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A table of contents for *Journal of the Transactions of the Victoria Institute* can be found here:

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1900.

ORDINARY GENERAL MEETING.*

PROFESSOR EDWARD HULL, F.R.S., IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed.

The following Elections were announced :—

MEMBERS:—Rev. H. G. D. Latham, London ; Rev. Okey Johnson Moore, U.S.A.

ASSOCIATES :—Rev. J. Hodgson, M.A., Cornwall ; Rev. C. H. Kilner, U.S.A. ; Rev. P. P. Flournoy, D.D., U.S.A. ; H. W. Rankin, Esq., U.S.A. ; Rev. A. V. Thornton, M.A., Cornwall.

The following paper, entitled "The Scope of Mind," was then read by the author, Alfred T. Schofield, Esq., M.D., M.R.C.S.E., etc.

THE SCOPE OF MIND. By ALFRED T. SCHOFIELD, Esq., M.D., M.R.C.S.E., etc., Chairman of the Council of Parents' National Educational Union.

A FULL concept of mind must be the basis of all true physiologico-psychical education, and also has a direct bearing in its issues on every stage of life ; more particularly on those earlier periods when the character is formed. And this is becoming of increasing importance from the great interest that is being taken in the mental development of children. It is not too much to say that true education or true child-culture must be based on a full and broad concept of mind.

There can be no doubt that amongst psychologists the concept is changing and enlarging. The causal force at work is at present largely German, where the new is perhaps accepted as the true with a greater facility than with English scientists, who carry all their national stolidity and doggedness into their studies, and still move on stereotyped lines with proper reverence for established authority.

* April 12th, 1897.

Investigations and inferences are more boldly pushed and more rapidly made abroad, and perhaps not unfrequently supplemented by that inner consciousness whose dicta are incapable of verification or proof. We have, however, in England notable exceptions to the rule of "follow-my-leader" whom we shall often quote, but whom at present it is needless to name.

Historically, distinguished men have from time to time striven to enlarge our concept, but with indifferent success from the want of support from the physiological side, which only of late years has made much advance, and on which all future psychology must be increasingly based. A decided impetus from an irregular but prolific source has undoubtedly been recently given in the phenomena laid bare by hypnotism, and it is somewhat significant that all modern psychologists feel constrained seriously to discuss and examine these phenomena.

At the same time deliberate efforts have not been wanting to check and ridicule all concepts of mind that exceeded the old time-honoured definitions, lest the new wine should burst the old bottles; while many physiologists so far from extending our horizon, have definitely limited all idea of mind to a function of matter. Thus, while there is generally a consent to extend our ideas, in most quarters they are limited in others either by flat denial of a *non possumus* kind, or by a physiological materialism; both, though the offspring of different schools, being probably expressions of the smallness of our thoughts compared with the largeness of our subject.

One word of explanation perhaps is needed as to why the present writer deals with subjects so abstract and abstruse. It is because, being a physician in constant contact with nerve and mental phenomena, and witnessing continually the powers of that which he desires to recognise as mind, both in the production of disease, and in a power of relieving and curing it, that the writer has been forced to study these matters. It would in his opinion be well if all physicians and surgeons investigated these powers more, which, when known, give a key to many unexplained and perplexing lapses from, and restorations to, health.

Without further preface, therefore, we will proceed to consider the relations of mind and matter. Such questions bristle with difficulties, and like unpractised navigators when exploring the stream of knowledge, we must take

especial care at the outset to avoid those numerous rocks which project from either bank, on which we might early suffer shipwreck from the temptation to exceed our limitations.

For instance, are the psychical and the physical the two Cartesian clocks, abysmally apart, which, when wound up, nevertheless correspond tick for tick? Or shall we follow Professor W. James when he says,* “The simple and radical conception dawns upon the mind that mental action may be uniformly and absolutely a function of brain action, varying as the latter varies, and being to the brain action as effect to cause.”

“This conception” (he continues) “is the ‘working hypothesis’ which underlies all the ‘physiological psychology’ of recent years.” To adopt one theory is to be proclaimed a dualist, to adopt the other, a monist, and we would therefore avoid both, the more especially as neither contains the whole, but each contains a part of the truth.

For instance, the abysmal distance between mind and matter is shown in that while “physical phenomena are phenomena in space, psychical phenomena are phenomena in time only,”† for it is a fundamental thought to grasp that mind cannot have a “seat,” as it has not any extension in space, having no relation with it that we know of. It does not cover a surface or fill a volume. It is only related to time. In this we follow, of course, the popular assumption that time and space are essentially different, neglecting certain speculations as to time being after all a spatial extension (in a fourth dimension). The extent of the connection between mind and matter is still unknown, though it has furnished material for discussion for centuries.

Some like Professor Clifford make psychical action universal in matter, others like Descartes limit it to man only, while Schopenhauer from a broader standpoint says, “The materialists endeavour to show that all mental phenomena are physical and rightly so, only they do not see that on the other hand every physical is at the same time metaphysical.”

Lest, however, we should become dogmatic on these relations we are reminded that the whole material universe may be, after all, but an inference of mind, and that matter and mind may not be two but one, the former being in this view a projection of the latter, rather than the latter a function of the former.

* *Psychology*, W. James, p. 6.

† *Human Mind*, Jas. Sully.

Professor Herbert says,* "The common supposition, then, that the material universe and the conscious beings around us are directly and indubitably known, and constitute a world of 'positive' fact, in which reason can certainly pronounce without any exercise of faith . . . is an entire mistake, based upon astonishing ignorance of the essential limitations of human knowledge, of which thinkers who lived in the very dawn of philosophy were perfectly aware. The fact is we are equally obliged to transcend phenomena, and to put faith in events and powers and realities which do not appear, when we recognise the past, or the distant, or the material universe, or the minds of men, as when we infer the existence of God and of the unseen world."

That life involves mind has, of course, like all else, been vigorously disputed and equally vigorously affirmed. "Life," says Professor Bascom,† "is not force, it is combining power. It is the product and presence of mind." No mechanical process can indeed ever adequately represent or account for the processes of life, and yet life is not in itself a force, it is the power to use force for unique ends.

The extent to which the word "mind" may be employed as the inherent cause of purposive movements in organisms is a very difficult question to solve. There can be no doubt that the means employed to produce such movements are the natural forces, but behind these the directing and starting power seems to be psychic. "From the first movement," says Dr. R. Dunn in the *Journal of Mental Science*, "when the primordial cell-germ of a human organism comes into being, the entire individual is present, fitted for human destiny. From the same moment matter, life, and mind are never for an instant separated, their union constituting the essential work of our present existence." Again, "one cannot forbear assuming in the vital process of each individual organism an *idea*, which continually supports and renews the organism."‡ Carpenter goes further still,§ "The convertibility of physical forces and correlation of these with the vital and the intricacy of that nexus between mental and bodily activity which cannot be

* *Realistic Assumptions of Modern Science Examined*, Professor Herbert, p. 455.

† *Comparative Psychology*, Professor Bascom, p. 58.

‡ *Psychology*, F. Kirchener, p. 141.

§ *Mental Physiology*.

analysed, all leads upwards towards one and the same conclusion—the source of all power is mind. And that philosophical conclusion is the apex of the pyramid which has its foundation in the primitive instincts of humanity.”

