I purpose in this paper briefly to suggest certain topics for reflection,—topics which will need to be more fully worked out elsewhere. My theme is the multiplex and mutable character of that which we know as the Personality of man, and the practical advantage which we may gain by discerning and working upon this as yet unrecognised modifiability. I shall begin by citing a few examples of hysterical transfer, of morbid disintegration; I shall then show that these spontaneous readjustments of man's being are not all of them pathological or retrogressive; nay, that the familiar changes of sleep and waking contain the hint of further alternations which may be beneficially acquired. And, lastly, I shall point out that we can already by artificial means induce and regulate some central nervous changes which effect physical and moral good; changes which may be more restorative than sleep, more rapid than education. Here, I shall urge, is an avenue open at once to scientific and to philanthropic endeavour, a hope which hangs neither on fable nor on fancy, but is based on actual experience and consists with rational conceptions of the genesis and evolution of man.

I begin, then, with one or two examples of the pitch to which the dissociation of memories, faculties, sensibilities may be carried, without resulting in mere insane chaos, mere demented oblivion. These cases as yet are few in number. It is only of late years—and it is mainly in France—that savants have recorded with due care those psychical lessons, deeper than any art of our own can teach us, which natural anomalies and aberrant instances afford.

Pre-eminent among the priceless living documents which nature thus offers to our study stand the singular personages known as Louis V. and Felida X. Felida's name at least is probably familiar to most of my readers; but Louis V.'s case is little known, and although some account of it has already been given in English,¹ it will be

needful to recall certain particulars in order to introduce the specula-
tions which follow.

Louis V. began life (in 1863) as the neglected child of a 
turbulent mother. He was sent to a reformatory at ten years old, 
and there showed himself, as he has always done when his organisa-
tion has given him a chance, quiet, well-behaved, and obedient. 
Then at fourteen years old he had a great fright from a viper—a 
fright which threw him off his balance and started the series of 
psychical oscillations on which he has been tossed ever since. At 
first the symptoms were only physical, epilepsy and hysterical paralysis 
of the legs; and at the asylum of Bonneval, whither he was next 
sent, he worked at tailoring steadily for a couple of months. Then 
suddenly he had a hystero-epileptic attack—fifty hours of convulsions 
and ecstasy—and when he awoke from it he was no longer paralysed, 
no longer acquainted with tailoring, and no longer virtuous. His 
memory was set back, so to say, to the moment of the viper's appear-
ance, and he could remember nothing since. His character had 
become violent, greedy, and quarrelsome, and his tastes were radically 
changed. For instance, though he had before the attack been a 
total abstainer, he now not only drank his own wine but stole the 
wine of the other patients. He escaped from Bonneval, and after a 
few turbulent years, tracked by his occasional relapses into hospital 
or madhouse, he turned up once more at the Rochefort asylum in 
the character of a private of marines, convicted of theft but con-
sidered to be of unsound mind. And at Rochefort and La Rochelle, 
by great good fortune, he fell into the hands of three physicians— 
Professors Bourru and Burot, and Dr. Mabille—able and willing to 
continue and extend the observations which Dr. Camuset at Bonneval 
and Dr. Jules Voisin at Bicêtre had already made on this most 
precious of mauvais sujets at earlier points in his chequered career.¹

He is now no longer at Rochefort, and Dr. Burot informs me that 
his health has much improved, and that his peculiarities have in 
great part disappeared. I must, however, for clearness' sake, use the 
present tense in briefly describing his condition at the time when 
the long series of experiments were made.

The state into which he has gravitated is a very unpleasing one. 
There is paralysis and insensibility of the right side, and (as is often 
the case in right hemiplegia) the speech is indistinct and difficult.

¹ For Dr. Camuset's account see Annales Médico-Pyschologiques, 1882, p. 75; 
for Dr. Voisin's, Archives de Nervrologie, September, 1885. The observations at 
Rochefort have been carefully recorded by Dr. Berjon, La Grande Hystérie chez 
l'Homme, Paris, 1886, and by Drs. Bourru and Burot in a treatise, De la sug-
gestion mentale, &c. (Bibl. scientifique contemporaine), Paris, 1887.
Nevertheless he is constantly haranguing any one who will listen to him, abusing his physicians, or preaching, with a monkey-like impudence rather than with reasoned clearness, radicalism in politics and atheism in religion. He makes bad jokes, and if any one pleases him he endeavours to caress him. He remembers recent events during his residence at the Rochefort asylum, but only two scraps of his life before that date—namely, his vicious period at Bonneval and a part of his stay at Bicêtre.

Except this strangely fragmentary memory there is nothing very unusual in this condition, and in many asylums no experiments on it would have been attempted. Fortunately the physicians of Rochefort were familiar with the efficacy of the contact of metals in provoking transfer of hysterical hemiplegia from one side to the other. They tried various metals in turn on Louis V. Lead, silver, and zinc had no effect. Copper produced a slight return of sensibility in the paralysed arm. But steel, applied to the right arm, transferred the whole insensibility to the left side of the body.

