

Prabuddha Bharata

Arise ! Awake ! and stop not till the goal is reached.

—Swami Vivekananda

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SRI RAMAKRISHNA'S TEACHINGS

BHAKTI—V

A JAR kept under water is full of water inside and outside. Similarly the soul immersed in God sees the all-pervading Spirit within and without.

THE darkness of centuries is dispersed as soon as a light is brought into the room. The accumulated ignorance and misdoings of innumerable births vanish before a single glance of the Almighty's gracious look.

GOD is in all men, but all men are not in God : that is the reason why they suffer.

AS a lamp does not burn without oil, so a man cannot live without God.

Q. WHERE is God ? How can we get to Him ?

A. THERE are pearls in the sea ; you must dive deep again and again until you get them. So there is God in the world, but you should persevere to see Him.

BHAVA (a stage of devotion) is like an unripe mango. Prema is like the ripe fruit.

PREMA is like a string in the hands of the Bhakta, which binds Sachchidananda God. The devotee holds the Lord under his control, so to speak. The Lord comes to him whenever he calls Him.

IN Persian books it is written that back of the flesh are the bones, back of the bones is the marrow, and so on, and back of all is Prema.

SREE KRISHNA is called *Tribhanga* i. e., bent in three different directions. It is only a soft thing that is capable of being twisted, so this form of Sree Krishna implies that He must have been softened in some way or other. The softening in this case is accounted for by Prema.

BHAKTI-Yoga is communion with God by means of Bhakti (devotion) and self-surrender. It is specially adapted to *Kali-Yuga*. This is the *Yugadharm*—the Way for the present age. It reduces Karma (work) to a minimum. It teaches the necessity of prayer without ceasing.

LEAVES FROM THE GOSPEL OF SRI RAMAKRISHNA

(ACCORDING TO M.)

Sinti Brahma Samaja : 28th October, 1882.

IS GOD WITH OR WITHOUT FORM?
THE NATURE OF BRAHMAN CANNOT
BE EXPRESSED

AMONG those assembled a Brahma devotee asked, "Is God with or without form?"

Sri Ramakrishna :—He cannot be limited in any way. He has form and is again formless. To the devotee He is with form. To the Jnani, that is, to him who has felt the world as a dream, He is without form. The devotee feels that he is an entity and the world is another. Therefore God manifests Himself as a Person to the devotee. The Jnani such as the Vedantist, only discriminates, "not this, not this." By discrimination he realizes that he himself as well as the world are alike unreal—as a dream. The Jnani realizes Brahman in his super-consciousness. He cannot express what Brahman is.

Do you know how it is? Brahman is, as it were, the sea of Absolute Existence, Knowledge and Bliss, unbounded in every direction. Owing to the frost of devotion, the water of this sea freezes in places,—is condensed in the form of ice. In other words, He sometimes manifests Himself to the devotee as a Person by assuming some form. Again, when the sun of Jnana rises, the ice melts. Then God is no longer known

as a Person, nor are His forms seen. What He is cannot be expressed. After all, who then is there to speak? The 'speaker' himself is *non-est*, he cannot find out his 'ego.'

By discrimination, nothing of the ego is left. Just as in peeling an onion, you take off the red skin first, then the thick white one and so on in skinning it like this you get nothing inside.

Where one's own *ego* cannot be found out—and who is there to find it out?—who is to say what is the realisation of Brahman in super-consciousness like? A salt-doll went down to measure the depth of the ocean. No sooner did it go down into the water than it dissolved. Who was there to report?

The mark of perfect Jnana is that when it is attained, man becomes silent. Then the salt-doll of the ego gets dissolved and becomes one with the ocean of Existence, Knowledge and Bliss. There remains not a trace of the sense of difference between the ego and Brahman.

When water finds its way from a tank into the fields, how great is the noise produced by the moving stream in the beginning. But as soon as the water in the tank and that on the field come to the same level, there is no more noise.

So long as discrimination does not end, people reason and argue glibly. When

it ends, they become silent. When a jug is full, when the water in it and that in the reservoir from which it is filled attain the same level, there is no noise. There is noise as long as the jug is not full.

Formerly people used to say that a ship comes not back from the 'black waters' (Bay of Bengal).

