

SUPPLEMENT.

I.

* * It is proposed to append to each Part of these *Proceedings* a Supplement, consisting of papers not strictly included within the transactions of the Society. The number of books and articles in foreign countries which bear upon our subject is steadily increasing, and we hope to give in the Supplement reviews or abstracts of this contemporary work. The Editor will be glad to receive suggestions from correspondents as to publications deserving notice. Papers of certain other kinds, moreover, such as that which immediately follows here, may find place in the Supplement, though not forming part of the definite work of the Society.

THE WORK OF EDMUND GURNEY IN EXPERIMENTAL PSYCHOLOGY.

How great a loss the work of our Society, and all cognate work throughout the world, has sustained in the death of Edmund Gurney it would be difficult adequately to express. We can best discern it by reviewing what he had already done,—the six years' work of a man in the prime of life, from whom some score of further years of undiminished energy might not have seemed too much to hope. And some such brief account must clearly be attempted in these *Proceedings* of which he was the Editor ;—for the hearing at least of this Society of which he was the indefatigable mainspring. The task, however, has difficulties of its own. Much of his work lies in a field still so subject to controversy that, while awaiting with confidence the world's ultimate verdict, we must beware of claiming as decisive achievement what many critics may still depreciate as mere mistaken endeavour. Much of his labour, too, was carried on in such close conjunction with other colleagues,—in a spirit of such entire postponement of any claims of his own to the interests of the common search for truth,—that it is not easy to disentangle the precise share of thought

or discovery to which his mind has an exclusive title. Much work, however, remains which is indisputably valuable, indisputably his;—much work, and that of a quite other kind than an outside observer of his earlier years would have expected him to choose for the prime task of his maturity.

This is no place for a detailed account of his character, or for review of his literary achievements in other directions; but it would be impossible to explain either how he came to take up this special line of research, or how he came to succeed in it, without indicating in some few words in what sense his previous life had trained him for the task on which he entered at thirty-five years of age, in 1882.

Edmund Gurney's intellectual nature offered one of those cases, so to say, of double foci, of juxtaposed but scarcely reconciled impulses, which seem destined to become commoner as civilisation becomes more complex, and which, at whatever cost to the individual, are none the less essential for the progress, the unification of knowledge, if ever the emotions of the one half of the world are to become the science of the other. I mean that while his instincts were mainly æsthetic, his powers were mainly analytic. His dominant capacity lay in intellectual insight, penetrating criticism, dialectic subtlety. His dominant passion was for artistic, and especially for musical sensation. For a long time it seemed as though, by some strange irony, Nature had heaped upon him gifts which he did not care to use, only to deny him the one gift of musical inventiveness—or even of executive facility—which would have satisfied his inborn, ineradicable desire. During all his boyhood, during all his college days, music was his strong preoccupation. Called upon to choose between classical and mathematical studies, he chose classics almost at hazard, and worked at them, one may say, in the intervals of his practice on the piano. In spite of this divided interest, and of a late beginning—for he came up to Cambridge ill-prepared—his singular acuteness in the analysis of language, his singular thoroughness in leaving no difficulty unsolved, secured him high honours and a Trinity Fellowship. Few men have attained that position by dint of studies which formed so mere an episode in their intellectual life. He quickly returned to music, and for years continued a struggle for executive skill which at last became obviously hopeless. Yet his devotion to music was not wasted; rather it bore fruit far more valuable to the world, though less satisfying to himself, than the manual dexterity which he had craved in vain. He wrote *The Power of Sound*, a treatise which judges more competent than I, abroad and at home, have accepted as a work of serious—even of unique—value on the philosophy of music. And even the unmusical reader can discern in the book the combination of its author's characteristic qualities;—on

the one hand the depth, the force, the refinement of emotion ; on the other hand the trenchant dialectic, the logic which pierces like a dividing sword through the tangle of sentimental fallacies with which all æsthetic criticism is still painfully encumbered.

When music failed him he had to consider his next step. And here it should be said that, although he possessed a competence, he was far from rich ; nor, on the other hand, had he been brought up with the tastes and habits of a poor man. Again, in spite of the commanding stature and noble presence which gave the impression of so much force and fire,—in spite, too, of much actual muscular and athletic power,—he was not really robust ; and, as is sometimes the case with very tall men, he suffered from a constitutional lassitude which often made all effort distasteful. It might have been expected, then, that either he would live a quiet dilettante life, or that if he worked hard it would be with the object of increasing his income. But, in fact, neither of these alternatives would have been tolerable to him. He could not bear to live without hard work ; yet toil was so irksome that he could not willingly undertake it for a merely personal end. Since, then, artistic delight had failed him, he had to appeal to a still deeper, a still more potent stimulus. That stimulus he drew from his moral nature, on which I have not yet touched;—from the profound sympathy for human pain, the imaginative grasp of sorrows not his own, which made the very basis and groundwork of his spiritual being. As yet this power of sympathy had expended itself mainly in private friendships, and had given to his affections, to his consolations, a unique quality on which I cannot now dwell. And it had also interwoven itself with his craving for the power of musical expression, in which his goal defined itself to him as the capacity so to render the best music as to make “the poorest dwellers in the dingiest cities” enter with him into “the rarer air of pure artistic exaltation,” and thus to infuse “the isolation of inward experience” with “the living interest of human sympathy.”¹

And now, in the ruin of artistic hopes, this human sympathy, this deep desire to better the lot of suffering men, became and remained his dominant, almost his only motive. But the right mode of altruistic action was not easy to find. He felt himself too sceptical—perhaps also too fastidious—for many of the forms of practical philanthropy. He took no sanguine view of his power to influence mankind by any purely literary production. He felt that the field in which his mind could work most effectively was the field of exact logic, of cogent argument, in science or metaphysics. And he turned to medicine, not as a pursuit in which he would be likely to attain practical

¹ *The Power of Sound*, p. 422.

success, but as a branch of science which, if grasped aright, might open at least some indirect avenues to usefulness. In the preliminary studies for the medical degree—physics, physiology, chemistry—he showed unusual thoroughness, unusual penetration; and passing the second M.B. Cantab. examination (1880), he accomplished the scientific, as opposed to the clinical part, of a physician's training. But he soon found, as he had expected, that for clinical work he had no special aptitude; that he would do well to leave the bandaging of the actual physical wounds of poor humanity to men who perhaps sympathised with the sufferer less, but who fastened the bandages better. He had not, therefore, definitely adopted any profession, when in 1882 a possibility presented itself of serving both science and humanity in an unlooked-for and adventurous way.

In order to understand the manner in which this new appeal affected him, we must consider for a moment the nature of his deep realisation of the sorrows of mankind. This sympathetic pain, though it prompted him to share in various benevolent movements, was essentially not of a kind which any specific philanthropies, any social readjustment, could assuage or satisfy. Rather—like the melancholy of Marcus Aurelius, or of those fragments of early Greek philosophy which enter, as it were, at the first onset into the very core of human fates—Edmund Gurney's compassion for his neighbours' suffering was based, not so much on removable, as on irremovable things; on that endless disproportion between man's desire and his attainment which evolution can only intensify; on that sudden snapping of man's deepest affections which evolution can only teach him to feel as a still crueller wound; on that wail of anguish which, though it should arise but from one hopeless, helpless creature amid the whole planet's broad content, must still prevent us from regarding with enthusiasm, with worship, a universe in which a single sentient being is born to unmerited and unrequited woe.

In his essay on "The Human Ideal,"¹ the most deeply-felt chapter, perhaps, in all that he wrote, he used his penetrative imagination, his unshrinking reason, to tear aside the fallacies of those who speak to us of earthly life without a future as of a satisfying and glorious thing; who would fain gild with enthusiasm that outlook before which the wisest men have been the most sternly silent, or the most courageously resigned.

"The Positivist religion," he says, "is 'to explain man to himself.' The Positivist, then, is able to imagine that the time will come when a man will never, in sudden flashes, see himself, and his brief hold on life, and his relations to existence outside him, as an inscrutable riddle;

¹ *Tertium Quid*, Vol. I.

a time when 'the abysmal deeps of personality' will be wholly filled up; a time when men will be insensible to the irony of affections and devotions spreading and deepening up to the blighting and clipping point; of 'Humanity overflowing the individual as the ocean does a cup,' till the cup happens one day to turn upside down; of the voice of conscience speaking in tones whose depth and urgency seem often a mockery of their contents; of the Goddess in whose paths 'flowers laugh' and 'fragrance treads' crushing worshippers beneath her chariot wheels; of the sense of infinite import in life, to be found (we are told) by each in the mere multitude of lives stunted and limited like his own."

The practical lesson which he draws is virtually identical with that taught by J. S. Mill in his celebrated posthumous essay, namely, that it is helpful, not injurious, to the moral welfare of mankind, that they should indulge in the hope—or speculate on the possibility—that our life may not be truly ended by the death we know.

"I simply state, as a psychological fact, that the sense of possibilities that can never be disproved is capable of exercising pervading effect on the human mind which is absolutely irrelevant to any numerical estimate of odds; and that human spirits, oppressed in the manner described in this paper, find the sense of these possibilities an ineradicable fact in their lives. On paper, in a scheme of philosophy, the 'grand Perhaps' may look as feeble as 'Humanity' looks imposing. But there is another arena. In the hearts of countless individuals the former expands into a pervading influence, where the latter shrinks into a mere noun of multitude. To tell them that 'nebular hypotheses' are 'the religion of scholars, and not of men and women with work to do,' has no force unless it can be proved that the work remains undone; that the hypotheses interfere with the human creed and the ideal of self-renouncing duty; that they have some anti-social tendency which contains the germs of their own decay. No such proof has been given. As the spread of science supplies no direct, so the spread of social morality supplies no indirect argument for the probable cessation of an attitude of mind which is equally compatible with both."

Whatever may be said of such utterances as these, they will scarcely be held to indicate either conceited fanaticism or eager credulity. I have thought it important to quote them, because the *prima facie* presumption in scientific minds against any research which bears even indirectly on the problem of man's immortality, assumes that such research is only undertaken either by men whose feeling for evidence on all subjects is weak, or by men whose personal craving for a future life is vivid enough to blind them to the slightness of the evidence for that special belief. Neither of these categories can be stretched to include Edmund Gurney. It has already been shown—and all his writings prove it—that the type of his intellect was not rhetorical, imaginative,

mystical, but sceptical, analytical, and—to use again the old Platonic word which best describes him—*dialectical*. And as regards personal pre-occupation with a future life he was again far removed from the character which *à priori* critics might have assigned to him. For my part, indeed, I assuredly cannot admit that a preoccupation with the unseen world, to whatever pitch it may be carried,—that a laying up of our treasure in things above, however ardently our eyes may turn to where that treasure lies,—need either diminish a man's terrene energy, or blunt his eagerness to know the very truth—the truth on which he has staked his all. I leave it to those who condemn such a temper of mind to consider how much of high religion, of high philosophy they must strike out, as noxious surplusage, from the upward strivings of mankind.