Inexplicable as such a phenomenon certainly is, it is sufficiently common (as French physicians hold) in hysterical cases to excite little surprise. What puzzled the doctors was the change of character which accompanied the change of sensibility. When Louis V. issued from the crisis of transfer, with its minute of anxious expression and panting breath, he was what might fairly be called a new man. The restless insolence, the savage impulsiveness, have wholly disappeared. The patient is now gentle, respectful, and modest. He can speak clearly now, but he only speaks when he is spoken to. If he is asked his views on religion and politics, he prefers to leave such matters to wiser heads than his own. It might seem that morally and intellectually the patient's cure had been complete.

But now ask him what he thinks of Rochefort; how he liked his regiment of marines. He will blankly answer that he knows nothing of Rochefort, and was never a soldier in his life. "Where are you, then, and what is the date of to-day?" "I am at Bicêtre; it is January 2nd, 1884; and I hope to see M. Voisin to-day, as I did yesterday."

It is found, in fact, that he has now the memory of two short periods of life (different from those which he remembers when his right side is paralysed), periods during which, so far as can now be ascertained, his character was of this same decorous type and his paralysis was on the left side.

These two conditions are what are now termed his first and his second, out of a series of six or more through which he can be made to pass. For brevity's sake I will further describe his fifth state only.
If he is placed in an electric bath, or if a magnet be placed on his head, it looks at first sight as though a complete physical cure had been effected. All paralysis, all defect of sensibility, has disappeared. His movements are light and active, his expression gentle and timid. But ask him where he is, and you find that he has gone back to a boy of fourteen, that he is at St. Urbain, his first reformatory, and that his memory embraces his years of childhood, and stops short on the very day when he had the fright with the viper. If he is pressed to recollect the incident of the viper a violent epileptiform crisis puts a sudden end to this phase of his personality.

Is there, then, the reader may ask, any assignable law which governs these strange revolutions? any reason why Louis V. should at one moment seem a mere lunatic or savage, at another moment should rise into decorous manhood, at another should recover his physical soundness, but sink backward in mind into the child? Briefly, and with many reserves and technicalities perforce omitted, the view of the doctors who have watched him is somewhat as follows: A sudden shock, falling on an unstable organisation, has effected in this boy a profounder severance between the functions of the right and left hemispheres of the brain than has perhaps ever been observed before. We are accustomed, of course, to see the right side of the body paralysed and insensible in consequence of injury to the left hemisphere, which governs it, and vice versa. And we are accustomed in hysterical cases—cases where there is no actual traceable injury to either hemisphere—to see the defects in sensation and motility shift rapidly—shift, as I may say, at a touch—from one side of the body to the other. But we cannot usually trace any corresponding change in the mode of functioning of what we assume as the "highest centres," the centres which determine those manifestations of intelligence, character, memory, on which our identity mainly depends. Yet in some cases of aphasia and of other forms of asemia (the loss of power over signs, spoken or written words and the like) phenomena have occurred which have somewhat prepared us to find that the loss of power to use the left—which certainly is in some ways the more developed—hemisphere may bring with it a retrogression in the higher characteristics of human life. And the singular phenomenon of automatic writing (as I have previously tried to show1) seems often to depend on an obscure action of the less-used hemisphere. Those who have followed these lines of observation may be somewhat prepared to think it possible that in Louis V.'s case the alternate predominance of right or left hemisphere affects memory and character as well as motor and sensory innervation. Inhibit his left brain (and right side) and he becomes,

1 Proceedings of the S.P.R., Vol.-III.
as one may say, not only left-handed but sinister; he manifests himself through nervous arrangements which have reached a lower degree of evolution. And he can represent in memory those periods only when his personality had assumed the same attitude, when he had crystallised about the same point.

Inhibit his right brain, and the higher qualities of character remain, like the power of speech, intact. There is self-control; there is modesty; there is the sense of duty—the qualities which man has developed as he has risen from the savage level. But nevertheless he is only half himself. Besides the hemiplegia, which is a matter of course, memory is truncated too, and he can summon up only such fragments of the past as chance to have been linked with this one abnormal state, leaving unrealled not only the period of sinister inward ascendency, but the normal period of childhood, before his Wesen was thus cloven in twain. And now if by some art we can restore the equipoise of the two hemispheres again, if we can throw him into a state in which no physical trace is left of the severance which has become for him a second nature, what may we expect to find as the psychical concomitant of this restored integrity? What we do find is a change in the patient which, in the glimpse of psychical possibilities which it offers us, is among the most interesting of all. He is, if I may so say, born again; he becomes as a little child; he is set back in memory, character, knowledge, powers, to the days before this trouble came upon him or his worse self assumed its sway.

I have begun with the description of an extreme case, a case which to many of my readers may seem incredible in its bizarreness. But though it is extreme it is not really isolated; it is approached from different sides by cases already known. The mere resumption of life at an earlier moment, for instance, is of course only an exaggeration of a phenomenon which frequently appears after cerebral injury. The trainer, stunned by the kick of a horse, completes his order to loosen the girths the moment that trepanning has been successfully performed. The old lady struck down at a card party, and restored to consciousness after long insensibility, surprises her weeping family by the inquiry, "What are trumps?" But in these common cases there is but a morsel cut out of life; the personality reawakens as from sleep and is the same as of old. With Louis V. it is not thus; the memories of the successive stages are not lost but juxtaposed, as it were, in separate compartments; nor can one say what epochs are in truth intercalary, or in what central channel the stream of his being flows.