It would thus appear we cannot define where psychic action begins, for however far we travel down in the scale of life, psychic action is seen. “Entirely ignorant as we are,” Maudsley remarks, “we certainly cannot venture to set bounds to its power over those intricate and insensible molecular movements which are the basis of all our visible bodily functions . . . There are many more things in the reciprocal action of mind and organic elements than are yet dreamt of in our philosophy.”*

Regarding the unicellular organism Professor W. H. Thompson in his Belfast address in 1894 actually says, “The amoeba present active and spontaneous movements, and here one not only meets with a power of choice, but also an intelligent consciousness in selecting food.”

Maudsley observes, “An organism plainly has the power (call it intelligent or call it what you will) of feeling and eschewing what is hurtful to it, as well as of feeling and ensuring what is beneficial to it.”†

Perhaps one instance of this may be given. Romanes observes,‡ “No one can have watched the movements of certain Infusoria without feeling it difficult to believe that these little animals are not actuated by some amount of intelligence. There is a rotifer whose body is of a cupshape, provided with a very active tail armed with strong forceps. I have seen a small specimen of this rotifer attach itself to a much larger one with its forceps, the large rotifer at once becoming very active and springing about with its burden till it came to a piece of weed. It took firm hold of the weed with its own forceps, and began a most extraordinary series of movements to rid itself of the encumbrance. It dashed from side to side in all directions; but not less surprising was the tenacity with which the smaller rotifer retained its hold, although one might think it was being almost jerked to pieces. This lasted several minutes, till eventually the small rotifer was thrown violently away. It then returned to the conflict, but did not succeed a second

* *Mind and Body*, Maudsley, vol. i, p. 39.

† *Ibid.*, vol. i, p. 7.

‡ *Animal Intelligence*, Romanes, p. 18.

time in establishing its hold. The entire scene was as like intelligent action on the part of both animals as could well be imagined. So that if we were to depend upon appearances alone, this one observation would be sufficient to induce one to impute conscious determination to these micro-organisms."

However strongly such an illustration as this proves the presence of psychic force, all may not be agreed as to the question of consciousness. By some it is assumed, as we have said, to accompany all psychic action.

That unconscious psychic action is to be attributed to plants seems a little startling and need not be pressed, but on the other hand we think it must be admitted in all animals.

Dr. Noah Porter says,* "The first acts of life, whether they pertain to body or soul, are unconscious," and when Herbert Spencer says,† "Reflex action is the lowest form of psychical life," he thereby tacitly admits unconscious mind action in animals.

When we proceed higher in the scale another question arises with regard to instinct and intelligence; but again we are confronted with the inscrutable problem of the connection of the two, and the origin of the former.

Consider an illustration given us by Romanes from a class by no means renowned for instinct or for intelligence. "Sticklebacks swim quietly about amidst rapacious pike which do not attempt to attack them; for if by oversight a pike even actually attempts to swallow a stickleback, the latter with its projecting dorsal spines sticks in his throat and the pike must infallibly die of hunger, and accordingly cannot transmit his painful experience to posterity."‡

Proceeding one step higher to insects, their instinct or intelligence is summed up by Professor Lindsay in the following 15 psychic phenomena§:—

1. Co-operation for a given purpose.
2. Division of labour, working by turns, and relief parties.
3. Obedience to authority, including language of command.
4. Understanding a language (often of touch).
5. Organization of ranks and military discipline.

* *The Human Intellect*, N. Porter, p. 100.

† *Principles of Psychology*, Herbert Spencer, vol. i, p. 428.

‡ *Animal Intelligence*, Romanes, p. 99.

§ *Mind in Animals*, Lindsay, chap. vi.

6. Knowledge of possession of power and use of it; subjection of the weak by the strong.
7. Judicial punishment of disobedience or rebellion.
8. Forethought, real or apparent.
9. Practice of agriculture, harvest and storage.
10. Respect for and interment of dead.
11. Mourning in bereavement, or its resemblance.
12. Funeral ceremonies, including processions.
13. Use of natural tools, instruments, and weapons.
14. Passions of rage and anger.
15. Imagination and its derangement by hypnotism.

Now how far are these phenomena of instinct and how far of intelligence?

We fear a solution that will meet all difficulties has yet to be discovered; meanwhile we may accept the broad statement that instinct is unconscious psychic action. "As in human ideation," says Kirchner, "we find in instinct the action, unconscious and yet purposive, whose consequence is indeed much more certain than that of human ideation."*

Leaving now these perplexing and yet unsolved problems that surround the threshold of our inquiry, let us pause for one moment to consider the present position and aim of the science known as psychology.

Its definition, given by Professor Ladd and quoted by Professor James,† is—the description and explanation of states of consciousness as such. In this explanation it assumes as true two peculiar data‡:—1. Thoughts and feelings, or whatever other names transitory states of consciousness may be known by. 2. Knowledge, by these states of consciousness of other things.

Psychology is, however (until lately), so fettered and bound by its arbitrary limitation to the discussion of states of consciousness that it is thus described (or decried) by James§: "Psychology is but a string of raw facts, a little gossip and wrangle about opinions; a little classification and generalization on the mere descriptive level, a strong prejudice that we *have* states of mind, and that our brain conditions them; but not a single law in the sense in which physics shows us laws. At present psychology is in the

* *Psychology*, Kirchner, p. 138.

† *Psychology*, W. James, p. 1.

‡ *Ibid.*, p. 2.

§ *Psychology*, W. James, p. 468.

condition of physics before Galileo and the laws of motion, or of chemistry before Lavoisier."

We have purposely paused over this word "psychology" and given these extracts in order that our temerity may not be deemed so excessive in endeavouring to overthrow its most cherished dogma, and to enlarge our conception of the word mind.

After all not only have we a house divided against itself but one in a state of chaos: a science bristling with contradictions, its greatest agreement being in the general proposition that consciousness and mind are one and the same, the sphere of the latter being entirely defined by the extent of the former, and that to speak of unconscious mental phenomena is to stultify the meaning of words, to betray confusion of thought and as a matter of fact to talk nonsense. It is this proposition and no less that we seek to overthrow, it is these bonds that we hope to burst, in the firm belief that it is mainly for want of a broader basis, and on account of this rigid adherence to this narrow, and we may say effete, shibboleth that psychology has not made a greater advance and reared a more imposing structure.

The way will be better prepared for the consideration of the connection of mind with consciousness if we briefly touch upon two points; first, the connection of mind and brain, and secondly, the various mental qualities connected with their action, and constituting our personality.

To some it is very difficult to draw the line between mind and matter in the human brain.

The intelligible connection of the two is well expressed by Dr. Browne, "The great character of current opinion appears to be that wherever there is nerve there is psychological function, actual or potential, which may rise with the range of consciousness.* Not only is there apparently inseparable connection during life between the nervous structures and mental phenomena, but the latter are clearly dependent on the former. The ordinary condition of the nervous system is like that of a moderately charged battery, that can be discharged by the completion of the circuit and re-charged by the blood. The will can complete the charged circuit. Mental causes can produce physical effects and physical causes mental

* Dr. W. A. F. Browne in *Journal of Mental Science*, vol. xii, p. 321.

effects." "We have every reason to believe," says Professor Bain, "that with all our mental processes there is an unbroken natural (physical) succession." Herbert Spencer says, "No thought, no feeling, is ever manifested save as the result of a physical force. This principle will before long be a scientific commonplace."*

Having thus marked the intimate connection and interdependence of mind and brain we must, to keep the balance of truth, equally insist on the radical distinction between the two. "The intelligence of man," says Calderwood, "as known in personal consciousness, is of a nature entirely distinct from any sensory apparatus. Mind is not a product of cerebral evolution."† Again Herbert Spencer sounds a timely note of warning, "Here indeed we arrive at the barrier which needs to be perpetually pointed out alike to those who seek materialistic explanations of mental phenomena, and to those who are alarmed lest such explanations may be found. The last class prove by their fears almost as much as the first prove by their hopes, that they believe that mind may possibly be interpreted in terms of matter whereas . . . there is not the remotest possibility of so interpreting it. For the concept we form of matter is but the symbol of some form of power absolutely and for ever unknown to us.

