ANIMAL IMMORTALITY.

Is there any living existence in store for the lower animals after physical death?

The problem is an old one, and it has been answered in various ways. The belief in the survival of animal ghosts is still common to a large number of savage communities; though such ghosts, as a rule, seem to be only shadowy reproductions of the living animals, which grow fainter and fainter, till they die out of the ken of the rude thought which created them. But among the earliest philosophers of antiquity, as among the modern Buddhists, there was a strong belief in a more permanent continuity of animal existence, which rested on the theory of metempsychosis. Traces of this belief appear in the philosophy of Heraclitus. Empedocles and the Pythagoreans held the generic identity of human and animal souls so strongly that they condemned the consumption of animal food, and indeed the destruction of any animal life[1]: and the doctrine of metempsychosis is distinctly formulated in Plato's famous description at the end of the *Republic* of the vision of Er.

Early Christianity was too deeply concerned with the hereafter of the human soul to pay much attention to the eschatology of animals; and it was not till the seventeenth century that the question was brought into some prominence by the Cartesian theory that the lower animals were automata, and as such devoid of feeling, *expressly* on the ground that they had no souls. This view was readily adopted by the theologians of the age, who saw in it a path of escape from the moral difficulty presented by the existence of animal suffering. Pascal regarded it as a means of exculpating Divine benevolence from the imputation of purposeless cruelty; and Malebranche supported it, because, though opposed to reason, it was in accordance with

[1] Empedocles seems to have thought that the souls of men and animals were souls which had been banished from heaven for their offences, and doomed to do penance in some body of the lower earth. He describes himself as

φυγὰς θεόθεν καὶ ἀλήτης
νείκει μαινομένῳ πίσυνος—

i.e., 'an outcast from godhome and a wanderer, a slave to raving strife.' Elsewhere he declares that he has been in turn 'a youth, a maid, a bush, a bird, and a dumb fish in the sea.'

faith. It will be seen that this theory assumed as a matter of course that animals have no soul; and this, too, is the prevalent opinion at the present day, so far as the idea of a soul is held to include the attribute of immortality.

Indeed, so long as the soul, with its nature and attributes, was treated as a subject belonging exclusively to theology, the question of animal souls or animal immortality could hardly be seriously raised. Obviously there can be no place for animals in the theological scheme of a future existence, with its tremendous issues of salvation or perdition. But now that philosophy and science have successfully claimed a voice in the matter, the conditions of the problem are considerably changed.

As soon as the Darwinian doctrine of the physical evolution of man from lower animal forms became firmly established, it was inevitable that the principle of that doctrine should be applied to his mental development. The controversy on this point is still at an early stage; but the evolutionist view is concisely expressed by Dr. Romanes, who asserts[2] that the minds of animals must be placed in the same category as the mind of man; and again (p. 10) that for the evolutionist 'there must be a psychological no less than a physiological continuity throughout the length and breadth of the animal kingdom.' Evidently, therefore, the question of animal immortality acquires a new and important interest from the fact that it is inseparably interwoven with the question of the immortality of man. It is quite possible of course to deny, as many scientific men do, the immortality of the human soul; and such a denial, whether correct or not, certainly cannot be conclusively refuted. But if we accept the immortality of the human soul, and *also* accept its evolutional origin, how can we deny the survival in some form or another of animal minds? If mind and body perish together there is nothing more to be said. But if we regard mind as something more than a temporary property of the bodily organism, we cannot in the same breath affirm and deny its evolution. We cannot legitimately declare that man's mind has been evolved from a series of lower animal minds, but that the necessary continuity of the evolutional process is broken at every joint by the extinction of each member of the series at the death of the animal to which it has belonged.

Clearly, therefore, on this view, animal minds must survive the physical death of the animal, and undergo a further evolutional development. But how?

Before attempting to deal with this question specifically it will be well to clear the ground a little.

The objections to a future existence for animals as commonly understood are obvious, and, to my mind, unanswerable. The old doctrine of metempsychosis in its original form is clearly unworkable.

[2] *Animal Intelligence*, p. 7.