Self-severances profound as Louis V.'s are naturally to be sought
mainly in the lunatic asylum. There indeed we find duplicated individuality in its grotesquer forms. We have the man who has always lost himself and insists on looking for himself under the bed. We have the man who maintains that there are two of him, and sends his plate a second time, remarking, "I have had plenty, but the other fellow has not." We have the man who maintains that he is himself and his brother too, and when asked how he can possibly be both at once, replies, "Oh, by a different mother."

Or sometimes the personality oscillates from one focus to another, and the rival impulses, which in us merely sway different moods, objectify themselves each in a *persona* of its own. An hysterical penitent believes herself one week to be "Sœur Marthe des Cinq Plaies," and the next week relapses into an imaginary "Madame Poumaire," with tastes recalling a quite other than conventual model. Another patient seems usually sane enough, but at intervals he lets his beard grow, and is transformed into a swaggering lieutenant of artillery. The excess over, he shaves his beard and becomes once more a lucid though melancholy student of the early Fathers. Such changes of character, indeed, may be rapid and varied to any extent which the patient’s experience of life will allow. In one well-known case a poor lady varied her history, her character, even her sex, from day to day. One day she would be an emperor’s bride, the next an imprisoned statesman—

Juvenis quondam, nunc femina, Cæneus,
Rursus et in veterem fato revoluta figuram.

Yet more instructive, though often sadder still, are the cases where the disintegration of personality has not reached the pitch of insanity, but has ended in a bewildered impotence, in the horror of a lifelong dream. Speaking generally, such cases fall under two main heads—those where the loss of control is mainly over *motor* centres, and the patient can feel but cannot act; and those where the loss of control is mainly over *sensory* centres, and the patient acts but cannot feel.

Inability to act just as we would wish to act is a trouble in which we most of us share. We probably have moods in which we can even sympathise with that provoking patient of Esquirol’s who, after an attack of monomania, recovered all those social gifts which made him the delight of his friends, but could no longer be induced to give five minutes’ attention to the most urgent business. "Your advice," he said cordially to Esquirol, "is thoroughly good. I should ask nothing better than to follow it, if you could further oblige me with the power to *will*
what I please.” Sometimes the whole life is spent in the endeavour to perform trifling acts—as when a patient of M. Billod’s spent nearly an hour in attempting to make the flourish under his signature to a power of attorney; or tried in vain for three hours, with hat and gloves on, to leave his room and go out to a pageant which he much wished to see. Such cases need heroic treatment, and this gentleman had the luck to be caught and cured by the Revolution of 1848.

Still more mournful are the cases where it is mainly the sensory centres which lie, as it were, outside the personality; where thought and will remain intact, but the world around no longer stirs the wonted feelings, nor can reach the solitary soul. “In all my acts one thing is lacking—the sense of effort that should accompany them, the sense of pleasure that they should yield.” “All things,” said another sufferer, “are immeasurably distant from me; they are covered with a heavy air.” “Men seem to move round me,” said another, “like moving shadows.” And gradually this sense of ghostly vacancy extends to the patient’s own person. “Each of my senses, each part of me, is separate from myself.” “J’existe, mais en dehors de la vie réelle.” It is as though Teiresias, who alone kept his true life in unsubstantial Hades, should at last feel himself dream into a shade.

Sometimes the regretful longing turns into a bitter sense of exile, of banishment, of fall from high estate. There are words that remind us of the passionate protestations of Empedocles, refusing to accept this earth as his veritable home. Κλαίωσά τε καὶ κόκυνοι, said the Sicilian of Sicily, ἵππον ἀσυνήθεα χῶρον (“I wept and lamented, looking on a land to me unwonted and unknown”). “Lorsque je me trouvais seul,” said a patient of Krishaber’s, “dans un endroit nouveau, j’étais comme un enfant nouveau-né, ne reconnaissant plus rien. J’avais un ardent désir de revoir mon ancien monde, de redevenir l’ancien moi; c’est ce désir qui m’a empêché de me tuer.”

These instances have shown us the retrogressive change of personality, the dissolution into inco-ordinate elements of the polity of our being. We have seen the state of man like a city blockaded, like a great empire dying at the core. And of course a spontaneous, unguided disturbance in a machinery so complex is likely to alter it more often for the worse than for the better. Yet here we reach the very point which I most desire to urge in this paper. I mean that even these spontaneous, these unguided disturbances, do sometimes effect a change which is a marked improvement. Apart from all direct experiment they show us that we are in fact capable of being reconstituted after an improved pattern, that we may be fused and recrystallised into greater clarity; or, let us say more modestly, that the shifting sand-heap of our being will sometimes suddenly settle itself into a new attitude of more assured equilibrium.
Multiplex Personality.

Among cases of this kind which have thus far been recorded, none is more striking than that of Dr. Azam's often quoted patient, Féilda X.¹

Many of my readers will remember that in her case the somnambulic life has become the normal life; the "second state," which appeared at first only in short, dream-like accesses, has gradually replaced the "first state," which now recurs but for a few hours at long intervals. But the point on which I wish to dwell is this: that Féilda's second state is altogether superior to the first—physically superior, since the nervous pains which had troubled her from childhood have disappeared; and morally superior, inasmuch as her morose, self-centred disposition is exchanged for a cheerful activity which enables her to attend to her children and her shop much more effectively than when she was in the "état bête," as she now calls what was once the only personality that she knew. In this case, then, which is now of nearly 30 years' standing, the spontaneous readjustment of nervous activities—the second state, no memory of which remains in the first state—has resulted in an improvement profounder than could have been anticipated from any moral or medical treatment that we know. The case shows us how often the word "normal" means nothing more than "what happens to exist." For Féilda's normal state was in fact her morbid state; and the new condition, which seemed at first a mere hysterical abnormality, has brought her to a life of bodily and mental sanity which makes her fully the equal of average women of her class.