But I am not here imagining an ideal character, but describing a real one; and I merely state it as a fact that Edmund Gurney had *not* a strong personal craving for a future life—had not even that kind of confidence in Providence, or in evolution, which leads most of us to take for granted that if that life exists, then for us and for the universe all must in the end be well.

When, therefore, he entered upon that class of inquiries behind which the great hope obscurely hangs, this was not with any personal flutter, with any stimulus from inward longings or inward terror. Reason had convinced him, not that if there were a future life the universe *must* be good, but that if there were a future life the universe *might* be good; and that without such a life the universe could *not* be good in any sense in which a man moved with the sorrows of humanity ought to be called upon to use that word. And thus his attitude in the inquiry reconciled, if I may so say, the lessons of two opposing aphorisms,—the saying of Spinoza, "*De nulla re minus liber homo, quam de morte, cogitat,*" and that older saying, and weightier still: "*Vita philosophi commentatio mortis.*" For his meditation on death, and on what might follow death, was begotten, I say, neither by cravings nor by fears; it was the deliberate outcome of a penetrating survey of the possibilities of weal for men.

His practical concern with such matters was of gradual growth. It began with a form of research—if research it could be called—strangely at variance with his previous companionships or habits of thought. He attended (and here I must confess to some persuasion on my own part), he attended, during the years 1874-8, a great number of Spiritualistic *séances*. He sat in the *cénacles* of those happy believers, an alien, formidable figure, courteous indeed to all, but uncomprehended and incomprehensible by any. What knowledge, what opinions he gained in this long ordeal he never made known to the world, nor shall I here attempt to say. But thus much I may affirm,

I think, for all of us who seriously pursued that quest, that in the first place—in spite of much of failure—we could never persuade ourselves that we had a right to abandon it; and that in the second place we perceived that the *séances* with paid mediums, which formed the ordinary method of Spiritualism, were ill-calculated to lead us to any solid results; nay, that, in beginning our inquiry with the so-called Spiritualistic phenomena at all, we were somehow beginning it at the wrong end. I will not here repeat the account given in the Introduction to *Phantasms of the Living* of the gropings and the *étonnements*, the disappointments and the successes, which ultimately taught us, in 1882, to discern a less hazardous line of approach to the cloud-capt citadel. The Society for Psychical Research was founded, with the establishment of thought-transference—already rising within measurable distance of proof—as its primary aim, with hypnotism as its second study, and with many another problem ranged along its dimmer horizon. Here, at length there was sea-way for a definite adventure; with wide possibilities, indeed, of failure—with the bones, so to say, of ship-wrecked precursors bleaching along all the shore,—but yet with chances also of an achievement which, though in our lifetime it might remain obscure and inchoate, should grow and broaden to unguessed issues in generations yet to be. But there was urgent need of someone to give the *coup de collier* to the new enterprise;—of an Honorary Secretary—as far removed as possible from fool or fanatic—who should devote his whole time and energy gratuitously to the task.

The previous pages will have enabled the reader to judge how far by gifts, by training, by various experience, by deep-seated thirst for knowledge, Edmund Gurney was fitted for such a post as this. He undertook it; and in all the work—whatever be its final appraisalment—which our Society has thus far accomplished, his part is closely interwoven. That work has been in great measure conjoint and consultative; but his was ever a leading voice in the consultation. And there is much also which practically belongs to him alone. On two such points I may dwell; two points on which his services to human knowledge cannot, I think, be controverted even by those who take a wholly adverse view as to the value of those further inquiries which would fain launch the bark of science upon a strange, an unvoyaged sea.

The two points of which I speak are his work in psychological hypnotism, and his work on the theory of hallucinations.

I claim that he was the first Englishman who studied with any kind of adequate skill the psychological side of hypnotism, making therein experiments,—cut short, of course, by his premature death, but already of the highest value;—experiments which, though sometimes concurrent with those of the French school, were yet independently executed;

and which mark, as it seems to me, an epoch in the study of hypnotism in England.

Three names before Edmund Gurney's are associated with three successive stages of the history of mesmerism or hypnotism in the British Empire. The first is that of Elliotson,—a man who, partly through his own lack of tact and temper, but mainly through the sheer ignorance, the sheer bigotry of his medical contemporaries, has never yet received the honour which was justly his due. He practically introduced curative mesmerism into England; he made a vast number of experiments and threw out a vast number of ideas; and although many of his experiments were loose, and many of his conclusions hasty, yet if he could look down on the great centres of hypnotic activity to-day,—on the Salpêtrière and the Charité, on Nancy, on Bordeaux, on Toulon,—he might fairly claim that the great mass of the phenomena which he spent his later life in demonstrating,—to be met only with calumnies, sneers, or silence,—have now become the common-places of the lecture-room, and the routine of clinical practice.

The second name is Esdaile's. Esdaile had persistence like Elliotson's, with better tact, or better fortune; and the long series of carefully-noted, carefully-figured operations which he performed under mesmeric anæsthesia upon Hindoos in the Calcutta Hospital made it impossible for any candid inquirer to doubt longer that the mesmeric trance was a real, a valuable discovery.

The third name, of course, is that of Braid, whose discovery that a similar condition of trance or "hypnotism" can be sometimes induced without gaze or "passes,"—without any intervention of a second person at all,—by mere fixation of the eyes on a bright object with an inward and upward squint, was a most important contribution to our knowledge of abnormal states. Braid's work became gradually known, and hypnotism met with readier acceptance than mesmerism had found. Yet Braid's work—such was the animus of the time—was welcomed much less for its own positive value than because it was supposed to supply a kind of refutation to the mesmerists who had preceded him. It is needless—or it should be needless—now to say that Braid's work was in reality a *development* of their previous work, superseding or modifying, indeed, certain premature or too exclusive theories, but unmistakably indicating that the whole problem of the induction of trance, or of somnambulant states, was an even wider one, and even more important to science, than a Puységur or a Petetin, an Elliotson or an Esdaile, had ever ventured to imagine. This narrow polemical spirit had its usual retribution in the retardation of further discovery. Braid's experiments—valued only as confounding Elliotson's—were not themselves repeated or pursued. Incredible as it may seem, in all the long interval from (say) 1855 till 1883—the date of publication of

Edmund Gurney's first experiments—there was scarcely an experiment performed in England which added anything further to our knowledge. About 1875 a great revival of hypnotism began in France—began with Charcot and Richet in Paris, and spread from another focus—the persistent labours of Dr. Liébeault—to the Professors at Nancy. Since that date a whole literature of hypnotism has grown up in France; experiment outstrips experiment, and memoir supersedes memoir with bewildering rapidity. But to all this movement there was in England for some years no response whatever. Nay, there was no apparent knowledge that such a movement was going on; and when some of us in 1883-4 began to report from personal observation what was being done in France, and to add some experiments and reflections of our own, our papers were received with astonishment bordering on incredulity. Even yet, the *savants* on this side of the Channel are strangely indifferent to what is being done in this subject by *savants* on the other; but nevertheless there has been progress enough in the past five years to convert a good many of our quondam paradoxes into truisms. To recount the experiments of others, however, is not a difficult task. Edmund Gurney did much more than this. He devised and carried through (1885-8) a complex series of experiments, surpassed by no other hypnotist in exactness, either of observation or of record, with a definite view to the investigation of two great problems which lie on the borderland between physiology and psychology, and which are apt to seem not less but more perplexing the wider our induction extends. The first question may be phrased as follows: "Is the hypnotic state ever induced by some yet unrecognised agency—some specific influence of operator on subject?" To this question Edmund Gurney and I were, so far as I can discover, for some years the only writers who maintained the affirmative answer. But it is not, of course, to the mere maintenance of a view then altogether scouted, but now gradually gaining ground, that credit is due; but rather to the invention and execution of definite experiments testing the matter in a rigorous way. I must claim then—for in the vast preponderance of French work in hypnotism a piece of English work, unless clearly put forward, is likely to be overlooked—that Edmund Gurney's long series of experiments on the anæsthetization of single fingers of a healthy waking subject, without his seeing the finger selected or receiving any suggestion as to which finger it was to be,—are not only the *best* experiments that have yet been made on this branch of the subject, but are about the *only* experiments where the conditions have for any long time been kept sufficiently rigorous to give the record of what occurred a permanent and objective value. The excellence, that is to say, of these experiments did not depend (as so often in hypnotism) merely on

the susceptibility of the subjects employed (for the subjects, judged by a French standard, were not remarkable); but it depended on the inventiveness with which the experiments were planned, the caution with which they were executed, and the acumen with which the operator interpreted their results. Those results, though in some ways perplexing, are surely of very high importance. For they prove—so far as any one operator's experience in this protean subject can be held to prove anything—they prove that there *is* sometimes in the induction of hypnotic phenomena some agency at work which is neither ordinary nervous stimulation (monotonous or sudden), nor suggestion conveyed by any ordinary channel to the subject's mind. I do not say that these experiments, or any one man's experiments with living organisms under such delicate conditions, can in themselves be called conclusive. If not repeated, they must fall to the ground. But, on the one hand, we still offer to repeat them, and to exhibit them, on the person of a perfectly healthy and normal man, to any medical or otherwise well-qualified observer. And, in the second place, the conclusion to which they point, so absolutely heterodox a few years ago, is now receiving adhesions from very different quarters. That conclusion is involved in the experiments in *sommeil à distance* of Gibert, Janet, Richet, Héricourt, &c. It is involved in the transferences of hysterical symptoms vouched for by Babinski. It is involved—in one of its forms—in the belief to which the veteran Liébeault, with characteristic openmindedness, has—after combating it for 20 years—avowed his conversion, as to the efficacy in the treatment of *sleeping infants* of certain hypnotic methods which he previously supposed to be operative by dint of *suggestion* alone. What the precise nature of this influence, or of these influences, may be is a further question. Edmund Gurney discussed that point in his last published paper on "Hypnotism and Telepathy," in *Proceedings*, Vol. IV., but he did not suppose that the last word, or his own last word, had yet been said on the subject.

