (Bernard, p. 172) should have fancied that he was *inventing* the common Greek word *ἀφασία*, which in its poetical form is as old as Homer, where *ὄην δὲ μιν ἀμφοσίν ἐπέων λάβει* occurs twice, (Il. xvii. 695; Od. iv. 704.) Nor can I understand Broca's and Bernard's view that the word had a *different meaning* in old Greek. The temporary speechlessness of Antilochus on hearing of the death of Patroclus, of Penelope on hearing of the journey of Telemachus, though, of course, not dependent on cerebral disease, seems to me to approach the modern cases as closely as a poetical can be expected to approach a clinical phenomenon.

‡ Hughlings-Jackson and Bernard despair of establishing any other word

and to utter it ourselves ; to recognise it when we see it written, and to write it ourselves.

Inability to do the *first* of these things is called word-deafness ; inability to do the *second*, for which, properly speaking, the name aphasia should have been reserved, is called motor aphasia, or aphemia. *

Inability to perform the *third* operation is called word-blindness ; inability to perform the *fourth*, agraphy. These various inabilityes may be, and generally are, found in conjunction with each other, in a great variety of ways. But all of them alike appear generally to depend (in right-handed persons) on certain definite lesions of the *left* hemisphere of the brain,—the hemisphere which mainly controls the *right* side of the body.

With these possible sources of analogy in our minds, let us now consider what are the earliest stages of our own special phenomenon, graphic automatism.

In my first paper I adduced as “the first incipient stage of automatism,” cases where words were written “by mere attention, without any voluntary muscular action whatever.” These cases (to which at some future time we shall have to make further reference) are assuredly transitional between voluntary and automatic writing. But they are not what we want now ; they are transitional, so to speak, by a different transit ; they show us the median line between voluntary and involuntary action, whereas what we now desire is to trace the process by which the involuntary action, when once initiated in the brain, externalises itself into increasing definiteness. To discover this process I would recommend my reader to try for himself ; to sit quietly many times for 10 or 20 minutes, with a pencil in his right hand and attention concentrated on a wish to write. His experience is likely to resemble,

than aphasia as the title for the whole group of affections of speech. Pitres refuses even yet to concede to the word so awkward an extension of meaning. Dr. McLane Hamilton has proposed *asemasia*, “defect in the power of giving signs.” I shall venture to suggest *asemia* (with the adjective *asemic*.) as shorter and not more unauthorised. A term is wanted which shall include all kinds of defect in the usage of signs—as in piano-playing, drawing, &c., faculties which may or may not be affected along with speech. “Sign-troubles” would have an un-English sound ; but we shall need to use greater freedom in combining old terms, as well as in introducing new ones, if our vocabulary is to represent the exactness and the range of modern science.

* Strictly speaking, *aphemia* should be *aphemismus*, just as telegram should be telegrapheme. But (though thus far siding with Trousseau against Broca) I do not think it important to preserve the correct terminations any more than the original meanings, in adapting words from the Greek. So many Greek words are wanted that practical convenience must dictate the conditions on which they are to be received.

not that of Mr. A., a remarkably sensitive subject, but that of an ordinary insensitive person, myself for example.

By extreme persistency, in the year 1875, I attained for a few weeks to the lowest degree of graphic automatism. The first symptom was that my fist would thump itself violently on the paper. Spasms were entirely new to my experience, but this seemed like a spasm of the arm, induced by expectant attention. Soon, however, it was plain that there was more than this. There was an unmistakable attempt to go through the act of writing. I scrawled rapidly many meaningless interlacing strokes, which sometimes bore a vague resemblance to letters of the alphabet, but never shaped themselves into a legible word. I never got beyond this point, and after some neglect of practice, even this faculty (if such it can be called) deserted me.

Now, trivial though this piece of unconscious cerebration may be, it is not altogether easy to explain. What I expected and wished was not to scrawl, but to write. I persistently imagined my hand as *writing*, and had I actually written words, though without knowing what I wrote, the automatic externalisation of my inward picture would have been natural enough, as when the sitters, in Faraday's experiment, pushed the table round when they expected it to move round of itself. But what I actually *did* was something quite different from what I wished or expected to do. It was as if Faraday's sitters, instead of pushing the table round, had taken to scratching the varnish off with their fingers. Moreover, I was of course fully aware of what I was doing, and I could stop doing it at any moment; but while I continued to let my hand go I could not direct or modify its movements. However explained, the experience was enough to persuade me that other friends who began in much the same way, but gradually attained to the writing of actual words, deserved at any rate the credit of being thorough-going automatists. And I will select as an example of this next stage the case of Mrs. Brietzcke, an Honorary Associate of the Society for Psychical Research, who was quite unfamiliar with this subject, but tried experiments at my request.

"I have tried the Planchette," she writes, "and I get writing, certainly not done by my hand consciously; but it is nonsense, such as *Mebeu*. I tried holding a pencil, and all I got was *mm* or *rererere*; then for hours together I got this: *Celen, Celen*. Whether the first letter was C or L I could never make out. Then I got *I Celen*. I was disgusted, and took a book and read while I held the pencil. Then I got *Helen*. Now, note this fact: I never make H like that (like I and C juxtaposed); I make it thus: (like a printed H). I then saw that the thing I read as I Celen was Helen, my name. For days I had only Celen, and never for one moment expected it meant what it did."

Mrs. Brietzcke has since lost even this degree of power, and can now produce nothing more than a slight scrawl automatically.

And now let us quote a passage from Dr. Bernard (p. 226), describing, with references which I need not give, some of the familiar forms of agraphy.

“Tel malade, la plume ou le crayon en main, ne tracera que des traits irréguliers entrelacés, ou même rien absolument; tel autre, qu'une même lettre, la lettre r, par exemple, ou la même syllabe. Celui-là ne pourra écrire que son nom, ou le même mot, celui-ci qu'un même fragment de phrase ou la même phrase. Les lettres tracées par l'un ne constitueront qu'un assemblage indéchiffrable de caractères ou de syllabes sans signification. Au milieu des essais d'écriture, au milieu des lettres bizarrement assemblées, à la fin des mots, tracés du reste correctement par un autre, la même lettre, la même réunion de lettres réapparaîtront. C'est là ce que Gairdner a d'abord nommé *l'intoxication du cerveau par une lettre.*”

How close is the correspondence here! We find the agraphic patient unable to write at all, or scrawling meaningless marks on the paper, or writing some one letter, as rrrr, or some one syllable, over and over again. We find him writing senseless words, or able to write nothing but his own name, or interspersing his sentences with some perpetually recurring letter or syllable which has, so to speak, intoxicated his brain.

And all these stages are being repeated daily in the graphic automatism of scores of persons who, like myself when I tried the experiment in 1875, have never so much as heard of agraphy in their lives.

And these, so far as I know, are the only two conditions in which a waking, sane, and sober man, with a trained and healthy hand, persistently *scrawls* when he attempts to write.* In writer's cramp, for instance, the hand itself is unhealthy; its local centres are overworked, and the attempt to write is followed by local spasm. But the imperfect writing in graphic automatism, and in agraphy, is not the fault of the hand, but of the orders which are sent down to it from the brain. The agraphic patient can sometimes draw, though he cannot write.† The automatist can cease his scrawling when he chooses, and write voluntarily in his usual style.

In short, the physician who should simply see the graphic automatist, in his early stages, at work, without opportunity of learning the history of his affection, would be bound, according to recognised rules of diagnosis, to class him as an agraphic patient.

And I believe that the analogy is not merely accidental, but that the inco-ordination of agraphy and the inco-ordination of rudimentary graphic automatism,—inco-ordinations so limited in range, but so unique

* I do not forget the confused writing of post-epileptic states, “epileptiform migraine,” &c., which I shall hope to discuss later, but which are transient, not persistent, states.