"Mind is also unknowable, and the simplest form under which we can think of its substance is but a symbol of something that can never be rendered into thought. Nevertheless were we compelled to choose between translating mental phenomena into physical phenomena, or of translating physical phenomena into mental phenomena, the latter alternative would seem the more acceptable."‡

It may not be out of place here, having touched upon the connection of mind and brain, to give a brief description of the latter as far as it throws light on mental activities.

For this purpose then besides the obvious divisions of the brain into greater and lesser (or cerebrum and cerebellum) and into two halves right and left, we may divide the cerebrum into three regions, consisting from above downwards of "cortex" or surface brain, "basal ganglia" or mid-brain, and

* *First Principles of Psychology*, Herbert Spencer.

† *Relations of Mind and Body*, Professor Calderwood, p. 307.

‡ *Principles of Psychology*, Herbert Spencer, 2nd edit., p. 63.

“medulla” or lower brain, each of these containing a large proportion of the active agent in brain work known as grey matter, which consists of masses of brain cells.

The medulla or lower brain connects the spinal cord below with the mid-brain above, and is “the co-ordinating centre of most associated movements.”* It is in fact the organising centre for carrying on all the processes connected with the passive or vegetative life of the body as contrasted with the active or animal life. All the processes carried on here are far below the level of consciousness.

The basal ganglia of the mid-brain are principally three in number; the corpora quadrigemina, connected with sight, the corpora striata with motion, and the optic thalami with sensation.

In this mid-brain we see the organization of the functions of animal life subject to, or of an inferior order to, the highest centres and conducted without consciousness.

Lastly, we come to the cortex or surface brain, the seat of conscious mental life and the source of all voluntary actions.

The cortex is the seat of conscious sensation, though we are by no means conscious of all that takes place even in the cortex, for innumerable sensations may, and probably do, continually reach it of which we are wholly or partially unconscious; in many cases, of course, this is accounted for by non-attention. On the other hand, it would appear from recent researches that it is not possible to be conscious of any currents that do not reach the surface of the brain.

With regard to there being two hemispheres right and left, Gall, Spurzheim, Dr. A. L. Wigan, Sir H. Holland, and Brown Séquard conclude we have two brains united for common action, and that we have probably two minds acting normally in perfect harmony, but which can and do act separately in many conditions.

When a nerve cell acts (whatever this means), impulses tend to pass off from it along its various connected nerve fibres, and the force and number of these impulses depend on the violence of the cell action; if this is gentle there may be only a slight impulse passing off through the largest connecting fibre (the freest channel); if the action is violent it may overflow through the various connecting fibres in any direction.

* Ferrier, *Functions of the Brain*.

It appears that apart from the cortex, the nerve paths in the lower parts of the brain consist of sensori-motor arcs, the nerve currents arriving at the hinder part of the brain by the posterior part of the cord, and leaving the anterior ganglia, notably the corpora striata, and descending down the front of the spinal cord, in the resulting motor impulse. To use now the words of Dr. Hill:* “On these arcs, which collectively make up the lower system, are superadded arcs the loops of which lie in the higher grey matter (of the cortex). At the same time, therefore, that an impulse flows across the spinal cord as a simple reflex action, a certain part of this impulse is also diverted to the brain along fibres which ascend in the outer part of the spinal cord; and from the brain descending fibres carry the impulse back again to the lower arc. One thing is quite certain, namely, that the routes which are the most frequently used are the most open, and therefore the most easily traversed.”

All this means, speaking generally, that a nerve current arriving at the brain may take one of three courses—either being directly reflected as action by the lower brain, or travelling in a short arc by the mid-brain in unconscious action, or in a long arc by the cortex in conscious action. In connection with this it may be observed that the cranial nerves have all two deep origins, the one in the basal ganglia of the mid or unconscious brain, and the other in the cortex or upper conscious brain.

It only now remains for us very briefly to touch on the action and qualities of mind before reaching in conclusion the question with which we started: Is mind limited by consciousness? First of all then with regard to the old classical question as to whether the “mind,” which we have seen is so inseparably associated with nerve cell action, is the player or the tune of the harp, the rower or the motion of the boat,—the harp and boat being both the nerve cells in question.

Professor E. Montgomery of California† concludes “We are unhesitatingly certain that our movements are not directed and controlled by the peripheral stimulation of sensory elements. In shaping our actions we are not slavishly executing the immediate promptings of our actual

* Paper on “Reflex Action,” by A. Hill, Cantab., *Victoria Institute Proceedings*, 1893.

† E. Montgomery in *Mind*, vol. v, p. 23.

environment. This is so palpable a truth that no serious doubt concerning the same has ever gained or ever can gain ground." The existence of the will is proved by knowledge and experience. The consciousness of effort as well as purpose in will when running counter to prompting sensations is strong proof (in spite of explanations) of its real existence. Carpenter says,* "It is clear the will is different from the general resultant of the automatic activities of the mind; for in the first place all alcoholic stimulants excite the automatic activity of the mind while diminishing the power of the will." No doubt, however, a large part of the mind runs in grooves, which though they may be unknown and unfelt are none the less real. The lines of mental function are in many respects as definite as the lines of instinct in bees or ants.

The three great divisions of the mind generally laid down by psychologists of feeling, knowing, and willing, first came from Germany before the days of Kant.

Professor Dunn traces the evolution of the three. "At birth the nascent consciousness becomes awakened, purely sensational at first; and emerges step by step from self-consciousness to world consciousness, and through the ideal and emotional up to the intellectual."

This, however, practically traces the rise of our mind to unconscious origins; and indeed all willing, thinking, and feeling are ultimately based on unconscious springs and trains of thought and motion. Even when developed many mental qualities seem partly or wholly unconscious. Let us enumerate a few. *Intuition* may be conscious or unconscious. *Perception* is an example of conscious intuition. *General synthesis* may be conscious or unconscious, some can say why they think so and so, others cannot.

Kant says, "Innumerable are the sensations of perception of which we are not conscious, although we must undoubtedly conclude that we have some obscure ideas, as they may be called (to be found in animals as well as in man). The clear ideas indeed are but an infinitely small fraction of these same exposed to consciousness. That only a few spots in the great chart of our minds are illuminated may well fill us with amazement in contemplating this nature of ours."†

* *Mental Physiology*, Carpenter.

† *Anthropologica*, Kant, Sec. v.

Tact, the psychic analogue of touch, is a faculty of unconscious origin.