BUT THE EGO GOES NOT

"When 'I' shall die, all troubles shall be over" (Laughter). But how much so ever one may discriminate, the ego does not go. Therefore the egoism, 'I am a devotee of God,' is good for many. God with attributes is for the devotee. To him He manifests Himself as with attributes, as a Person, as a form. It is He who hears prayers. The prayers done in the Brahma Samaja are offered to Him alone. You are not Vedantins. You are not Jnanis. You are Bhaktas. It matters not whether you believe in God's form or not. It will do if one believes Him to be a Person, who hears one's prayers, who creates, preserves and destroys the world, who is omnipotent. He is easily attainable by the path of devotion.

GOD-VISION

A Brahma devotee asked, "Sir, can God be seen? If so, why do we not see Him?"

Sri Ramakrishna:—Yes, He can certainly be seen. He can be seen as with form. Again He can be seen as without form. How can I make you understand that?

Brahma devotee:—By what means, can He be seen?

Sri Ramakrishna:—Can you cry out for Him with intense yearning? Men cry a good deal for their children, for

their wives and for money. But who is crying for God? So long as the child is happy with its doll, forgetful of its mother, she remains busy with the household works. But when it has had enough of play and cries for its mother, anon she comes to it, leaving her work and takes it up to her arms.

Brahma devotee:—Why is there so much difference as regards the conception of God's nature? Some say He is without form, others say He is with form. Again from the latter we hear of His many different forms. Why is there so much controversy?

Sri Ramakrishna:—There is really no difficulty. A devotee is apt to take Him to be of the form in which he sees Him. If he can establish himself in God-consciousness, He then makes him understand everything. You never did so much as visit the neighbourhood, how would you get posted as to its ins and outs?

Listen to a story. A man went to the foot of a tree. He saw an animal on it. Coming back he told another man that he had seen a beautiful, red animal on such and such a tree. The latter replied, "Well I too had gone there and saw the animal. But why should it be red? It is green to be sure." A third man contradicted him and said he had seen it yellow. A fourth man said it was blue. Another said it was orange. In this way, they all differed with one another and fell out. Then they all went to the spot and found a man sitting there. Being questioned, he said, "I live under this tree. I know the animal very well. Every one of you is right. The animal is at one time red, at another time green, some time yellow, again blue. And it takes many

other colours. Sometimes again I find no colour on it."

That is to say, he alone knows the true nature of God, who always thinks of Him. He alone knows that He manifests Himself in many forms and in many ways,—that He is with attributes, again He is without attributes. He, who lives under the tree, only knows that the chameleon changes its colour,—again sometimes there is no colour on it.

Kavir used to say, "The formless God is my Father and the God with form is my Mother."

He manifests Himself to the devotee in the form he loves. He is Bhaktavatsala (i. e., so kind to His devotees). The Puranas say that He took the form of Sita-Rama for the sake of Hanumana, a veritable hero amongst devotees!

MEANING OF THE FORMS OF KALI, THE MOTHER OF THE UNIVERSE, OF A DARK BLUE COLOUR

Form vanishes before Vedanta discrimination. The last conclusion of that discrimination is that Brahman is real and the world with name and form is unreal. So long as there is the egoism "I am a devotee," God's forms are seen and conception of Him as a Person is possible. Looked at from the stand-point of discrimination, the devotee's egoism keeps him a little away from God.

Why is the form Kali, or the form Shyama three cubits and a half? Because of this distance. The sun looks small because of its distance. Go near it,—then it will look so large that you will not be able to comprehend it. Again, why is the form Kali, or the form Shyama blue? Also because of distance. The

water of a big pond looks blue from distance. Go near it and take a little water in the palm of your hand, you will see it has no colour. The sky, seen from distance, looks blue. Go near it and see, there is *no* colour

Therefore I say Brahman is without attributes according to Vedanta discrimination. His exact nature cannot be expressed. But so long as you yourself are real, the world also is real and God's names and forms also are real. And conception of God as a Person is also real.

KNOWLEDGE OF THE INFINITE

Sri Ramakrishna :—Yours is the path of devotion. It is very good,—it is a very easy path. What is the need of 'knowing' God in His infiniteness? When I have got this priceless state of man, devotion to His Lotus Feet is the one thing needful for me.

If my thirst is allayed by drinking one glass of water,—what is the use of my measuring how much water there is in the pond? I get intoxicated by drinking half a bottle of wine,—what is the use of my calculating how many gallons of wine there are in the public-house?

—
Take up one idea. Make that one idea your life; dream of it; think of it; live on that idea. Let the brain, the body, muscles, nerves, every part of your body be full of that idea, and just leave every other idea alone. This is the way to success, and this is the way great spiritual giants are produced. Take one thing up and do it, and see the end of it, and before you have seen the end, do not give it up.