The second hypnotic problem at which he worked with marked success was the profoundly important one of hypnotic memory—"What is the relation of the memory in one hypnotic state to the memory in another hypnotic state, and of both to the normal or waking memory?" This is at the very root of the psychology of hypnotism; and yet, so far as I can discover, before Edmund Gurney's time there had in England been absolutely no experiments (unless some scattered observations of Elliotson's are to be so counted,) which threw light on this fundamental question. It may be doubted whether even now there are many English readers who can comprehend the full value of the papers on "The Stages of Hypnotic Memory," "Stages of Hypnotism," &c., which practically opened up in England a whole department of experimental psychology. Still fewer, perhaps, are those who will

be prepared for my next remark,—that, from the point of view of a technical estimate of Edmund Gurney's claims as a *savant*, the question is not as to the value of these papers, but as to their *priority*. The publication of his first paper of importance in this line was preceded by a few months by the publication of the first of the remarkable papers of a cognate kind by which Professor Pierre Janet has so rapidly made for himself so distinguished a place in contemporary psychology. But I know for a fact—nor will our courteous friend at Havre be disposed to question it—that Edmund Gurney's experiments were thought out, and in great part performed, before he so much as heard (I was myself his informant) of the brilliant results attained by the French Professor. He of course instantly recognised the value of those results; but, as will be seen by comparing the two series of experiments, he continued to the end to work on his own original lines.

I do not wish to exaggerate my friend's performances, or to show any insular lack of appreciation of the achievements of foreign *savants*. But taking the history of hypnotism *in England*, the history, that is, of one of the main branches of experimental psychology in a country which has long boasted of her psychologists, it seems to me that beside the epoch-making names of Elliotson, Esdaile, and Braid, the critical historian must place the name of Edmund Gurney.

Leaving now the subject of hypnotism, the next important piece of work which I claim for my friend is the revision and large extension of our previous knowledge as to *hallucinations*. To this important, but little explored, topic he was led by a somewhat unexpected road.

I have spoken of the discovery (as I regard it) of thought-transference, or telepathy, as the determining incident which led Edmund Gurney to devote himself to what, for want of a more distinctive appellation, we have entitled Psychical Research. In the slow experimental establishment of this discovery he took a leading share. And at the same time he saw that this principle, once admitted, must have a wider than its merely experimental scope,—must be invoked as the nearest approach to an explanation of certain spontaneous phenomena, in all times loosely alleged to occur, and now confirmed by first-hand testimony which flowed in upon us in an amount far exceeding any previous harvest of that kind. If there be (and we soon became convinced that there veritably *are*) cases, too numerous for chance to explain, where an apparition or other hallucination has been truth-telling, or *veridical*,—has corresponded, that is to say, with the moment of death or crisis of the person whose aspect or voice (at a distance transcending the ordinary operation of the senses), is phantasmally discerned,—then here surely—whatever else we have—

we have at any rate a communication between mind and mind, effected through no ordinary, no recognised channel. It was plainly our business to deal with all obtainable narratives of this kind,—to show how far these phantasms could be called into court as witnesses on the side of telepathy.

But yet to attempt to introduce hallucinations of any kind whatever as sources of trustworthy knowledge—nay, as the very basis and starting-point of deductions of the highest moment—this was an adventurous, a difficult matter. Plainly there was an indispensable pre-requisite—that some one at least of those who undertook thus to treat hallucinations from so new an aspect should show that he had mastered all that could be known of them from the old, the ordinary stand-point. This task Edmund Gurney undertook.

Of his treatise on hallucinations—for it is veritably a treatise, though compressed and packed almost beyond the limits of lucidity—of his treatise on hallucinations included in *Phantasms of the Living*, it must be said, as of his essays on the psychological side of hypnotism, that it is not only the *best* discussion in our language, but actually the *only* one in our language; the only connected review of foreign work on the subject, the only serious attempt at scientific determination of the genesis of hallucinations, their concomitant phenomena, their relative frequency. Previous essays in English with a similar title had been little more than mere groups of anecdotes; they had still belonged to the pre-scientific era. Nay, there were not even any statistics available on the matter at all until Edmund Gurney took the trouble—the tedious trouble—to get census-papers filled up by over 5,000 persons taken at random, and thus to gain, though not all the information desirable, at least so much more information than anyone had possessed before him that his conclusions must serve as the point of departure for any further inquiry through this channel into the mechanism of the mind of man.

Thus far, then, I have claimed for Edmund Gurney certain psychological successes of an ordinary kind—pieces of work independent of that more advanced, more hazardous line of inquiry which leads without a serious break from telepathic experiments to the appraisal of phantasms of the living and of the dead. For my own part, however, (I need hardly say,) I look upon his work in this direction as the main achievement of his brief career. But since that work was done under conditions somewhat unusual,—conditions in which he himself took deep delight—done in consultation by a small group united both in personal friendship and in intellectual interests,—it is impossible to state with accuracy the part taken by any member of that group, however active and indispensable. It will be more to the purpose to try to define the temper of mind which Edmund Gurney

brought to this difficult task—a temper of which the three leading notes were disinterestedness, precision, sympathy.

By *disinterestedness* I mean more than that disregard for the chances of personal fame or fortune which was implied by his devoting himself unreservedly to this unpopular, this almost derided, quest. I mean an intellectual disengagement from prejudice on his own side—a readiness, in Plato's words, "to follow the argument whithersoever it leadeth"—a genuine, instinctive delight in the mere process of getting at truth, apart from any consideration of the way in which that truth might affect his own argument. In controversy he showed—if I may make a perhaps fanciful appeal to fashionable doctrines of heredity—a combination of the acumen belonging to a descendant of the late Baron Gurney's, with the chivalrous, fighting quality of the Greys, from whom on the mother's side he sprang. He delighted in the fray—delighted in acknowledging a fair stroke or rebutting a foul one; delighted in replying with easy courtesy to attacks envenomed with that *odium plus quam theologicum* which the very allusion to a ghost or the human soul seems in some philosophers to inspire.

His precision of thought again, was of course essential in an enterprise the very object of which was to import, so far as possible, the scientific spirit into a region hitherto abandoned to loose reports and chimerical fancies. But to his mind precision, thoroughness, minute attention, were not duties so much as necessities. He had, indeed, too much of these qualities for complete effectiveness in common life. His fastidious exactness was incompatible with that "breadth of style" which creates a strong popular impression. He pointed out too many difficulties ever to give the air of having arrived at an incontrovertible solution. Yet for the particular work which he was called upon to do these qualities were above all things needful. But for them, that congeries of widely-gathered evidence which, under his shaping hand, assumed corporate being as *Phantasms of the Living* would assuredly have presented many more vulnerable points to the searching criticism to which it has very rightly been subjected.

The strict canons of written and oral investigation on which Edmund Gurney—taking the lion's share of the joint work—with ever-growing scrupulousness insisted, involved, of course, an arduous and a continually increasing labour. For some three years (1883-5), his life was largely spent in letter-writing and in interviews bearing on the cases to be cited in the book. Many of these letters were on topics requiring careful handling; most of them needed to be in autograph; although, as the work went on, Mr. G. A. Smith's competent help as secretary was of essential service. But he often wrote fifty autograph letters in a day, sometimes as many as sixty—involving some eight or nine hours of close application.

These letters, again, needed to be supplemented by the still more important work of personal interviews. Almost every living witness of importance in *Phantasms of the Living* (and many persons whose names do not appear in that book) had before the book was published been personally visited by one of ourselves; and the chief, the most successful part of this delicate work was performed by Edmund Gurney. Here it was that his power of *sympathy* showed itself so rare, so indispensable. For the intimate narratives which form the bulk of *Phantasms of the Living* were not (as critics have sometimes assumed) pressed eagerly upon us by vain or imaginative informants. Rather they were for the most part won with difficulty from opposing reserve; they seldom depended upon one witness alone; and even when the principal witness understood the importance of the inquiry, and was willing to help us, there were generally subsidiary witnesses whose testimony was hard to come at. And there was perpetual need to steer between the conflicting prepossessions of two classes—the mystics (or would-be mystics), and the *savants* (or would-be *savants*), who were ready on each hand to denounce the inquirer either as weakly credulous in accepting, or as coarsely sceptical in rejecting, accounts which no narrator till now had seriously endeavoured either to invalidate or to confirm. To these problems, half social, half scientific, Edmund Gurney brought more than the mere instinct of courtesy, more than the mere lawyer-like acumen. He brought a heart touched with the sense of human fates—an eye which grew steadier as it gazed on issues of deeper import; his presence held with a gentle sway; and I believe that after all his hundreds of interviews he never left a true mystic disgusted with his hardness, or a true *savant* with his credulity.

What this power of sympathy was to his intimate friends I must leave my readers to imagine. Yet no sketch of Edmund Gurney as colleague or associate could be complete without some mention of one faculty which, though it scarcely appears in his published works, was to his friends a constant, a characteristic charm. I mean his *humour*,—a spring fed from the deepest sense of life's incongruities—an arrowy satire winged with tenderness—a laughter nigh to tears. His complex nature, with all its conflicting gifts and impulses, bloomed at its freest in this intimate, this fugitive flower. All this has perished; no trace is left, save in the memories of those for whom life has lost its rarest savour.

We work on at a task grown harder, with heavy hearts. Yet we have a fresh, a powerful motive to pursue it with what strength we may. Our friend's ultimate fame must follow the fortunes of a yet undecided adventure. It is only by pressing to ever larger issues that enterprise of which he was so bold a pioneer that we may win for him

that honour which was not what he worked for, but which we none the less account his due.

And meantime there are one or two at least for whom, as no living man was dearer than Edmund Gurney, so also few men, dead or living, have done work more vital than he. Not by emotion, but by evidence, by facts and not by rhetoric,—himself not greatly hoping,—he has helped us towards the eternal hope. He is gone; but he has already done what he could to console us. Not all in vain did his heart grieve for human woe. He beat against the bars of our earthly prison-house, and he has forced a narrow opening through which we seem to breathe immortal air.

FREDERIC W. H. MYERS.

FRENCH EXPERIMENTS ON STRATA OF PERSONALITY.¹

It is hoped that, in the form of Supplements to these *Proceedings*, some more or less continuous account may be given of work done in our own or other countries upon the subjects with which our Society is concerned. In an early number of the *Proceedings* it is proposed to give a brief conspectus of the present position of hypnotism in France. The paper which here follows is based mainly on a remarkable essay of Professor Pierre Janet's, which should be studied in the original by all who are interested in the problems of personality. I have analysed that essay in part only; and I have inserted many reflections for which Professor Janet is not responsible. For the experiments described in his article, and carried out, as it seems to me, with admirable skill, bear so closely upon certain views which I have already ventured to set forth in these *Proceedings*,—illustrate with such striking appositiveness the theory of personality which I have here repeatedly advanced,—that it was impossible for me to let them pass without hinting at other lessons even beyond those drawn by M. Janet, which his results, when carefully studied, do most significantly convey.

