DARWINISM AND RELIGION.

AT last Mr. Darwin's long-promised work on "Man" is given to the world, and there is no longer any question as to the views which he entertains concerning the lineal descent of our race from the lower animals. To some who have always "hoped against hope," from the previous silence maintained on this subject in successive editions of the "Origin of Species," this may come as a startling blow: but to the majority it will be nothing more than a direct statement of a conclusion which followed necessarily from the If the evolution Darwinian theory. hypothesis is to be received at all as regards the organic creation, there is no possibility of stopping short when we come to man, at least so far as his bodily structure is concerned. Professor Huxley, as long ago as 1863, pointed out that "man, in all parts of his organization, differs less from the higher apes than these do from the lower members of the same group;" and the mass of overwhelming evidence brought forward in the present work to prove our intimate connection with the lower animals does but strengthen a conviction, slowly and reluctantly yielded to by all who accept any phase, whether Darwinian or otherwise, of the theory of evolution.

If Mr. Darwin, therefore, had confined his speculations to the bodily structure of man, his new work, though strengthening his previous theory by many new facts and arguments, would not have enunciated any novel or startling prin-But he had already hinted at ciple. another subject of inquiry, when in the last edition of the "Origin" (p. 577) he said, "In the distant future I see open fields for far more important researches. Psychology will be based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation."

Into these fields of speculation he enters boldly in the present work, and arrives at the conclusion that the mental powers of man, though so different in degree to those of the higher animals, are yet the same in kind; while in the social instincts existing so strongly in many animals, he finds a basis for the moral sense or conscience of the human race. "The following proposition," he says, "seems to me in a high degree probable-namely, that any animal whatever, endowed with well-marked social instincts, would inevitably acquire a moral sense or conscience, as soon as its intellectual powers had become as well developed, or nearly as well developed, as in man." For, firstly, the social instincts lead an animal to take pleasure in the society of its fellows, to feel a certain amount of sympathy with them, and to perform various services for them. But these feelings and services are by no means extended to all individuals of the same species, only to those of the same association. Secondly,-As soon as the mental faculties had become highly developed, images of all past actions and motives would be incessantly passing through the brain of each individual, and that feeling of dissatisfaction which invariably results from any unsatisfied instinct would arise as often as it was perceived that the ever-present social instinct had yielded to some other instinct at the time stronger, such as hunger, or the desire of vengeance, but less enduring in its nature, and not leaving behind a very vivid impression. Thirdly,-After the power of language had been acquired, and the wishes of any small community could be distinctly expressed, the impulse to act for the good of the community would be strengthened and directed by public opinion, the power of which rests on instinctive sympathy. Lastly, habit in each individual would strengthen the social instincts and impulses, as it does all other instincts. The social instincts themselves Mr. Darwin considers as probably an extension of the parental and filial affections, and on the origin of these last he says it "is hopeless to speculate, though we may infer that they have been to a large extent gained through natural selection."

This short summary, though extremely inadequate to express even the leading features of the theory as traced out by Mr. Darwin, suffices to show that he derives not only our bodily but also our mental and moral nature by development from the lower animals. The difference, he acknowledges, between us and them "is enormous;" nor is there the slightest tendency in any part of his work to detract from all that is noble in our nature. He takes for his text the soul-stirring words of Kant, and elevates the unselfish virtues to the highest rank to which moralists have Yet many who ever assigned them. would concede without hesitation the evolutionary origin of their bodily frame, shrink with great pain from such a derivation of their mental and moral nature. They fear that if the noble gift of conscience can be traced back in all its gradations to the humbler instincts, the human race will become the victims of a gross Materialism, and that all communion with God and all hope of immortality will be blotted out of our existence.

I believe that this fear, if it be founded upon the theory of the moral sense, as set forth in the "Descent of Man," is a groundless one; and the object of the present essay is to attempt to show—

Firstly: That the nobility of our conscience as a gift from God, and our power of communion with Him, are in no way impugned by this theory.

Secondly: That our hope of immortality stands on precisely the same basis on the hypothesis of evolution as on that of separate creation.

Lastly: That Mr. Darwin, if his theory

be even approximately true, has given a new impulse to the Utilitarian philosophy, in enunciating a proposition by which, as he says, "the reproach of laying the foundation of the most noble part of our nature in the base principle of selfishness is removed."