—*Swami Vivekananda*

SPIRITUAL PERFECTION AND EVOLUTION

LIFE means the play of two forces. In the material, the vegetable, the animal, or the human world, two forces are eternally at work. The planets try to fly away from the sun; again they are attracted towards it by the centripetal force. Atoms and molecules try to fly away from one another; chemical attraction draws them together. Innumerable are the patent varieties of plants, trees, insects, birds, animals, men, in short, of living beings. Not one individual is exactly the same as another. Again, from the seed of a mango-tree only a mango-tree grows. The characteristics of a species are present alike in the parents and their offsprings. Hate separates individuals. Love brings them together. Men fight and separate. They also form themselves into groups, families, tribes and nations. Throughout Nature act two forces, one constantly producing variations and the other as constantly bringing about sameness in the midst of the variations.

Nor is life possible without either of the two forces. The very existence of an individual as such depends on its possession of certain attributes differentiating it from the rest. If there were no differentiation, there would be no separate individuals. It would be one nameless and formless homogeneous whole. Again continuance of an individual as such depends on coalescence of its attributes during the period of its continuance. Let there be no force for unification, all

the individuals will in no time break into pieces. The universe will crumble into an infinite number of inconceivable atoms, floating in space, each in its own way. Either state is annihilation of the only life we see or can conceive.

Differentiation in unification and unification in differentiation is the plan of Nature. In the real world, they always go together. Nor can they be separated theoretically. Concepts imply correlatives. The conception of a part is impossible without that of a whole. There can be no conception of equality, without one of inequality, of finiteness without one of infiniteness. In the same manner, conception of differentiation is possible only by opposition to that of unification; and *vice versa*. Have the one, you shall have the other. Destroy one, both are destroyed. The state of difference only without unity and the state of unity only without difference, both are equally inconceivable.

Taking one side of the universal fact, some say that unity is illusion and variety is the only thing that exists, while others hold that variety is illusion and unity is the only thing that exists. Both are wrong, as they take only one-half of the situation. Others come in the middle and declare that, behind variety which of course we know definitely, there is an unity, of absolute existence, of which we have now only indefinite knowledge and the varieties are neither non-existent nor existent in the absolute sense, but are

of relative existence. It is that unity that appears as the varieties. They cannot be absolutely non-existent because we see and work in and through them. They are not absolutely existent because they will disappear with the full and definite knowledge of the unity and besides, till that knowledge, they are changeful and exist only relatively to our minds. Such a view is also imperfect as its recognition of the variety ceases with the definite knowledge of the unity.

The highest goals of religions vary according to these different views of the universe. Some say, "Do not run after the unity. It is false. Take only the variety." Others say, "Avoid variety. It is non-existent or, at best, relatively existent. Try to reach the unity which ought to be the goal." Evidently both are laying stress on one side and therefore, fail to take the whole thing as it is.

We can understand that the variety is changeful and exists only relatively to our minds, that behind the variety, there is an unity which is of unchangeable absolute existence and that the varieties are the appearances of the unity. We admit that our present knowledge of the variety is definite and of the unity indefinite. But is there really a state in which the knowledge of the unity becomes fully definite and the variety does indeed totally disappear? The plan of Nature and the correlativeness of concepts both answer the question in the negative. The knowledge of one or the other may be more or less definite or indefinite at one time or another but they are always together.

Variety and unity are the two parts of a complete whole. Acceptance of one in exclusion of the other is one-sided

and impossible. The goal of a perfect religion ought to be harmonious development of the knowledge of both the variety and the unity.

With the man of the world who has no idea of religion, the knowledge of the variety is exceedingly definite and of the unity exceedingly indefinite; the reverse is the case with the Yogi. In his Samadhi, his knowledge of the variety becomes exceedingly indefinite and of the unity exceedingly definite. Some of the Yogis will not or cannot return from their Samadhi. With them, for ever, it is all unity with an infinitely fine remnant of the variety. Mukti or freedom from variety is conceivable only in this sense. Absolute freedom with no variety is inconceivable. Others return and bring the glad tidings to the world of the freedom they realize. But, when returning, their knowledge of the variety gets more and more definite and of the unity proportionately indefinite. The Great Ones again walk, in their greatness, on the border-land, as it were, of variety and unity, commanding views of both. They can combine in them infinite definite knowledge of both the variety and the unity or can have as much or as little as they like of either or of both. They are, as it were, awake and sleeping simultaneously, as Swami Vivekananda used to describe them. In the words of Bhagavan Sri Ramakrishna, they stand, as it were, on the threshold with one foot inside the room of unity and another outside in variety. This is spiritual perfection.