The heroine of the story is the same Mme. B. of whom our readers have already often heard;—a timid elderly peasant woman, the wife of a charcoal-burner near Cherbourg,—and whom at first sight one would think as unlikely a person as could well be found to extend one's idea of the capacities of the human intelligence. Yet nature has in some way fitted this ignorant woman to become the best known living exemplar of a whole series of strange psychological phenomena; and there is perhaps no one in France whose personal history is watched with so keen an interest by such a group of scientific men. Her shyness and illiteracy,—her stolid absence of curiosity and her submissive acceptance of whatever her kind physician (Dr. Gibert of Havre) in the first place, and Professors Janet and Richet in the second place, may choose to ordain,—these qualities, though rendering her in some ways less interesting as a subject, are in reality an advantage in such an inquiry,—when contrasted, for instance, with the alert intelligence of some of the habitual subjects at the Salpêtrière. She

¹ I. *Les Actes Inconscients dans le Somnambulisme.* Professor Pierre Janet, *Revue Philosophique*, March, 1888.

II. *Un Nouvel Etat Psychologique.* Professor Jules Liégeois, *Revue de l'Hypnotisme*, August, 1888.

has now been under close observation for several years ; and physiological phenomena have been noted, and tests applied, which have amply satisfied every observer, lay or medical, that in this case the hypnotic states are of a genuine character.

In this same subject, we have the best modern case of hypnotisation at a distance—as already recounted in our *Proceedings*—and also the best modern instance of hypnotic severance of personalities,—as now to be recounted—and apparently also the best modern instance of lucidity or clairvoyance, as recounted by Professor Richet, of whose experiments it is hoped that an account may appear in these *Proceedings*.

It is interesting thus to realise the inter-connection of these various supernormal phenomena. It would almost seem as though some slight modification of ordinary conditions—slight, I mean, as regards its influence on the common processes of life—were enough to give outlet to very various capacities or susceptibilities which in our ordinary existence find no opportunity of manifestation.

In these extremely complex observations there is occasion for much tact and skill in selecting some special phenomenon and tracing its development and modification under various psychological conditions. It is well to have some clue which we can hold, as we track personality to its recesses. Professor Janet's present paper is mainly concerned with the relation of unconscious actions to the somnambulant state. In other words, it contains hints for an answer to the perplexing question: Supposing that in ordinary life I perform some action involving apparent intelligence, but am not aware that I perform it, is there nevertheless within me anything which can be called a *knowledge* of that unconscious act? Is there any mode of evoking within me, by hypnotic agency, a memory which may include that unconscious act? This is the simplest form of the question, but, as will be seen, it branches out into many ramifications.

Professor Janet begins by distributing unconscious waking actions into four classes, viz., (1) Acts unconscious by reason of post-hypnotic suggestion ; (2) Acts unconscious by reason of the anæsthesia of the limb which performs them ; (3) Acts unconscious by reason of mere absence or distraction of mind ; (4) *Spontaneous* unconscious acts,—a perplexing phrase, which signifies acts initiated by a subconscious personality without the knowledge or participation of the ordinary or superficial personality.

I. Let us take first the case of acts which are rendered more or less unconscious to the waking subject by having been suggested to him when he was in the hypnotic state. Now the degrees of unconsciousness with which the subject executes the command are very various, and can only be understood in the light of the conception which we have now gained of the hypnotic self as a kind of permanent entity, persisting

and watchful within the subject after the hypnotic trance has been cleared away. When, therefore, a subject in hypnotic trance is told to perform a certain act—say to open his umbrella indoors after the trance is over—his state during the fulfilment of that command is a variable combination of the dominions of the primary and the hypnotic self. One man, for instance, will execute the suggestion consciously, will open his umbrella saying, “I like to carry my umbrella open, even indoors,”—and will suppose that if he liked he could have left the umbrella shut. In this case the invasion of the primary by the hypnotic self is very slight, and barely sufficient, sometimes insufficient, to get the suggestion fulfilled. But in other cases the hypnotic self reoccupies the domain of the primary self in a complete manner. This may happen in two ways. Sometimes the subject when executing the suggestion falls back into the hypnotic trance. This is a condition which has led some observers, as Professor Delbœuf, to maintain that the subject is always virtually asleep until the suggestion has been executed, although he may seem to have been fully awakened from the trance. But there is yet another mode in which the hypnotic self controls the primary to the performance of the suggested acts. Sometimes it simply causes the primary self to perform the act unconsciously. To take the trifling instance which I have given above, the man will open his umbrella and continue talking on other matters and quite unaware that he has opened it. We may call this, I think, the most advanced instance of the dominion of the hypnotic self, exercised in the waking state. For it thus accomplishes what seems to be its *object*, the fulfilment of the suggestion, without the needless accompaniment of a renewal of the trance. It has got the brain so well under its control that it can set going the machinery needed for its desired act without stopping or interfering with the machinery which carries on the common business of life.

It is with the relation of these selves to each other that we are at present mainly concerned, and I may begin with a trivial incident, containing nothing new to students of hypnotism, but well illustrating the concurrent action of the primary and the hypnotic personality,—the hidden criticism which the subjacent self seems to be ever exercising upon the words and actions which our primary selves fondly suppose to be the full expression of what we are.

In these researches Mme. B. in her every-day condition is known by the name of Léonie. In the hypnotic trance she has chosen for herself the name of Léontine, which thus represents her secondary personality. Behind these two, this triple personality is completed by a mysterious Léonore,—of whom we shall hereafter have much to say, but who may for the present be taken as non-existent. Well then, a post-hypnotic suggestion was given to Léontine, that is to

say, Léonie was hypnotised and straightway became Léontine, and Léontine was told by Professor Janet that after the trance was over and Léonie had resumed her ordinary life, she, Léontine, was to take off her apron—the joint apron of Léonie and Léontine—and then to tie it on again. The trance was stopped, Léonie was awakened, and conducted Professor Janet to the door, talking with her usual respectful gravity on ordinary topics. Meantime her hands—the joint hands of Léonie and Léontine—untied her apron—the joint apron—and took it off. Professor Janet called Léonie's attention to the loosened apron. "Why, my apron is coming off!" Léonie exclaimed, and with full consciousness and intention she tied it on again. She then continued to talk, and for her—for Léonie—the incident was over. The apron, she supposed, had somehow come untied, and she had retied it. This, however, was not enough for Léontine. At Léontine's prompting, the joint hands again began their work, and the apron was taken off again and again replaced, this time without Léonie's attention having been directed to the matter at all.

Next day Professor Richet hypnotised Léonie again, and presently Léontine, as usual, assumed control of the joint personality. "Well," she said, "I did what you told me yesterday! How stupid the other one looked"—Léontine always calls Léonie "the other one"—"while I took her apron off! Why did you tell her that her apron was falling off? I was obliged to begin the job over again."

This trifling incident well illustrates the important point which M. Janet in France and Mr. Gurney in England have largely helped to establish,—namely, the persistence of the hypnotic self, as a remembering and reasoning entity, during the reign of the primary self. When a post-hypnotic suggestion works itself out during the waking state which follows the hypnotic trance, we seem at first to see a mere isolated idea which has been implanted in the mind proceeding to fructify; or it is as though we had set the mental clockwork to release an alarm at a given hour. The suggested idea fulfils itself, in isolation, more or less complete, from the stream of normal memory; and there, it seems, is an end of it. And this is, no doubt, the safest way in which to regard the trivial experimental suggestions with which any hypnotic subject must needs begin. But if we proceed, and especially if we give suggestions which are to be fulfilled at a date still remote, we begin to find that what goes on can hardly be described as the mere automatic self-realisation of the hypnotically-suggested idea. There must be something like an effort to keep the idea alive,—to jog the hypnotic memory—to mark off the number of days which still remain before the accomplishment of the suggestions falls due. In some of Mr. Gurney's cases we get this jogging of memory in the simplest form. It appears as a kind of self-suggestion repeating and enforcing the original hypnotic suggestion,

but without modifying it in any way. And so long as there is no *modification*, we may still say that these self-reminders are a part of the original suggestion. If I set the great clock of Strasburg to show the new moon when the new moon is due—say at six p.m. ten days hence—then at six p.m. during each intervening day, there is, or may be, some little self-adjustment of the clockwork, which carries on the notification to the next evening, and marks off another of the intervening days. But we do not on this account think it necessary to credit the clock with a watchful personality, which remembers the suggestion to strike and counts the hours till the time comes to do it.

But compare the apron case which we have just cited. Here the hypnotic self begins the suggested act, but the primary self intervenes and completes it. The hypnotic self, however, is not satisfied with this, and begins to act again and completes the act itself. Here, surely, we have got beyond anything like mechanism, and into something like instinct. Léontine, refusing to acquiesce in the apron-tying of Léonie as an adequate fulfilment of her own impulse to tie it, resembles the insect which must needs bore its hole or build its nest in its own way, and will not make use of any assistance offered to it. Léontine's *act*, I say, resembles the instinctive act of the insect; but her recital of her act, her comment on Léonie's perplexed discomfiture when the apron fell off without apparent cause, these already indicate something more even than instinct at work. We see in them a parallel rather to the mental operations of the *child*,—the unquestioning acceptance of the act ordered, however meaningless, and at the same time the power of seeing the absurdity of the intrusion of that act into ordinary waking life.

Observe, moreover, that if we wish the hypnotic self to cease doing something which it has been told to do, but which has now become inconvenient, we must give our reversing order to that self directly, or no notice is taken of any remonstrance or appeal. Like Casabianca on the burning deck, the hypnotic self will go on obeying the order once given until it is cancelled by the same voice with equal authority. For instance, M. Janet told N., an entranced subject, that she was to say her prayers as soon as she awoke from her trance. In this case the suggestion was able to influence the ceremonial act, but not the conscious intention. N. was awakened, and showed no real disposition to pray. But her hands clasped themselves together, without her consciousness,—the hypnotic self doing, so to say, what it could to pray in spite of her. After a time one of the bystanders, and then M. Janet himself, tried to unclasp her hands, but they were unable to do so. She then perceived that her hands were clasped, tried in vain to unclasp them, and became greatly alarmed. The muscles continued in strong

contracture and she could do nothing with them. Professor Janet was obliged to re-entrance her, and then a word or touch of command was enough.

Observe, however, that a collision of this kind can generally be easily guarded against. The operator has only to add, in giving the suggestion, "You are to do this until I tell you to cease doing it, and even after the primary self has been awakened you are to continue on the alert for any command of mine." It would probably in all cases be easy to educate the hypnotic self up to this point of common-sense.

I am assuming of course that there is no *antagonism* to be overcome,—that the hypnotic self is merely anxious to obey the operator, so soon as it recognises an authentic command. I do not say that it is impossible that the hypnotic self should take the bit, so to say, between its teeth, and defy the operator and the primary self alike. What might happen in such a case we can at present only conjecture.

There is another point with regard to this contracture of the hands in the attitude of prayer which deserves careful attention.