† See Dr. Pitres' Obs. III., *Rev. de Médecine*, November 10th, 1884.

and striking within those limits,—arise from the same cause; from the employment in the act of writing of untrained centres in the right hemisphere of the brain. That these dextro-cerebral centres initiate the imperfect writing of the agraphic patient it is not my part to prove. I may be content to refer the reader to Dr. Hughlings-Jackson, whose authority is at least not inferior to that of any other writer on these processes of nervous dissolution. My own task is rather to show that the analogies presented by graphic automatism are so numerous and exact that the same form of cerebral action must almost necessarily be assumed as operative in either case.

And here I may introduce a curious analogy which graphic automatism presents, not specially to agraphy, but to other cases of writing almost undoubtedly initiated by the right hemisphere.

Anyone who has watched much automatic writing is likely to have noticed two phenomena, apparently cognate, but each of them exceedingly perplexing.

Sometimes the word or "message" which is being written will suddenly become unintelligible. It is, perhaps, abandoned at the time as mere nonsense; but subsequent scrutiny shows that there is a method in the apparent confusion. The word is simply spelt *backwards*, thgin for night, &c.* Now this may, of course, remind the reader of "Clelia's" anagrams; but the impression actually given when the phenomenon occurs is a rather different one. In the case of the anagrams there was *an intention to puzzle*; the communicating intelligence (which was still, of course, in my view, a part of Mr. A.'s own intelligence) was obviously acting in a purposive way. But when the reversed words are given there seems often to be no purpose on the part of the communicating intelligence (still assumed to be an emanation of the writer's own brain) to diverge in any way from ordinary script.

Can we find any parallel to this phenomenon? Is any other case known where words are written or spelt *backwards*, without apparent knowledge that anything unusual is being done?

I have ascertained, by inquiry in elementary schools, that this is actually sometimes the case with left-handed children, when they first begin to write and spell. They will *transpose* the letters of small words in a way in which right-handed children do not.

And "Dr. Wilbur, of Syracuse, N.Y., mentions the case† of a left-

* This phenomenon is also frequently observed when messages are spelt out by the tilting of tables; another method of obtaining answers, due, in most cases, as we may at least provisionally assume, to unconscious muscular action prompted by unconscious mental action.

† In a communication to Dr. Ireland, *Brain*, Vol. IV., p. 366. I quote from Dr. Ireland's article, "On Mirror-writing and its Relation to Left-handedness and Cerebral Disease."

handed child who, when beginning to read, asked his father what 'efiw' was. Such inversions not unfrequently occur in teaching imbecile children to read."

I would, suggest, therefore, that here is a mode of perception to which the right hemisphere is prone, and which appears in three cases: (1) In left-handed children, in whom the right hemisphere is undoubtedly predominant; (2) in certain imbeciles in whom the right hemisphere may very possibly be predominant, though we have not as yet details of the autopsy of a backward-writing imbecile; and (3) in my cases of graphic automatism, in which, as I am trying to show by cumulative observations, the right hemisphere is taking a leading part.

But this is not all. Besides the simple backward-writing already described, the automatist will sometimes produce a form of script reversed in a more complex manner, *i.e.*, so written that in order to read it one has to look through the paper at the light, or to hold it before a mirror.

And this kind of writing, too, occurs sometimes without notice, or apparent reason, and in a way which entirely baffles the writer. In one case which I know, a lady made rude automatic drawings of Egyptian figures (interesting from another point of view, but foreign to our immediate subject). Amongst these figures was a cartouche, with what looked like a hieroglyphic inscribed. The lady and her friends, who took the matter seriously, tried hard to decipher this description on Egyptian analogies. They entirely failed; and it was not till some months afterwards that an acquaintance to whom the automatic drawing was shown held it up to the window, and easily read the inscription, which was an English name in mirror-writing.

I cite another case, sent by a gentleman well-known to me, in which the *first* automatic writing achieved was of this type.

One of my sisters, a clergyman's wife, once tried to persuade me that all so-called automatic writing was in some unconscious way really the act of the "medium" through whose hand it came, and to prove it, said, "If I were to hold a pencil to the end of time my hand would never write anything unless I willed it to do so." She took pencil and paper; her hand soon began to move, in spite of all her efforts to keep it still, and after scrawling a quantity of unmeaning circles and zigzags, produced something that looked like writing, but which neither of us could decipher. She laid down the pencil and took up some other occupation. Suddenly, after some time had elapsed, it occurred to one of us, I forget which, that she might have been writing backwards. On holding the paper up to the looking-glass she found that she had written, quite legibly, "Unkind. My name is Norman." Before this was written she had asked the supposed spirit for its name, and had jeered at it for its

apparent inability to reply. (We neither of us could remember having ever known any spirit, in or out of the flesh, of the name of Norman.)*

ALGERNON JOY.

20, Wilton Place, London.

February 4th, 1885.

Now the Spiritualist will say that the spirits resort to backward-writing or mirror-writing, either in order to show that a mind other than the medium's is at work, or in order to communicate some secret which some of the persons present are not intended to know. But (apart from the other objections to this explanation) the way in which mirror-writing is interspersed among ordinary script does not look like pre-meditation. I have seen an automatist writing page after page in ordinary handwriting, and then a page in mirror-writing, at the same rapid pace, and in mere continuation of some general topic—perhaps of the *sermonising* type, which these communications so often assume.

Let us consider whether mirror-writing has been observed in past times, or may now be observed, among the manuscripts of ordinary men.

Mirror-writers, it would appear,† if they did not “live before Agamemnon,” lived not very long after him; for the first seven letters of that chieftain's name are so written in an inscription in the Louvre (Hall of Phidias, 69). The last two letters return *βουτροφιδόν* from right to left. It would, however, be foreign to our purport to dwell on the varieties of writing among early peoples; which would probably be found to indicate a less specialised instinct of graphic *direction*, (centrifugal or centripetal, horizontal or vertical), than is now organised in our civilised brains. But in the well-known case of Lionardo da Vinci's mirror-writing, Erlenmeyer (whom Ireland follows) is surely in error in ascribing it to paralysis of the right hand; for the mirror-writing accompanies elaborate drawings, which must have been executed before this affection supervened. It is possible that Lionardo may have been ambi-dextrous and have written his *Spiegel-Schrift* with his left hand, for purposes of concealment.

What, then, do we find to be the position of ordinary right-handed persons with respect to mirror-writing? Of course, anyone can *learn* to write and to read it, but is it ever written without deliberate effort, or accepted by the eye as normal writing?

Most people, I fancy, are, like myself, unable to write *Spiegel-Schrift*, either with right or left hand. If I try to write with my left hand, I scrawl roughly, but in the same direction, &c., as usual. There are,

* I imagine this answer to have been an imperfect reproduction of the once familiar quotation, “My name is Norval,” which was sometimes jocosely used by persons affecting to conceal their identity. I take it, therefore, as a sally of the “secondary self's,”—about on the usual level of planchette's humour.

† Bernard. “De l'Aphasie,” p. 235.

however, some *right-handers*, (if this useful abbreviative term may be allowed), who, if they try to write with their left hands, instinctively produce *Spiegel-Schrift*, though if they look at what they are writing they are puzzled and cease to be able to do it.

Beyond these, again, comes a small class of persons, (one is known to me, and one is mentioned by Dr. Wilbur), who can write simultaneously with both hands,—with the right in ordinary, the left in mirror-writing. I am inclined to class these persons, even if not in all respects ambi-dextrous,—as *ambi-cerebral*,*—capable of using both hemispheres concurrently in certain ways which are impossible to ordinary men.

But without insisting on this, let us pass on to the case of *left-handers*. It has been observed by Dr. Ireland (and inquiries of my own confirm this) that left-handed children when learning to write are apt to write *Spiegel-Schrift*, without perceiving that it differs from the copy set to them. And Buchwald has a striking case, which Dr. Ireland cites, of an aphasic patient with hemiplegia of the right side, in whom the tendency to mirror-writing, even with the right hand, persisted after the aphasia had disappeared. To this may be added a very curious case of Dr. Bernard's,† where an ataxic patient, with right hand partially paralysed, wrote *Spiegel-Schrift* with her left without perceiving that it differed from ordinary writing. She wondered that she received no replies to her letters, the addresses of which, of course, no one could read.