Our present knowledge of physiology forbids the idea that the mind of an animal could function in the body of a man, or that the personality of a human mind could be compatible with the physical life of an animal. Nor, again, can we suppose that the mind of a dead animal will persist in an eternal animalism; for, independently of any other objections, this idea would be quite incompatible with the progressive development which is the essential doctrine of evolution.

On the other hand there are some strong *prima facie* grounds for believing in *some sort* of future existence for animals.

In the first place it is plain that many of the higher animals closely resemble man both in physical structure and mental faculties. In some of the embryonic stages the two are scarcely distinguishable. With them, as with man, mental power, as a rule, varies concomitantly with the size and complexity of the brain, and the difference in the size of the brain at the meeting point between man and beast amounts to a few cubic inches only. The difference in mental power cannot be measured so precisely, but there is a corresponding approximation in this respect between the lowest men and the highest animals; and such difference as does appear is a difference rather of degree than of kind. And yet, according to current opinion, on one side of this division is immortality, on the other extinction. Eternal life for the bushman, eternal death for the fox terrier!

Again, it is difficult to understand, and perhaps more difficult still to justify, the awful waste involved in this supposed annihilation of animal minds. Whatever the precise nature of an animal mind may be, it is at any rate a force complex of great power and high capabilities. In many cases it does not fall far short of the mental level which in man we deem compatible with immortality. And if millions of such minds are annually destroyed (at any rate *as* minds) instead of being utilised, any belief which we may cherish as to an intelligent control of the universe must receive a severe shock.

We are thus confronted, on the one hand, by some strong reasons in favour of animal immortality, and, on the other, by the difficulty of conceiving a satisfactory method for effecting this. It remains to see whether some such method may not be found.

Dr. Weissmann, in his 'Essays upon Heredity,' contends that hereditary transmission is effected by means of certain cells which he calls 'germ cells.' In these germ cells the generative powers of the individual are centred, and they are endowed with the capability of reproducing in the offspring all the peculiarities of the parent body. In the case of vegetal and the lower phases of animal life, heredity is most prominent in the physical peculiarities reproduced. In the case of the higher animals, however, it is clear that the mental as well as physical peculiarities of the parent are largely reproduced in the offspring. But if mental and physical qualities are, as in these cases, hereditarily transmitted *together* from parent to offspring, why

are we bound to dissociate their origin? There is at any rate a strong *prima facie* probability that the origin of both is to be found in the germ cell, and consequently that the germ cell contains a mental element. There is nothing at all improbable in this; and indeed we learn on scientific authority that matter and mind are organically linked together in the very lowest forms of life known to us.[3] Moreover it seems clear that without the presence of mind in its simplest form, sentience, living matter would be an impossibility.

Without attempting to discuss the nature of mind, I will borrow from Professor Clifford, and call mind, in its elementary form, 'mind-stuff.' We must remember that the germ-cell is only potentially endowed with a faculty of reproducing the peculiarities of the parental body. It is not a complete animal in miniature, but something which is capable of becoming a complete animal. Accordingly the mental element of the germ-cell will consist, not of a complete mind, intelligence, or soul, but of a portion of mindstuff suitably adjusted to the structural possibilities of the germ-cell. In the subsequent development of the germ-cell its organic progress and unity will be dependent on the harmonious interaction of its linked elements of mind and matter. Its mental part cannot develop properly, because it cannot operate properly, in an imperfect or mutilated physical structure, as is shown by the mental effect of injuries to the brain. And in like manner the due development of its physical structure cannot proceed without an effective mental equipment to educe its possibilities and minister to its needs. The organism in all its stages will require an environment mentally and physically adapted to it, including of course the possibility of proper nutrition. And as the animal derives its physical nutriment from the matter of its environment, so we may suppose it to derive its mental nutriment from the environing mindstuff. The analogy moreover, may be carried a step farther. The higher animals are incapable of forming protoplasm for themselves out of inorganic materials, and depend ultimately for physical nutrition upon the formed protoplasm fashioned by the lower organisms of the vegetal kingdom. Similarly it may well be that in the higher animals the mental element of their nature is built up of the mindstuff structures of lower organisms whose physical life is over. The human soul is no exception to this rule, and we must regard it as being to a great extent a complex of lower animal mind-structures grouped into a higher unity. But inasmuch as at this stage *self*-consciousness appears, it seems impossible that the human soul can, in its turn, undergo any further grouping. This view then enables us to accept the belief in animal immortality, while it escapes the objections to that belief to which I have already referred.