The *will* itself may be unconscious. "The conscious and unconscious wills are essentially distinguished by this, that the idea which forms the object of will is conscious in the one case, unconscious in the other."*

"If it is desired further to distinguish the two kinds of will, for conscious will language already offers the term exactly covering the conception—free-will; while the word 'will' must be retained for the general principle, which exists in us all, unconscious will."† "We may regard it as settled that the laboratory of volition is hidden in the unconscious. That we can only get to see the finished result, and that the glances we succeed in throwing into the laboratory never reveal those unconscious depths of the soul where occur the reaction of the will on motives and its passage into definite volition."‡

The discovery of the *beautiful*, and the "creation of the beautiful by man proceed from unconscious processes whose results the feeling and the discovery of the beautiful represents in consciousness, and forms the starting point of further conscious work which however at every stage needs more or less the support of the unconscious."§

The ordinary artist does everything with conscious choice. There is a lack of "divine frenzy, the powerful breath of the unconscious, which appears to consciousness as higher and inexplicable suggestions which it is forced to apprehend as facts, without ever being able to unravel their source."|| "The difference between talent and genius is the difference between the conscious and the unconscious."¶

Instinct is not the result of conscious reflection, not a consequence of bodily organization, not mere results of the mechanical foundation of the organization of the brain, but "the individual's own activity, springing from his inmost nature and character."***

The *ethical* element in man lies in the deepest night of the unconscious. "Consciousness may perhaps influence actions

* *Philosophy of the Unconscious*, E. von Hartman, vol. i, p. 253.

† *Ibid.*, vol. ii, p. 69.

‡ *Ibid.*, vol. i, p. 263.

§ *Ibid.*, vol. i, p. 291.

|| *Ibid.*, vol. i, p. 278.

¶ *Heredity*, E. Ribot, p. 229.

** *Philosophy of the Unconscious*, E. von Hartman, vol. i, p. 113.

by presenting motives to react on the unconscious ethical, but whether this reaction follows, consciousness must calmly wait.* “Mystics in every country and age put faith only in their unconscious knowledge.”†

Our personality itself, the “ego,” seems to have its origin or source in the unconscious region.

Professor Barrett (Dublin) says:—“It is to the existence and vital faculty of this large area of our personality which is submerged below the level of consciousness, that I wish to draw attention, for psychologists are agreed that its range must be extended to include something more than is covered by our normal self-consciousness. What we call ‘ourselves’ is a something which lies in the background of our consciousness, enabling us to combine the series of impressions made upon us, or the states of feeling within us, into a continuous personal identity.”‡

We are now prepared by the brief survey of mind from various sides and in its various developments to see that it everywhere tends to burst the confining wall of consciousness that has so long interposed as an iron barrier between it and the vast psychical region without, which we desire to see included under the one word “mind.” Let us then in the first place see what can be said in favour of the limitation of “mind” to consciousness, for to us the limitation is so transparently artificial that it is well to know it is still seriously and stoutly maintained. Thus “Mind is to be understood as the subject of the various internal phenomena of which we are conscious. Consciousness is to the mind what extension is to matter. We cannot conceive mind without consciousness, or a body without extension.”§

Positivism defines mind as (1) the sum of consciousness at any instant in an individual; or (2) as the sum of the consciousness during the life of an individual, consciousness being not an attribute of mind, but mind itself. Again the extreme statement “All and only the phenomena that are conscious are psychical.”|| “Wherever consciousness is impossible, mental action is impossible.”¶ Professor Brentano declares there are no such things as unconscious psychical acts.

* *Philosophy of the Unconscious*, E. von Hartman, vol. i, p. 265.

† *Heredity*, E. Ribot, p. 229.

‡ Barrett, in the *Humanitarian*, 1895.

§ *Lectures on Metaphysics*, Sir W. Hamilton, ix.

|| *Psychology*, Professor Ziehen, p. 4.

¶ *Relation of Mind and Body*, Professor Calderwood, p. 269.

Again "psychical and conscious are for us, at least at the beginning of our investigation, identical. The conception of unconscious psychical processes is for us an empty conception."* Here we find a little hedging, but what is worse, on the same page† we get an illustration of the unconscious passing of a friend when absorbed in thought coming to our consciousness after. Professor Ziehen accounts for the unconscious impression by saying that more intense ideas absorbed the thoughts, and that only as these waned did the psychical perception of the friend appear, or he says the sight of a friend "may be accompanied by a sensation which, however, is not very intense in consequence of the predominance of other ideas."

This theory is negatived by the simple fact that these unconscious impressions do not rise to consciousness as other ideas lessen, but are flashed into consciousness often at long intervals afterwards. Of course an impression was made at the time unconsciously. Again, "Though in a loose sense of the term consciousness, some mental events may be said to be outside it, in another and stricter sense of the word all that is mental is at the same time an element of consciousness. Consciousness is the widest word in our vocabulary, and embraces everything that mind embraces."‡ This may be so as used by Mr. Mill, but if so it embraces unconsciousness and becomes a word without meaning. Professor Alexander (Oxford) says, "Mind and consciousness are coextensive, though not synonymous. I take mind to be convertible with consciousness." Aristotle, Mill, Hamilton, and Ward generally consider that consciousness is the cause and necessary form of mental states, and that mind cannot be conceived without it, and yet, as we shall see, more than one of these contradicts this position in his own writings.

Reid, Stewart, Jouffroy consider consciousness is a faculty of mind. "The school of Descartes and Locke, *i.e.*, the whole of the 17th and 18th centuries, expressly held that psychology has the same limit as consciousness, and ends with it. What is without consciousness is remanded to physiology, and between the two sciences the line of demarcation is absolute. Consequently all those penumbral phenomena which form the transition from clear consciousness to perfect unconsciousness

* *Psychology*, Professor Ziehen, p. 5.

† *Ibid.*

‡ *Analysis of the Human Mind*, James Mill, p. 227.

were forgotten, and hence came superficial explanations and insufficient and incomplete views.

"The nature of things cannot be violated with impunity. Leibnitz alone in the 17th century saw the importance of this. Less was not to be expected of the inventor of the infinitesimal calculus. By his distinction between perception (conscious) and apperception (unconscious) he opened up a road in which in our time most physiologists and psychologists have somewhat tardily entered. There is no completed work on the subject. Such a work would need to show that most if not all the operations of the soul may be produced under a twofold form; that there are in us two parallel modes of activity, the one conscious, and the other unconscious."*

Turning now to those in favour of unconscious psychical action, we find that the fundamental importance for the conscious of the unconscious psychical life, the thorough dependence of the former on the latter is with Maudsley, as we shall see, a firm conviction. Amongst others he cites Hamilton, Carlyle, and L. P. F. Richter in support of it. G. H. Lewes sees consciousness everywhere even in the reflexes of the spinal cord, while Maudsley equally clearly, but to our mind with far greater reason, sees unconsciousness everywhere. He says,† "It is a truth that cannot be too distinctly borne in mind that consciousness is not coextensive with mind, that it is not mind, but an incidental accompaniment of mind." "The whole business of mental function as work might go on without consciousness just as the machinery of a clock might work without a dial. It is a necessary concomitant, not an energy at work in the manufacture, of the mental organism. The misfortune is that ordinary language assumes it to be a kind of superior energy."‡ Again, "Those who base psychology on the revelations of consciousness cannot but acknowledge that it is not essential to mental being at every moment, nor at any moment coextensive with the whole of it; but that mental powers exist habitually and even act occasionally in the absence of consciousness."§ A. Bain thinks that|| "Mind must be understood to cover the entire storage of mental impressions (even) when absolutely inactive and exercising

* *Heredity*, E. Ribot, p. 221.

† *Mind and Body*, Maudsley, p. 25.

‡ Dr. Maudsley in *Mind*, vol. xii, p. 503.

§ *Ibid.*, vol. xii, p. 489.

|| Professor A. Bain in *Mind*, New Series, vol. iii, p. 353.

no mental agency. The term consciousness refers purely to the moments of mental wakefulness or mental efficiency for definite ends."