"It may be asked," says Dr. Ireland, "is the image or impression, or change in the brain-tissue from which the image is formed in the mind of the mirror-writer, reversed like the negative of a photograph; or if a double image be formed in the visual centre, one in the right hemisphere of the brain

* I venture to suggest the following terms as likely to be useful in discussions as to the respective operation of the right and left hemispheres of the brain.

Anbi-cerebral.	Originating in, or operating with, both hemispheres.
Dextro-cerebral	" " " the right hemisphere.
Sinistro-cerebral	" " " " left "
Hemi-cerebral	" " " " one hemisphere only.

Two objections may be taken to these terms:—

(1) That *ambi-cerebral* is formed as though "cerebrum" meant one hemisphere only; whereas in *hemi-cerebral*, &c., "cerebrum" means both hemispheres. To this I reply that such slight anomalies in compound words are very common, and less confusing here than the introduction of a term like *ambi-hemispherical* would be.

(2) That *hemi-cerebral* is a barbarous word, being half Greek and half Latin. I reply that the best way of using Greek and Latin prefixes is the way in which the French have used them in the metric system; where, for instance, *milli* and *kilo* are prefixed to the Greek basic word *mètre*, with clearly-defined differing significations. Similarly I take *hemi* to mean that half of a thing is spoken of, as *hemisphere*, and *semi* to mean that the object is half one thing and half another, as *semi-fluid*.

† "De l'Aphasie," p. 237.

and the other in the left, do the images lie to each other in opposite directions; e.g., C on the right side and ⓐ on the left side? We can thus conceive that the image on the left side of the brain being effaced through disease, the inverse image would remain in the right hemisphere, which would render the patient apt to trace the letters from right to left, the execution of which would be rendered all the more natural from the greater facility of the left hand to work in a centrifugal direction. Moreover, when one used the left hand to write there would probably be a tendency to copy the inverse impression or image on the right side of the brain."

The subject needs further investigation, but in the meantime it is noticeable how closely this hypothesis accords with the explanation which must be given on my theory to the mirror-writing of the automatist. I hold that in graphic automatism the action of the right hemisphere is predominant, because the secondary self can appropriate its energies more readily than those of the left hemisphere, which is more immediately at the service of the waking mind.* Nevertheless, I hold that it uses the *right* hand habitually, being unable to overcome the incompetence of the *left*. But in its right-handed writing I should expect traces of dextro-cerebral influence occasionally to occur; and this I maintain that I have shown to be the case, first in the *reversed words* and secondly in the *mirror-writing*, which graphic automatism so frequently shows.†

And I must here remind the reader that *occasional* indications are all that we can expect to find in tracing the "seat of election" of supernormal cerebral automatism. The lines will not be as sharply drawn as they sometimes are in cases of traumatic injury, or of congenital defect. For besides the alternated action of specialised centres, which I am here suggesting, other and profounder departures from normality are likely to be involved, and *their* results may be such as to leave no more than a mere hint discernible of such a comparatively minor change as the replacement of some sinistro-cerebral by some dextro-cerebral centre of sight or speech.

Such a hint, I may add, in what seems an appropriate parenthesis, I believe that we have got in experimental thought-transference, as well as in graphic automatism. The reader may remember that in

* In speaking thus of the two hemispheres, I refer only to their functions in connection with the various stages of the graphic synergy. I do not mean to assume any doctrine with regard to them of a more general character than my argument absolutely requires.

† Following the hints of Gley, &c. (see Bérillon, p. 63), as to the influence on the carotid pulse of cerebral activity, it would be desirable to obtain tracings of the pulses of *both* carotid arteries during ordinary and during automatic writing. And the "cerebral thermometry" of Amidon, Bert, &c.—if better established—might be used to record a possible difference of local cephalic temperature during ordinary and during automatic speech or writing.

Proceedings, Vol. I., pp. 80-166, &c., we detailed some experiments in which the image of an arrow, and other figures, were telepathically seen by Mr. Smith sometimes in an *inverted*, but more often in a laterally-inverted or *perverted* position. The results were not uniform, and we were at the time unable to explain them.*

Some time afterwards, in 1884, I asked a young lady, whom I will call Miss K., of highly sensitive temperament, to try some experiments in thought-transference with her sister. She soon told me that the experiments had succeeded, but with this strange peculiarity, that, when the sister fixed her eyes on some word, Miss K. saw its letters appear in her field of mental vision *in reverse order*. Miss K. was, unfortunately, very liable to headache, which these experiments quickly induced, and I was only allowed one short series of trials. I placed the word NET behind her, and looked fixedly at the letters. She said that she saw successively the letters T, E, N. I next chose SEA, and she saw A, E, S. I chose a third word, but she saw no mental image, and headache stopped the experiments.

But I would suggest that we have here a case parallel to the backward writing of the left-handed child, and of the graphic automatist; and I trace in these reversed telepathic images a further indication of the action, through the right hemisphere, of the secondary self.†

From this digression I return to my more immediate subject. There is another peculiarity of the early stages of automatic writing which it has somewhat embarrassed Spiritualists to explain. "Planchette," automatists often testify, "is sadly given to *swear*." Especially when the hand is exhausted by a long and somewhat barren effort, the word *devil* will sometimes be written over and over again with an energy which shocks the unsuspecting writer. If, however, I have been obliged, on the one hand, to request the Shakespeares and Byrons of "spirit messages" to retire, if I may so say, into the recesses

* See also *Proceedings*, Part V., p. 37. Some experiments in the telepathic transference of *double numbers* seem, perhaps, to point the same way:—as when 38 is guessed as 63, &c.

† In Miss K.'s experiments with her sister contact was not found needful. In my own brief trials I did hold her hand, in deference to a fancy on her part that in trials with a comparative stranger some contact would be necessary. I need not say that had she undertaken to *write* the word which I saw, contact would have vitiated the experiment, as my unconscious muscular indications might have guided her movements. And even when (as in this case) the word is to be *spoken*, contact is still objectionable, as the agent may unconsciously *trace* the required letters by slight motions of his hand on the percipient's. To avoid this risk, I grasped Miss K.'s fingers with so firm and rigid a clasp that neither could any unconscious movement of mine have borne any appreciable relation to the general force of compression exercised, nor were my muscles capable, without a relaxation of tension which I must have perceived, of the delicate movements required to trace a letter on another hand.

of some humbler intelligence, I am glad, on the other hand, to be able to suggest a reassuring analogy to those whose peace of mind is compromised by association with this ill-omened sign-manual.

For I believe that in most cases, at any rate—for even here I will not attempt to close all loophole to a more realistic interpretation—the swearing of Planchette is just the same thing as the swearing of the aphasic patient. The aphasic patient who has only one or two utterances left him has mostly an oath among the number. * So oddly does he rap it out, as an expression indifferently of disgust and gratitude, discomfort and satisfaction, that his ward-neighbour is apt to refuse to keep a record of his expressions, on the ground that, though the fellow says but little, what he *does* say is such as no one ought to be bound to listen to. The physician, however, has another explanation of this monotonous crudity. He recognises (it is to Dr. Hughlings-Jackson that the explanation is due) that in the dissolution of speech the highest speech—propositional utterances—first disappear; and that on the lower level of evolution which remains, no speech is left except what has become highly automatic, so automatic that its special machinery has become organised in the right hemisphere. Now interjections are the most instinctive parts of speech, and oaths with the uneducated are the most emotional of interjections. They represent the point where speech is least of an intellectual effort, and most of an organic cry. And with all deference to the refined automatist, it must be said that with him, too, the gradual enfeeblement of the secondary self's directive control, the gradual exhaustion of the centres available for the message, are bringing him down to those highly-organised † dextro-cerebral verbal processes which represent words, which, however little a man may use them himself, are unavoidably familiar to him as the habitual expression of impatience and discontent.