He who saw the scene in which Sri Ramakrishna cried aloud to his Mother, "I do not want Brahma-Jnana, O Mother.

Do not give it to me," will ever carry with him the impression of the superiority of Divine Sonship over Brahma-Jnana, Sonship in which the divine son enjoys both the aspects, the unity (i. e., Brahma-Jnana) and the variety—and who knows what more aspects of Her infiniteness the Mother reveals to Her son?—of the Mother who is, as Sri Ramakrishna used to say, unity and variety and She alone knows what else besides.

The undertone of the life in India murmurs renunciation, "Abandon the variety and seek the unity"; that in the West hums enjoyment, "Cleave to the variety and care not for the unity." Both the aspects of life are defective. Life cannot last long under either of them. Nature's blessing hand is not stretched to one who loves a portion of her and hates the rest. Babylon, Egypt, Rome, Greece—they ran after the variety and rose, only to fall and never rose again. Who can tell if their fate awaits not present Europe? India is dying and shall die unless she does not find it too late to rectify her folly. Union of the ideals of life of the Western and the Eastern alone can produce that harmony which will effect a natural and perfect evolution of the human race and the sooner that union be brought about, the better for both.

If they in the West want to live on and if we in the East do not want to die, let the cry of renunciation be raised in the West and let the East be roused to activity and struggle after material prosperity.

Life, everywhere in Nature, is the balance of disintegration and integration, of variety and unity. The undue prepon-

derance of one means death. And none can hoodwink Nature.

Ideal evolution then should be perpetual advancement and along with it, balancement of both variation and unification. Why should there be an end to evolution? There are infinite possibilities of progress in man and Nature and they require infinite time to be exhausted. Let there be as many variations as possible and let each in its own way grow to its excellence and at the same time, let them be drawn together more and more strongly and deeply in the bond of unity.

Religion, science, industries and arts; castes, tribes, nations and races; the priest, the king, the merchant and the servant; the rich and the poor, the strong and the weak, the intelligent and the ignorant, the saint and the sinner;—all these variations there are and will remain eternally. But let them be regarded as components of a common whole. Let the unity running through them be recognised more and more. Let there be no privilege, no aggression or suppression of one by another but mutual love and co-operation and recognition of the usefulness and the greatness of each in its own place.

Z.

THE Vedanta does not, in reality, denounce the world. The ideals of renunciation nowhere attain such a climax as in the teachings of the Vedanta, but, at the same time, dry suicidal advice is not intended; it really means deification of the world—give up the world as we think of it, as we seem to know it, as it is appearing, and know what it really is. Deify it; it is God alone, and, as such, we read at the commencement of the oldest of the Upanishads, the very first book that was ever written on the Vedanta—"Whatever exists in this Universe, whatever is there, is to be covered with the Lord."

—Swami Vivekananda

SCIENCE AND RELIGION : VIEWS OF LORD KELVIN

AND HIS CRITICS

I

ON the 1st May 1903, at the University College, London, in moving a vote of thanks to the Rev. Professor G. Henslow, who lectured before the Christian Association on "Present-day Rationalism: An Examination of Darwinism", Lord Kelvin, "that prince of science" as Lord Reay, the Chairman of the meeting, described him, made some very interesting statements on the relation between science and religion. A discussion followed in the columns of the *London Times*, in which some of the notable scientific men of England participated and the thunderer itself devoted a leader in its issue of May 13th to the defence of the great physicist, characterizing his observations thus: "That is a momentous conclusion, and it is a momentous matter that it should be asserted by a man of 'transcendent ability' which Sir John Burdon-Sanderson justly assigns to Lord Kelvin."

We propose to give our readers the words of Lord Kelvin in full and quotations from the more important criticisms on them as they appeared in the *Times*.