In 1888 the Aristotelian Society held a special meeting to decide if "Mind is synonymous with Consciousness." It was decided in the negative. Professor Shadworth H. Hodgson, President of the Society, said, "It seems to me that both usage and accuracy of definition alike concur in deciding the question in the negative, for if we identify mind with consciousness, what are we to do with those states commonly called mental which are below the threshold of consciousness, and some kinds of which never rise above." With this Dr. G. Ritchie (Oxford) and many others agreed.

To proceed with our roll of witnesses.

"In the developed soul there is a perpetual alternation of consciousness and unconsciousness."* Professor Beneke proceeds, "What has once been produced in the soul continues still to exist even when it has ceased to be excited. That which was conscious merely becomes unconscious, or lives in the internal substance of the soul. This unconscious continuation of what has once existed in the soul is memory." Sir W. Hamilton practically admits unconscious psychical action in his illustration of a chain of thought of which the first and last links alone are recognised; being like a row of billiard balls, which if struck at one end only the last one moves, the vibration being only transmitted through the rest. He gives as an instance, suddenly when on Ben Lomond thinking of the Prussian System of Education. These were the first and last links, the intermediate ones of which were recalled after, seeing that previously on the mountain he had met a German, and this German was a Prussian. He says, "Some hold that these hidden links rise into consciousness momentarily, but are forgotten."† But a few pages previously he says, "The whole we are conscious of is constructed out of what we are not conscious of."‡

"It is necessary to realise," quoting Stout, "clearly that psychical dispositions, out of consciousness, form an indispensable factor in mental processes throughout conscious life."§ These psychological writers of advanced views all feel

* *Elementary Psychology*, Professor Beneke, p. 190.

† Lecture in *Metaphysics*, Sir W. Hamilton, vol. i, p. 354.

‡ *Ibid.*, p. 348.

§ *Analytical Psychology*, 1896, G. F. Stout, p. 23

it necessary to state them as tentative and novel simply because the bulk, not alone of metaphysicians but psychologists, have undoubtedly held that mind is consciousness. Some using, as we have seen, a "wide" sense, have included under the term states that may become conscious if sufficient attention is directed to them. But to talk of unconscious mind was distinctly held to be a contradiction in terms, and even the unconscious cerebration of the brain, which is now nearly universally acknowledged, was considered as late as 1876 a most objectionable doctrine.

Professor Lazarus says*: "We have first of all to remember that our psychic life is made up of conscious and unconscious elements. We think of consciousness as a brightly illuminated space surrounded with widely extended darkness, with the dim elements, though outside consciousness, co-operating with those within in a state of co-vibration."

The testimony of physiology is as follows: "The facts of physiology have at length led psychologists to see that states of consciousness form only a portion of the mental life, and have as background sub-consciousness and unconsciousness. At first it seems like a contradiction to speak of facts of unconsciousness as belonging to psychology; but when it is considered that the same changes in the nervous system may be accompanied by consciousness, or some sub-conscious change, it is evident that mind must consist of other elements than those which appear in consciousness. The study of physiology was necessary to bring out clearly the conception of unconscious feelings as facts in mental phenomena."†

Again, "The metaphysical view that mind and consciousness form an indivisible unity will not harmonize with the facts of physiology; for whole tracts may be cut out of the territory of intellectual consciousness without interfering with the integrity of consciousness, and will may be abolished while consciousness remains."‡

We will now sum up the evidence in the words of Bastian: "If we are, as so many philosophers tell us, to regard the sphere of mind as co-extensive with the sphere of consciousness, we shall find mind reduced to a mere imperfect disjointed series of agglomerations of feelings, and conscious states of

* *Das Leben des Seele*, Professor Lazarus, in *Mind*, vol. vii, p. 599.

† T. White in *Mind*, vol. vi, p. 506.

‡ *Functions of Brain*, Ferrier.

various kinds—while a multitude of initial or intermediate nerve actions would have no claim to be included under this category. For these and other reasons we feel ourselves driven to the conclusion that the common notion as to what should be included under the term mind is one which is altogether erroneous.* “If we are compelled to believe that consciousness is not co-extensive with the sphere of mind, in face of the now admitted fact concerning the frequent interpolation of unconscious nerve actions as integral parts of mental processes, only one course lies open to us. We must widen the signification of the term ‘mind’ itself.

“This is no question of choice, but one of absolute necessity. The meaning of the word ‘mind’ must be considerably enlarged so as to include . . . as mental phenomena the functional results of all nerve actions . . . whether these nerve actions are accompanied by a recognized conscious phasis or no.”† “Let us enlarge our conception and definition of mind. Let us openly profess that which has already been tacitly implied by many. Instead of supposing that mind and consciousness are co-extensive, let us make mind include all unconscious nerve actions. We must inevitably come to this, and the doctrine of unconscious cerebration (Carpenter) has served to pave the way for it.”‡

The case for the enlargement of the scope of mind has now been placed before our hearers, the writer having sought all through to establish the various points by voices other than his own, and it is for our readers to judge whether all through the history of mind from its earliest dawn it is not everywhere inseparably connected with unconscious psychic actions, and finally whether when speaking of the mind that is in man it is not now high time definitely to include the unconscious mental powers that we trust we have proved to exist.

It appears indeed to the writer that the conscious mind is a very small part of the whole psychic force within. A coral island in the South Pacific is a mere ring of rock in the water of insignificant size to the sailor; but to the biologist or geologist it is the highest peak of a stupendous structure that rises from the bottom of the ocean as a mountain miles high. Commencing as it does in the very smallest beginnings,

* *Brain as an Organ of Mind*, C. Bastian, p. 146.

† *Ibid.*, p. 148.

‡ H. C. Bastian in the *Journal of Mental Science*, vol. xv, p. 522.

it remains unrecognized until it rises above the surface of the sea. We only see the top of this structure and call it an island; indeed, it is all we are conscious of except by soundings or occasional glimpses of what is beneath, on calm days or at low tides. In the same way it appears to me that of the sum of the psychic forces which we may call mental, and which constitute mind, only a very small portion are fitfully illuminated by what we call consciousness.

Some may think the point raised in this paper has merely an academic interest. It is not so. Had it not the most far-reaching practical issues throughout life this paper would never have been written. The establishment of the fact of an unconscious mind has a great bearing on the training of children; as children can be moulded unconsciously with far greater ease than through their consciousness. It gives also a great key to the cause and cure of many, if not of most, diseases. It lays bare at last the foundations of character, of conscience, of the entire Ego so long obscured by a psychology bounded by the conscious.

DISCUSSION.

The CHAIRMAN.—Ladies and gentlemen, is it your pleasure to return your thanks to Dr. Schofield for this communication? I feel that your applause has already answered that question, and I trust that such a very interesting paper as this will give rise to an interesting discussion, as it is a subject on which, no doubt, there are various opinions; while gentlemen are making up their minds, perhaps Captain Petrie will read one or two communications that he has had.

The HON. SECRETARY (Captain FRANCIS PETRIE, F.G.S.) then read the following communications:—

From T. BARKWORTH, Esq.:—

Having read Dr. Schofield's paper, I feel it right to say that I am in complete agreement with his main positions, and wish I could have been present to support them; but the state of my health made that impossible. A few criticisms which occurred to me I sent to the author, as the meeting was past. The old notion of metaphysicians that the Ego is one and indivisible

(which is partly based upon a theological assumption of its being necessary to the possession of a "soul," and inseparable from moral responsibility) will take long to break down; but physiology is doing much for this, and experimental psychology will do more, and presently it will be seen that the integrity of the Ego is no more essential to faith than creation by fiat, or the geocentric theory of the universe.