A contracture, or persistent contraction of a limb, may be of three main kinds—(1) All the muscles may be contracted to their utmost capacity. The attitude which the limb assumes in such a case is invariable; being the resultant of the several opposing muscular forces at work. Such a condition is rarely obtained in a perfect form, as the nervous energy is rarely equally distributed, but it may, perhaps, be seen sometimes in tetanus. (2) Or the contraction may be confined to a single muscle, or more commonly to a single group of muscles whose nervous supplies are intimately associated together by long habit. Without going further into details, we may say that contractures of these two classes are *anatomically defined*,—that their limits correspond to nerve-provinces, and that they are thus distinctly referable to some organic lesion.

(3) But there is a third class of contractures sometimes seen in hysterical cases, where the distribution of the contracture does not correspond with the results which ought to follow from any known organic lesion.¹ That is to say that certain muscles innervated by different nerves may be contracted in different degrees, in such a manner as to keep the limb in a rigid attitude, simulating a special act or emotion, as menace, supplication, &c. In these cases, as in certain troubles of speaking and writing (aphasia, agraphy), the area of trouble corresponds to a complex idea, which works itself out in a group of associated movements. And these contractures, consequent on hypnotic suggestion, while affording an excellent means of studying such coordinations of movements, throw light also (as M. Janet remarks) on

¹ See Charcot's *Leçons sur les Maladies Nerveuses*, Leçons xx., xxi., xxv.

the cause and treatment of certain complex contractures which occasionally arise in hysterical or insane subjects. Professor Janet himself effected a very singular cure of a trouble of this kind. A woman quarrelled with her husband, and raised her arm to strike him. "As if by a punishment from heaven the right arm remained contracted in the attitude of a menaced blow." This contracture lasted for three days, and she consulted Dr. Gibert, who showed the case to Professor Janet. She refused to be hypnotised; but, as it turned out, no actual hypnotisation was necessary. A single command given to her by Professor Janet in the waking state caused the contracture first to oscillate between the right and left arm, and then to disappear altogether. Thus the contracture, the forced and permanent attitude which the limb had assumed under a strong psychical stimulus, in the access of rage, was abolished by another psychical stimulus,—the command confidently uttered by an operator in whose power this susceptible subject probably already believed.

This hysterical delimitation of a fantastic area of injury is observable also in anæsthesiæ and dysæsthesiæ, and seems precisely parallel to the results of hypnotic suggestion.

I will mention yet one more experiment to illustrate the partition of powers between the normal and the hypnotic selves. It shows what may happen when the two controls are pretty equally balanced, and the kind of deadlock which may result. The subject N. was once more ordered in the trance to *pray* after being awakened. Her hands accordingly drew together to execute the command, but this time the order had not taken such a strong hold as usual, and the hands were easily separated, and the effect of the suggestion seemed to be at an end. And now the waking and conscious N. was requested to put her hands in the attitude of prayer. She tried to do so, but she found that it was impossible. She could only clench her fists, or interlock her fingers; she could not remember how to hold her hands with palm pressed to palm. That position had for the time been appropriated by the hypnotic self, and although the hypnotic self had not power to maintain the position, it still retained control (so to say) over the brain-cells which governed the position; so that the normal self was left in a state something like that of the aphasic patient who knows quite well what he wants to say but cannot control his vocal organs to utter the sound. And similarly with the same subject, if an order were given to the hypnotic self to write down the even numbers, the normal self was only able to write down the odd numbers. In like manner, in the troubles of verbal memory, we come upon cases where definite individual words cannot be recollected. And thus the experimental cases confirm the lessons already drawn from the morbid cases, and indicate that each several word or number must in some sense

correspond to a separate nervous process, *isolable* from all other processes, however closely some of them may resemble it.

Let us now pass on to consider the second class of unconscious acts, viz.,

II. *Acts unconscious by reason of the anæsthesia of the limb which performs them.* And here let us consider whether some part of the process thus far described is capable of *reversal*. We have seen that by suggesting an unconscious action we can sometimes induce a partial or systematised anæsthesia, an unconsciousness on the subject's part which extends to the suggested act, and to that act only. Now supposing that anæsthesia already exists, as the result of nervous malady, can we induce an unconscious action without the aid of hypnotism? With some subjects this can in fact be done. Let us take the case of an arm which has no sensation. Place a screen between the subject's eyes and his arm;—(this is better than closing his eyes, which may to some extent hypnotise him),—and raise the insensible arm in the air. It will remain in that position for a long time,—sometimes for more than an hour,—thus showing (just as the rigidity consequent on hypnotic suggestion also shows) that our failure under ordinary circumstances to keep the arm extended for more than a few minutes is due to nervous and not to muscular exhaustion. Moreover, if we communicate some movement to this insensible arm it will repeat the movement many times; even continuing to write a sentence which has been suggested to it.

Mme. B. is completely anæsthetic on the left side. Professor Janet put an opera-glass into her left hand, a screen being interposed between hand and face, so that Mme. B. could not tell what had been done. But the left hand opened the glass and raised it towards the face, thus bringing it into Mme. B.'s visual field. Mme. B. exclaimed with astonishment, "Why, it is an opera-glass that I have in my left hand." We thus see that the unconscious self which controlled the anæsthetic hand controlled also a certain amount of intelligence. The hand was made to execute the complex movement which the touch of the opera-glass suggested. Thus although Mme. B. (Léonie) could not feel what was happening to that arm and hand, someone or something must have felt the touch; some nervous centres must have responded which were capable of executing much more than an ordinary reflex movement, centres which had at their command the experience of life, even the experience of writing a sentence, which in Mme. B.'s case is an accomplishment quite recently acquired.

Once more. The self, or whatever we call it, which dominates the anæsthetic limb, is capable of exerting a choice, or recognising a distinction between various operators, as decidedly as the normal self can do so. Thus if M. Janet (out of sight of Mme. B.) extends her anæsthetic arm in the air, he finds that he can himself easily move it in any

direction, but that others cannot do this. A friend tried to move it, but failed; or if he pushed it forcibly out of its position it recoiled into position again. Thus, whatever the *electivity* between different operators, the obedience to one rather than to another, may mean, the anæsthetic self exercises this electivity, or power of choice, as discriminatingly as the normal self.

Experiments like these, with anæsthetic limbs, ought to be repeated as often as possible. Thus far they seem to show that there is a close analogy between the psychical conditions governing the anæsthetic limb and the psychical conditions governing the subject when in the state of hypnotic trance. We shall next reach an analogous conclusion by a still more curious train of experiments.

III. Let us now deal with acts rendered unconscious by distraction of mind. This class of actions, of course, is no longer the sign of any kind of abnormality, but is common to the whole human race. There is no one who does not many times a day perform some trifling action, which, nevertheless, is not a reflex action, but needs, or has once needed, something of intelligent consideration. It may be remembered that in introducing the subject of automatic writing I pointed out that the first indication of writing not immediately governed by the waking intelligence was to be found in the words often unconsciously scrawled on examination-papers, &c., by persons whose mind was concentrated on some train of argument. Such unconscious *writing* is, of course, only one variety (though the most interesting variety) of the unconscious *gestures* or *actions* with which we have now to deal. And the study of these unconscious actions brings out in a curious way their analogy to the acts of the hypnotic self. Just as our scattered dreams may consolidate, so to say, into successive periods of somnambulism, connected by a chain of memory, so also our acts of distraction in waking hours may be educed and fostered in such a way as to become a more or less continuous manifestation of an underlying personality. M. Janet's good fortune in finding "subjects," and skill in using them, has afforded a curious instance of what may be done by mere suggestion in the waking state,—suggestion not loud and dominant, but insinuated so gently that the acts which follow upon it never obtrude themselves upon the subject's attention, which continues occupied in some other way.

P., a man of 40, was received into the hospital at Havre for *delirium tremens*. He improved, and became quite rational during the day time, though still delirious at night. The hospital doctor observed that he was highly *suggestible*, and invited Professor Janet, whose words I now quote:—"While the doctor was talking to him [on a subject which interested him] I placed myself behind him and told him to raise his arm. On the first trial I had to touch his arm in order to

provoke the desired act, afterwards his unconscious obedience followed my order without difficulty. I made him walk, sit down, kneel,—all without knowing it. I even told him to lie down on his stomach, and he fell down at once, but his head still raised itself to answer the doctor's questions. The doctor asked him, 'In what position are you while I am talking to you?' 'Why, I am standing by my bed, I am not moving.' 'Don't you see how small you have become?' 'I am shorter than you are, but I am not shorter than usual.' I could scarcely believe that a man awake and in possession of his faculties (for there was no delirium), could imagine that he was standing up when he was really lying on his stomach on the ground. But in fact a kind of hallucination united with the 'systematised anæsthesia' in producing this strange state of things." This subject was never hypnotised at all, and the sensibility to suggestion seems to have been the mere temporary result of the state of alcoholism. It would appear, indeed, that any relaxation of mental unity, any slackening of the centralising energy which, so to say, keeps a man's personality together, may afford opportunity for the setting up of a secondary series of actions, not included in the primary consciousness. The man recovering from *delirium tremens* was suggestible in much the same manner as a healthy man in a hypnotic trance, or in an ordinary doze or dream.

And here I shall for the time desert M. Janet, in order to relate a recent experiment of Professor Liégeois, of Nancy. Professor Liégeois seems not to have seen Professor Janet's article, and discusses the phenomena from a different point of view.¹ It is the more interesting therefore, to note their complete concordance with Professor Janet's results.

My readers are probably aware that it is a common experiment to say to an entranced subject, say Camille, "When you wake, Professor Liégeois [or any given person present] will have left the room;—he will be no longer present, you will not hear him or see him." Camille wakes, and experiences what the school of Nancy term a "negative hallucination." She no longer perceives Professor Liégeois, though in all other ways she is apparently perfectly normal. Now in the experiment to be recounted Professor Liégeois, thus banished by suggestion from the purview of the apparently waking Camille, succeeds in getting stealthily back into communication with some consciousness of Camille's, but not with that same consciousness from which he has been expressly banished. I abbreviate Professor Liégeois' account of one of these cases.

¹ The article in the *Revue de l'Hypnotisme* is taken, we are told, from a forthcoming book of Prof. Liégeois' on *Suggestion and Somnambulism, in their Connection with Jurisprudence and Legal Medicine.*

“M. Liébeault entranced Camille, and, at my request, suggested to her that she would neither see nor hear me any longer. Awakened, the subject is *en rapport* with everyone else ; I alone exist for her no longer ; but, as I shall show, this is not strictly true ; there are in her, as it were, two personalities, one of which sees me, while the other does not see me, and hears me, while the other pays no attention to my words.