Now, before we go further, let us ask ourselves whether this result, which sounds so odd and paradoxical, ought in reality to surprise us. Had we any reason for supposing that changes as profound as Féilda's need always be for the worse, that the phase of personality in which we happen to find ourselves is the phase in which, given our innate capacities, it is always best for us to be?

To make this question more intelligible, I must have recourse to a metaphor. Let us picture the human brain as a vast manufactory, in which thousands of looms, of complex and differing patterns, are habitually at work. These looms are used in varying combinations; but the main driving-bands, which connect them severally or collectively with the motive power, remain for the most part unaltered.

Now, how do I come to have my looms and driving-gear arranged in this particular way? Not, certainly, through any deliberate choice of my own. My ancestor the ascidian, in fact, inherited the business when it consisted of little more than a single spindle. Since his day

¹ For the fullest account of Féilda, see Hypnotisme, Double Conscience, &c., par le Dr. Azam. Paris, 1887.
my nearer ancestors have added loom after loom. Some of their looms have fallen to pieces unheeded; others have been kept in repair because they suited the style of order which the firm had at that time to meet. But the class of orders received has changed very rapidly during the last few hundred years. I have now to try to turn out altruistic emotions and intelligent reasoning with machinery adapted to self-preserving fierceness or manual toil. And in my efforts to readjust and reorganise I am hindered not only by the old-fashioned type of the looms, but by the inconvenient disposition of the driving-gear. I cannot start one useful loom without starting a dozen others that are merely in the way. And I cannot shift the driving-gear to suit myself, for I cannot get at much of it without stopping the engines, and if I stopped my engines I should not know how to set them going again. In this perplexity I watch what happens in certain factories—Felida’s, for instance—where the hidden part of the machinery is subject to certain dangerous jerks or dislocations, after which the gearings shift of themselves and whole groups of looms are connected and disconnected in a novel manner. From hence I get at least a hint as to the concealed attachments; and if I see that new arrangement working well I have an object to aim at; I can try to produce a similar change, though a smaller one, among my own looms and by my own manipulation.

For even if these profoundest spontaneous changes are beyond the reach of imitation, there are smaller changes, long familiar to us, which we now see in a new light, as imitable in a manner which shall reproduce their advantages without their drawbacks. There is the painless trance which sometimes supervenes in hysteria; there is the action of alcohol; there is especially the action of opium, which from the first commended itself by its psychical effect, by the emotional tranquillity which it induces. Such at least seems to be the inference from the well-known passage where the wifely Helen determines to give her husband and his friends the chance of talking comfortably, without interrupting themselves by perpetual tears and laments.

Then heaven-born Helen in their cups would throw
Nepenthes, woeless banisher of woe:
This whoso drank daylong no tear should shed—
No, though he gazed on sire and mother dead;
No, though his own son on that dreamy day
Before his own eyes raging foes should slay.¹

The successive discoveries of intoxicants, narcotics proper, and anaesthetics formed three important stages in our growing control over the nervous system. Mesmer’s discovery, or rather his rediscovery of a process probably at least as old as Solon, marked an epoch of quite

¹ *Od. iv. 219.*
equal significance. And the refinements on Mesmer’s process which this century has seen, the discoveries linked with the names of Puységur, Esdaile, Braid, Charcot, &c., though often set forth with an air of controversy rather than of co-operation, will gradually be recognised as mutually concordant elements in a new branch of moral as well as physical therapeutics. Nay, it is a nascent art of self-modification; a system of pulleys (to return to our previous metaphor), by which we can disjoin and reconnect portions of our machinery which admit of no directer access.

One or two brief instances may indicate the moral and the physical benefits which hypnotisation is bringing within the range of practical medicine. And first I will cite one of the cases—rare as yet—where an insane person has been hypnotised with permanent benefit.¹

In the summer of 1884 there was at the Salpêtrière a young woman of a deplorable type. Jeanne Sch—— was a criminal lunatic, filthy in habits, violent in demeanour, and with a lifelong history of impurity and theft. M. Auguste Voisin, one of the physicians on the staff, undertook to hypnotise her on May 31st, at a time when she could only be kept quiet by the strait jacket and “bonnet d’irrigation,” or perpetual cold douche to the head. She would not—indeed, she could not—look steadily at the operator, but raved and spat at him. M. Voisin kept his face close to hers, and followed her eyes wherever she moved them. In about 10 minutes a stertorous sleep ensued; and in five minutes more she passed into a sleep-waking state, and began to talk incoherently. The process was repeated on many days, and gradually she became sane when in the trance, though she still raved when awake. Gradually, too, she became able to obey in waking hours commands impressed on her in the trance—first trivial orders (to sweep the room and so forth), then orders involving a marked change of behaviour. Nay more; in the hypnotic state she voluntarily expressed repentance for her past life, made a confession which involved more evil than the police were cognisant of (though it agreed with facts otherwise known), and finally of her own impulse made good resolves for the future. Two years have now elapsed, and M. Voisin writes to me (July 31st, 1886) that she is now a nurse in a Paris hospital, and that her conduct is irreproachable. In this case, and in some recent cases of M. Voisin’s, there may, of course, be matter for controversy as to the precise nature and the prognosis, apart from hypnotism, of the insanity which was cured. But my point is amply made out by the fact that this poor woman, whose history since the