The fear that our conscience, if proved to have been developed by natural laws, will cease to be to us the voice of God, arises, I believe, either from our thinking too meanly of the laws involved, or from our endeavouring to separate them from their one great Source, and so to remove the necessity of an overruling Creator from the theory of the universe. Yet the truth is that those laws which we have to call to our aid for the supposed evolution of the moral sense, are the very highest which our capacities enable us to discern. The foundation of our conscience is made to rest upon the purest of instincts—that of parental and filial affection; while the powers through which it has been developed-intelligence, reason, memory (and the consequent power of reflection), language, imagination, and self-consciousness—all arise out of a network of laws so infinite in their complexity, so immeasurable in their grandeur, that, after all the utmost efforts of science, we still stand like the ignorant savage in presence of the thunderstorm, as he bows his head and exclaims, "It is the voice of a mighty God."

No one can appreciate our present incapacity as regards these points more fully than Mr. Darwin himself. He not only acknowledged from the first that the dawn of life was entirely beyond the scope of his speculations, and that "our ignorance of the laws of variation is profound ;" but in the present work he recognizes at every step the narrow limits of our knowledge. "In what manner," he says, "the mental powers first developed in the lower were organisms, is as hopeless an inquiry as how life first originated. These are problems for the distant future, if they are ever to be solved by man. . . On the origin of the parental and filial affections," he also says, "it is hopeless to speculate." And again—"We cannot decide at what age the new-born infant becomes self-conscious, or capable of reflecting on its own existence, neither can we decide this question in regard to the ascending organic scale." These and numberless other passages which might be quoted, serve to show how, in a true spirit of philosophy, he affirms constantly the still hidden and higher laws of our being.

But even supposing for a moment that these sentences might bear the interpretation that the higher laws are only as yet unknown to us; even if the more advanced intelligence of man should one day discover the laws of mind, and we should at last arrive at an "equivalent of consciousness" 1-shall we, therefore, drive out God, or make our conscience less a gift from Him ? If Paley's man, who found the imaginary selfreproducing watch, could by inductive research have traced back the mode of its formation until he was enabled to make its counterpart, he would still need the hypothesis of a designing mind behind the point he had reached : for he would need a creator of those Laws by obeying which alone he could produce the mechanism. There is a fallacy, I believe, involved in the supposition that "evolution by law," whether organic or inorganic, can dispense with the necessity of a present overruling Creator. The watch, when it leaves the hand of the man who made it, is indeed separated from its immediate cause—*i.e.* the man working through laws; but it still remains governed by its more general cause-i.e. the laws by means of which its formation was rendered possible; which laws exist independently of the man. But when we speak of the laws which govern our universe we cannot regard them as separate entities independent of God, as watch-laws are of ourselves; for then they would depend upon some first cause other than God. We must look upon them as emanating from Him, and non-existent without Him. Here we find ourselves face to face with

¹ Huxley on Descartes' Lay Sermons, p. 372.

a deep mystery. "The consciousness of an Inscrutable Power," says Mr. H. Spencer, "manifested to us through all phenomena, has been growing ever clearer, and must eventually be freed from its imperfections. The certainty that on the one hand such a power exists, while on the other its nature transcends intuition and is beyond imagination, is the certainty towards which intelligence has from the first been progressing."¹ On no hypothesis founded on the facts of nature can we shut out the ever-present action of the Infinite and All-perfect First Cause, nor shake the belief that, whether through a process of creation or the apparently less direct one of evolution, "in Him we live, and move, and have our being."

"But how," the intuitionist inquires, " can my mind and conscience, if a mere development of the instincts of unconscious animals, hold communion, real personal communion, with this Inscrutable Power, whom you place at an infinite distance from intuition and even imagination ?" If the theory rendered such communion impossible or inconceivable, then indeed it must either be false, or cause the destruction of our highest and noblest aspirations. But surely this difficulty arises, not out of the theory itself, but from our want of power to adapt our previous conceptions to the new form in which the natural facts are presented to us. If we grant the evolution of animal forms at all, we must allow that vast powers of perception and sympathy have been produced in the dog which do not exist in the jelly-fish. Yet we do not consider these powers as a special spiritual gift to the higher animal. So also with the power of communion. If a medusa be taken from the sea-shore and placed in a room inhabited by man, what will it comprehend of his movements, his actions, or his motives ? How far will it be conscious of his presence ? except when he touches it, or casts a shadow upon it, when it will shrink as it would from contact with any inanimate body. We feel at once that it would be absurd