“I began by satisfying myself as to the state of her sensibility ; oddly enough she was still sensitive to pain inflicted by other persons present, but not by me ; if they pricked her she quickly withdrew her arm ; if I pricked her she felt nothing ; even if I left a pin sticking in her she neither felt nor saw it. [Professor Liégeois supposes this elective anæsthesia to be a quite novel phenomenon ; but it is surely only an extension of the difficulty which the subject of a negative hallucination habitually has in perceiving any manifestation of the personage temporarily abolished. The degree of the difficulty varies in different cases, and no doubt in the present case the negative hallucination was very complete.] Having found that a direct appeal from me produced no reply, I proceeded as *impersonally* as possible ; speaking, not in my own name, but as though I were an inward voice of the subject's own, expressing thoughts which emanated from her own mind. I said, ‘Camille is thirsty ; she will go to the kitchen and ask for a glass of water, which she will place on this table.’ She seemed to have heard nothing, and yet after a few moments she executed the prescribed action, with the quick impetuous movements often observed in the somnambulist state. She was asked why she had brought the glass and put it on the table ; she could not understand what was meant ; ‘she had not moved ; there was no glass on the table.’ Similarly she uttered whatever words I suggested to her, and immediately afterwards was unaware of having uttered them. At the same time, when M. Liébeault addressed me she was astonished, and thought that he was talking to the wall. Wishing to assure myself that she did actually see me, though not conscious of doing so, I said, ‘Camille will take from the pocket of M. Liégeois a bottle which contains eau de Cologne ; she will uncork it and smell the delicious scent.’ She got up, came straight to me, found in my pocket a bottle of ammonia, uncorked it and smelt the odour with delight.’

I need not prolong the account of the experiment. Its point is plain. While Camille was under the spell of the negative hallucination,—while, so far as her conscious self was concerned, she could not discern Professor Liégeois' presence,—Professor Liégeois, speaking impersonally but authoritatively, succeeded in gaining control over some unconscious stratum in Camille, and in prompting acts of which the active, speaking Camille continued unaware even while she executed them.

“It has been believed till now,” adds Professor Liégeois, speaking perhaps in somewhat too general terms, “that the negative hallucination completely annulled the visual or auditory sensations, preventing their being perceived by the brain. Well, we believe that this is an error ; there is visual, there is auditory perception ; these perceptions do not

reach the conscious ego, but they realise themselves in the unconscious ego; and the person banished by the negative hallucination can enter into communication with the subject, from whose eyes it was believed that he had entirely disappeared."

It will be seen how closely concordant is all this with Professor Janet's results. I forbear to insist here on another point which Professor Liégeois' experiment with the ammonia suggests,—namely, that if we assume, as is on other grounds probable, that no sensation of Camille's can have been misinterpreted by the whole of her personality, there was probably a self profounder still which recognised, both that M. Liégeois was in the room all the time, and that the flask contained ammonia, and not eau de Cologne. But this point may recur to the reader's mind at a later stage of Professor Janet's experiments, —to which experiments we must now return.

Thus far we have dealt with a secondary personality summoned into being, so to say, by our own experiments, and taking its orders entirely from us. It seems, however, that, when once set up, this new personality can occasionally assume the initiative and can say what it wants to say without any prompting. This is curiously illustrated by what may be termed a conjoint epistle addressed to Professor Janet by Mme. B., and her secondary personality, Léontine. "She had left Havre more than two months when I received from her a very curious letter. On the first page was a short note, written in a serious and respectful style.—She was unwell, she said,—worse on some days than on others,—and she signed her true name, Mme. B. But over the page began another letter in a quite different style, and which I may quote as a curiosity. 'My dear good-sir, I must tell you that B. really really makes me suffer very much; she cannot sleep, she spits blood, she hurts me; I am going to demolish her, she bores me, I am ill also, this is from your devoted Léontine.' When Mme. B. returned to Havre I naturally questioned her about this singular missive. She remembered the *first* letter very distinctly . . . but had not the slightest recollection of the *second*. . . . I at first thought that there must have been an attack of spontaneous somnambulism between the moment when she finished the first letter and the moment when she closed the envelope. . . . But afterwards these unconscious, spontaneous letters became common, and I was better able to study their mode of production. I was fortunately able to watch Mme. B. on one occasion while she went through this curious performance. She was seated at a table, and held in her left hand the piece of knitting at which she had been working. Her face was calm, her eyes looked into space with a certain fixity, but she was not cataleptic, for she was humming a rustic air; her right hand wrote quickly and as it were surreptitiously.—I removed the paper without her noticing me and then

spoke to her; she turned round, wide awake, but surprised to see me, for in her state of distraction she had not noticed my approach. Of the letter which she was writing she knew nothing whatever."

Léontine's independent action is not entirely confined to writing letters. She observed (apparently) that when her primary self, Léonie, discovered these letters, she (Léonie) tore them up. So Léontine hit on the plan of placing them in a photographic album into which Léonie could not look without falling into catalepsy (on account of an association of ideas with Dr. Gibert, whose portrait had been in the album). In order to accomplish an act like this Léontine has to wait for a moment when Léonie is distracted, or, as we say, absent-minded. If she can catch her in this state Léontine can direct Léonie's walks, for instance, or make her start on a railway journey without luggage, in order to get to Havre as quickly as possible.

It will be observed that Léontine has now arrived at a point midway between the mere *stages*—which cannot be called *personalities*—through which Mr. Gurney's hypnotic subjects could be led backwards and forwards at pleasure,—and, on the other hand, the fully developed alternating personalities of such a case as Félicité X. If Léontine were habitually encouraged,—if a large part of Mme. B.'s life were passed in that hypnotic stage in which Léontine holds unchecked dominion,—we must suppose that Léontine would acquire more and more power of intervening in Mme. B.'s waking state—her Léonie state—also; until perhaps the relapses from Léontine into Léonie,—from the secondary into the primary personality,—might become as brief and rare as they have become in the often-cited case of Félicité X. And thus the whole personage might undergo profound alteration by gradual steps leading on from what was at first a mere momentary experiment.

V. We have thus very briefly traced the analogy between four classes of unconscious or automatic actions,—actions not forming a part of the primary chain of memories. We have considered the automatic actions which are the result of hypnotic suggestion; and those which accompany local anæsthesiæ; and those which occur during mental distraction (or negative hallucination); and those which present themselves spontaneously,—which make an irruption into normal life as though for some definite purpose, to fulfil the wishes of some sub-conscious personality. I think that Professor Janet's comparison of these various forms of automatic action is highly instructive, and I observe with interest that they have led him to a view of the essence of the hypnotic state which resembles the old view of Deleuze, and comes nearer than anyone else's that I can quote to the view which I have myself several times endeavoured to express, but which has hitherto attracted little notice.

"I shall be tempted," says M. Janet (p. 258), "to say with Deleuze that the forgetfulness of all that has passed during the somnambulant state is the principal psychological character of somnambulism. This is its only constant character." Now it is perhaps too much to say that any character of the hypnotic trance is absolutely constant in all cases. But it seems to me most important that this *formation of a secondary chain of memory* should be insisted on as a fundamental point, rather than the *susceptibility to suggestion* which recent savants have more usually singled out, or the transmission of a specific effluence on which most of the early mesmerists insisted. I do not, of course, deny the suggestibility, and I continue to believe in something like the specific effluence, now so generally discredited, but which Mr. Gurney's experiments seem to me to confirm. But neither of these characteristics, I think, goes so deep as the division of *memory*. There is nothing else which shows us so instructively the true relation of hypnotism to other states.

And here I may repeat my own contention,¹ which is briefly this:—

I hold that hypnotism (itself a word covering a vast variety of different states) may be regarded as constituting one special case which falls under a far wider category,—the category, namely, of *developments of a secondary personality*. I hold that we each of us contain the potentialities of many different arrangements of the elements of our personality, each arrangement being distinguishable from the rest by differences in the chain of memories which pertains to it. The arrangement with which we habitually identify ourselves,—what we call the normal or primary self,—consists, in my view, of elements selected for us in the struggle for existence with special reference to the maintenance of ordinary physical needs, and is not necessarily superior in any other respect to the latent personalities which lie alongside it,—the fresh combinations of our personal elements which may be evoked, by accident or design, in a variety to which we can at present assign no limit. I consider that dreams, with natural somnambulism, automatic writing, with so-called mediumistic trance, as well as certain intoxications, epilepsies, hysterias, and recurrent insanities, afford examples of the development of what I have called secondary mnemonic chains,—fresh personalities, more or less complete, alongside the normal state. And I would add that hypnotism is only the name given to a group of empirical methods of inducing these fresh personalities,—of shifting the centres of maximum energy, and starting a new mnemonic chain.

And observe that this is no mere matter of verbal definition; it involves in the first place a principle of classification, and in the second place a novel criterion for the discussions so frequently raised

¹ See *Proceedings S. P. R.*, Vol. IV., pp. 163-6, 224-232, 503-5.

as to the *consciousness* or *unconsciousness* of any given act. In the first place, the classification of hypnotic stages must not be determined, as the Salpêtrière school determine it, by somatic indications alone,—by states of the muscles or of the reflexes. The true, the central indication of a change of hypnotic state will be a change of the scope of memory.

And conversely every somatic change—even the stiffening of a limb during apparently normal waking life—will on this view bear some relation to the change of memory. Thus suppose that my arm is rendered anæsthetic by hypnotic suggestion, and is then pricked without my seeing it, I shall be unconscious of the pricks. My normal self, that is to say, will be unconscious of them, and on the ordinary view my *whole* self will be unconscious of them. But in the view which I am now advocating I shall consider it as practically certain *à priori* that some phase of personality of mine must have been conscious of the pricks, and must have registered them on some latent mnemonic chain. Thus, in a word, nothing which my organism does or suffers is unconscious, but the consciousness of any given act or endurance may form a part of a chain of memories which never happens to obtrude itself into my waking life.

The subject needs as much illustration as possible ; and here I will give two examples of the mode in which a transition from one form of incipient secondary personality to another may be effected. Both are taken from Professor Janet. The first shows the transition from acts of distraction to the hypnotic state ; the second shows the transition from the hypnotic state to an independent alternative personality, sharing in the concerns of ordinary active life.

First I quote the words in which M. Janet describes how by merely educing and fostering acts of distraction the hypnotic state was ultimately induced ;—as though it were the hypnotic self which performed the acts of distraction, and when these acts became numerous and complex the hypnotic self was obliged to assume full control of the personality in order to fulfil its task.