"Lord Kelvin, in moving a vote of thanks to the lecturer, said he wished to make a personal explanation. He had recently had occasion to make use of the expressions ether, atoms, electricity, and had been horrified to read in the Press that he had spoken of ether-atoms. Ether

was absolutely non-atomic; it was absolutely structureless and homogeneous. He was in thorough sympathy with Professor Henslow in the fundamentals of his lecture, but he could not say that with regard to the origin of life science neither affirmed nor denied creative power. Science positively affirmed creative power. Science made every one feel a miracle in himself. It was not in dead matter that they lived and moved and had their being, but in the creating and directive power which science compelled them to accept as an article of belief. They could not escape from that when they studied the physics and dynamics of living and dead matter all around. Modern biologists were coming once more to a firm acceptance of something, and that was a vital principle. They had an unknown object put before them in science. In thinking of that object they were all agnostics. They only knew God in His works, but they were absolutely forced by science to admit and to believe with absolute confidence in a directive power—in an influence other than physical, dynamical, electrical forces. Cicero had denied that they could have come into existence by a fortuitous concourse of atoms. There was nothing between absolute scientific belief in creative power and the acceptance of the theory of a fortuitous concourse of atoms. Was there, he asked, anything so absurd as to

believe that a number of atoms by falling together of their own accord could make a crystal, a sprig of moss, a microbe, a living animal? People thought that, given millions of years, these might come to pass, but they could not think that a million of millions of millions of years could give them unaided a beautiful world like ours. They had a spiritual influence, and in science a knowledge that there was that influence in the world around them. He admired the healthy, breezy atmosphere of free thought in Professor Henslow's lecture. Let no one, he urged, be afraid of true freedom. They could be free in their thought, in their criticisms, and with freedom of thought they were bound to come to the conclusion that science was not antagonistic to religion, but a help for religion."

The next day Lord Kelvin wrote to the *Times* :

"In your report of a few words which I said in proposing a vote of thanks to Professor Henslow for his lecture 'On Present-day Rationalism' yesterday evening, in University College, I find the following :—'Was there anything so absurd as to believe that a number of atoms by falling together of their own accord could make a crystal, a sprig of moss, a microbe, a living animal?' I wish to delete 'a crystal,' though no doubt your report of what I said is correct. Exceedingly narrow limits of time prevented me from endeavouring to explain how different is the structure of a crystal from that of any portion, large or small, of an animal or plant, or the cellular formation of which the bodies of animals and plants are made; but I desired to point out that, while 'fortuitous concourse

of atoms' is not an inappropriate description of the formation of a crystal, it is utterly absurd in respect to the coming into existence, or the growth, or the continuation of the molecular combinations presented in the bodies of living things. Here scientific thought is compelled to accept the idea of Creative Power. Forty years ago I asked Liebig, walking somewhere in the country, if he believed that the grass and flowers which we saw around us grew by mere chemical forces. He answered, 'No, no more than I could believe that a book of botany describing them could grow by mere chemical forces.'

Every action of human free will is a miracle to physical and chemical and mathematical science."

Prof. E. Ray Lankester in his letter to the *Times* has boiled down the speech and letter of Lord Kelvin to the following four statements. We give these for convenience and easy reference to the criticisms we quote below.

"1. That 'fortuitous concourse of atoms' is not an inappropriate description of the formation of a crystal.

2. That 'fortuitous concourse of atoms' is utterly absurd in respect to the coming into existence, or the growth, or the continuation of the molecular combinations presented in the bodies of living things.

3. That, though inorganic phenomena do not do so, yet the phenomena of such living things as a sprig of moss, a microbe, a living animal—looked at and considered as matters of scientific investigation—compel us to conclude that there is scientific reason for believing in the existence of a creative and directive power.

4. That modern biologists are coming once more to a firm acceptance of something, and that is—a vital principle.”

CRITICISMS ON STATEMENTS 1 AND 2

BY PROF. E. RAY LANKESTER

“Lord Kelvin speaks of a ‘fortuitous concourse of atoms,’ but I must confess that I am quite unable to apprehend what he means by that phrase in the connexion in which he uses it. It seems to me impossible that by ‘fortuitous’ he can mean something which is not determined by natural cause and therefore is not part of the order of nature. When an ordinary man speaks of a concourse having arisen ‘by chance’ or ‘fortuitously’, he means merely that the determining conditions which have led by natural causation to its occurrence were not known to him beforehand; he does not mean to assert that it has arisen without the operation of such determining conditions; and I am quite unable to understand how it can be maintained that ‘the concourse of atoms’ forming a crystal, or even a lump of mud, is in any philosophic sense more correctly described as ‘fortuitous’ than is the concourse of atoms which has given rise to a sprig of moss or an animal.”