¹ Annales Médico-Psychologiques, 1884, vol. ii., p. 289 sqq. The case was rediscussed at the last meeting of the French Association for the Advancement of Science.
age of 13 had been one of reckless folly and vice, is now capable of the steady, self-controlled work of a nurse at a hospital, the reformed character having first manifested itself in the hypnotic state, partly in obedience to suggestion, and partly as the natural result of the tranquilisation of morbid passions.

M. Voisin has followed up this case with others equally striking, into some of which a committee of the Société Médico-Psychologique is now inquiring. And M. Dufour, the medical head of another asylum, has adopted hypnotic suggestion as a regular element in his treatment. "Dès à présent," he says, "notre opinion est faite: sans crainte de nous tromper, nous affirmons que l'hypnotisme peut rendre service dans le traitement des maladies mentales." As was to be expected, he finds that only a small proportion of lunatics are hypnotisable; but the effect produced on these, whether by entrancement or suggestion, is uniformly good. His best subject is a depraved young man, who after many convictions for crimes (including attempted murder) has become a violent lunatic. "T.," says Dr. Dufour, "a été un assez mauvais sujet. Nous n'avons plus à parler au présent, tellement ses sentiments moraux ont été améliorés par l'hypnotisme." This change and amelioration of character (over and above the simple recovery of sanity) has been a marked feature in some of Dr. Voisin's cases as well.

There is, indeed, in the sleep-waking state even of sane persons, a characteristic change of character, more easily recognised than described. Without generalising too confidently, I may say that there seems usually to be an absence of self-consciousness and anxiety, a diminution of mere animal instincts, and a sense of expansion and freedom which shows itself either in gaiety or in a sort of beatific calm. In Madame B. (a subject whose susceptibility to hypnotisation by Dr. Gibert and Prof. Janet from a distance has recently attracted much notice) there was something—as it seemed to me—indescribably absurd in the contrast between the peasant woman's humble, stolid, resigned cast of countenance and the childish glee with which she joked and babbled during the "phase somnambulique" of her complex trance. On the other hand M. Richet says of a recent subject of his own, "She seems when in the somnambulic state to be normal in all respects except that her character has changed. When awake

1 I have myself seen Dr. Voisin successfully hypnotise a melancholic patient who was in a state of extreme—it might have seemed of hopeless—restlessness.

2 Dr. E. Dufour, médecin en chef de l'asile Saint-Robert (Isère). See Annales Médico-Psychologiques, September, 1886, p. 238, and Contribution à l'étude de l'hypnotisme, par le Dr. Dufour. (Grenoble, 1887.)

3 Revue Philosophique, September, 1886, p. 327.
she is gay and lively; when entranced, grave, serious, almost solemn. . . . Her intelligence seems to have increased."

And I may remark that this phase of the somnambulistic character, this tendency to absorption and ecstasy, is a fact of encouraging significance. It is an indication that we may get more work out of ourselves in certain modified states than we can at present. "Ecstasy," which in former ages was deemed the exalted prerogative of saints, is now described as a matter of course among the phases of a mere hysterical attack. The truth is, perhaps, more complex than either of these views would admit. Ecstasy (we may certainly say with the modern alienist) is for the most part at least a purely subjective affection, corresponding to no reality outside the patient, and appearing along with other instabilities in the course of hysteria. True; but on the other hand ecstasy is to hysteria somewhat as genius is to insanity. The ecstasy, say, of Louise Lateau assuredly proves no dogma, and communicates to us no revelation. Yet, taken strictly by itself, it is not altogether a retrograde or dissolutive nervous phenomenon. Rather it represents the extreme tension of the poor girl's spirit in the highest direction which her intellect allows; and the real drawback is that this degree of occasional concentration usually implies great habitual instability. The hysterical patient has an hour of ecstasy, during which her face, if we may trust Dr. Paul Richer's drawings, often assumes a lofty purity of expression which the ordinary young person might try in vain to rival. But she pays for the transitory exaltation by days of incoherent scolding, of reckless caprice. And similarly, as I maintain, the power of exaltation, of concentration, which constitutes genius implies a profound modifiability of the nervous system, a tendency of the stream of mentation to pour with a rush into some special channels. In a Newton or a Shelley this modifiability is adequately under control; were it not so, our Shelleys would lapse into incoherence, our Newtons into monomania.

And I maintain that the hypnotic trance, with its liberation from petty preoccupations, its concentration in favourite channels, has some analogy to genius as well as to hysteria. I maintain that for some uneducated subjects it has been the highest mental condition which they have ever entered; and that, when better understood and applied to subjects of higher type, it may dispose to flows of thought more undisturbed and steady than can be maintained by the waking effort of our tossed and fragmentary days.

I have dwelt at some length on the moral accompaniments of the hypnotic trance, because they are as yet much less generally known than the physical. It would, indeed, be a mere waste of

space to dwell on the lulling of pain which can be procured by these methods, or even on the painless performance of surgical operations during the hypnotic trance; but I will cite a case illustrating a point comparatively new—namely, that the insusceptibility to pain need not be confined to the entranced condition, but may be prolonged by hypnotic suggestion into subsequent waking hours.