¹ First Principles, p. 108.

to say that the jelly-fish was conscious of the man as a man. But as we rise in the scale of life we can see that powers of perception begin to be developed, so that a toad or a fish is not only instantly conscious of the presence of man, but will acquire an instinctive perception of the cruelty or kindness which it may expect at his hand. In the dog this is far more fully developed. For who will say that a dog does not share the uneasiness or expressed joy of his masterdoes not look for benefits at his hand, fly at any one who attacks him, feel fear when he has disobeyed him, remain faithful to him often for long years, watch by his sick-bed, and in many instances pine away and refuse to be comforted when separated from him by death? Surely, in so far as the powers of a dog correspond and attain to those of a human being, he does hold intercommunion with him. Why then should we find any difficulty in the fact that man-whose powers so infinitely transcend those of the dog, whom we know to have acquired the faculty of forming abstract ideas, so that he can conceive of space, time, and infinity; possessing also the highly-developed moral ideas of truth, self-sacrifice, and duty-should be able to hold communion with that Intelligence who, among all His infinite and often inscrutable attributes, must possess those from which originated the laws of our being ?

It matters not how our higher faculties have been acquired—whether the germs of them exist in the lower animals, or whether the higher laws producing them only began to act at a later stage of development. So surely as we believe that our conception of the Deity, and our capability of discerning Him, though but faint and weak, yet infinitely transcend any like powers in a poor ignorant savage, so may we hold fast without wavering to that power, even though we could prove that it has been gradually developed from the instincts of the brute creation. And as we can make a dog understand our wishes, just so far as his capacity extends, there is nothing in the theory of evolution to cause us to

doubt that the *higher* and *nobler* minds amongst us do, through the working of natural laws, receive more knowledge of a higher Power than the mass of mankind. This we call "Revelation," receiving it through poet, philosopher, or prophet, just so far as their mental and moral nature surpasses our own.

The bearing of the theory of evolution upon a future individual existence is more difficult to discuss, because the hope of immortality is acknowledged by all to be more a conviction than a certainty. "I do not mean to affirm," says Bishop Butler, "that there is the same degree of conviction that our living powers will continue, after death, as there is that our substances will." Those views of the present moral government of the world which lead us not only to long and to hope, but even to feel assured, that our life's history does not end in the grave, are far too comprehensive and complicated to be dealt with My object is merely to attempt here. to show that these hopes are no less consistent with the theory of evolution than with that of creation.

We have seen that the derivation of our higher faculties from animals is not necessarily any bar to revelation,¹ and therefore those who have always built their faith in immortality upon this foundation have no need to fear that it will be taken away from them. No one ever contended that the revelation of God to man was complete, but only such as his mental powers can receive; therefore, in so far as we can have communion with God, there is nothing in this theory to prevent our receiving from Him our knowledge and hope of eternity. But they who, deriving their arguments from purely natural religion, base their hope of immortality upon the supposed essential difference between man and animals, feel as though the very ground of their faith were destroyed by the theory of a common origin. Yet, as Mr. Darwin truly says,

¹ By revelation I do not mean any special scheme of theology, but, as just explained, the communion of God with man.

"few people feel any anxiety from the impossibility of determining at what precise period in the development of the individual, from the first trace of the minute germinal vesicle to the child, either before or after birth, man becomes an immortal being; and there is no greater cause for anxiety, because the period in the gradually ascending scale cannot possibly be determined."¹

They must indeed limit the power of an omnipotentCreator who do not believe it to be just as possible for Him to create a soul through gradual development from the capacities of the lower animals, as to create a body, with all its wondrous mechanism, from a germ-cell which does not possess a trace of organization. Indeed, so far as analogy can be trusted, this mode of development would seem to be most consistent with the general working of the laws known to us.

