Science and a Future Life. By WILLIAM GRAHAM, M.D., Medical Superintendent of the District Asylum, Belfast.

NORMAL humanity has never taken kindly to the idea of annihilation. As far back as anthropology has pushed its researches traces of a belief in a survival after death have been found. We have but to open the tombs of the men of the neolithic period to discover idols, mystic symbols, traces of food and clothes, with which our far-off progenitors sought to express their belief that the dead still lived and were open to the ministries of pious affection. The truth is, the thought of annihilation is too abstract to be intelligible to the primitive mind. Wordsworth's "little maid" could not conceive death except in terms of life, and her inability is a universal mark of undeveloped thought. Savage man has no knowledge of death as a fact or process of nature, only as the product of some hidden and malevolent energy which, though it may destroy, cannot annihilate. The dead are not really dead. They haunt the spot which on earth they loved, mingle with the dreams, and affect for good or evil the fortunes of the living. Out of this instinctive impulse, through the growth of mental faculties and the reaction of environment, have been gradually evolved the lofty hopes of religion and philosophy.

Nor is the idea of annihilation less obnoxious to civilised and cultivated man. Philosophies, materialistic and pantheistic, have done their best to rid him of that notion of immortality. Huxley, while forced to believe in the everlasting duration of matter and force, cannot discern a shred of evidence for a life beyond the grave; Frederic Harrison, unable to detect any permanent spiritual root or centre in man's being, hands him over to oblivion, while transferring to the race the destiny denied to the individual; Haeckel, believing thought to be a function of matter, and personality to be a momentary cohesion of sensations, perceptions, and ideas, sees in death the end of all so far as the individual is concerned. These are typical of the forces inimical to the belief. Yet it still holds its own. Beset with difficulties unknown to a Plato or a Paul, embarrassed with problems, physiological, biological, ethical, and astronomical, which awaken the gravest reflection, the great thought, so far from dying, was never more insistent than to-day,

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and seeks fresh proofs for its validity in the unexplored remainders of the psychologic realm, the X rays of the spirit world. Man, amid all the stress and strain of living, the illusions of hope, the miseries of despair, the irony and mockery of circumstance, cannot brook the thought of death as the grand catastrophe of his existence. Not without insight does St. Augustine say in his *City of God* that even the damned amid the horrors of their inferno deem life a good, and prefer existence to non-existence; and, to cite a very different witness, the late Professor Huxley made a pathetic admission in a letter to Mr. John Morley: "It is a curious thing that I find my dislike to the thought of extinction increasing as I get older and nearer the goal. It flashes across me at times with a sort of horror that in 1900 I shall probably know no more of what is going on than I did in 1800. I had sooner be in hell a good deal—at any rate, in one of the upper circles, where the climate and country are not too trying. I wonder if you are plagued in this way?"

And yet it has been questioned whether the desire for immortality is as keen and widespread as apologists and philosophers suppose. Are men in the mass intensely conscious of their inevitable end, and do they look forward with wistful longing to an immortal future? Or rather, must we not say that the great majority are like the old man whom Plato represents in the *Republic* as saying that as a youth he scorned the legends and myths about Hades, but now that he had grown old he was tormented with the fear that there might be something in them after all? The truth is, the average man shrinks from thinking about the other world. This world is good enough for him. He has health, wealth, troops of friends, and the thought of heaven, even arrayed in all the effulgent splendour of the dreams of Patmos, appears to him cold and uninviting. The natural, self-satisfied, complacent existence must be broken up ere the soul's deeper needs are revealed. Hence immortality becomes really credible and a thing to be desired when, under the influence of some high impulse, intellectual or emotional, we rise above ourselves and strain after an ideal good. The desire of immortal life is thus not the *conscious* possession of *all* men nor even of some men at all times, yet it lies implicit in the human soul ready to assert its power when the necessary conditions arise. The natural shrinking