[3] Romanes, *Mental Evolution in Animals*, p. 62. Darwin, *Movements of Plants*, p. 573.

Meanwhile, there is another side of the question to be considered. Assuming that this theory is a satisfactory account of the evolutional development of animal mind, we have still to see whether it is compatible with what we know of the human soul. However probable the theory may appear from the animal side, it would be weakened or overthrown if it should appear unlikely or impossible that the human soul could be evolved on these lines. This possibility is contested on two grounds—the one philosophical, the other theological.

At first sight the philosophical objection seems one of some weight. The salient feature of man's soul does certainly seem to be his self-consciousness. We may define the human soul broadly to be that permanent something by which each individual's personality is constituted. But I think it is clear that we cannot extend this definition to the minds of the lower animals. The very essence of the human soul seems to be its self-consciousness—its apprehension, that is to say, of its own existence as a personality or ego. It is extremely difficult, and perhaps impossible to form an accurate idea of an animal's mind; but, so far as we can judge, it does not seem possible to ascribe any such self-consciousness to the lower animals. Consequently, the philosophical objection comes to this: since self-consciousness is a necessary quality of the human soul, such a soul cannot be composed of mind-structures which have not attained to self-consciousness. Upon this point, however, there is a good deal to be said.

In the first place, with regard to the ego, it is by no means certain that our ordinary conception of it is correct. We are accustomed to think of the ego or personality as something *totus, teres atque rotundus*, a complete indivisible unity, a supreme monarch without a rival.

Recent researches, however, have thrown considerable doubt on this view, and seem to indicate that the unity of the human consciousness is not one of its fundamental attributes; and the apparent monarchy begins to look suspiciously like a confederation.

Mr. Myers, in his article on 'Human Personality,'[4] clearly inclines to this view. On p. 639 he says:—

'We start, then, with the single cell of protoplasm endowed with reflex irritability. We attempt a more complex organism by dint of mere juxtaposition, attaining first to what is termed a 'colonial consciousness,' where the group of organisms is, for locomotive purposes, a single complexly-acting individual, though when united action is not required, each polyp in the colony is master of his simple self. Hence, we advance to something like a common brain for the whole aggregate, though intellectual errors will at first occur, and the head will eat its own tail, if it unfortunately comes in its way. . . . We rise higher, and the organism is definitely at unity with itself. But the unity is still a unity of co-ordination,

[4] *Fortnightly Review*, 1885, p. 637.

not of creation; it is a unity aggregated from multiplicity, and which contains no element deeper than the struggle for existence which has evolved it. The cells of my body are mine in the sense that, for their own comfort and security, they have agreed to do a great many things at the bidding of my brain. But they are servants with a life of their own; they can get themselves hypertrophied, so to speak, in the kitchen without my being able to stop them. Does my consciousness testify that I am a single entity? This only means that a stable *cœnesthesia* exists in me just now; a sufficient number of my nervous centres are acting in unison; I am being governed by a good working majority. Give me a blow on the head which silences some leading centres, and the rest is split up into "parliamentary groups," and brawl in delirium or madness. Does memory prove that I was the same man last year as now? This only means that my circulation has continued steady; the brain's nutrition has reproduced the modifications imposed on it by stimuli in the past.

'My organism is the real basis of my personality; I am still but a colony of cells, and the unconscious or unknowable, from which my thoughts or feelings draw their unity, is below my consciousness and not above it; it is my protoplasmic substructure, not my transcendental goal.'

The italics are mine.

If this view be correct, the self is not a separate entity independent of the organism in which it dwells, and its unity is really a product of its structure. Indeed not only the consciousness of self, but the quality of the particular self, depends on the relations—partly structural relations, partly relations of adjustment—between the cells or other units which compose the organism. Alter these relations and you alter the self.