I do not positively assert that this explanation meets all the cases. There are, perhaps, some rare instances where violent expressions with which the writer is almost demonstrably unacquainted run from his automatic pen. We may compare these to the cases of delirium where the patient utters expressions which would have been supposed to be entirely unknown to him.

* M. Beaudelaire, for instance, the poet of "Les Fleurs du Mal," was compelled by the sad irony of disease to summarise his revolt against the moral order of the universe into the two reiterated syllables, "Cré nom!" Bernard, p. 182, on the authority of M. Alphonse Daudet.

† See Hughlings-Jackson, in *Brain*, Vol. II., p. 331. By "highly-organised verbal processes" are here meant the processes which subserve, *not* new and elaborate speech, but old, automatic speech. The process for uttering the interjection is "lower and earlier than true speech;" it is "ready made-up" (in Dr. H.-J.'s view) in the right hemisphere, in consequence of frequent past reproduction.

While we are speaking of the "recurring speech" of the aphemic patient we must remember that these interjections are by no means confined to oaths alone. Any kind of gibberish, such as monomomentif, nazi bouzi, macassa,* may form the one reiterated utterance which can still issue from the injured brain.

Here again we have a parallel to Mrs. Brietzcke's "Celen," and to similar cases known to me, where some one word or sentence has been automatically written perhaps hundreds of times in succession. I have observed, moreover, that the word or sentence thus repeated is often one which has been more or less appropriate on the first occasion on which it was used, and has got rooted, as it were, in the unconscious mind, so that it returns again and again when wholly meaningless. This is paralleled by the utterances of many aphasics,—utterances once propositional but now senseless,—like the "Come on to me" of a well-known case of Dr. Hughlings-Jackson's, where the signalman who repeated this parrot-like cry had probably been uttering it with meaning and intention at the moment when he was attacked.

Did the scope of this paper permit me to dwell at length on *vocal automatism*,—on "trance-utterances," "speaking with tongues," and the like, I could greatly develop these suggested analogies. At present it must be enough merely to refer to automatic speech, and to point out that we have here two pairs of psycho-physical conditions,—agraphy and aphemia on the one side, automatic writing and automatic speech on the other side, which all of them share certain marked characteristics, not found (or, at least, not found so definitely or so generally) in any other states of the human organism.

The first pair of abnormal states—agraphy and aphemia—are undoubtedly closely connected together. Their common characteristics are due to a common cause, and that cause is presumably connected with the replacement of some of the activities of the diseased left hemisphere by activities of the partially-trained, or automatically-acting, right hemisphere.

The second pair of states—*supernormal*, as I term them—are also found frequently in conjunction, and are presumably closely connected together. Their common characteristics are likely to be due to a common cause; and it seems, therefore, no unreasonable hypothesis that that cause may, in some degree, be identical with the cause which produces similar effects in asemic troubles; viz., some predominance of the activity of the more automatic hemisphere.

I have not yet, however, exhausted my parallel. I have thus far been dwelling mainly on cases where the synergy of graphic automatism is doubly imperfect,—cases, that is to say, where there was neither a

* Cited by Bernard, p. 182, from Trousseau and Durand-Fardel.

distinct internal image of the words which were to be written, nor a facile transmission of those words to the paper. And consequently our asemic parallels have been from cases where the synergy of speech or writing was similarly imperfect in a double manner, that is to say—when there was agraphy, and word-blindness along with agraphy, or aphemia, and word-deafness along with aphemia.

But I must now consider cases of a more advanced kind—cases on the automatic side, in which, in my view, *evolution* has proceeded further; which will, therefore, be parallel to cases on the asemic side where *dissolution* has not proceeded so far.

And first, let us consider the cases where automatic writing is performed rapidly and easily, but without any internal knowledge of what is being written, or is about to be written. These cases will be paralleled on the asemic side by cases of word-blindness, without actual agraphy. The ordinary graphic automatist is by no means necessarily very acute in reading what he has himself written. I have often been able to furnish such an one with a “lectio emendata” of his own composition. But it is curious to watch the process by which the puzzled automatist enlightens himself as to what he means. He usually appeals verbally: “What is the word which I cannot read?” And thereupon his hand retraces the word, slowly and with exaggerated motions for each letter. Or if this process is too tedious, he makes a guess, and says: “Is the word so-and-so?” If it is, his hand or pencil gives three taps on the table; and one tap if it is *not* the right word—this being the conventional code which on such occasions indicates assent or dissent by a mere muscular movement. I have often witnessed this, and have been struck by the delicate control maintained by the unconscious agency over the muscles of the automatist, while at the same time it is plainly unable to affect his word-seeing centres, to evoke in him any internal picture of the intended word.

When this process is seen going on, it certainly has a strange look of *possession*;—the sight of a man appealing to his hand to help out his brain is a curious reversal of ordinary operations.

The asemic parallel to this particular condition will plainly be some case of pure *word-blindness*; where the patient can write from dictation or write a letter of his own composition, but is totally unable to read what is written. The reason of the inability is, of course, different in the two cases. In the one case it is “verbal cecity,” a specific inability to recognise written or printed words at all, owing to a specific lesion of the left hemisphere. In the other case it is the ordinary difficulty of reading bad handwriting;—with this special oddity, that the manuscript which the automatist cannot read has just that moment proceeded from his own pen. The *analogy* lies in the fact that in these two cases, and in these perhaps alone, we have the graphic synergy function-

ing with ease, but in complete detachment from that directive inward visualisation of the words to be written, which habitually guides our hand, whether we actually *look* at what we are writing or not. The plane of cleavage between writing and reading is thus the same in the abnormal and in the supernormal case, though the forces which effected that cleavage are altogether different.

On a close examination of recent cases of word-blindness, another point comes out which is not without interest for us. M. de Capdeville* noted the curious fact that word-blind persons are sometimes able to read manuscript but not print. The reason of this was first guessed by M. Charcot from observation of a Mr. H. P.'s case. I extract a passage from M. Charcot's account,† of which the reader will perceive the significance.

“ Il écrit sans hésitation son nom et son adresse, une longue phrase, et même une longue lettre, sans fautes notables d'orthographe, sans passer de mots. ‘J'écris,’ dit-il, ‘comme si j'avais les yeux fermés ; je ne lis pas ce que j'écris.’ . . . Il vient d'écrire le nom de l'hospice ; je l'écris à mon tour sur une autre feuille de papier, et je le lui donne à lire ; il ne peut pas d'abord ; il s'efforce de le faire, et pendant qu'il se livre à ce travail nous remarquons qu'avec le bout de son index de la main droite il retrace une à une les lettres qui constituent le mot, et arrive après beaucoup de peine à dire : ‘La Salpêtrière.’ On écrit ‘rue d'Aboukir,’ l'adresse de son ami ; il trace avec le doigt dans l'espace les lettres qui composent le mot, et après quelques instants dit : ‘C'est la rue d'Aboukir, l'adresse de mon ami.’

“ Ainsi l'alexie n'est pas absolue pour l'écriture. La lecture est seulement extrêmement difficile, et elle n'est possible que sous le contrôle des notions fournies par les mouvements exécutés par la main dans l'acte d'écrire. C'est évidemment là le sens musculaire qui est en jeu, et ce sont les notions qu'il fournit qui permettent seules au malade de vérifier les notions vagues qu'il recueille par la vision.”

It will be observed that this last sentence would have been equally applicable had M. Charcot been describing the slow demonstrative word-tracing, or the conventionally significant pencil-tapping, with which, as I have already described, the graphic automatist supplements and expounds his own indecipherable scrawl.

Between the two states, then, asemic and automatic, abnormal and supernormal, we have once more detected a resemblance which, however caused, is hardly shared by any third psychical condition. In order to find another case of a writer assisting his perceptions of what he has written by movements imitative of the act of writing, we should have to go back to the young child's first efforts, when the instinct of writing

* In the *Marseille Médical*, 1880, cited by Bernard. See also some of Mdlle. Nadine Skwortzoff's cases (“De la Cécité et de la Surdité des Mots dans l'Aphasie,” 1881), cited by Bernard and Pitres.