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from annihilation can be transformed into a yearning after immortality only through the passion of some great faith which, as it were, by sheer might robs death of its power, and deems itself heir to ineffable hopes. Hume, indeed, has shown in his posthumous *Essay on Immortality* that the existence of a wish for a future life is no proof of the reality of the thing wished for. Yet there is a truth lying at the root of this common belief. And it is this, that man's nature, when analysed, discloses the presence of a purpose some dim outline of which we are permitted to see, and that to the fulfilment of this purpose a future existence is essential. We are shut up to the dilemma: either our ideals are rooted in reality, in a scheme of things over which death has no power, or the order of cosmic justice stands condemned and morally bankrupt. As Goethe says: "Man has a right to believe in the existence and immortality of the soul, and such a belief is agreeable to his nature, whereas the contrary is not." And yet it would be a mistake to suppose that belief in life beyond the grave carried with it belief in the survival and continuity of personality to the thoughts of early men. The Greeks of Homer's time knew an existence after death, but it was a kind of vague, phantasmal copy of life on earth, without joy, activity, or hope. Hades is a land of squeaking, gibbering phantoms leading a life which is the negative of life in any real sense. Later, indeed, Greek thought developed the idea of retribution and recompense. Great criminals met a dreadful doom, heroic and virtuous souls were supremely blessed, but the great mass of men were fated to lead a thin, colourless existence, in a land of barrenness, darkness, and utter desolation. No wonder the Greek mind instinctively turned away from the contemplation of such a destiny to this bright living world, with its pains and pleasures, its joys and sorrows, and found here, for the most part, the satisfaction of its desires. The Assyrio-Babylonish belief is of the same order. When the individual dies his *ekimmu*, or shade, is separated from his body, and goes down to *Aralu*, a subterranean abode whose inhabitants feed on dust and mud. As to any survival of the person himself in the other world, the cuneiform inscriptions are silent.

At the root of these and similar beliefs lay an undeveloped sense of human personality. Doubtless even in the earliest peoples animism argued an inchoate consciousness of their own

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personality; still, it is clear that in imputing life or spirit to all things, animate and inanimate alike, the essential stage has not been reached which views persons and things as incommensurable quantities. As has been recently remarked: "As the idea of human personality becomes clearer in the minds of men, the number of those who are thought to preserve their personal identity complete in the after-life increases, and Hades is no longer the type of the world to come. The world beyond the grave ceases to be less and tends to be more than earth. Mankind has begun to see that the development of human personality here calls for its continuance and perfection there. From the idea of a general persistence of all life, often very characterless and insipid, represented at one time by animism and at another by transmigration and similar beliefs, the race advanced to the conception of personality as the greatest thing on earth, and the most worthy of perpetuation." Human personality has been a thing of slow and tedious growth, and its recognition of its own nature has been also gradual, and subject to great fluctuations. From the first dawning of life the evolutionist sees the universe at work, travailing in pain for the birth of personality. Nature has indeed hidden the evidence of man's origin; the geologic record is incomplete; yet we can see that the great purpose of the lower evolution of animal life was to prepare the way for man. The data for tracing clearly the steps in the process that issued in the sense of personality are not available; man once arrived, the crown and culmination of Nature's work, the stages in his development could be forgotten. Nevertheless, there are certain moments in the upward progress of man which must have been of decisive and far-reaching significance. One of these moments was when the evolutionary process took a sudden and unexpected turn in ceasing to operate zoologically, and in setting up a series of psychological changes that issued in thought, ethical sentiment, and religious feeling. Henceforth the emphasis falls, not on the body, but on the psychic forces which are conditioned by the body. The whole of the evolutionary process which, apart from man's appearance, presents such a depressing and melancholy spectacle, is lifted to a new and higher plane, and is vested with ethical meaning as the necessary prelude to the apparition of a human soul. Another moment was when man began to suspect that the world

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was his friend, not his foe. Savage man was the child of fear. Nature and Nature's forces stand over against him to be propitiated or cajoled, a malignant power on which he must ever keep vigilant guard. With the beginnings of civilisation man began to find in the world more and more the means to an enrichment of his personal life. It was a still more significant moment in the course of human history when the scheme of his existence ceased to centre in the reproductive function. For uncounted ages man was viewed simply as the organ or instrument by which life could be transmitted to a new generation; this achieved, his *raison d'être* was at an end. The interests of the individual were subordinated to those of the race. As long as this way of thinking prevailed, personality in any real sense was impossible. As yet man was not an end in himself; he was only a means to an end. And even long after this stage had been outgrown, so far as the male was concerned, woman had ages to wait ere the character of a rational responsible being was conceded her. Aristotle could regard her as the fruit of Nature's first bungling endeavours to make man!