In a subsequent article on 'Multiplex Personality'[5] Mr. Myers carries the argument farther still, and shows that under favourable conditions the same organism can furnish forth a number of perfectly distinct selves. In the case of Louis the Fifth, which he quotes and describes at length, six perfectly different personalities are displayed by the same man, which, to borrow the language of his former article, may presumably be ascribed to the operation of as many separate 'parliamentary groups.' Moreover, the memories of the different personalities are kept quite distinct, and when a transition takes place from one state to another, the new consciousness reverts to the past with which it was linked in the last previous existence of the new state. Modern developments of hypnotism have made this phenomenon of double or multiple personality tolerably familiar; and it is significant that sometimes, as in the case of Felida the Tenth, cited by Mr. Myers, the hypnotic state is 'morally and physically superior' to the natural state.

From this it seems not only that the ego for the time being is simply a resultant of the energies of the organism, and the structural conditions of their operation, but, further, that it is not necessarily the best ego of which the organism is capable. The same conclusion is confirmed by direct experiment, showing that when the lower

[5] *Nineteenth Century*, November, 1886.

qualities are repressed by hypnotic treatment, a new self emerges in which the higher and better qualities predominate.

Practically it is the self in man, by whatever name we call it, which is commonly supposed to survive the grave; and if it were found that to each human organism there was but one self, unalterable and indivisible, it might be possible to regard this self as a complete something specially introduced into man independently of any evolutional process. But when the reverse of this is found to be the case, when the same human organism is seen to be capable of manifesting a variety of distinct selves, each displaying an equally complete unity, the conclusion is almost irresistible that self is not imposed from without but springs up from within, and is a manifestation of the mind-structure of the human organism along the line, for the time being, of the least resistance.

If this be so, the difficulty is disposed of. Human self-consciousness need not be referred to any extraneous source, but may be regarded as a natural product of the orderly evolution of mind.

The theological objection to the evolution of the human soul also rests on the view that man's being comprises an element which differentiates it generally from any animal's being. This element is said to be the πνεῦμα or spirit, and man's nature is regarded as tripartite, being composed of body, soul, and spirit. This doctrine is thus laid down by Dean Alford[6]:—

> Τὸ πνεῦμα is the SPIRIT, the highest and distinctive part of a man, the immortal and responsible *soul* in our common parlance; ἡ ψυχὴ is the lower or animal soul, containing the passions and desires which we have in common with the brutes, but which in us is ennobled and drawn up by the πνεῦμα.

The doctrine rests chiefly on this passage in the first epistle to the Thessalonians, which runs thus:—

> And the very God of peace sanctify you wholly, and I pray God your whole spirit and soul and body be preserved blameless, unto the coming of our Lord Jesus Christ.[7]

I think that most unprejudiced persons will consider this rather a slender foundation for such an important doctrine, and will agree with the Rev. C. A. Row, who observes[8]:—

> The passage is a prayer for the complete sanctification of the Thessalonian converts, and their preservation in holiness unto the coming of Christ. It is therefore incredible that in such a prayer he (the apostle) should have intended to elaborate a philosophical psychology of man.

Moreover the usage of the two words πνεῦμα and ψυχή in the New Testament does not bear out the supposed distinction between

[6] 1 *Thess.* v. 23, note.

[7] The following passages are also relied upon, among others, in support of it Heb. iv. 12; 1 Cor. ii. 14, 15, and xv. 45–6.

[8] *Future Retribution*, p. 189.

them. It is clear from the instances collected by Mr. Row that while πνεῦμα and ψυχή have to some extent distinct meanings, their meanings continually overlap each other; and the two words 'are frequently used interchangeably to denote one and the same thing—viz. everything in man which distinguishes him from a mere animal.'

I will add one more criticism. If the πνεῦμα is, as Dean Alford says, 'the highest and distinctive part of man, the immortal and responsible soul in our common parlance,' all men must possess it: otherwise it would not be distinctive of man, but only of some men. It appears, however, from Jude 19, that some men do not possess πνεῦμα. The passage runs: 'These be they who separate themselves, sensual, having not the spirit;' the Greek of the last words being ψυχικοὶ πνεῦμα μὴ ἔχοντες, a perfectly clear and definite statement. Upon this passage Dean Alford has the following remarkable note:

> These men have not, indeed, ceased to have πνεῦμα as part of their highest nature, but they have ceased to possess it in any worthy sense; it is degraded beneath and under the power of the ψυχή, the personal life, so as to have no real vitality of its own.