“ M. Binet had been kind enough to show me one of the subjects on whom he was in the habit of studying acts rendered unconscious by anæsthesia, and I had asked his permission to produce on this subject the phenomenon of *suggestion by distraction*. Everything took place just as I expected. The subject (Hab.), fully awake, talked to M. Binet. Placing myself behind her I caused her to move her hand unconsciously, to write a few words, to answer my questions by signs, &c. Suddenly Hab. ceased to speak to M. Binet, and, turning towards me, continued correctly by the *voice* the conversation which she had begun with me by *unconscious signs*. On the other hand, she no longer spoke to M. Binet, and could no longer hear him speak ; in a

word, she had fallen into elective somnambulism. It was necessary to wake her up; and when awakened she had naturally forgotten everything. Now Hab. had no previous knowledge of me at all; it was not, therefore, my presence which had sent her to sleep. The sleep was therefore in this case manifestly the result of the development of *unconscious actions*, which had invaded, and finally effaced, the normal consciousness. This explanation, indeed, is easily verified. My subject, Mme. B., remains wide awake in my neighbourhood so long as I do not provoke unconscious phenomena; but when the unconscious phenomena become too numerous and too complicated, she goes to sleep. We may similarly explain a peculiarity in the execution of the post-hypnotic suggestions. So long as these are simple, the subject executes them unconsciously while she talks of something else. But when they are long and complicated, the subject talks less and less while she executes them, ends by going to sleep, and executes them rapidly in the somnambulant state." M. Janet goes on to suggest (as had already been suggested *Proceedings S. P. R.*, Vol. IV., pp. 235, 254, &c.), that the trance which often comes upon the "writing medium" in the middle of the séance is a phenomenon of this same kind. When the tension of the automatic script which the "medium" is producing becomes too great, the normal self sinks for the time being below the level of consciousness, and the secondary self, from which the writing proceeds, becomes dominant in its turn.

It must be observed that this explanation of that very singular phenomenon—the trance of the automatist—is a new one, and by no means identical with the phrase commonly used by Spiritualists, who say that the writing medium is "mesmerised by the controlling spirit." In putting forward this new explanation, which refers the trance to a mere change of cerebral equilibrium—a mere shifting of the psychical centre of energy within the personality of the automatist himself,—I do not mean to deny the possibility that some influence external to the writer's may at times be operative. On the contrary, if Mrs. Newnham, for example, (when writing automatically answers to questions put by Mr. Newnham, but unseen by her), had fallen into a trance when overtaxed (instead of merely feeling headache and exhaustion), this might certainly have been classed as a kind of mesmerisation by an influence coming primarily from outside the automatist's personality, though exercised—not by external "passes" or words or looks—but as it were from a base of operations within the automatist herself. And if there be any intelligences, other than those of living men, which can in any way act upon us, then assuredly this mode of action would for them also be in accordance with analogy;—namely, to influence the subject to write, and occasionally to send him to sleep,—to submerge his

normal personality,—when their controlling influence reached a certain degree of intensity. But it is in ordinary cases quite unnecessary to assume any external influence at all. Unless the *matter* of the written message be provably such as the writer's mind, in a state of exalted dream, could not have originated, we cannot possibly assume, in the face of all these hypnotic analogies, that the mere fact that the writing comes automatically,—appears to him as external to his normal consciousness,—in any way proves that it has in truth originated outside himself.

And next as to the transition from the hypnotic trance to an independent secondary personality. M. Janet justly remarks,—and here he is following, probably without ever having seen the *Zoist*, the observations which Elliotson made long ago,—how very different, in different cases, is the *amount of personality* which the hypnotised subject is able to manifest. For it must be observed that the hypnotic self by no means closely follows the characteristics of the waking self. A person who is lively and clever in common life may make a dull and torpid hypnotic subject; and on the other hand a person who in common life is shy or stupid may develop, when hypnotised, a surprising boldness and vivacity. This was eminently the case with Dr. Elliotson's patients, the Okeys. "I used first to send them to sleep," he says (*Zoist*, Vol. III., p. 58); "on their opening their eyes, and becoming active again, they were in a wild, merry, and mad state, most waggish, and full of ungovernable fun, caring for nobody." This fact, like many other points which are now matter of daily observation, roused suspicion as to the genuineness of Dr. Elliotson's phenomena. It is to be wished that those who scoffed at the Okeys could have seen Professor Janet's undeniably genuine subject Mme. B., whose hypnotic character (as I have myself seen) undergoes an even grotesque change of the same kind. "This poor peasant," says Professor Janet, "is in her normal state a serious and somewhat melancholy woman, calm and slow, very gentle and extremely timid. No one would suspect the existence of the personage whom she includes within her. Hardly is she entranced when she is metamorphosed; her face is no longer the same; her eyes indeed remain closed, but the acuteness of her other senses compensates for the absence of sight. She becomes gay, noisy, and restless to an insupportable degree; she continues goodnatured, but she has acquired a singular tendency to irony and bitter jests. . . . In this state she does not recognise her identity with her waking self. 'That good woman is not I,' she says, 'she is too stupid!'"

Once more. We have seen that Léontine (Mme. B.'s hypnotic self) carries to a high point the difference of *character* which is in different degrees observable in the majority of similar cases. But Léontine is

in another way also a remarkable hypnotic personality. Mme. B. has been so often hypnotised, and during so many years, (for she was hypnotised by other physicians as long ago as 1860), that Léontine has by this time acquired a very considerable stock of memories which Mme. B. does not share. Léontine therefore counts, as properly belonging to her own history and not to Mme. B.'s, all the events which have taken place while Mme. B.'s normal self was hypnotised into unconsciousness. It was not always easy at first to understand this partition of past experiences.

"Mme. B., in the normal state," says Professor Janet, "has a husband and children. Léontine, speaking in the somnambulic trance, attributes the husband to 'the other' (Mme. B.), but attributes the children to herself. . . . At last I learnt that her former mesmerisers,—as bold in their practice as certain hypnotisers of to-day,—had induced somnambulism at the time of her *accouchements*; Léontine, therefore, was quite right in attributing the children to herself; the rule of partition was unbroken, and the somnambulism was characterised by a duplication of the subject's existence." There surely could hardly be a more striking illustration of the remark made (*Proceedings*, Vol. III., p. 225) that "when once a second mnemonic chain is woven, the emergence of a second personality is only a matter of degree."

Hypnotise a man once; go through a few experiments, and wake him up. The memory of what has been done will (in ordinary cases) have passed away, and you may plausibly maintain that he was not conscious during the trance. Hypnotise him again and you find that he recollects what happened in the first trance;—that there is now a little scrap of memory in which his waking self has no share. But it would be absurd to dignify these fragmentary interludes with the name of a secondary personality. Repeat the process, however, many hundred times, and at last the time spent in the hypnotic trance, the experience gained therein, will become comparable with the time spent in normal existence, and the experience gained in the common routine of life. And if, as in Mme. B.'s case, the faculties are quickened in the hypnotic trance, we shall have a secondary personality like Léontine,—less capable, probably, than the primary personality of managing the practical business of life, but yet claiming with plausibility a kind of intellectual leadership in the joint concern.

And here, I repeat, the induced somnambulism of the hypnotic trance is precisely paralleled by the spontaneous somnambulism, which, as we know, sometimes appears in the first instance as little more than an occasional vivid dream, but may develop by repetition into a nearly complete scission of personality, with perhaps (as in Félicité X.'s case)

an ultimate triumph of the new or somnambulant personality over the old or normal one.

Thus far, then, we have been tracing various ways in which a hypnotic or secondary self may be discovered or developed, without asking further whether or no that new personality is itself to be accepted as a permanent or homogeneous thing. Of course we have no right to make any such assumption about it. On the contrary, when once our habitual centre of personality has been displaced, we seem to be in a position of unstable equilibrium, and readily susceptible of further psychical displacement.

So soon, therefore, as we have developed a secondary personality in our subject, we ought to try whether this personality in its turn can be split into two parts, or rather whether it affords faults or interruptions through which some underlying stratum can now be discerned. Now Mr. Gurney has shown that even in the most ordinary hypnotic trance of healthy persons two stages can in many cases be evoked, a lighter and a deeper stage, each with a separate chain of memory; although, as might have been expected, considering the very slight difference between the two stages, these separate chains of memory tend ultimately to coalesce into one. And these experiments of Mr. Gurney's gain additional importance from the fact that, with exceptional, hysterical subjects, Professor Janet has been able to carry this fragmentation of the hypnotic state, as we shall see, to a surprising point. For it is by small experiments with average subjects that we can best assure ourselves that the advanced experiments with exceptional subjects present us not with a mere anomaly but rather with salient examples of a general law.

Let us see, then, if we can use the clue which the observation of *unconscious actions* affords us to penetrate yet deeper into the strata of human personality. And one of the first questions which must be met,—it is M. Janet who has formulated it distinctly,—is this: Do the acts of distraction performed in waking life form part of the somnambulant chain of memory? Do the strata (as I may say) lie superposed in this regular fashion, so that the acts of distraction of one stratum form part of the conscious acts of the stratum immediately below it? If I divert the attention of a waking friend so that he scribbles some word without being aware of what he is doing, will he, if hypnotised, remember the scribbled word?

This is a question which experiment alone can solve; and it is probable that in different cases we shall have different results. In the first place, all those acts of distraction which, though performed in the waking state, have special reference to an already-evoked hypnotic personality, are likely to be remembered in the hypnotic state. Thus Léontine, as we have seen, remembers Léonie's acts of distraction, so

far as those were prompted by Léontine herself,—she remembers, for instance, the Léontinian postscripts to Léonie's letters. But these postscripts, though M. Janet here cites them as *spontaneous* acts of distraction, were not spontaneous in the sense in which the word scribbled on an examination-paper is spontaneous. They were prompted by a personality which we know to be readily evocable, and which we naturally imagine as lying near the surface even in its periods of latency. And, on the other hand, I do not see that we have yet any definite proof that acts of distraction in no way connected with hypnotism are ever recollected in the hypnotic state. They may be so; and, looking to the great variety of these phenomena, I should suppose that they sometimes are so. But the question is not to be settled in this simple way. Sometimes, at any rate, the waking person's acts of distraction are *not* included in his hypnotic memory; and we have then to look for some memory in which they *are* included.

"Certain somnambules," says M. Janet, "as L., hardly ever recover in somnambulism the memory of their unconscious acts; others remember only a portion of them. Léontine" (who, it must always be remembered, is simply the hypnotic personality of Mme. B.) "remembers perfectly Mme. B.'s unconscious acts when these are spontaneous," (*i.e.*, initiated by Léontine herself) "or due to post-hypnotic suggestion; but she never remembers Mme. B.'s unconscious acts, when the unconsciousness is due to anæsthesia or to distraction." M. Janet's analysis of this difference (pp. 266-272) seems to me a model of delicate psychological investigation.

The clue to the inquiry lies in the observation that when a subject, already partially anæsthetic through hysteria, is thrown into the somnambulant state, the anæsthesia may continue unmodified, and consequently such acts as in her normal state lie outside of her consciousness by reason of their affecting the anæsthetic limb, may still lie outside her hypnotic consciousness, for the same reason. But we have reason to believe that the sensation of limbs hysterically anæsthetic is never really abolished; that it exists potentially in all cases, and may in some cases be evoked in certain phases of trance. A hypnotic consciousness, therefore, which does not include the consciousness pertaining to such limbs, cannot be regarded as embracing the whole of the possibilities of consciousness which lie beneath the normal threshold.