An hysterical patient in the hospital of Bordeaux suffered recently from a malady which was certainly not imaginary. She had a "phlegmon," or inflamed abscess, as big as a hen's egg, on the thigh, with excessive tenderness and lancinating pain. It was necessary to open the swelling, but the screaming patient would not allow it to be touched. Judging this to be a good opportunity for testing the real validity of deferred hypnotic suggestion, Dr. Pitres hypnotised the woman by looking fixedly in her eyes, and then suggested to her that after she had been awakened she would allow the abscess to be opened, and would not feel the slightest pain. She was then awakened, and apparently resumed her normal state. M. A. Boursier proceeded to open and squeeze out the abscess in a deliberate way. The patient merely looked on and smiled. She had no recollection of the suggestion which had been made to her during her trance, and she was not a little astonished to see her formidable enemy thus disposed of without giving her the slightest pain.

Cases like these are certainly striking enough to give a considerable impetus to further experiment. Hypnotism, however, has in England many prejudices to contend with. I shall touch on one such prejudice only—a very excusable one and germane to the main argument of this paper. "These duplications of state," it is said, "are not natural; and what is unnatural, even if it is not morbid, can never be more than a mere curiosity." I would ask of such an objector one single question: "Which state, then, do you consider, as unnatural, your own ordinary sleep or your own ordinary waking?"

This rejoinder goes, I think, to the root of the matter; for we do indubitably undergo every day of our lives a change of state, a shifting of our internal mechanism, which is closely parallel to the artificial changes whose induction I am here recommending. Our familiar sleep, whether considered from the psychical or the physiological side, has a curious history, strange potentialities. In its psychical aspect—to take the point which here most concerns us—it involves at least the rudiments of a "second state," of an independent memory. I should like, had I space, to show how the mere recurrence of a dream-scene—a scene which has no prototype in waking life—is the first stage on the

1 First given in the Journal de Médecine de Bordeaux, and cited at length in Dr. Bérlillon's Revue de l'Hypnotisme for September, 1886. Professor Pitres' name, I may add, carries great weight in the French medical world.
way to those recurrent accesses of somnambulism, linked by continuous memory, which have developed into the actual ordinary life of Féilda X. Leaving this point for future treatment, and passing to sleep's physiological aspect, we recognise in it the compromise or resultant of many tentative duplications of state which our lowly ancestors have known. Their earliest differentiation of condition, it may be, was merely the change between light and darkness, or between motion and rest. Then comes encystation, a fruitful quiescence, originally, perhaps, a mere immobility of self-defence, but taken advantage of for reproductive effort. And passing from protozoa to metazoa, we find numerous adaptations of this primitive duplicability of condition. We find sleep utilised as a protection against hunger, as a protection against cold. And, on the other hand, we find animals for whom what we call "true sleep" is wanting, whose circumstances do not demand any such change or interruption in the tenor of their lifelong way.

Yet why describe this undifferentiated life-history as a state of waking rather than of sleep? Why assume that sleep is the acquired, vigilance the "normal" condition? It would not be hard to defend an opposite thesis. The new-born infant might urge with cogency that his habitual state of slumber was primary as regards the individual, ancestral as regards the race; resembling at least, far more closely than does our adult life, a primitive or protozoic habit. "Mine," he might say, "is a centrally stable state. It would need only some change in external conditions (as my permanent immersion in a nutritive fluid) to be safely and indefinitely maintained. Your waking state, on the other hand, is centrally unstable. While you talk and bustle around me you are living on your physiological capital, and the mere prolongation of vigilance is torture and death."

A paradox such as this forms no part of my argument; but it may remind us that physiology at any rate hardly warrants us in speaking of our waking state as if that alone represented our true selves, and every deviation from it must be at best a mere interruption. Vigilance in reality is but one of two co-ordinate phases of our personality, which we have acquired or differentiated from each other during the stages of our long evolution. And just as these two states have come to co-exist for us in advantageous alternation, so also other states may come to co-exist with these, in response to new needs of the still evolving organism.

And I will now suggest two methods in which such states as those described, say, in Dr. Voisin's or in Dr. Pitres' case, might be turned to good account. In the world around us are many physical invalids and many "moral invalids," and of both these classes a certain percentage are sure to prove hypnotisable, with patience and care. Let us try to improve the moral invalid's character by hypnotic suggestions
of self-restraint, which will continue effective after he wakes. And let us try to enable the physical invalid to carry on his intellectual life without the perturbing accompaniment of pain. I am not bringing out a panacea, and I expect that with the English race, and in our present state of knowledge, but few of these experiments will succeed. But increased experience will bring the process under fuller control, will enable us to hypnotise a larger proportion of persons and to direct the resulting phenomena with more precision. What is needed is the perseverance in experiment which springs from an adequate realisation of the ultimate gain, from a conviction that the tortuous inlet which we are navigating is one of the mouths of a river which runs up far into the unexplored interior of our being.