Comment on this explanation is hardly necessary, but it shows the desperate expedients to which theologians are driven to support this doctrine. To dispose of a troublesome by suppressing an all-important negative is a feat of exegetic audacity which is only rivalled by the Chancellor's device in Mr. Gilbert's *Iolanthe*, where he proposes to get over the difficulty caused by a law of Fairyland, prescribing death to any fairy who should marry a mortal, by inserting 'not' before the word 'marry.'

It does not seem, therefore, that this doctrine can be accepted as establishing such a distinction between human and animal souls as cannot be accounted for by orderly evolutional progress. It is obviously a theological invention, practically unsupported by the scriptural authority on which alone it is professedly based, and hardly more discredited by the criticisms of its opponents than by the arguments of its friends.

At this moment, however, a certain interest attaches to the doctrine of the πνεῦμα from the fact that Mr. A. R. Wallace has lately propounded a sort of scientific parody of it. Accepting in full all Darwin's conclusions as to the essential identity of man's bodily structure with that of the higher mammalia, and his descent from some ancestral form common to man and the anthropoid apes, he nevertheless dissents from the view that the moral and mental faculties are also derived by gradual modifications from the lower animals. His grounds for this dissent are that some special faculties of man, such as the mathematical, musical, and artistic faculties, could not have been developed by variation and natural selection

alone, (1) because superiority in them would have been of no value to early man in his struggle for existence; (2) because, while the characters developed by natural selection are found in all the individuals of a species, and do not vary widely from a common standard, the special faculties above mentioned only exist in a small proportion of individuals, and the difference of capacity between these favoured individuals and the average of mankind is enormous. The evidence which he adduces in support of these reasons seems to me altogether insufficient to support them. I cannot, however, discuss it here, and I pass at once to the constructive part of his theory, which more immediately concerns us.

He very fairly admits[9] that the rudiments of these opening faculties are found even in low savages, and, as I understand, in some of the higher animals also. But he does not think that our present high development of them could have come from these rudiments alone. Accordingly he concludes (p. 474) that

> these special faculties clearly point to the existence in man of something which he has not derived from his animal progenitors, something which we may best refer to as being of a spiritual essence or nature, capable of progressive development under favourable conditions.

The meaning of this is not very clear, but I understand Mr. Wallace to suppose that human spirit has been evolved *pari passu* with human bodily structure, but along a different line of development, and that at some apparently unknown point these two lines meet. He does not, however, offer any explanation of what he considers spirit to be, or of the conditions of this spiritual evolution, or of its subsequent contact with the products of physical evolution. Moreover, if, as he admits, the rudiments of the special faculties are found in man independently of any spiritual influx, it is not easy to see, on evolutional principles, why the special faculties should not have been duly evolved from these rudiments without the interposition of spirit. To deny the evolutional capacity of a germ because it is such a very little one is surely a strange argument for a man of science. Again, what is the position of the unfortunate savage before this 'influx of spirit' which is 'superadded to his animal nature' (p. 474)? Mr. Wallace does not regard him as an animal, for he describes him as a man. But at the same time he denies him the faculties which he calls characteristic of man, leaving him only with an animal nature. If the spiritual influx were supposed to take place at birth, the theory might or might not be sound, but it would be consistent and adequate. As it stands at present, however, it is a theory of the human soul which professedly does not extend to a large part of the human race. Mr. Wallace affirms his belief in the survival of man's soul after death. What then happens to

[9] *Darwinism*, pp. 464–8.

the soul of a savage who dies before the spiritual influx? Does it survive as a human soul, or does it meet the fate, whatever that may be in Mr. Wallace's opinion, of the soul or intelligence of an animal? *Quâ* soul, it is clearly of an animal nature, the spiritual nature not having been superadded to it. On the other hand it is enshrined in a human body, and is also, I presume, a personality of some sort, for I do not understand Mr. Wallace to deny self-consciousness to these savages. Indeed he appears (p. 475) to regard 'sensation *or* consciousness' (the italics are mine) as identical with the Ego: in which case not only men but animals are self-conscious. As a matter of psychology it sounds rather startling to find sensation identified with consciousness, and with the Ego, but I do not attempt to criticise this further. I may point out, however, that even with regard to the animal elements of man's mental fabric, which Mr. Wallace apparently admits to be derived from animal progenitors, he gives us no information as to how this process of derivation is effected, nor does he make it clear whether these animal elements survive the physical death of man, or whether it is only the superadded spirit which is immortal.