Only with the recognition of her moral and intellectual rights was a serious hindrance to the development of man's own personality taken out of the way, and the idea of humanity received a fuller and richer content. In the advent of Christianity a new era was opened in the growth and recognition of personality.

The Christian doctrine of the Incarnation may or may not be credible, but it is the barest historical fact that the belief in it and interpretation of it revealed human nature in a new and alluring light. The personality of the Founder of the Christian faith was itself the most potent quickener of personality in other men. What He had been, every being that wore a human face, male and female, Scythian, bond, or free, was declared capable of becoming. A new sense of human worth took gradual possession of the world. As Aubrey De Vere expresses it:

> "My kind, now vested with the eternal glory,
> Glorious to me became."

Nor was Christianity without precursor. Socrates, the great hero of antiquity, heralded, under whatever limitations, the

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advent of the fuller truth. "The Grecian state," says Emerson, "is the era of bodily nature, the perfection of the senses—of the spiritual nature unfolded in strict unity with the body." (1) The Socratic mission put an end to this unspiritual mode of thought. Socrates devoted himself to the task of vindicating for man his function as a thinker, as one who could organise out of the plastic raw material of sensibility a rational and ethical character, a free personality. It is unnecessary to trace further the growth of that which in Goethe's phrase is the "höchstes Glück der Erdenkinder." Let us turn to the question of its survival after death. Some may think that the question is already settled in conceding that personality is the product of the natural process. Belonging to Nature, it shares in Nature's destiny. But the question cannot be so summarily disposed of; for in man a new element appears which, as Huxley said in his famous Romanes lecture, "checks the cosmic process at every step," and "involves a course of conduct which, in all respects, is opposed to that which leads to success in the cosmic struggle for existence." The true nature of a cause is given only in its effect. We must, then, interpret Nature in terms of man, not man in terms of Nature.

As Fiske remarks: "That which the pre-Copernican astronomy naïvely thought to do by placing the home of man in the centre of the physical universe, the Darwinian biology profoundly accomplishes by exhibiting man as the terminal fact in that stupendous process of evolution whereby things have come to be what they are. In the deepest sense it is as true as ever it was held to be that the world was made for man, and that the bringing forth in him of those qualities which we call highest and holiest is the final cause of creation." (2) With man a new chapter in the history of the universe is opened. Up to this point non-moral brute strength ruled; in the passage from the pre-human to the human stage of being man is no longer the slave of sensation and impulse: he becomes their lord, measures their worth, and makes them contributory to a fuller and deeper realisation of his rational self.

Henceforth the world knows a new order of being, with new claims in life, and therefore with a destiny not necessarily implicated in that of the lower orders on which it rests. The rise of personality is not explained by simply regarding its antecedent conditions, the crude material of instinct, impulse,

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selfish, and social feelings. We must ask, How did it come to pass that these elements combined to produce such a being as ethical man appears to be? To that query two answers are possible: *either* that of the agnostic, who, unable to find a solution in unadulterated materialism, regards the problem as an insoluble riddle; *or* that of the theologian and idealistic philosopher, who views the differentiating element in personality, in the last resort, as coming from the eternal ground and source of things which religion calls God.