I have dealt elsewhere with some further cases which go to show the persistent efficacy of moralising suggestions—suggestions mainly of abstinence from pernicious indulgences—when made to a subject in the hypnotic trance. It must suffice here to point out that such moralisation, whether applied to a sane or an insane subject, must by no means be considered as a mere trick or a mere abnormality. It is but the systematisation of a process on which religious and moral “revivals” have always largely depended. When some powerful personage has thrown many weaker minds into a state of unusual perturbation, unusual plasticity, there is an element in that psychical tumult which may be utilised for lasting good. A strong suggestion may be made, and its effect on the brain will be such that it will work itself out, almost automatically, perhaps for years to come. When Father Mathew spread the temperance pledge through Ireland he showed this power at its best. What it can be at its worst we see, for instance, in the recent epidemic of frenzy in the Bahamas, where the hysterical symptoms were actually the main object sought, and the dogma only served to give to that hysteria a stimulating flavour of brimstone. Scenes not dissimilar have been witnessed in England too; yet the sober moralist has been forced to recognise that a germ of better life has often been dropped, and has quickened, amid the turbulence of what to him might seem a mere scandalous orgy.

Just so did the orthodox physician look on in disgusted contempt at the tumultuous crises of the patients around Mesmer’s baquet. But science has now been able to extract from that confused scene its germ of progress, and to use a part of Mesmer’s processes to calm the very accesses which Mesmer employed them to generate. Let her attempt, then, to extract the health-giving element from that moral turbulence as well, and to use the potency which in ignorant hands turns men and women into hysterical monomaniacs, to revive in the spirits which she dominates the docility of the little child.

1 Proceedings of the S.P.R., Part X.
This last phrase represents a true, an important analogy. The art of education, as we know, rests on the physiological fact that the child's brain receives impressions more readily, and retains them more lastingly, than the adult's. And those of us who have been well drilled in childhood are not apt to consider that the advantage thus gained for us was an unfair or tricky one, nor even that virtue has been made unduly easy to us, so that we deserve no credit for doing right. It surely need not, then, be considered as over-reaching Destiny, or outwitting the Moral Law, if we take persons whose early receptiveness has been abused by bad example and try to reproduce that receptiveness by a physiological process, and to imprint hypnotic suggestions of a salutary kind.

I ventured to make a proposal of this sort in a paper published in 1885; but, although it attracted some comment as a novelty, I cannot flatter myself that it was taken au sérieux by the pedagogic world. But as I write these lines I see from a report of the Association Française pour l'Avancement des Sciences (Session de Nancy, 1886) that the "Section de Pédagogie" has actually passed a resolution desiring "que des expériences de suggestion hypnotique soient tentées, dans un but de moralisation et d'éducation, sur quelques-uns des sujets les plus notoirement mauvais et incorrigibles des écoles primaires." I commend the idea then, with the sense that I am not alone in my paradox, to the attention of practical philanthropists.

My second suggestion—namely, that we may conceivably learn to carry on our intellectual life in a state of insusceptibility to physical pain, may appear a quite equally bold one. "We admit," the critics might say, "that a man in the hypnotic trance is insensible to pinching; but, since he can also notoriously, when in that state, be made to believe that his name is Titus Oates, or that a candle-end is a piece of plum-cake, or any other absurdity, the intellectual work which he performs in that mood of mind is not likely to be worth much." But my point is, as may have been already gathered, that this clean-cut, definite conception of the hypnotic state is now shown to have been crude and rudimentary. Dr. Pitres' case, above cited (where the patient was restored to ordinary life in all respects except that she continued insensible to pain), is a mere sample of cases daily becoming more numerous, where power is gained to dissociate the elements of our being in novel ways, to form from them, if I may so say, not only the one strange new compound "hypnotic trance," but a whole series of compounds marking the various stages between that and the life of every day. Hysterical phenomena, now for the first time studied with something like the attention which they deserve, point strongly in this direction. And apart from hysteria, apart from hypnotism, we find in active and healthy life scattered hints of the possible absence of
pain during vigorous intellectual effort. From the candidate in a competitive examination who forgets his toothache till he comes out again, to the soldier in action unconscious of the bullet-wound till he faints from loss of blood, we have instances enough of an exaltation or concentration which has often made the resolute spirit altogether unconscious of conditions which would have been absorbing to the ordinary man. And here too, as in the case of moral suggestibility, already dealt with, the function of science is to regularise the accidental and to elicit from the mingled phenomenon its permanent boon. Already men attempt to do this by a mere chemical agency. There have been philosophers who have sought in laudanum intellectual lucidity and bodily repose. There have been soldiers who have supplemented with "Dutch courage" the ardour of martial fire. Philosopher and soldier alike expose themselves to an unhappy reaction. But by the induction of hypnotic anaesthesia we are taking a shorter road to our object; we are acting on the central nervous system without damaging stomach or liver on the way. It was an abridgment of this kind when sub-cutaneous injection of morphia replaced in so many cases morphia taken by the mouth. Yet though the evil done in transitu was subtler and slower, evil still was done. On the other hand the direct non-chemical action on the central nervous system, in which hypnotism consists, is not proved to be in any way necessarily injurious, and has thus far, when under careful management, resulted almost uniformly in good. Such at least is the view of all physicians, so far as I know, who have practised it themselves on a large scale, though it is not the general view at present of those men—physicians or others—who are content to judge from hearsay and to write at second-hand.