† Bernard, *op. cit.* p. 84.

was not as yet sufficiently specialised to be able to dispense with a sympathetic contortion of the whole body. And at that period, may we say? the child's *left* hemisphere was very much in the condition as to lack of training for the graphic synergy in which his *right* hemisphere permanently remains.

There is yet one more phase of asemic troubles on which I ought, for the sake of symmetry, to touch. It is the case—a rare one—where there is inability to write, but ability to read—agraphy without word-blindness. But the parallel to this on the automatic side will plainly be a case where automatic *writing* is, at any rate, not the prominent feature. For if the secondary self has command enough over word-picturing centres to make its message known interiorly, it need hardly resort to the pen. And, therefore, although no branch of automatic action is more interesting than that which writes its burning message as with “a hand upon the wall,” or inscribes it inwardly as “upon the tablets of the heart,” I must, for the present, pass this topic by, as scarcely germane to our discussion.

And finally ;—since we have been tracing upwards the various stages of asemic trouble, from complete inco-ordination to co-ordination defective only in part, and have been endeavouring to trace their parallel in automatic performance, finally, we may ask ourselves what is the automatic parallel to the normal writing of conscious men?

Are there cases where the secondary self has a control over the graphic synergy as undisputed as that which the primary self ordinarily possesses? Are there cases where mental picture and manual act are alike dominated by the same supernormal will?

Such cases there assuredly are, and although their discussion will not fall within our present limits, yet it may be hoped that the mere attempt to co-ordinate them with other forms of automatic writing may not be without instruction. For it is plain that this last class must include all cases where writing is produced in a supernormal state in which there is no intercurrent of consciousness of the ordinary kind. Such writing may be produced during what seems normal sleep, by somnambulists, or in the hypnotic trance, by hypnotic sleep-wakers, or in spontaneous trance, to which condition, indeed, the mere act of graphic automatism seems sometimes to lead or predispose.

I must not here discuss these difficult phenomena. To do so would prolong beyond all bounds a paper which is already inconveniently crowded with detail. But nevertheless a discussion of automatic writing would be very imperfect which did not mention these, its highest phases, with some attempt to indicate the relation in which the lower manifestations stand towards this ultimate victory of the secondary self (so to say) along the whole line.

And I shall here endeavour to present a synoptic view of the various

automatic conditions which I have been discussing, with the asemic conditions which, in my view, are parallel to them, arranged for ready comparison.

Any such synopsis, even if it came from an expositor far better qualified than I, must of necessity be very crude and imperfect. My own attempt is rude in the extreme; it is not intended to resist attack, but to give such preliminary clearness as I can to conceptions which others may form more correctly than I. Following the Baconian hint, when absolute truth is beyond our reach, we should at least endeavour that our more fortunate successors may need rather to distinguish it from our *error* than to disentangle it from our *confusion*.

I shall not, however, speak altogether without authority, for I shall begin by reproducing M. Charcot's scheme of the processes of speech and writing, given by Dr. Bernard, but not, so far as I know, as yet published in England.*

The *letters* by which I designate the various centres are selected by myself, and will be explained later.

In the first place, Dr. Charcot's diagram may be briefly explained as follows:—

First as regards the auditory and vocal aspect of verbalisation.†

A bell rings near a child.

The child's auditory nerves convey the sound to the common auditory centre, where it "forms a deposit,"—becomes gradually an "organised image" by repetition.

A man calls Bell! and points to the bell which has rung.

The child's auditory nerves convey this sound also to the common auditory centre, where it forms an organised image in close connection with the preceding one, but in the *word-hearing* centre, the centre specially organised for the intelligent perception of articulate speech.

* I must not omit to notice Dr. Broadbent's diagram (*Brain*, Vol. I., pp. 493-4) which, though less suited to my present purpose, may remind us in how many ways cerebral operations of this complex character may be instructively represented. In the diagram and explanation in *S.P.R. Proc.*, Vol. II., pp. 168, 169, C corresponds to what is here called the ideational centre, B to the visual centres. M. Dejerine's schemata ("Etude sur l'Aphasie dans les Lésions de l'Insula de Reil," *Revue de Médecine*, March 10th, 1885) practically include the "common auditory" and "common visual" centres of M. Charcot's figure in the "ideational centre." It must be remembered that this is here a mere matter of diagrammatic clearness, and that no definite assertion as to the extent or nature of the centres classed as "ideational" is necessary to my argument.

Professor Lichtheim's schemata (*Brain*, January, 1885) would necessitate a far more elaborate system of notation than I have here employed. Professor Lichtheim's views, though apparently quite independent of M. Charcot's, do not, I think, differ therefrom in any point essential to my argument.

† Verbalisation is a useful word of Dr. Hughlings-Jackson's to sum up the cerebral processes concerned in hearing and uttering, reading and writing, *words*.

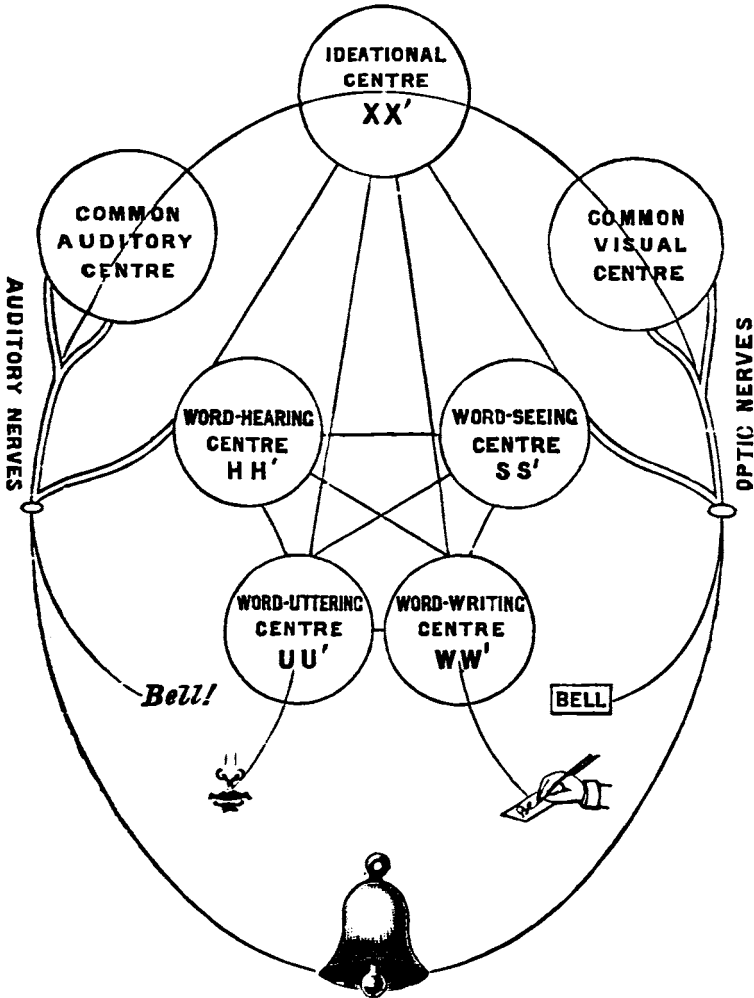
The child's ideational centres register these images, and he is fully aware that the word "bell" corresponds to the special sound.

The child now wishes to pronounce the word "bell." His word-

DR. CHARCOT'S DIAGRAM OF SPOKEN AND WRITTEN SPEECH.

(Symbols modified as explained below.)

From Dr. Bernard's "De l'Aphasie."



hearing centre supplies him with an internal image of the sound required. He transfers this to his *word-uttering* centre, which, after some practice, articulates the sound "bell."

Similarly with regard to the visual and graphic aspect of verbalisation

A bell is placed before the child's eyes.