BY SIR OLIVER LODGE

“I should like to explain that the adjective ‘fortuitous’ as employed by Lord Kelvin was evidently not selected by him as specially appropriate or illuminating, but merely used as part of a well-known phrase or quotation. It is clear that what our chief meant was that the formation of a crystal, and such like, proceeded in accordance with the un-supplemented laws of ordinary mechanics; whereas the formation of an animal

or plant seemed controlled by something additional—viz., the presence of a guiding principle or life-germ, the nature of which neither I nor any other physicist in the least understands. I shall be surprised if biologists claim that they really understand it either.”

CRITICISMS ON STATEMENT 3

BY SIR WILLIAM THISELTON-DYER

“In the former (inorganic nature) he claims for scientific investigation the utmost freedom; in the latter (organic nature) scientific thought is ‘compelled to accept the idea of Creative Power.’ That transcends the possibilities of scientific investigation. Weismann defines this to be ‘the attempt to indicate the mechanism through which the phenomena of the world are brought about. When this mechanism ceases, science is no longer possible.’ Lord Kelvin, in effect, wipes out by a stroke of the pen the whole position won for us by Darwin. And in so doing it can hardly be denied that his present position is inconsistent with the principle laid down in his British Association address at Edinburgh in 1871:—

“Science is bound by the everlasting law of honour to face fearlessly every problem which can be fairly presented to it. If a probable solution, consistent with the ordinary course of nature, can be found, we must not invoke an abnormal act of Creative Power.’.....

What biologist has ever suggested that a fortuitous concourse of atoms ‘could make.....a sprig of moss?’ I confess I think that Lord Kelvin’s first thoughts were best, and that it is equally absurd to suppose that crystal could be made in the same way. A fortuitous concourse

of atoms might produce an amorphous mass of matter; but to form a crystal the 'atoms' must be selected and of the same kind, and their concourse is therefore not fortuitous. The fact is that the argument from design applies, for what it is worth, as much to a diamond as to a caterpillar. If it is to be rejected in favour of a mechanical explanation in the one case, it is impossible, logically, to maintain it in the other."

BY MR. W. H. MALLOCK

"Lord Kelvin's language is ambiguous, and is likely to be misinterpreted by many people, who will imagine that he means either more than he does mean or less. His opinion appears to be that the inorganic universe is theoretically explicable as the result of a 'fortuitous concourse of atoms,' but that the phenomena of organic life, alike in plants and animals, demand the hypothesis of a 'Creative Power.' Now if this Creative Power is to have anything to do with religion, it must be not only a creative, but a moral Power also. What, then, it would be interesting to learn, is this. Does the evolution of organic life—does 'nature red in tooth and claw'—suggest to Lord Kelvin, what it failed to suggest to Tennyson, that the source of life is a Power which is not only creative, but is also wise, loving, and just in every comprehensible sense?"

BY THE EDITOR OF THE TIMES

"As Clerk Maxwell asked, in his memorable article on Atoms, 'How did the atoms come to be all alike in those properties which are in themselves capable of assuming any value?' We are, as he said, 'forced to look beyond them to some common cause or common origin

to explain why this singular relation of equality exists'; and if Lord Kelvin, like Clerk Maxwell himself, saw this common origin in a 'creative and directive power,' he would be more consistent than in confining the evidence of that power to the phenomena of life..... But it would seem a simple and reasonable argument that the construction of the atoms themselves, their character—to use Sir John Herschel's expression quoted by Clerk Maxwell—of 'manufactured articles,' and their uniform observance of definite laws, is alone sufficient to compel belief, on purely scientific grounds, 'in a creative and directive mind.'"

BY PROF. E. RAY LANKESTER

"I am not misrepresenting what Lord Kelvin has said on this subject when I say that he seems to have formed the conception of a creator who first of all, without care or foresight, has produced what we call 'matter,' with its necessary properties and allowed it to aggregate and crystallize as a painter might allow his pigments to run and intermingle on his palette; and then, as a second effort, has brought some of these elements together with 'creative and directive purpose,' mixing them, as it were, with 'a vital principle' so as to form living things, just as the painter might pick out certain colours from his confused palette and paint a picture.

This conception of the intermittent action of creative power and purpose does not, I confess, commend itself to me. That, however, is not so surprising as that it should be thought that this curious conception of the action of creative power is of value to religion. Whether the in-

termittent theory is a true or an erroneous conception seems to me to have nothing to do with 'religion' in the large sense of that word so often misused. It seems to me to be a kind of mythology, and I should have thought, could be of no special assistance to teachers of Christianity. Such theories of divided creative operations are traceable historically to polytheism."