But I think we may go even farther than this; and though I am fully aware of the solemnity and magnitude of the problem to be solved, and the danger there is of erring through extreme ignorance, yet I cannot resist offering a reflection suggested by Bishop Butler's pregnant essay upon a future life. His argument is founded upon the apparent indestructibility of life; that as we know not at all upon what the existence of our living powers depends, neither can we urge with any probability that death, or the mere disintegration of the body, can be their destruction. Now, in spite of all the advances of science since the days of Butler, our ignorance as to the origin of life remains as complete as ever. Even if spontaneous generation could one day be established, we should then merely discover "the conditions under which matter assumes the properties which we call vital,"2_the source of those properties would still remain unknown. And further, since life is acknowleged to be the cause and not the consequence of organization, the changes in, and development of, an organism would seem to be the consequence of various internal and external conditions

¹ Descent of Man, Vol. II. p. 395.

² Huxley, British Association Address, Liverpool, 1870.

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acting upon that vitality by which alone the organism exists. Though these actions may be infinitely complex and reflex, and we may not be able to trace how far the organization and vitality mutally act and re-act upon each other, yet I conceive (and I cannot discover from writers on physiology and psychology that I am mistaken) that, in order to produce a change or development in the organism, the conditions acting upon it must produce some kind of change in the vitality which animates it.

Professor Tyndall, after enumerating all the physical phenomena which we can ever hope to discover connected with states of consciousness, adds, that if we were acquainted with all these, "we are as far as ever from the solution of the problem-How far are these physical processes connected with the facts of consciousness ?" (Brit. Assoc. 1868). If, then, no amount of purely physical action can account for the production of consciousness, and since we have no reason to suppose that life in its lowest forms has this consciousness, adoes it not follow that the internal vitality itself has been developed in ourselves into something higher, and susceptible to the action of more subtle influences, than it is in the jelly-fish? With this conclusion in our minds, let us now fall back upon the fact that this vitality, whatever its nature and origin, being the *cause* and not the consequence of organization, cannot be dependent upon the physical organism for its existence; and have we not then an intimation that the mere destruction of the bodily powers cannot destroy the attributes which have been developed in that which we call spirit? Nor does this inference seem to be incompatible with the fact that the suspension of the bodily powers, by sleep or by mental disease, temporarily destroys consciousness; for this merely indicates that the supposed development effected in the internal life can find expression only through the means of organization; and we are so entirely ignorant of the conditions under which the vitality will be placed after separation from the body, that if we could prove the capability of consciousness, and the many faculties connected with it, to be latent in the spirit, the mere difficulty of expression would be a trivial objection.

This suggestion, which is so speculative as not to deserve the name of an argument, I offer with much hesitation, as showing that the most strictly materialistic view of life, being obliged to start with an unknown force, cannot *disprove* a future individual existence; and if the idea thus roughly stated could in any way be confirmed by those who are competent to judge, our highest aspirations would gain much probability, from our being able to assign a limit to the powers of mere material organization.

Be this as it may, the difficulties which have always surrounded this subject are neither increased nor diminished by the theory of evolution. It is true that if our spirit be one of gradual development, and if we can trace the germs of so many of our faculties to the higher forms of the lower animals, they may be supposed to share with us the probabilities of immortality. But neither is this the outcome of evolution. Bishop Butler, holding the theory of creation, acknowledges that his arguments for the indestructibility of life are also applicable to the brute; "and it is thought," he says, "an insuperable difficulty that they should be immortal. and by consequence capable of everlasting happiness." But he treats this objection as both invidious and weak, since we do not know: firstly, how far they may be capable of improvement in a future existence; nor secondly, whether animals in various stages of development may not be required by the economy of the universe. In fact, he concludes, "all difficulties as to the manner they are disposed of, are so apparently and wholly founded on our ignorance, that it is wonderful they should be insisted upon by any but such as are weak enough to think they are acquainted with the whole system of things."

Having now endeavoured to remove any feelings of pain and distrust awakened by a hasty consideration of Mr. Darwin's theory of the evolution of the moral sense, it only remains to point out in what way I believe it to be an immense advance beyond the former theories of morals. In the first place, by approaching the subject from the side of natural history, it gives us the means of testing metaphysical arguments by the touchstone of physical facts; and in doing this Mr. Darwin seems to me to unite in a remarkable degree the rival claims of intuitive and utilitarian moralists.