The optic nerve transmits the bell's image to the common visual centre, where it "forms a deposit,"—effects some slight permanent change.

A man shows the child this written word "bell" and points to a bell (if the child is deaf), or says "bell," and thus appeals to the already organised connection between the object "bell" and the sound "bell."

The optic nerve conveys the written sign to the *word-seeing* centre, in close connection with the preceding deposit.

The ideational centres register these images, in connection with the auditory bell-images already registered.

The child now wishes to write the word "bell." His word-seeing centre supplies him with an inward image of the required word, and his word-writing centre, after much practice, is able to reproduce the written word "bell."

Now I do not suppose that Dr. Charcot means to imply that this diagram is at all a *complete* representation of the facts of the case. All that can be said is that it conveys as much truth (and as little error) as so simple a diagram of so complex a process can convey.

I have now to explain the *symbols* which I have affixed to Dr. Charcot's centres. By XX' I mean the ideational centres (waiving the question as to whether, in ultimate analysis, these are themselves to be considered as sensori-motor) of the left and right hemisphere conjointly: activities of the *right* hemisphere being in each case indicated by the *dash* above the letter.

By HH' I mean the word-hearing centres of the two hemispheres conjointly. Following Hughlings-Jackson I assume that H' is a real quantity—that there is a certain potential educability of the dextro-cerebral word-centres, although the sinistro-cerebral word-centres habitually do all, or almost all, the work.

By SS' I mean the word-seeing centres of the two hemispheres conjointly. Here again S in a right-handed man is entirely dominant, and the existence of S' rests on inference mainly.

By UU' I mean the word-uttering centres of the two hemispheres conjointly. Here again U' must be conceived as habitually taking part only in the utterance of automatic or highly-organised speech. (Hughlings-Jackson.)

By WW' I mean the word-writing centres of the two hemispheres conjointly. It is on the existence and specific tendencies of W' that our further arguments will mainly turn.

I shall now attempt to give a conspectus of normal verbalisation,

and also of cerebrally-defective verbalisation, or asemia, in the shape of a series of formulæ. The several quantities in each formula represent factors in a physiological co-ordination, elements of the vocal or graphic synergy. I am not acquainted with any other attempt at formulæ of this kind,* and I have hesitated by what sign to connect these collaborating nervous energies. But the sign of *addition* seems perhaps the fittest; as in the case of chemical formulæ, where + sign denotes, not a mere mechanical juxtaposition, but a mechanical juxtaposition leading to action and reaction between the substances thus juxtaposed.

We begin, then, with the series of formulæ for the speech of a right-handed man, in health or asemic disease.

XX'+HH'+UU'... Normal speech, involving ideational centres of both hemispheres, word-hearing centre of left, and subordinately of right, hemisphere, and word-uttering centre of left, and subordinately of right, hemisphere.

XX'+HH' Imagined or inward speech. The ideational centres conceive the speech, (perhaps as an articulatory movement,) and the word-hearing centre represents it inwardly, but no attempt at utterance is made. This formula will also represent some of the cases under the next heading.

XX'+HH'+U' ... Pure aphemia. The patient hears and understands what is said to him, and can imagine the desired replies; but he cannot utter these replies; he can only utter words whose vocalisation has become automatic;—words whose corresponding articulatory movements have become organised in the right hemisphere,—words which, in Dr. Hughlings-Jackson's phrase, are "kept ready made-up."

{ XX'+H'+UU' ... Pure word-deafness. The patient can still speak
 { XX' +UU' fluently, but cannot understand questions asked, or his own talk when he hears it. It is doubtful how far a dextro-cerebral word-hearing centre is active here,—in default of

* While this is passing through the press, my attention has been called to the fact that Dr. Hughlings-Jackson has himself employed somewhat similar formulæ, (to represent muscular movements,) in an article in the *Medical Press and Circular*, November 15th, 1882. Dr. Hughlings-Jackson's contributions are scattered through so many periodicals that it is, unfortunately, very hard to be sure that one has seen them all.

the paralysed or disintegrated sinistro-cerebral word-hearing centre. If no word-hearing centre is functioning, the speech will be parallel to the congenital deaf-mute's, which would be represented by the same formula $XX'+UU'$, having been learnt by imitation of the articulatory movements of others, with no inward word-hearing faculty.

{	$XX'+H'+U'$	... Aphemia combined with word-deafness. The
	$XX'+H'$	... patient can neither understand questions nor
	$XX' + U'$	... answer intelligibly. Fragments of word-hearing and word-uttering faculty generally subsist, probably of dextro-cerebral origin.

Passing, for the sake of added clearness, to the case of a *left-hander*, we may represent his ideational centres by $X'X$,—indicating a presumable pre-eminence of the *right* hemisphere,—and similarly for his word-hearing and word-uttering centres. The series for the verbal audition and vocalisation of the left-hander will, therefore, be as briefly indicated below.

	$X'X+H'H+U'U$	... Normal speech.
	$X'X+H'H$	... Inward speech.
	$X'X+H'H+U$	... Pure aphemia.
{	$X'X+H+U'U$	... Pure word-deafness.
	$X'X + U'U$	
{	$X'X+H+U$	...
	$X'X+H$	Aphemia combined with word-deafness.
	$X'X + U$	

Next as to *writing*. In the normal writing of a right-handed man both hemispheres will co-operate in forming the *idea* of writing—(perhaps as a specialised manual movement, reading being conceived as a specialised ocular adjustment)—in the internal *picture* of the writing, and in the *act* of writing. Repeating, then, the formulæ corresponding to those already obtained for *speech*, we have, for a right-handed man, the following series.

	$XX'+SS'+WW'$	... Normal writing.
	$XX'+SS'$	... Reading, or internal imagination of writing. This formula will also represent some of the cases under the next heading.
	$XX'+SS'+W'$	... Pure agraphy. The patient can read but cannot write intelligibly.

- { $XX' + S' + WW'$... Pure word-blindness. The patient can write fluently, but cannot read what he or others have written. Here again it is doubtful how far a dextro-cerebral word-seeing centre is active. If none such is functioning, the writing resembles that of a congenitally-blind man, which might be represented by the same formula $XX' + WW'$, having been acquired by means of tactile impressions, without the aid of an inward visual representation of the words written.
- { $XX' + S' + W'$... Agraphy combined with word-blindness. The patient can neither read nor write intelligibly. Sometimes, though having some conception of writing, he can make no graphic movement whatever. Sometimes his hand scrawls vaguely, with apparently no conception of any definite word to be written.
- { $XX' + S'$
- { $XX' + W'$

The same series, with transposition of the signs of the hemispheres, will serve for the (normal and asemic) visual and graphic verbalisation of the left-handed man.

Thus far I have mainly been endeavouring to explain the views of M. Charcot, modified by those of Dr. Hughlings-Jackson and others.

I now proceed to the more original part of my task.

I have spoken of a secondary self—a second focus of mentation—which I assume to be active in graphic automatism.

I propose to call this second focus of mentation xx' , and to repeat the above formulæ with this symbol,* instead of the XX' , which represents the normal co-operation of the two hemispheres in the mentation of the primary self.

I shall thus in some measure test the reality of this second focus. If this is a merely exaggerated and misleading title which I have given to some scattered hysterical phenomena, I am likely to find it impossible to assign a rational meaning to my new series of formulæ.

If, on the other hand, I can show that each one of my series of formulæ involving xx' is explicable—on the same principles on which the formulæ involving XX' were explained—as representing a well-

* I mean the symbol xx' to imply that there is mentation of a supernormal kind presumably acting through both hemispheres. But as we have no means of knowing whether the seat of this secondary mentation is in any way dependent on congenital right- or left-handedness, I do not transpose the factors xx' in any of the formulæ. If preferred, the symbol X'' might be used for the secondary self, and the question of the predominance of sinistro- or dextro-cerebral ideational centres in supernormal mentation altogether avoided.

defined phenomenon of automatic or partially automatic verbalisation which has actually been observed, I shall have some *prima facie* case for assuming that xx' represents in some way a real psycho-physical fact.