Let us not then, I would say, be satisfied if we can merely give some poor sufferer a good night by hypnotism, or even if we can operate on him painlessly in a state of trance. Let us approach the topic of the banishment of pain in a more thoroughgoing and bolder spirit. Looking at that growing class of civilised persons who suffer from neuralgia, indigestion, and other annoying but not dangerous forms of malaise, let us consider whether we cannot induce—in those of them who are fortunate enough to be readily hypnotisable—a third condition of life, which shall be as waking but without its uneasiness and as sleep without the blankness of its repose, a state in which the mind may go serenely onwards and the body have no power to distract her energy or to dispute her sway.

Is there anything in nature to render this ideal impossible? Let us consider the history of pain. Pain, it may be plausibly suggested, is an advantage acquired by our ancestors in the course of their struggle for existence. It would be useless to the fortunate animalcule, which, if you chop it in two, is simply two animalcules instead of
one. But as soon as the organism is complex enough to suffer partial injury, and active enough to check or avoid such injury before it has gone far, the pain becomes a useful warning, and the sense of pain is thus one of the first and most generalised of the perceptive faculties which place living creatures in relation with the external world. And to the human infant it is necessary still. The burnt child must have some reason to dread the fire, or he will go on poking it with his fingers. But, serviceable though pain may still be to the child and the savage, civilised men and women have now a good deal more of it than they can find any use for. Some kinds of pain, indeed (like neuralgia, which prevents the needed rest), are wholly detrimental to the organism, and have arisen by mere correlation with other susceptibilities which are in themselves beneficial. Now if this correlation were inevitable—if it were impossible to have acute sense-perceptions, vivid emotional development, without these concomitant nervous pains—we should have to accept the annoyance without more ado. But certain spontaneously occurring facts, and certain experimental facts, have shown us that the correlation is not inevitable; that the sense of pain can be abolished, while other sensibilities are retained, to an extent far beyond what the common experience of life would have led us to suppose possible.

Our machinery is hampered by a system of checks, intended to guard against dangers which we can now meet in other ways, and often operating as a serious hindrance to the work of our manufactory. A workman here and there has hit on an artifice for detaching these checks, with signal advantage, and is beginning to report to the managers his guess at a wider application of the seemingly trivial contrivance.

Be it mentioned too that not only pain itself, but anxiety, ennui, intellectual fatigue, may be held in abeyance by hypnotic treatment and suggestion. There is not, indeed, much evidence of any increase of sheer intellectual acumen in the hypnotic state, but in most kinds of ordinary brain-work the difficulty is not so much that one's actual power of thinking is inadequate to the problems proposed as that one cannot use that power aright, cannot focus one's object steadily or gaze on it long. Hypnotism may not supply one with mental lenses of higher power, but in its artificial attention we have at least the rudiment of a machinery like that which holds firm the astronomer's telescope and sweeps it round with the moving heavens, as compared with the rough and shifting adjustments of a spy-glass held in the hand.

These speculations, especially where they point to moral progress as attainable by physiological artifice, will seem to many of my readers venturesome and unreal. And in these days of conflicting dogmas and impracticable Utopias, Science, better aware than either priest or demagogue of how little man can truly know, is tempted to confine herself to his material benefit, which can be made certain, and to let
his moral progress—which is a speculative hope—alone. Yet, now that Science is herself becoming the substance of so many creeds, the lode-star of so many aspirations, it is important that she should not in any direction even appear to be either timid or cynical. Her humble missionaries at least need not show themselves too solicitous about possible failure, but should rather esteem it as dereliction of duty were some attempt not made to carry her illumination over the whole realm and mystery of man.

Especially, indeed, is it to be desired that biology should show—not indeed a moralising bias, but—a moral care. There has been a natural tendency to insist with a certain disillusionising tenacity on the low beginnings of our race. When eminent but ill-instructed personages in Church or State have declared themselves, with many flourishes, "on the side of the Angel," there has been a grim satisfaction in proving that Science at any rate is "on the side of the Ape." But the victory of Science is won. She has dealt hard measure to man's tradition and his self-conceit; let her now show herself ready to sympathise with such of his aspirations as are still legitimate, to offer such prospects as the nature of things will allow. Nay, let her teach the world that the word evolution is the very formula and symbol of hope.

But here my paper must close. I will conclude it with a single reflection which may somewhat meet the fears of those who dislike any tamperings with our personality, who dread that this invading analysis may steal their very self away. All living things, it is said, strive towards their maximum of pleasure. In what hours, then, and under what conditions, do we find that human beings have attained to their intensest joy? Do not our thoughts in answer turn instinctively to scenes and moments when all personal pre-occupation, all care for individual interest, is lost in the sense of spiritual union, whether with one beloved soul, or with a mighty nation, or with "the whole world and creatures of God"? We think of Dante with Beatrice, of Nelson at Trafalgar, of St. Francis on the Umbrian hill. And surely here, as in Galahad's cry of "If I lose myself I find myself," we have a hint that much, very much, of what we are wont to regard as an integral part of us may drop away, and yet leave us with a consciousness of our own being which is more vivid and purer than before. This web of habits and appetencies, of lusts and fears, is not, perhaps, the ultimate manifestation of what in truth we are. It is the cloak which our rude forefathers have woven themselves against the cosmic storm; but we are already learning to shift and refashion it as our gentler weather needs, and if perchance it slip from us in the sunshine then something more ancient and more glorious is for a moment guessed within.