The intuitive school have always insisted that the highest moral virtues could never be derived from mere utility, or from the principle of the "greatest happiness." Duty, they say, has a value of its own which could never have arisen from seeking our own happiness, or even the happiness of others merely as re-acting upon ourselves. Hence the intuitional theory pre-supposes a feeling, a sense of right and wrong, in our nature, "antecedent to and independent of, experiences of utility." The derivative or utilitarian school, on the contrary, have maintained that we have no proof of such an intuitional sense; that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. But since they have never assigned any other reason for the desire to produce general happiness than this-that it first of all produces the happiness of the individual-they have never been able, in spite of the endeavours of their noblest advocates (especially Mr. John Stuart Mill), to purge entirely from their theory the spirit of calculation, the base dross of selfishness, which they vet disclaim at every step.

Among the low and almost unconscious forms of animal life Mr. Darwin finds for them their true foundation-stone. The parental and filial instinct which in its highest forms presents us with the most noble, pure, and unselfish love, cannot even in its very lowest stage be said to have any trace of selfishness. Whether we call this instinct by the name of an intuition or not is clearly of no moment. If, as Mr. Darwin supposes, it has been gained (*i.e.* selected and intensified) by natural selection, it is because that community among which its faint germ first appeared flourished best in consequence of this unselfish impulse; and it thus became farther developed for the good, that is, the welfare or increased power of thriving, of that community. Here we have a reason for development, distinct on the one side from mere happiness or pleasure, and on the other from the base feeling of selfishness. It is a principle of utility in the strictest sense, but of utility founded upon an instinct of unknown origin as pure and devoid of self-seeking as the intuitionist can desire. Nor need we be uneasy because Mr. Darwin has shown that the opposite feeling of hatred, or the destruction of others, may also be developed under certain conditions, as in the workerbees which kill their brother drones, and queen-bees which kill their daughter-queens; for if we have traced back duty to the necessary obedience of the instincts governed by natural laws, an action may become a sacred duty to the community in the case of the hive-bee which we know from fact not to be the law of our being.

But Mr. Darwin does more for the Utilitarian theory than merely removing from it the reproach of selfishness. He also affords a suggestive explanation of the sense of the terms "higher" and "lower" as applied to moral rules. This has been a great stumbling-block in the way of the derivative theory; since, if a man worked for the happiness of others only in order to increase his own, how could he rise to such a sense of what was due to others as to consider self-sacrifice, courage, and other social virtues-which in many cases never do produce his own individual happiness, at any rate in this life—as higher virtues than prudence, self-preservation, and the like? But by Mr. Darwin's theory, the higher virtues are those which are founded on the social instincts, and relate to the welfare of others; and these are considered higher because they have tended to the welfare of the

community, and have thus been developed largely by natural selection, and afterwards by reason, public opinion, and sympathy. The lower relate chiefly to self, and have, though developed for the good of the individual, been checked by the social instincts; till, as reason and experience increased, and their indirect influence upon the community became, perceived, they would be increased by public opinion so far as they were beneficial to all.

Thus the good of the community becomes at last the end and aim of our moral nature. A man who has no sympathy, whose inordinate desires are strong, and his social instincts weak, is essentially a bad man; yet another may also act with bad results, because, though his social instincts are strong, they are guided by a weak intellect. The cultivation of the intellect becomes therefore a supreme duty, while the development of love and sympathy are equally imperative. By the cultivation of the first, we render vivid the memory of past actions; by the exercise of the second, we render the memory of bad and selfish actions intolerable: and this is conscience, by which ultimately man becomes freed from the influence of the mere praise and blame of others, for his convictions become his guide and rule.

I have endeavoured in this short essay to keep strictly and logically to facts, allowing but little scope to heart and imagination, that no preconceived prejudice might creep in: But if, calmly reasoning upon the evolution theory, we can establish that it neither shuts out God, degrades our conscience, checks our belief in the power of communion with the Divine mind as far as our faculties will permit, nor diminishes our hope of immortality, may we not then even while allowing the theory as probable, give rein to the glorious conceptions and inspirations which flash upon us in happy moments of thought, and feel that all things are possible to us-that we have a never-ending future, and a hope of drawing nearer and nearer to the Almighty Being from whom we derive all and hope for all. A. B.