Or, to avoid the risk of over-statement, let me repeat this in somewhat different language.

On one side we have the well-known series of asemic troubles, more or less definite defects of the verbalising faculty, which stand to each other in relations referable to certain more or less definite and circumscribed cerebral lesions.

On the other side we have the vague and hitherto unexplored congeries of phenomena included under the term of automatic writing.

Now suppose that automatic writing were purely what, to use the vaguest word which can claim a place in scientific nomenclature, is called a *hysterical* phenomenon. Or, disentangling the central meaning which this word is often used to cover, let us suppose that graphic automatism is the product of a kind of *half-insane cunning*. Surely the characteristic of its different forms will then be *caprice*. No scientific classification of them will be possible; the more we look into them the more random and baffling will they appear. They will not even have the orderliness which is discernible among asemic troubles; for that orderliness depends on the original orderliness of the cerebral arrangements on which the disease operates (so that even the disorderliness of the disease is referable to a certain law), whereas if graphic automatism be dependent on the caprices of a half-insane cunning, there is no known law of aberration by help of which such caprice can be either predicted or described.

I have used the term "half-insane cunning," because that seems most nearly to convey the view intimated rather than expressed as to phenomena of this kind in ordinary physiological treatises. Something of half-conscious deception, something of moral distortion, seems always to be presupposed. If that be so, the argument of my last paragraph seems to apply. But we might, of course, make another supposition, and say that graphic automatism is a symptom of some real and definite cerebral malady, not, indeed, involving organic lesion, but showing itself in a functional disorder which follows somewhat the same course in different individuals. Now this view, could it be established, would not be necessarily inconsistent with the suggestions of this paper. "Perturbation that masks evolution" is my phrase for the mode of manifestation of the secondary self. That in *some* graphic automatism, at least, there actually is something *evolutionary*, I hold that my telepathic cases (Mrs. Newnham's, &c.) suffice to show. That there is *perturbation* also I have throughout asserted; and to what degree the phenomena of that perturbation are to be considered as in themselves evolutive or dissolutive, is a question as hard to answer here as in certain parallel

cases, already alluded to, which concern the development or the reproduction of the physical frame of man. When we come to consider *vocal* automatism (the phenomena of "revivals," "possession," &c.), such questions will be strongly forced on our attention. But in *graphic* automatism (apart from the hypothesis, already discussed, of hysterical or capricious deception or self-deception), there is very little, as it seems to me, to suggest definite cerebral disorder.

On the contrary, my cases of *graphic* automatism have (as has been seen) for the most part been developed by sane and healthy persons for experimental purposes,—are not accompanied with any history of intercurrent brain-troubles,—and resemble in their general character the acquirement of an accomplishment rather than the invasion of a disease. I hold, then, that I am justified in provisionally extending to these cases in general the designation of "supernormal," with its implication of an evolutionary element, which is, no doubt, more demonstrably applicable to the *telepathic* cases alone.

And in order to test this view, I urge that if automatic writing be the product, not of an undefined *dissolution* of faculty, but of an obscure *evolutionary nisus*;—if it be originated, not by the half-insane cunning of the self familiar to us, but by the rudimentary efforts of a secondary self to emerge into objective activity;—then it is likely that there will be some order discernible among the manifestations;—some "seat of election" among cerebral faculties, in which this secondary self will be found to establish itself most perceptibly,—some "path of least resistance" by which its externalisation will be most commonly effected.

And what I am at present maintaining is that in cases where automatic writing occurs during the waking consciousness of the primary self, then the right hemisphere is, to a certain extent, the "seat of election" of the secondary self, and the word-seeing and word-writing centres of that hemisphere form, to a certain extent, the readiest path of externalisation for its inward activity.

And I urge that this view becomes *pro tanto* more probable if I can show (as I have tried to show by the concrete examples which I am now about to summarise in formulæ) that the observed phenomena of *graphic* automatism do in fact fall naturally into an arrangement which is roughly parallel to the arrangement into which *asemic* troubles fall, when arranged according to the seat which *disease* has elected, and the path of externalisation which is then left still open for the mutilated primary self.

First, then, let us give the formulæ, involving xx' , which are parallel to the formulæ representing (normal and *asemic*) auditive and vocal verbalisation of the primary self of a right-handed man.

- $xx' + HH' + UU'$... Speech of somnambule, entranced hypnotic subject, &c. Both hemispheres (so far as active) are at the service of the secondary self. All the observable mentation is supernormal.
- $xx' + HH'$... Internal audition ; the demon of Socrates, and "messages of revelation" in general, where not referable to disease of the brain.
- $xx' + HH' + U'$... "Speaking with tongues." Automatic speech when there is an inward conception of the message to be given, but difficulty in its delivery, resulting perhaps in mere vague reiterated cries. The sinistro-cerebral word-uttering centre has not passed under the control of the secondary self.
- $\left\{ \begin{array}{l} xx' + H' + UU' \\ xx' \quad + UU' \end{array} \right.$... "Trance-utterance in the normal state." Words are poured forth fluently by a waking and conscious person, who, however, has no internal perception of his own words, to which he listens like one of the bystanders. The word-hearing centres of one or both hemispheres are still unappropriated by the secondary self.
- $\left\{ \begin{array}{l} xx' + H' + U \\ xx' + H' \\ xx' \quad + U' \end{array} \right.$... Rudimentary automatic speech. Non-propositional words, or mere cries, are uttered, sometimes with, and sometimes without, internal knowledge that some kind of speech is intended. In $xx' + H'$ we have the lowest form of vocal automatism, where no sound is uttered, but there is mere gasping and sighing, with an indistinct impulse to speak.

Finally, we must give the series, involving xx' , which is parallel to that which represents the (normal and asemic) visual and graphic verbalisation of the primary self. The following formulæ will represent the graphic automatism of a right-handed man.

- $xx' + SS' + WW'$ Writing of the somnambule, hypnotic subject, &c. The word-seeing and word-writing centres, so far as active, are entirely at the service of the secondary self.* All the observable mentation is supernormal.

* It would not surprise me to find a right-handed hypnotic subject becoming slightly more left-handed (or ambi-dextrous) in the sleep-waking state. I have myself a hypnotic subject who, from temporary disablement of her right arm,

- xx' + SS' ... Inwardly-realised message in writing, which may be either imagined as internal (written on the heart, &c.), or externalised as a hallucination (seen written on the wall, &c.) This complex phenomenon (belonging both to insanity and to ecstasy) does not fall strictly within our present limits and cannot now be fully described.
- xx' + SS' + W' ... Graphic automatism with inward word-picture. Case where words are flashed on the brain with impulse to write, or in the act of writing them (as in case sent by Professor Sidgwick), but with more or less difficulty in writing. The secondary self, while momentarily possessing itself of the waking man's sinistro-cerebral word-seeing centre, does not altogether subjugate his corresponding word-writing centre.
- { xx' + S' + WW' ... Graphic automatism without inward word-picture. Case where words are written with ease, but without knowledge of what is being written. The word-seeing supervision (if any) which guides this script is probably exercised by the dextro-cerebral centres; for the sinistro-cerebral remain at the service of the automatist's conscious will; and he reads a book voluntarily while he writes automatically.
 { xx' + WW'
- { xx' + S' + W' ... Rudimentary graphic automatism. The group of phenomena with which we have specially had to deal. The sinistro-cerebral word-seeing and word-hearing centres continue mainly at the service of the primary self; and
 { xx' + S'
 { xx' + W'

has been accustomed to write with her left hand in ordinary *rightward* script, —just as with the right hand. But when I asked her, in the trance, to write her name with her left hand she wrote it in *Spiegel-Schrift*, and this tendency persisted for about a minute after I woke her. But the phenomenon may have been due to suggestion merely; for although no hint was given during the trance, nor had that special experiment ever been suggested in the subject's presence, yet I found that she had heard mirror-writing discussed some fortnight before, and I believe (as Bernheim, for instance, found in experiments with magnets, (*Rev. Phil.*, March, 1885) that the hypnotised subject's unconscious mind catches up and works out hints of a very slight kind. The faint persistence of the idea after awakening would, of course, be quite in accordance with analogy.

consequently the writing produced resembles that of the word-blind and agraphic patient, —or sometimes is mirror-writing, like the untrained left-handed child's.