With the growth of personality has grown *pari passu*, or almost so, belief in its survival after death. In the earlier stages of thought it was great personalities that escaped the doom of common humanity. The warrior who with his club and bow wrought deeds of renown, the "shaman" or primitive priest whose occult powers enabled him to conquer evil spirits, the prophet in whose visions and ecstacies men saw proof of direct contact with the Divinity, the poet in whose songs the past lived over again, and an ideal world stood revealed—all these went to the after-world in full possession of their powers and faculties, and repeated there the wonders they had achieved on earth. Among certain barbarous peoples women were exalted to the priestly office, became the mouthpiece of the gods, and were alone deemed immortal. It is easy to see how the honour which at first was granted only to the few gradually became the inalienable right of the many, as the sense of the value of human personality developed.

Perhaps the most powerful factor in consolidating man's belief in a future world was the experience of dreams. Primitive man does not distinguish sharply between objective realities and subjective mental creations. The power to call up spectres and phantoms, which is especially strong in uncivilised races, is cultivated, as among the Zulus, in order that the percipient may become a fit medium for the communications of the god of the tribe. And yet we must not disparage or discredit the spiritual worth of a belief because of its crude beginnings or of the inadequate reasons men have alleged in its behalf in different ages.

The final and determining question is not *how* a belief has arisen, but *what* is its essence, its spiritual implications, and its affinities with our highest thoughts of life and the world? We can see how the doctrine, starting from the notion of a

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bare existence beyond the grave, gathers richness and content as it develops, undergoes a process of moralisation, and at length issues, as the tombs beside the Nile testify, in the solemn splendours of judgment and retribution. The essential value of a doctrine or a belief, as of an organism, is found, not in its primordial germ, but in its full-grown and perfected form. To quote again the words of Fiske: "When he [the primeval savage] sees in a dream his deceased comrade, and mistakes the vision for a reality, his error is not concerned with the most fundamental part of the matter. The all-important fact is that this dreaming savage has somehow acquired a mental attitude towards death which is totally different from that of all other animals, and is therefore peculiarly human. Throughout the half-dozen invertebrate branches or sub-kingdoms where intelligence is manifested only in its lower forms of reflex action and instinct we find no evidence that any creature has come to know of death."

It is by a curious inversion of the evolutional principle that Mr. F. W. H. Myers, in a work of over 1200 closely-printed pages,(3) appeals to like phenomena as ground on which modern man may rest his hopes of an immortal life. It is in hysterical ravings, ghostly voices, motor-automatism, spirit-control, and the phenomena of trances and dreams, that we are to find convincing evidence for the soul's future existence. Table-turning, telepathy, "auto-suggestion," "collective suggestion," are thought to reveal hidden psychic forces strong enough to pierce the veil of the unseen, and to reveal a secret hidden from the eye of the speculative reason. Does not this look like a reversion to ancestral and undeveloped modes of apprehension? "Out of the long Stone Age," says Mr. Myers, "our race is awakening into consciousness of itself. We stand in the dawn of history."(4) Exactly, and therefore we are still on speaking terms with our semi-human and barbaric ancestry. The evidence that appealed to them appeals to us, more or less, because they live in us, and in spite of ourselves still make their voices heard. Mr. Andrew Lang has shown that many of the most astonishing discoveries of psychical research are paralleled in the beliefs and customs of savage races.(5) Is evidence or proof that suited the untutored childhood of the race fit to convince cultivated and rational man? Interesting and valuable as throwing light on out-of-the-way psycho-

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logical corners, and puzzling perversions of the human mind, Mr. Myers' laborious effort does not advance us a single inch beyond the argument of philosophical reflexion on the way to an assurance of immortal life.