Assuming then that my conclusions are justified, it is obvious that they have an important bearing on our relations to the lower animals. If man's soul has any part in the hereafter, the minds of animals, through him, partake in it also; and we must cease to regard them as being in the strictest sense mere beasts that perish. It may be said that, even supposing animal minds to survive physical death, they might serve to animate future specimens of the same race without rising higher. But there are some serious objections to this idea. In the first place it assumes a practical fixity of species which we know did not originally exist. Another difficulty is presented by the case of species which have become extinct, whose minds in this case would be left without any appropriate physical tenement. Moreover, the idea of the transference of an old mind into a young body of the same physical species is not altogether satisfactory. But perhaps the strongest argument against this supposition is furnished by the undoubted facts of heredity. It is clear that mental no less than physical peculiarities are hereditarily transmitted, and this precludes us from supposing that the *entire* mental fabric of an animal can be supplied by the introduction of a ready-made alien mind.

At first sight it may seem that this wider view of the destiny of animal mind should condemn all destruction of animal life—an opinion actually held, as we have seen, by the Buddhists and others.

I do not think, however, that this conclusion is inevitable unless it can be shown that the future of the animal is permanently injured by its physical destruction; and for this supposition I see no ground whatever. On the contrary, if we regard the physical death of an

animal, not as injuriously affecting its future, but as the necessary antecedent to its attainment of any higher existence, many of the objections to animal destruction disappear.

However, if the minds of animals after physical death are ultimately destined to a higher future, is it in our power to aid this development? Of course any influence which we can exert in this direction is necessarily confined to those animals with which we are brought into immediate contact. But something may be done to develop these, possibly in moral sense, certainly in intellectual power. With regard to moral education, I am fully alive to the danger of interpreting animal states of consciousness by reference to our own. In ascribing vanity, sympathy, jealousy, and so forth, to a lower animal, we have nothing whatever but analogy to guide us, and we can never be certain that we are not pushing this analogy too far. At the same time it is impossible to disregard animal expressions of emotion; and, as Dr. Romanes points out,[10] if we are to interpret them at all, we can only do so by reference to a human standard. On the whole, it seems difficult to escape the conclusion that some of the lower animals exhibit emotions analogous, at any rate, to affection, sympathy, shame (as distinct from fear), and a certain sense of responsibility. Where these qualities appear, it is usually in our power to foster and promote their growth, and thereby to elevate and develop the animal's character. Again it is certainly in our power to abstain as far as possible from rousing the lower emotions, such as jealousy, rage, and the like, which cannot but impede the animal's moral development. On the side of inhibition the scope of educational treatment is necessarily more limited. Punishment, or blame, which in this case we must suppose arouses the fear of punishment, is the only means at our disposal for repressing undesirable conduct in the lower animals; and as these cannot be expected to appreciate its educational purpose, punishment is simply a non-moral appeal to their terrors. It is not, however, without its value as a developing influence, since the suppression of a bad habit, by whatever method it be effected, means the removal or mitigation of an obstacle to the animal's progress.

But when we come to treat of the intellectual development of the lower animals we tread on firmer ground. To take some special instances, the elephant, the dog, and even the horse show themselves capable of a high degree of training. The attainment of this requires an amount of mental application which can hardly fail to produce an increased mental complexity. Probably most of the ordinary actions of an animal should be ascribed either to instinct or to reflex action. But to acquire the accomplishments of the trained animal, something like reason must come into play. The creature's life is widened by the widening of its receptivity to new stimuli; and in short, if judged

[10] *Animal Intelligence*, pp. 8–9.

by a mental standard, it becomes a higher animal. Nor, so far as it appears, need this be accompanied by any diminution of its happiness. Animals constantly seem to take pleasure in their tricks or their duties, and a disciplined dog, for instance, certainly conveys the impression of enjoying a larger and happier existence than one whose education has been neglected. Of course where the education has been harsh or cruel this conclusion does not apply; but such an education usually defeats its own end, by deadening the intelligence which alone makes education possible.