From Professor CLELAND, M.D., D.Sc., LL.D., F.R.S. (Professor of Anatomy in Glasgow University):—

Were it not that the kind request of the President and Council is not lightly to be refused, I should hesitate, in the few sentences allowable in commenting on a paper which is not very long, to trench on so grave and intricate a subject as that which is involved in Dr. Schofield's communication.

I am probably not the only one who has not gathered from the title the object which Dr. Schofield has had in view. "The Scope of Mind" may be considered as including God and the whole universe, God being provably the source of all being. That is to say that even matter, although changeless when subjected to experiment, affords indication of an Intelligent Originator. It is not eternal, even though Milton (according to Macaulay) thought it was. Such questions, however, scarcely belong to Dr. Schofield's theme. His desire has been to point out that "of the sum of the psychic forces which we may call mental, and which constitute mind, only a very small portion are fitfully illuminated by what we call consciousness." In a great deal I cordially agree, as every scientific man will, with Dr. Schofield's contentions. We are much too liable to imagine that our whole mental constitution lies open to introspection, while in reality it is very far from doing so. Our own consciousness, so far as we can submit it to observation, is but the superficial stratum of something far deeper. But I do not consider that there is anything which can properly be called mind apart from consciousness. To apply the term mind to aught which is devoid of consciousness is to alter the meaning of the word.

So far as I can see, there are two faults of analysis leading to the confused notion of unconscious spirit—first, insufficient attention to the distinction between consciousness and self-consciousness, and, secondly, failure to distinguish between a conscious factor, however existent, and our own consciousness.

It is owing to the first of these faults, the failure to distinguish between consciousness and self-consciousness, that many actions are described as automatic which we perform habitually without, as we express it, thinking about them. Thus we are not conscious of the rapid and easy operation of our minds in the movement of our limbs in walking, and in the movements of the various organs of speech in the formation of the different sounds which go to make up words. We often, indeed, take no note of numbers of the words themselves as we speed them, each in proper place, to express an idea which touches us so slightly that it is forgotten the moment after. Yet we were once painfully conscious of the small details which have long since become so easy as to escape the introspective glance. Moreover, the same sequence of events is observed in actions to which persons become habituated at periods long after infancy and childhood are gone; for example, many movements of the hands in manufacturing and in music. When Dugald Stewart accounted for these things by pointing out that attention was necessary for memory, and time necessary for attention, he was surely nearer the truth than are the modern scientists who call them automatic. Had he lived a little later, he might have spoken of the attention required for noting a conscious act as self-consciousness.

But there are things in the history of mind to which my second criticism applies, viz., that we must distinguish between a conscious factor and our own consciousness. Thus, we talk of voluntary movements, and yet it is the fact that in performing in accordance with the dictates of our wills the simplest of these we are utterly unconscious of the existence of the different muscles brought into play. If we depended on our knowledge of muscles, nerves, and brain to bring them into operation in carrying out our conscious decrees, the longest lifetime would not suffice to raise the most distinguished anatomist or physiologist up from his bed. Yet it is not to be believed that these movements are accomplished by other than conscious power.

Let me give another example of the evidence of what Dr. Schofield, following others, considers as psychic force without consciousness, but which I am constrained to refer to a conscious Power beyond the sphere of our own consciousness. We come—our minds come—whence? We note, as development proceeds, the close connection between mind and brain. We follow the

development of the brain from its first beginnings in the embryo, and we trace back the embryo to the fusion, within the yelk, of spermatozoon and germinal vesicle. Now, mental phenomena are as much hereditary as are physical phenomena. Through what paths shall we trace them to their source? "Authorities" will ask you to accept of the physical facts as proof that mind is but a phase of matter. But to do so is simply to change the meaning of the word matter by including under the term something which is not included in the phenomena by which matter is defined in the laboratories. Dr. Schofield, supported by the authorities whom he quotes, asks you to believe in unconscious mind. By doing so you will change the meaning of the word mind, and the question arises—what do you gain?

The Rev. RICHARD COLLINS, M.A., writes:—

I thank you very much for sending me a copy of Dr. Schofield's paper on "The Scope of Mind." The conclusions of the paper seem to me to be very valuable. But I note the expression "unconscious mind." The word "mind," which carries with it always the idea of the nature of mind only, seems here to be taken as embracing what is evidently the whole acting absolute Ego, or self, apart from all that is material. What do we mean by "mind"? I do not think we shall ever be able to define "mind" any further than by saying that it is the *conscious* action of the *self* in the direction of reason, choice, purpose, will. Mind is not a *thing*; it expresses the operation of some *thing*. That thing is the individual self, or that entity which is the real centre of life and mind in the individual. It is the self, surely, that works both consciously and unconsciously; but I would hesitate to speak of the self as an "unconscious *mind*." The mind and will have power, no doubt, beyond their ordinary routine of working, as, for instance, when we will to control our breathing, or other involuntary functions, by an unusual act of the will; and we may not be able fully to set limits to such power. It is the self acting on its mental side, and this is a strong point in Dr. Schofield's paper. But the self cannot be defined in terms of anything which is merely mental. I am only able to think, therefore, when Dr. Schofield speaks of "unconscious mind" action, of the *self* acting unconsciously. The self acts in directions other than the merely mental. It receives, for instance, through the material body certain material and ethereal impressions, and interprets them, not as mere impressions,

but as tones and colours of exquisite beauty; this is not by a mental act, but rather by an instinctive and receptive character of its own, which seems to differentiate it from all merely mental, as well as from all physical, phenomena. The self also, undoubtedly, rules all the involuntary physical functions of the body, not mentally, but by some innate power too deep, perhaps, for us at present to fathom; although even these are influenced evidently to some extent, perhaps to a greater extent than we have often thought, by the mental action of the self on the body—as, for instance, in the physical results of fear, anxiety, grief, hope, anger, moroseness, joy, etc. Our self, or spirit, therefore, must be some *thing* apart from our bodily frame; and it acts in other directions than, strictly speaking, the mental. Now what the self is may be as difficult of apprehension as what an “unconscious mind” is; but we all hold, no doubt, that it is not, as philosophical sceptics like Straus and others have put it, the material body, but some other objective existence, which has built about itself by its own unconscious force the material body, as its fit and necessary instrument for dealing with its environments. The “unconscious mind,” then, of this paper appears to me to be really the *self*; and all I contend for is that the “mind” ought not to be used as synonymous with the “self,” or “soul,” or “spirit,” or by whatever other term we choose to represent that which is the real objective seat of life and thought. What is regarded in this paper as an enlargement of the scope of mind seems rather to be a deeper insight into the psychic, or what I should prefer to call the spiritual, nature of man, his spiritual powers embracing not merely what is, properly speaking, mental, but also all those energies which are needed for the life, action, and welfare of the body. That thought, or the mental functions of the self, may have an immense power over the welfare of the body through the spirit, whose power of thought is one side, though only one side, of its functions, is probably a matter of study of the utmost importance, as Dr. Schofield clearly shows, and such studies may be calculated to open up wide vistas of fresh thought on the subject of the powers of spirit over matter; but I do not see that this forces us to give the whole of the life-functions of the self a mental complexion.

Professor LIONEL S. BEALE, F.R.S., writes:—

Although unable to offer an opinion upon many of the important

views alluded to in the interesting communication of Dr. Schofield on "The Scope of Mind," I hope I may be allowed to draw attention to some influences which suggest themselves to the mind from a somewhat more restricted standpoint.