Again, the same view is confirmed by the observation of the *acts of distraction* performed in somnambulism itself. For when the somnambulant life reaches a point sufficiently alert and varied to be capable of distraction,—when it has attained, so to say, a sufficient bulk to make it experimentally divisible,—we find that the somnambule is liable to acts of distraction in an even greater degree than the normal

subject. It is possible, by watching an opportunity when Léontine is vividly talking, to induce her—or rather some other personality in the same skin—to hold a conversation by signs, without Léontine's consciousness, precisely as, when Léonie is in her normal state, Léontine can be induced to hold a conversation by signs, without Léonie's consciousness.

The two experiments, however, are not *reciprocal*. That is to say that although Léonie's unconscious acts are sometimes (not always) coincident with Léontine's conscious ones, Léontine's unconscious acts are never included in Léonie's memory, any more than in Léontine's own. They belong to some other, to some profounder manifestation of personality, to which M. Janet has given the name of Léonore. And observe that just as Léontine can sometimes by her own motion and without suggestion write a letter during Léonie's waking state and give advice which Léonie might do well to follow,—so also Léonore can occasionally intervene of her own motion during Léontine's dominance and give advice which Léontine might with advantage obey. But in what manner does Léonore intervene? What organ or instrument is left for her to employ in this doubly pre-occupied complex of psychical and physical manifestation? What actually occurs,—as briefly narrated by M. Janet (p. 267),—is an experimental confirmation of the view which will be found suggested in the *Journal* for July, 1887, as to the virtual equivalence of hallucination and automatism,—the interchangeability of these two phenomena, hallucination being a kind of passive automatism, or automatism an active hallucination. I then urged that the “*Dæmon of Socrates*,”—the series of monitions, intercurrent with ordinary life, which Socrates received in some fashion midway between internal impression and externalised voice,—was in reality a form of automatism,—a message emanating from sub-conscious (or super-conscious) strata of his own being, and finding access into his normal consciousness in the form of a hallucination, just as it might have found access in the form of an automatically written message, had he trained himself to the use of a pencil. I maintained that differences in the mode of percolation from one stratum of consciousness to another were not in themselves of primary importance,—that the primarily significant fact was rather that in one way or another such percolation was established, and that moreover, in Socrates' case, the message emerging from the profounder region was an expression, apparently, of a wisdom which the normal consciousness took willingly for the inspiration of a god. Further, I suggested that the special mode of transmission of the message—whether, on the one hand, by the active automatism of gesture, voice, or script, or, on the other hand, by the passive automatism of hallucinatory vision, audition, or touch,—might depend on the line of least

resistance which the emergent message might discover,—according (for example) as *visualising* or *motor* habits of thought might be predominant in one or another brain. The impulse which in the *motor* subject might prompt to automatic writing, might in the *visualising* subject become the basis of a visual hallucination.

To come, then, to the actual fact now to be noted. "The spontaneous acts of the unconscious self," says M. Janet, here meaning by *l'inconscient* the entity to which he has given the name of Léonore, "may also assume a very reasonable form, a form which, were it better understood, might perhaps serve to explain certain cases of insanity. Mme. B., during her somnambulism (i.e., Léontine), had had a sort of hysterical crisis; she was restless and noisy and I could not calm her. Suddenly she stopped and said to me with terror, 'Oh, who is talking to me like that? it frightens me.' 'No one is talking to you.' 'Yes! there on the left!' And she got up and tried to open a wardrobe on her left hand, to see if some one was hidden there. 'What is it that you hear?' I asked. 'I hear on the left a voice which repeats, "Enough! enough! be quiet; you are a nuisance."' Assuredly the voice which thus spoke was a reasonable one, for Léontine was insupportable; but I had suggested nothing of the kind, and had had no idea of inspiring a hallucination of hearing. Another day Léontine was quite calm, but obstinately refused to answer a question which I asked. Again she heard with terror the same voice to her left, saying, 'Come, be sensible, you must answer.' Thus the unconscious sometimes gave her excellent advice."

And in effect, so soon as Léonore, in her turn, was summoned into communication, she accepted the responsibility of this counsel. "What was it that happened," asked M. Janet, "when Léontine was so frightened?" "Oh, nothing; it was I who told her to keep quiet; I saw that she was annoying you; I don't know why she was so frightened."

Note the significance of this incident. Here we have got at the root of a hallucination. We have not merely inferential but direct evidence that the imaginary voice which terrified Léontine proceeded from a profounder stratum of consciousness in the same individual. In what way, by the aid of what nervous mechanism, was the startling monition conveyed? What are the laws of interrelation of these psychical strata? Who shall say what might be the lessons derivable from another subject, with a psychical cleavage as facile as Mme. B's., and with intelligence enough for a self-analysis in which several "selves" must combine?

I have spoken of Léonore as "summoned into communication." The way in which this is effected is again an instructive point. This second somnambulant life is reached by a transition from the first som-

nambulic life closely resembling the transition by which the first somnambulic life is reached from the life of every day. Just as Mme. B. was sent by passes into a state of lethargy from which she emerged as Léontine, so also Léontine in her turn was reduced by renewed passes to a state of lethargy from which she emerged no longer as Léontine, but as Léonore. This second awakening is slow and gradual, but the personality which emerges is in one most important point superior to either Léonie or Léontine. Alone among the subject's phases this phase possesses the memory of *every* phase. Léonore, like Léontine, knows the normal life of Léonie but distinguishes herself from Léonie, in whom, it must be said, these subjacent personalities appear to take little interest. But Léonore also remembers the life of Léontine,—condemns her as noisy and frivolous, and is anxious not to be confounded with her either. “Vous voyez bien que je ne suis pas cette bavarde, cette folle;—nous ne nous ressemblons pas du tout.” And in fact Léontine's own character, so far as it has yet been manifested, is worthy of that profounder place in the personality which she seems to occupy.

Yet one further variation, and I end my brief *résumé* of this complex history. Léonore is liable to pass into a state which does not, indeed, interrupt her chain of memory, but which removes her for a time from the possibility of communication with other minds. She grows pale, she ceases to speak or to hear, her eyes, though still shut, are turned heavenwards, her mouth smiles, and her face takes an expression of beatitude.

This is plainly a state of so-called ecstasy; but it differs from the ecstasy common in hysterical attacks in one capital point. Not only is it remembered—indistinctly, perhaps—by Léonore, who describes herself as having been dazzled by a light on the left side—but also it brings with it the most complex of all the chains of memory,—supplementing even Léonore's recollection on certain acts which have been accomplished unconsciously by Léonore herself.

Here again there seems a confirmation of a thesis already hinted at (*Proceedings*, Vol. III., p. 32, &c.) to the effect that the state of ecstasy, although generally associated with hysteria, or even occurring as a stage in an epileptiform attack, must not therefore be assumed to be *in itself* a morbid or degenerative condition. It is just as possible that it may be in itself an elevated condition, but that the possibility of entering it may be purchased by a perilous degree of nervous instability.

Ecstasy is an extreme case of “hypertrophy of the attention.” It has been compared by Esquirol to a mental *cataplexy*, by Ribot to a mental *contracture*. The second seems the truer analogy. To cataplexy we might rather compare the somnambulic state of maximum suggestibility, when the mind adopts and prolongs any idea which the

operator suggests, just as in catalepsy the limbs maintain the attitude in which the operator places them, or continue the action which he imposes upon them. On the other hand, ecstasy, which carries its subject into a region where suggestion from without is no longer attended to, resembles the strong contracture of a limb which no manipulation of the bystanders can resolve or modify.

This, however, is a comparison and nothing more. It is not at present plain what connection exists between the mental state of ecstasy and the muscular condition at the time. Ecstasy is sometimes accompanied by catalepsy, but sometimes it seems to determine the attitude of the limbs in a position not necessarily rigid, but to which, if disturbed, they tend to recur. This point needs further inquiry; forming, in fact, one case of the more general problem as to the relation, in abnormal or hypnotic conditions, of muscular to mental phenomena.

But these are topics which would lead us too far afield. It is the merit of experiments like those of Professor Janet that the lessons to be drawn from them are not exhausted at the first scrutiny. We shall have to return again and again to his fertile researches; and we may feel with satisfaction that there is no reason to fear that their prolongation is proving in any way injurious to the "subject" who varies so instructively from the ordinary constitution of mankind.

FREDERIC W. H. MYERS.

The subjoined scheme,—simplified from that given by Professor Janet,—may enable the reader to follow the above paper with greater ease. The shaded spaces indicate absence of consciousness.

Diagram of the joint life of	{ Léonie Léontine Léonore	Ordinary waking life	////	////	////	Ordinary waking life
		Knowledge of Léonie: latent	Emergence insomnambulic life	////	Emergence insomnambulic life	Knowledge of Léonie: latent
		Knowledge of Léonie & Léontine: latent	Knowledge of Léontine: latent	Emergence and ecstasy	Knowledge of Léontine: latent	Knowledge of Léonie & Léontine: latent

PROCEEDINGS OF THE GENERAL MEETING ON

January 25th, 1889.

The thirtieth General Meeting of the Society was held at the Westminster Town Hall, on January 25th, 1889.

THE PRESIDENT, PROFESSOR HENRY SIDGWICK, IN THE CHAIR.

Mr. T. Barkworth read a paper on "The Analogy between Hypnotic Phenomena and Certain Experiences of the Normal Consciousness."

The President delivered the following address:—

I.

In an address which I delivered six months ago I endeavoured to give a brief survey of the work done by the Society during the six years of its existence. But time did not allow me to deal adequately with the whole subject, and one branch of our inquiry in particular, which occupied an important place in the original view of the objects for which the Society was formed, I reserved for separate treatment. I mean the investigation of the physical phenomena attributed by Spiritualists to the agency of intelligences other than human. In reserving this for separate treatment, I was influenced by the fact that our action in this department has been subjected to a good deal of criticism, public and private, in which, as I understand, some members of our Society have taken part.

In noticing this criticism, my chief object is to explain the course that we have adopted, not to refute any opponents. I have always held that in so novel and difficult an investigation as that in which we are engaged, our object should be to obtain as much criticism as possible, and to extract from it thankfully all the instruction that we can, even though a good deal of it may seem to us to go wide of the mark.

The only criticism against which I am disposed to protest, is the judgment that, as we have now had this question before us for nearly seven years, we ought to have come to a conclusion about it one way or the other. I think that such a proposition is hasty and unreasonable, whether the critic really means that we ought to have come to a positive conclusion, or that we ought to have come to a negative one. Taken in the former sense, I must be allowed to say that such a demand implies a remarkable ignorance of the ordinary rate and manner of progress of scientific knowledge in any department. Considering the enormous importance of the conclusion that a definite and measurable