In the case of those animals in which our relations are more distant, the difficulty of exerting any developing influence upon them will vary directly with the gulf between us and them. But our conduct towards them should be guided by the same principles whenever an opportunity of applying them occurs.

In the days when such science as existed was the mere handmaid of theology, it was natural that the idea of animal immortality, being discountenanced by religion, should have gained little recognition from science.[11] But this state of things exists no longer. So far from this subject being forbidden to science, it seems to me that science is bound to justify her latest doctrines by investigating it. Evolutionists almost unanimously proclaim the continuity of mental as well as physical evolution. But while the physical evolution of man through the lower animals, from some still lower form of life, is studiously investigated and freely discussed, on the subject of man's mental evolution the authorities give us little but vague generalities. In those evolutionists who believe that mind, even in its highest known forms, is only a property of specialised matter, this silence is legitimate. For them the mind of man and animal alike is a product of physical growth, and perishes with physical death. But those who believe in the survival of the mental part of man are surely bound to reconcile their exclusion of animal minds from a survival after death with their doctrine that man's mental evolution, no less than his physical evolution, is a continuous ascent through lower animal forms. The spirit of ancient theology which regarded the universe as existing solely for the benefit of the earth, and the earth as existing solely for the benefit of man, is not yet dead, but lurks in many dark corners of the human mind, like the Kobolds which are supposed to haunt the recesses of the German home. It was this anthropocentric habit of thought which inspired the furious opposition to Darwin's theory that man's physical ancestry must be sought in the lower animals. Science in this matter has proved too strong for prejudice, and Darwinism has

[11] Quite lately it has met with some theological support. The Rev. J. R. Illingworth, writing in *Lux Mundi*, says (p. 115): 'Again, what are they [animals]? Had they a past? May they not have a future? What is the relation of their consciousness to the mighty life which pulses within the universe? May not Eastern speculation about these things be nearer the truth than Western science?'

won a general acceptance, at which its opponents may murmur, but which they cannot deny. The battle, however, is not yet over, and the next struggle will rage round the intellectual ancestry of man. There is every reason to be confident about the issue, but it is idle to suppose that the fight will not be severe. The repugnance to admitting an animal origin of man's mental equipment will be fully as strong as the repugnance evinced to admitting a similar origin of his bodily structure. And I venture to think that it is chiefly this repugnance which has driven a man of such brilliant attainments as Mr. Wallace into so impotent a theory of the human soul.

But be this as it may, it is clear that before the issue can be decided, the question of animal souls must come to the fore.

If we suppose man's soul to be immortal, it is clear that an immortal soul cannot be composed of mortal elements. Consequently, if the human soul is even partly an evolutional development of animal mind, we cannot logically assign immortality to the one, and extinction to the other. If, on the other hand, as Mr. Wallace and the theologians contend, man's soul consists of, or at any rate comprises, spirit, or something else which does not come to us from animal progenitors, we may fairly ask for some evidence of the existence of this mysterious something. At present we have practically none. The πνεῦμα of theology, though vaguely described as 'the highest and distinctive part of man,' has no intelligible contents whatever that are not borrowed from the ψυχή. Much the same may be said of Mr. Wallace's spirit; for the special faculties which he refers to its influence are, as he honestly admits, to be found in a rudimentary form in man, at a time anterior to the addition of spirit to his nature.

Such is the problem which now awaits solution, and I have here attempted to indicate the lines on which I believe this solution must proceed. Bearing in mind that mental and material development advance, roughly speaking, together, the conclusion is well-nigh inevitable that both are processes of evolution *in* the individual organism, regulated and conditioned by the structural organism. If this be so, man's mind, as well as his body, is the product of an evolution from lower animal forms in a line of unbroken continuity; and consequently, if this human mind-structure is held to be immortal, it is impossible to deny immortality to the lower animal mind-structure from which it has been evolved, and out of which it is largely fashioned.

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