The physico-chemical doctrines of life and mind so long in favour have recently given place to a very different doctrine, the advocates of which seek to extend the application of the words mental and psychical to all or nearly all living organisms, apparently forgetting, as it seems to me, that this will necessitate the admission on their part of different orders of psychical actions which characterise the different classes of living forms. Surely the psychical phenomena of man's brain cannot be regarded as of the same kind or order as those of an amoeba. To me it seems preferable to include all actions peculiar to living things, to living matter, in one category—*vital*. All mental actions are vital, but to call all vital actions mental would surely be incorrect and without meaning. The matter concerned in mind is actually living, and like all living matter in nature, actually structureless. But all structure has been formed from previously existing structureless living matter. This absolute distinction between *matter that lives and matter that is formed*—matter that has lived, but is no longer endowed with vital powers—has, I venture to think, been established by observation; and whether we examine the lowest and simplest organisms, or the highest cerebral cells or bioplasts of man's brain, we are led to the same general conclusion. Not only so, but when we trace backwards the formation of man's highest and most wonderful structures to their earliest state, to the living matter or bioplasm particles from which they were formed, we find similar structureless matter having no indications of structure, no chemical or anatomical characters which would enable us to say, "This, under certain favourable conditions, will become a man," no characters by which any evidence is afforded of its wonderful endowments—the existence of which endowments, however, is established by observing the changes which are brought about and the structures which are formed as development steadily proceeds. In relation with all structures of all living beings from the earliest period of existence are particles of living matter or bioplasts, which are necessary to life. Those, in relation with man's brain structure, possess those vital endowments without which no mental act is possible.

If this be so, the nerves, the marvellously complex arrangements of fibres slowly produced by living matter, are in all cerebral actions directly influenced by the vital movements and other changes of the millions of bioplasts in relation with them in the cerebral convolutions; and mental actions, like the mere movements of an amœba, are purely vital actions; but vital actions of different orders are dependent, as I think we must admit, upon different vital endowments communicated to matter from matter with similar endowments, we know not precisely how or when—endowments certainly not due to any properties of the atoms or combinations of the atoms of which they are composed, or to any powers of which science is cognisant, or of which, as yet, we have the slightest conception, powers undiscovered, and so far undiscoverable, powers beyond comprehension, but the existence of which we must admit, if we do not deny the facts we have established by actual observation.

Only last week I received, from one of the most eminent Professors of Minute Anatomy in Germany, a recognition of the results of some minute anatomical researches published in my lectures at the Royal College of Physicians thirty-six years ago.* The views I was then led to form have been confirmed and further strengthened by subsequent observations. Unfortunately over a period of many years we have been drifting towards purely physical doctrines of life, but a more careful review of facts long known and the results of recent investigations have led many to revise the general view they had been led to entertain and to admit that many facts in connection with living nature in all departments justify the conclusion that vitality is a special endowment which is transferable without loss or without modification from living to lifeless matter. All mental actions are purely *vital actions occurring in living matter.*

April 12th, 1897.

* "On the Structure and Growth of the Simple Tissues of the Human Body," a course of lectures delivered at the Royal College of Physicians, April–May, 1861 (*out of print*). London: John Churchill. Translated into German by Professor Victor Carus Engelmann, Leipzig.

Dr. ROBERT JONES, F.R.C.S.—I am afraid I shall be regarded somewhat as a kill-joy if I do not agree with the remarks as to the value of this paper. I am afraid, in this day, we are more or less mixed up with the verbal aspect of psychology, and to my mind the paper that has been read has not so much contributed to the value of physiology as I should have anticipated. I was not in time to hear the paper read, but I read it before I came here, and, so far as I can see, I expected a little more from "The Scope of Mind." I expected the application, perhaps, of the moral sentiment which is sometimes called "the seventh sense." I expected, from a medical reader, to have some application of the moral sense to a certain area of the brain perhaps. The late Dr. Jackson's views seem to tally more with the psychological sense of the present day than many of those that have been published in different papers and books on the subject.

The relation of mind to body must always remain a matter of interest. How far it may be a matter of interest I am not prepared to say, and I would suggest that, in future, the advantage we are to derive from psychological research will not be so much by the use of words. Mind has been held to include the conscious being. We may look on mind in a physical aspect. This has been recognised lately, so far as psychological research has gone, in the University of Cambridge.

I am sorry to say that I do not see the value of the paper in the education of children and the treatment of diseases. The climax is reached in the last few lines of the paper, where the author says the point raised in the paper "lays bare at last the foundations of character, of conscience, of the entire Ego so long obscured by a psychology bounded by the conscious." The paper has not explained character, conscience, or the entire Ego. It has been a paper built up, to my mind, by what has been taken from those who have written on the subject—a kind of summary, with a request that mind should include not only conscious, but also unconscious, actions.

I am sorry that I do not agree with the value of the paper to psychology.

Professor ORCHARD.—The able author of this paper will not, I am sure, think it is from any want of appreciation of its value, but I cannot see my way to concur in his very ingenious and interesting conclusions.

On page 236, he gives us a special warning to "take especial care, at the outset, to avoid those numerous rocks which project from either bank on which we might early suffer shipwreck from the temptation to exceed our limitations." I am very much afraid that the author, with all this piloting, has not entirely succeeded in steering clear of a certain rock he mentions in the third paragraph on page 235, as "physiological materialism." The trend of the paper is, to my mind, a little in this direction. I do not say it is intentional on the part of the author, but that is the impression it rather gives me.

On page 240, line 17 from the top, the author quotes a line from Kirchner—"We find in instinct the action, unconscious and yet purposive." That is a remarkably worded line! Does he mean by that that the action is unconscious in the animal, but purposive in him who is doing the action, or what does he mean? No doubt, if you row in a boat-race, you may say the action of the oar is unconscious, as far as regards the oar, and purposive as regards the rower. I do not know whether that is what the author of the passage means, or whether it is simply a line of pure and unadulterated nonsense.

I must differ from the author of the paper with regard to the statement (possibly it is a *lapsus lingue*) at the top of page 246—"The will itself may be unconscious." An unconscious will is, to me, an unmeaning phrase, nor can I agree with the author in his theory that "children can be moulded unconsciously" (at the end of the last page) "with far greater ease than through their consciousness." Possibly this expression "unconsciousness" may be used in this paper in a somewhat different sense to what it is generally understood to be. Of consciousness there are three kinds, dormant or latent consciousness, which we know as sub-consciousness; ordinary consciousness, or wariness of anything, and attention, or concentrated consciousness. It a little appears as though, in this paper, *consciousness* is sometimes confused with *attention*, and *unconsciousness* certainly with *sub-consciousness*. I would suggest to the learned author, if he will allow me, to abandon the term "unconscious mind" and to substitute for it "sub-consciousness."