The fundamental and unifying principle of the complicated details in Mr. Myers' work is his doctrine of the subliminal self. This doctrine lays it down that there is a self not derived from nor to be confounded with the ordinary normal self. Nay, rather, we are asked to believe that our ordinary self is derived from a primary self having its own separate experiences and its own states as the results of those experiences. Our ordinary "self" is only, he says, "a fragment of a larger self, revealed in a fashion at once shifting and limited through an organism not so framed as to afford it full manifestation." When death comes to us, this profounder "self," which for the most part here on earth is potential and circumscribed in its operations, is set free and enters on its proper heritage. In brief, there are, so to say, two "selves," one "supraliminal" formed by our ordinary earthly experience, the other "subliminal"—that is, a deeper self formed by an environment that is not of this earth. Yet the ordinary "self" is only a part really of the whole or larger "self"—a part especially fitted to meet the reactions of the ordinary earthly environment. Now, it is Mr. Myers' contention that it is this doctrine which removes the great barrier to his interpretation of psychical phenomena, for it provides the link, he maintains, between those phenomena and the ordinary course of nature as science knows it. This constitutes his "scientific proof." The phenomena of dreams, hysteria, hypnotism, and even the ideas of genius, are all evidences, tokens, of the presence of the "subliminal self," an uprush of thoughts not consciously originated but arising out of the profounder depths of man's being. But these phenomena are admitted facts of experience, and thus we have a bridge connecting them and the other phenomena claiming recognition such as communication from discarnate spirits. And this bridge is the "subliminal self." Now, if this bridge falls the whole theory for the sake of which Mr. Myers wrote these volumes falls with it. We are as far as ever from a scientific proof of immortality.

Let it be noted: (1) Assuming the existence of this subliminal self, how can any uprush from it bring to us a knowledge of its nature? In the very moment that it emerges into

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consciousness it ceases to be what it was before. And ceasing to be what it was before, we are left without any genuine knowledge of its character. (2) The utterances alike of hysteria and genius, in order to be genuine products of the unearthly self, must be inexplicable by any antecedent mental states of the neurotic or the sage. But the depositions of the subjects of hysteria have only to be examined in order to prove that they are easily explicable through the normal experiences of earth; and genius—however hard to explain—is always at least dependent on a given historical environment and can only be understood through that environment. (3) In hypnotism according to Mr. Myers we evoke the thoughts of the subliminal self into the ordinary consciousness. Now, as the hypnotiser can evoke whatever ideas he pleases, such as, for example, that the subject is drunk, or afflicted with deafness, or is the Emperor of Japan, one can only stand in amazement before a subliminal self who has had these experiences in time past, and now at the bidding of the hypnotiser brings them forth. Clearly there is something wrong about a doctrine which lands us in this curious but scarcely satisfactory hypothesis.

If, then, we can find no evidence of the subliminal self in the admitted facts of experience, it can afford no bridge connecting these with the phenomena of spiritualism. The alleged fact of communication with the dead stands out of relation to our normal experience, and as long as it does so, it may mystify —it cannot enlighten us. The fatal objection, from a scientific point of view, to the marvels of spiritism is that they cannot be produced at will and that the senses are fallible.

Mr. Myers contends that cases of "possession"—that is, cases in which the body is dispossessed of its rightful tenant and occupied for the time being by a different personality—prove that discarnate spirits exist and can communicate with living persons. Were this true, the survival of the soul after death would be proved. Now it may be admitted that the Psychical Researchers have proved that there are more things in human nature than orthodox psychology is wont to recognise.

We have learned that the brain operates in ways which astonish us very much, as radium or the Roentgen rays would have astonished the men of the eighteenth century. Telepathy

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and clairvoyance, which are ascertained scientific facts, account for the most striking of mediumistic phenomena, and have, moreover, the advantage of being merely extensions of our normal powers. Seeing, hearing, and smelling are essentially telepathic. If the revelations of spiritism are to form part of our organised knowledge, they must be seen to be related to our ordinary experience, otherwise they may be enigmatic signs, perplexing, but scarcely illuminating.

But granting the value which Mr. Myers assigns to his facts, of what avail is it? At most the argument would give us only a survival after death. What guarantee is there in the myriad phantasma of the dead that in the mysterious world from which they came there may be other and still greater shocks before which personality will go down and disappear? The whole theory assumes a point of view too low for the real significance of man. The claim which alone is consonant with his nature is concerned not with a temporal but an immortal future.