BY SIR OLIVER LODGE

"It is true that Lord Kelvin employed the popular phrase 'creative power'—a phrase I should not myself use, because I am unable to define it—and in other respects his wording was more appropriate to a speech than to a philosophic essay, but nevertheless his speech as reported had all the usual subjective interest attaching to the freely-spoken personal convictions of a great man, attained as the outcome of a lifelong study of various aspects of nature."

CRITICISMS ON STATEMENT 4

BY SIR JOHN BURDON-SANDERSON

"The question at issue is how far 'mechanical explanations' can be given of the phenomena of life. The view which for the last half century has been taught by physiologists may be stated as follows:—All the processes observed in living organisms are of such kind as to admit of being investigated by the same methods as are used in the investigation of the phenomena of non-living nature—*i. e.*, by measurement of their time and place relations under varying conditions—in other words, by the method of experiment. But, beyond the limit thus stated, we have to do with processes which cannot be directly measured or observed. These are, first, the mental processes,

whether of man or of animals, in respect of which the experimental psychologist is unable to go beyond the estimation of conditions and effects; and, secondly, the processes of organic evolution by which the organism grows from small beginnings to such form and structure as best fit it for its place in nature. This is the doctrine which was professed by Helmholtz, the founder of modern physiology, as the result of those early investigations which were embodied in his well-known treatise on the *Erhaltung der Kraft*, in which he demonstrated more clearly than had been done before that the natural laws which had been established in the inorganic world govern no less absolutely the processes of animal and plant life, thus giving the death-blow to the previously prevalent vitalistic doctrine that these operations of life are dominated by laws which are special to themselves. He thereby brought into one the before too widely separated sciences of physiology and physics."

BY "T. C. F."

"It is, therefore, interesting to quote Darwin's own words on the subject, given in a letter to D. Mackintosh of February 28, 1882—No. 516 of the lately published letters:—

'With respect to the main purport of your note, I hardly know what to say. Though no evidence worth anything has as yet, in my opinion, been advanced in favour of a living being being developed from inorganic matter, yet I cannot avoid believing the possibility of this will be proved some day in accordance with the law of continuity. I remember the time, about 50 years ago, when it was said that no substance found in a living plant or

animal could be produced without the aid of vital forces. As far as external form is concerned, Eozoon shows how difficult it is to distinguish between organized and inorganized bodies. If it is ever found that life can originate on this world, the vital phenomena will come under some general law of nature. Whether the existence of a conscious God can be proved from the existence of the so-called laws of nature (*i. e.*, fixed sequence of events) is a perplexing subject on which I have often thought, but cannot see my way clearly."

BY SIR WILLIAM THISELTON-DYER

"In his speech at University College Lord Kelvin is reported to have said:— 'Modern biologists were coming once more to a firm acceptance of something, and that was a vital principle.' I deny the fact. And Sir J. Burdon-Sanderson credits Helmholtz with having given 'the death-blow to the previously prevalent vitalistic doctrine that these operations of life are dominated by laws which are special to themselves.' He explains 'these operations' to mean 'the processes of animal and plant life.' Perhaps he will tell us how he reconciles this position with that of Lord Kelvin, on the one hand, and that attributed by Lord Kelvin to Liebig on the other. The new 'vital principle' is only a resurrection of the old 'vitalistic doctrine.'

One word more. Sir J. Burdon-Sanderson cites Helmholtz for the statement that 'the processes of organic evolutioncannot be directly measured or observed.' If he will consult recent volumes of the *Philosophical Transactions* or the pages of 'Biometrika' I think he will find reason in the light of recent

research to disagree with him."

* * * * *

"The attempt to introduce a directive force into the Darwinian theory is no new thing. It is, of course, only Creative Power in disguise. The most notable are those of Nageli in Germany, and Asa Gray and Cope in America. Weismann has generalized them as an attempt to set up a 'phyletic vital force,' and he points out that if we accept anything of the kind 'we should at once cut ourselves off from all possible mechanical explanation of organic nature.'"

BY PROF. E. RAY LANKESTER

"Lastly, with reference to Lord Kelvin's statement that 'modern biologists are coming once more to a firm acceptance of something—and that is a vital principle.' I will not venture to doubt that Lord Kelvin has such persons among his acquaintance. On the other hand, I feel some confidence in stating that a more extensive acquaintance with modern biologists would have led Lord Kelvin to perceive that those whom he cites are but a trifling percentage of the whole. I do not myself know of any one of admitted leadership among modern biologists who is showing signs of 'coming to a belief in the existence of a vital principle.'