Thus far I have dealt only with the automatist's secondary self, introducing neither telepathic impact from another living human mind, nor spiritual influence from a disembodied intelligence. Let us denote telepathic influence by Y, spiritual by Z. We will leave Z alone for the present, and merely indicate our formula for Mrs. Newnham's writing. Where another human mind was involved this will be :—

$$xx'Y+S'+W'$$

That is to say,

Mrs. Newnham's unconscious self wrote.

It wrote with the assistance of Mr. Newnham's mind.

It employed only her dextro-cerebral word-seeing centres. She did not know what was being written till she consciously read it. It employed *probably* mainly her dextro-cerebral word-writing centres, as the handwriting was unlike her own, and frequently degenerated into a scrawl.

On the occasion when she *foresaw* the word "Nipen" before writing it, the sinistro-cerebral word-seeing centre was for the moment implicated, and the formula would be :—

$$xx'Y+SS'+W'$$

We have thus come back once more to Mr. Newnham's case, and the reader who remembers the suggestion with which he concludes his communication,—viz., that the low moral tone of some of the automatic messages may be traceable to an untrained moral sense in the right hemisphere—may perhaps suppose that I am in agreement with that hypothesis.

This, however, is hardly the case. For although I hold that the right hemisphere had much to do with Mrs. Newnham's replies, as with other automatic writing, I nevertheless 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 ;—that is to say of the highest, or nearly the highest, co-ordinating processes of the mind. 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. The region where, for sheer lack of previous work on the sub-

ject,* something original must be attempted, comprises only the application of accredited physiological conceptions to such new evidence or experiment as our Society has been able to adduce;—or such old, but neglected evidence as we are endeavouring to bring within the field of scientific vision.

But although we may not see ground for referring this slight alteration of moral temper to any difference in the relative functions of the two hemispheres, we nevertheless may fairly expect to find some elucidatory parallel to it among other supernormal or abnormal phenomena. This inquiry, however, we cannot now pursue, and I suggest it merely in order to remind the reader that the phenomena of *asemia* are by no means the only ones which may instructively be compared with those with which we have to deal. *Somnambulism*, *double-consciousness*, *epilepsy*, *insanity itself*, are all of them natural *psychoscopes* which, rightly handled, may give an insight—beyond their own special province—into the mechanism of our most inward being.

For the present, however, our investigation must pause here. The promise of the original title of these papers has been, I think, in some part fulfilled. An explanation, partly dependent on telepathic influence, partly on unconscious cerebration alone, (though unconscious cerebration raised, if I may so say, to a higher power than had previously been suspected), has been offered for certain widespread phenomena, which, while ignored or neglected by the main body of men of science, have been, for the most part, ascribed by those who have witnessed them to the operation of some external and invading power.

* It is rather surprising to find how little serious attention has hitherto been paid to these automatic phenomena. The authors of handbooks to the "Pathology of Mind"—as Maudsley or Carpenter—stop their discussions, intentionally and avowedly, upon the threshold of our present subject. The more recent school of *psycho-physicists* approach our topic more closely. Their work, or that of *psycho-physical philosophers*, such as M. Ribot, (if I may so term him), was indeed an indispensable pre-requisite to fruitful inquiry on our present lines. But before M. Richet's article on Mental Suggestion in the *Revue Philosophique* of November last, I am not aware of any specific discussion of the phenomena of *automatism*, considered as anything more than a mere aberration. I have found only a few scattered passages where *automatism* is suggested in explanation of the speech or writing which *Spiritualists* ascribe to *possession*. Littré in the "Philosophie Positive," 1878, cited with adhesion by Dagonet (*Ann. Méd. Psych.*, 1881, Vol. VI. p. 20), explains in this way the "prophetic" speech of the "Convulsionnaires de Saint Médard." And Taine in the preface to the later editions of his treatise "De l'Intelligence," cites an ordinary case of automatic writing, and adds: "Certainement on constate ici un dédoublement du moi; la présence simultanée de deux séries d'idées parallèles et indépendantes, de deux centres d'action, ou si l'on veut, de deux personnes morales juxtaposées dans le même cerveau." But he does not follow up this suggestion. From the *Spiritualistic* point of view, automatic writing has been carefully and candidly discussed by "M.A. (Oxon.)," in "Spirit Identity" and other works.

If the view taken in these papers be accepted, a very large proportion of the phenomena to which Spiritualists are wont to appeal will be no longer available as evidence for any spiritual influence other than that of the spirits of living and breathing men.

The phenomena, however, which I have described by no means exhaust those which are alleged to occur in the course of graphic automatism. It is said that the handwriting of dead persons is sometimes reproduced; that sentences are written in languages of which the writer knows nothing; that facts unknown to anyone present are contained in the replies, and that these facts are sometimes such as to point to some special person, departed this life, as their only conceivable source. If these things be so, they are obviously facts of the very highest importance. Nor are we entitled to say that they are impossible *à priori*. The spiritualistic hypothesis, though frequently presented in an unacceptable shape, is capable, I believe, of being so formulated as to contradict none of the legitimate assumptions of science. And furthermore, I readily admit that should the agency of departed spirits be established as a *vera causa*, then the explanations here suggested will need revision in a new light.

But in order to establish any conclusion so startling in a way to satisfy the scientific world, there must assuredly be an amount of evidence, and a way of dealing with that evidence, very different from that with which Spiritualists for the most part appear to have been contented.

I am far from wishing to re-echo the common sneers at the credulity or incapacity of Spiritualists. I am not raising the question of fraud on the one side, or of imbecility on the other; I am assuming that something supernormal has in reality happened, and that the question is one of *observation* in the first place, and of *interpretation* in the second. But supernormal phenomena, whatever their explanation may be, have no tendency to occur preferentially in the presence of persons specially qualified to observe them. It is no wonder, therefore, that they have so often been loosely described and inadequately attested, while those who have witnessed them, deeply impressed with what they saw, and rushing to some hasty conclusion, have been unable even to understand the essential need in such experiments of exactness, repetition, control.

Loose assertion has been met with contemptuous neglect, and we now witness the spectacle of a small band of "believers" and an outside world which does not even take the trouble to examine the grounds of that belief. It is not thus that truth can be attained, and it need hardly be said that one special aim of the Society for Psychical Research is to establish at least a *modus vivendi* between

extremes of credence and non-credence by a dispassionate elucidation of the actual phenomena to which both parties appeal.

But as regards the special point with which we are now concerned—the question whether automatic writing ever shows unmistakable indications of an intelligence other than that of some living man—I must make an earnest appeal to Spiritualists in England and America to furnish me* with additional cases where they believe such intelligence to have been shown—cases which they can give on first-hand testimony, and with full details. The printed cases of the kind are not numerous, and many of them are now remote; so that supplementary evidence is urgently required before the subject can be discussed on a sufficiently broad basis. An appeal which I made in the leading Spiritualistic newspaper has produced very meagre results. Those who believe themselves to be in possession of truth of this high value may surely be invited to take as much trouble to prove it as the chemist is willing to take in investigating a new compound, or the physician in identifying a new disease. As a mere matter of fact, and without imputing blame to anyone, it may safely be said that no such persistent and organised presentation of Spiritualistic evidence has yet been attempted as is habitually demanded by the scientific world in matters of far less difficulty and importance. To any correspondents who may be disposed thus to help me towards a further instalment of the present discussion, I can promise, at any rate, cordial thanks and careful attention.

F. W. H. MYERS.

* Cases may be sent to me at Leckhampton House, Cambridge, or to the Secretary, 14, Dean's Yard, London, S.W