Turn the matter as we may in our mind, we are the more convinced that this way of approaching the problems of existence is a flagrant case of putting the cart before the horse. If life is devoid of spiritual meaning, if the voices of the universe bring no Divine message and stir no echo in the soul, what help is afforded us by ghostly visitants from "the wide, grey, lampless, deep, unpeopled world"? Granted that there is a kind of back door leading into the Beyond, and the spectral shades pass to and fro, we have still the riddles of the Sphinx to face, the eternal problems of religion and philosophy to think out as best we can, alike unhelped and unhindered by these phantoms of the night. So far as all the really important questions are concerned they are dumb, or if they speak it is to utter "the kind of trash for which there is no adequate language in the court of contempt to describe its character."

The quest of a scientific demonstration of a future life is the last infirmity of the religious mind. Such a proof from the nature of the case is not forthcoming. Science holds not "the keys of death and Hades." Whether we believe in immortality depends, *not* on our scientific knowledge, which is concerned with only one aspect of the universe, but on our total view of the universe itself. Is the universe at bottom spiritual? Then our belief has a foothold on reality. Is it material, ever changing,

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without any inner principle of continuity? Our belief must perish. Now, our age is peculiarly fitted to respond to the religious teacher when he unveils to us the world beyond. For one thing the old crude materialism is dead. No longer can we assert that the brain secretes thought as the liver secretes bile. We cannot say that the brain *produces* thought. All that can in strict science be said is that the brain and consciousness vary concomitantly; but what the nature of their connection is remains, and is likely to remain, an absolutely inscrutable mystery. All that science knows is that when the brain acts in one way, consciousness acts in another. If a theory of connection be insisted on, we may as well accept Professor James' notion that the brain *transmits* the life of the soul in a limited and imperfect fashion as to hold that it actually *produces* it. Both are speculations; both are alike valuable, or alike worthless. We simply do not know. Hence Science replies neither "yes" nor "no" to the question: Is there a future life? She is silent, leaving the way open for inquiry in other regions of experience with which she is not competent to deal. The belief is too great and vital to have its fortunes bound up with a fragment of our nature; it makes its appeal to the totality of our faculties. Some will perhaps think that in thus giving up the possibility of scientific proof, we virtually yield the whole question, for we never can be certain of immortality. But we must distinguish, as the late Cardinal Newman pointed out, between certitude and certainty. Certitude is a habit of mind, certainty a quality of propositions. Applied to our subject, we may say that we may have certitude but not certainty of immortal life. From a variety of causes, partly emotional, partly intellectual, we may believe in immortality, even though we fail of a resistless scientific or logical demonstration. This is implied in the saying of Emerson that "all serious souls have a better belief in immortality than they can give grounds for." The belief is an instinct interwoven with the deepest fibres of our nature. Doubt, or disbelief, will have always its more or less plausible objection; life will always give its victorious answer. Man's nature when studied makes immortality a credible and rational faith. He who asks for greater proof than this is really falling back from a spiritual upon a mechanical and external conception of man's relation to the spiritual world.

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Belief in immortality is the correlate of belief in personality. As the late Master of Balliol has remarked: "The more we think of reason as the highest thing in the world, and of man as a rational being, the more disposed we shall be to think of human beings as immortal."(6) To believe in a future life is to perform an act of faith in the worth of personality. We are conscious that face to face with our personal selves we are in contact with something greater than a myriad worlds of dead matter. If death can dissolve the rational conscious self, there is nothing beyond its annihilating grasp, and we may well proclaim it master of the universe. And when we probe human personality, we find that its characteristic function is self-realisation. There are "abysmal depths," undeveloped capacities, potentialities of energy, intelligence, and love which we must not conceive fruitless of their due lest we should be put to permanent intellectual confusion.

The animal lives for the day; its instinct is satisfied with the finite and the evanescent. Man, as the possessor of reason and will, knows himself immortal, and refuses to believe that the universe has betrayed him. There is a very real sense in which we may say man is not, he is yet to be. The most developed personality falls far short of that ideal which yet slumbers in us all.

"Death's true name
Is Onward—no discordance in the roll
And march of that eternal harmony
Whereto the world beats time."