The author has given us much from other minds; but he has not given us his own definition of mind. This does not conduce to clearness of thought. I do not know whether he intends to

adopt, as his own definition, the definition of Bastian, on page 252, line 20 from the top, that mind includes "all unconscious nerve actions." If mind includes all unconscious nerve actions, why should not it also include all unconscious moral actions and all unconscious mental actions? It would be, I think, very difficult to draw the line. It is really to confuse psychology and physiology to speak of conscious actions and unconscious actions, or conscious movements, rather, as belonging to mind. The notion that mind consists, wholly or partially, of a series of modifications is essentially materialistic. Conscious impressions may, of course, fade away and afterwards be revived. In such a case they are supposed to exist in sub-consciousness, or dormant consciousness. Undoubtedly, we are very familiar with that kind of phenomena. They may be revived by recollection, may these pictures that have faded, or by association of ideas; but I cannot revive the colours of a picture which has not, first, been painted, and so nothing can exist in sub-consciousness which has not first existed in consciousness. To confound thought with brain, and brain with nerves, is as unphilosophical as to confound the engine driver with his locomotive and the steam boiler with the wheels on which it runs. If you make mind co-existent with life you obliterate the soul of fundamental distinction, and alter, not advantageously, established definitions. In this age, especially, it seems important to emphasise difference and distinction as well as resemblance. There is too great a danger of attending only to the resemblance of things and ignoring their differences. That all power belongs to mind, or, as I would rather say, spirit, is a concretion in which I thoroughly concur with the author. Matter is itself unconscious; but it is another thing to say that there is such a thing as unconscious mind. Undoubtedly there may be certain spiritual actions of an unconscious character, but that is not mental action. Undoubtedly, there presides over all nature great intelligence which we know as God. This action is conscious and purposive. "He doeth all things according to the counsel of His own will." There is no unconsciousness about it; but, essentially, consciousness directed to an end.

While I am unable to agree with the learned author of this paper in what I cannot but regard as fallacious conclusions, I am, at the same time, exceedingly sensible of the great ability and originality for which we are indebted to him, and for the value and

benefit which we cannot fail to derive from this most interesting paper.

Mr. ANDERSON, C.B., LL.D.—I should say that I very sincerely thank Dr. Schofield for this valuable paper. I confess I came here, as the last speaker did, hoping to hear his own definition of mind. On the other hand, I must say that I concur fully in what the author says—that you can train children better while they are unconscious than when they are conscious. It is a fact, as I have seen myself, in that far-off British colony, the Mauritius, where we have to deal with a great number of children—especially uncivilised children coming from the depths of the centre of India—that it has been much easier to train these young minds when they do things unconsciously than when they do things consciously. I think I would not, in physiology, abandon the term “unconscious mind” and I think we can hold to it, that mind is conscious or unconscious. I was present at a strange incident that happened the other day in Paris. I was attending an operation on a boy of nine years old, under chloroform, and, at a certain moment, the boy became pale and his lips turned blue and he ceased to breathe. A fellow student of mine came near me and said, “Where is the soul now? Can you answer me, Anderson?” I was non-plussed, I confess, but I said “Certainly, it must be somewhere.” But by some power which, of course, the surgeon exerted, the little fellow came to. In the presence of that example I said to myself, “Under the power of chloroform the mind becomes, certainly, unconscious.” The brain had no power to act, but there was reflex action, because we saw the beating of the heart and the breathing of the lungs.

This is a very absorbing subject, and the more we study it the sooner the light will lead us through this mystery called mind.

I thank Dr. Schofield very much indeed for his paper. I am only sorry that I had not time to read it before I came to this hall.

The CHAIRMAN.—Before Dr. Schofield replies I should just like to ask him one question. We had from him a very interesting account of the action of an *amœba*, and, although its actions were exceedingly like the results of mind, I would like to ask Dr. Schofield whether he feels disposed to extend the range of what we call mind to the action of that *amœba*, or to similar actions amongst very lowly organic forms?

I will now ask him to reply to the criticisms on his paper.

Dr. SCHOFIELD.—It has been my unfortunate lot hitherto, Mr. Chairman, ladies and gentlemen, to read papers that have been so generally agreed with, being on somewhat stereotyped lines, that there has been no active discussion or opposition. I am extremely fortunate, at last, to have thrown down a bone of contention, to some extent, and to hear views diverse from one's own, which is always encouraging. I would ask you to distinguish between the many imperfections of the paper and the extreme theses that I am trying to prove, and not let the one suffer for the other.

The second writer's remarks on my paper simply beg the whole question, and he limits mind to pure consciousness. I have been asked for a definition of mind. I consider it is the sum of psychic action on us. Unconscious mind, he says, is *ourselves*, or *ego*. There is no such assertion in my paper. I say it is an important part of it. He absolutely speaks of spiritual powers that are not mental. A man who can distinguish and talk of spiritual powers that are not mental, I cannot follow. I consider that which is mental to be that which is not material; but certainly that which is spiritual is of the nature of mind. I am not here to distinguish between mind and soul, and so on, but I am taking mind as contrasted with matter.

Now, with regard to Mr. Jones, who, I regret to see, has departed, he complained that the paper was very limited. Nothing has tried me more, in writing this paper, than having to so exceedingly limit the scope of it, because one could have given such a much more interesting paper (and, perhaps, I may have the opportunity on a future occasion) to this audience; but I felt I must lay the foundation stone first. The misuse of words misleads science. If we talk of mind, which is conscious, where is mind when you are under the influence of chloroform, unless you admit unconscious mind? That is artificially unconscious; but I am speaking of a constant unconsciousness which is going on in all of us at this moment. Mr. Jones also made the extraordinary statement that mind here includes unconscious actions. Now I have shown, over and over again, that all unconsciousness is expressly excluded. He says that he does not understand children being taught unconsciously. Let me say the sooner it is understood the better. As a matter of fact, we do train children very largely, without knowing it, through their unconscious minds.

The unconscious mind can be trained and educated, as the conscious mind, by the force of environment unconsciously acting on the vital powers, and may so imbibe principles without knowing it. Take the instance of making a child clean. You surround it with materials of cleanliness and you will impart to its unconscious faculties cleanliness, and make it cleanly. You do not excite opposition, and it is educated without opposition, and this can be arranged definitely so as to educate it in definite directions; but that is a large matter that I need not enter upon.

My great and esteemed friend, who spoke in such flattering terms of my paper, Professor Orchard, does not seem to like the term "unconscious mind" as applied to "purposive." When bees form the hexagonal cells of the honeycomb they act unconsciously, and yet purposively, in a most astonishing manner. Surely instinct is purposive. I do not know that the point is open to much dispute. As to children being moulded unconsciously, perhaps Professor Orchard will take these remarks as applying to that subject also. Occupied, as I am, in the Educational Union, one finds the enormous use of educating children through their unconscious mind—the great point being that there is no opposition excited.

Now, as to sub-consciousness and unconsciousness. When I read a similar paper here, some time ago, Professor Orchard suggested that the term might be limited to sub-consciousness. There are many important psychic actions on which our conduct is based and which influence it, and which are connected with it in every way through life, that you may call sub-conscious; but *sub-conscious* really means, if you come to look at the word, *unconscious*. It is not that it has been conscious and become latent but it is that it is latent now and may never become conscious. If it is not conscious it is unconscious. I object to *sub-conscious* as being rather confusing. *Partly conscious*, perhaps, would be better than *sub-conscious*. At any rate, I must fight for the whole thing as the unconscious psychic faculties in man.

I agree with Professor Orchard, most fully, in repudiating the material basis as mind, and whatever quotations I made that might give such an impression I am not responsible for.

The valuable illustration given by Mr. Anderson I am thankful for.

With regard to the evidence of mind amongst the lower animals, I think I am not likely definitely to answer Professor Hull's

question. In my opinion there is mind in all purposive psychic action, and, if that amoeba not only apparently but really comes within that category, I do not see why we should limit our term, or arbitrarily deny the term, to one when we apply it to another for similar actions.

The CHAIRMAN.—It has no ganglia.

Dr. SCHOFIELD.—No.

The Meeting then terminated.