(1) Essay on "History."—(2) *Idea of God,* p. 21.—(3) *Human Personality and its Survival of Bodily Death.*—(4) Vol. ii, p. 306.—(5) Compare *Myth, Ritual, and Religion.*—(6) *Life of Benjamin Jowett,* vol. ii, p. 244.

Discussion

At the meeting of the Irish Division, held at Armagh, July 5th, 1904.

Dr. Dawson wished that he could agree with Dr. Graham that crude materialism was dead, but it was impossible to think so in view of the recent re-affirmation of the theories of Kronthal, according to which there is no such thing as personality, or even as a central nervous system; the nervous system consists of fibres running straight through from receptive apparatus to muscle; and the function of the nerve-cell (which is a mere fortuitous conglomeration of leucocytes) is simply to enable a stimulus to spread from one fibre to several. All the psychical functions would therefore be reflexes and nothing else. However, the grounds on which this theory was founded were quite inadequate, and in his opinion it constituted a *reductio ad absurdum* of materialism.

Dr. Conolly Norman said he believed the bringing forward of this paper was a proof of the trend of the times. Dr. Graham had taken up a certain stand in relation to developmental theories, and had arrived at a conclusion towards which

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other students tend on other grounds. He himself would be the last to speak slightingly of Darwin and his school, but the general tendency of modern thought was to make us feel that the Darwinian doctrines have not that value with which they are credited by Darwin and his followers. We had come to see that the theories of development following the old lines do not explain anything. The old theories of a Providence arranging everything to an immediate end which was patently visible, theories which were rejected by careful thinkers as long ago as Voltaire (who ridiculed them by saying that on these theories the nose was an organ made to support spectacles), had been cleared away by Darwin's deeper consideration of these matters; yet the trend of modern thought is towards feeling that the doctrine of development does not at all account for everything. If the human race is the last thing in development in this world, if the human intelligence or ethical feelings are the crown of human life, we are brought by the very reception of this belief to the conviction that the highest intellect and highest ethical feelings of man must have a meaning; and if the human ethical feeling says there is a meaning in the universe that must be true, otherwise development has developed to nothing, intellect means nothing, moral feelings mean nothing, there is no purpose in anything, and our views of development are a dream. Again, that there is a purpose beyond the powers of natural or sexual selection to bring about, that there is a something beyond the mere organised selfishness which the struggle for existence really means, is evident to us when we look even to the lower forms of life. It is obvious that in many of the activities of the lower animals there is a purpose quite beyond the mere struggle for existence; the economy of the hive shows us a number of animals working for a common end which is utterly inconceivable on the ground of a struggle for existence, natural selection, or sexual selection. The worker bee, who is a non-fertile female, struggles, not for herself, nor for her offspring, which she cannot have, but for an ethical end, for the good of the race. Again, in the human race we are brought into collision with two great forces which are contradictory to each other, namely, intellect and the moral feelings. The keenest intellect does not tend to benefit the whole race, therefore the moral feelings have sprung up. The basis of all moral feelings is self-sacrifice, which is not brought about by the struggle for existence, not fostered by sexual selection. The ethics which form the basis of human society are not dependent on natural selection, sexual selection, or environment, therefore there is something beyond. There is a tendency in things, there is a tendency in our own mind, in our own acts, which is the real guide and real basis of our acts. Dr. Graham quoted Hume as saying that the mere fact that a person believes a thing is no proof that it is true, but the bearing of this was not clear to his (the speaker's) mind. If the whole human race has certain feelings, instincts, and aspirations, they have come there with a purpose, with a history and with a future, as certainly as has the nose on our face.

Dr. GRAHAM replied shortly.

Mental Unsoundness and Mental Disease in a Local Prison.

By WILLIAM COTTON, M.A., M.D., D.P.H., Medical Officer, H.M. Prison, Bristol.

EXCLUDING debtors (who are non-criminal prisoners), a *local* prison is one containing persons charged with an offence awaiting trial, or convicted and serving a sentence of imprisonment of less than two years. A *convict* prison contains convicted prisoners sentenced to three or more years' penal servitude. All prisoners sentenced to penal servitude have

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