Biologists were, not many years ago, so terribly hampered by these hypothetical entities—'vitality,' 'vital spirits,' 'anima animans,' 'archetypes,' 'vis medicatrix,' 'providential artifice,' and others which I cannot now enumerate—that they are very shy of setting any of them up again. Physicists, on the other hand, seem to have got on very well with their problematic entities, their 'atoms' and

'ether,' and 'the sorting demon of Maxwell.' Hence, perhaps, Lord Kelvin offers to us, with a light heart, the hypothesis of 'a vital principle' to smooth over some of our admitted difficulties. On the other hand, we biologists, knowing the paralysing influence of such hypotheses in the past, are as unwilling to have anything to do with 'a vital principle,' even though Lord Kelvin erroneously thinks we are coming to it, as we are to accept other strange 'entities' pressed upon us by other physicists of a modern and singularly adventurous type."

Thus far the main propositions. As to the relation between science and religion, Prof. E. Ray Lankester wrote :

"So far as I have been able to ascertain, after many years in which these matters have engaged my attention, there is no relation, in the sense of a connexion or influence, between science and religion. There is, it is true, often an antagonistic relation between exponents of science and exponents of religion..... Setting aside such excusable and purely personal collisions between rival claimants for authority and power, it appears to me that science proceeds on its path without any contact with religion, and that religion has not in its essential qualities, anything to hope for, or to fear from, science.

The whole order of nature, including living and lifeless matter—man, animal, and gas—is a net-work of mechanism, the main features and many details of which have been made more or less obvious to the wondering intelligence of mankind by the labour and ingenuity of scientific investigators. But no sane man has ever pretended, since science became

a definite body of doctrine, that we know or ever can hope to know or conceive of the possibility of knowing, whence this mechanism has come, why it is there, whither it is going, and what there may or may not be beyond and beside it which our senses are incapable of appreciating. These things are not explained by science, and never can be."

We cannot withhold from our readers the amusingly diverse accounts of that 'problematic entity' ether, that have cropped up in the discussion :

Sir William Thiselton-Dyer wrote :

"Lord Kelvin said that 'ether was absolutely non-atomic ; it was absolutely structureless and homogeneous.' He speaks of it as if it were a definite concrete thing like the atmosphere. But we cannot picture to our minds how such a medium can possess elasticity, or how it can transmit undulations. The fact is that the ether is a mere mathematical figment, convenient because it satisfies various formulæ. As it is only an intellectual conception, we may invest it with any properties we please. The late Professor Clifford once told me that it was harder than steel. I believe it is now thought to be gelatinous. Anyhow, it is nothing more than a working hypothesis, which some day, like phlogiston, will only have historic interest."

"Que Scais-je," another correspondent, gave the following version :

"Lord Kelvin says that the ether is absolutely non-atomic, absolutely structureless, and homogeneous. Professor Osborne Reynolds announced not long ago as the result of the latest investigations that the ether is atomic or molecular in structure, gave the size of the mole-

cules, calculated their mean free path, and told us that the ether is 500 times as dense as gold, that its mean pressure is 750,000 tons to the square inch, and so forth."

II

To us Lord Kelvin's confession of faith and the highly interesting discussion it led to are fraught with unusual interest. To our mind the position here discovered for us is a close approximation to the Sankhya philosophy. If we read the striking address delivered by Sir William Crookes, entitled 'Modern Views on Matter: the Realisation of a Dream,' at the second plenary sitting of the International Congress for Applied Chemistry, held in Berlin on the 5th June last, we find Sir William's conception of 'Protyle' is almost identical with that of the Sankhya 'Prakriti,' the Mother, according to that philosophy, of all existence. Here is an extract from it:

"Indulging in a 'scientific use of the imagination' and pushing the hypothesis of the electronic constitution of matter to what I consider its logical limit, we may be in fact witnessing a spontaneous dissociation of radium—and we begin to doubt the permanent stability of matter. The chemical atom may be actually suffering a catabolic transformation, but at so slow a rate that, supposing a million atoms fly off every second, it would take a century for its weight to diminish by one milligramme. Thus we stand at the frontier where Matter and Power pass into one another. In this field lie the greatest scientific problems of the future. Here lie the ultimate realities, as far-reaching as they are wonderful. Our views of to-day of the constitution of

matter may appear satisfactory to us, but how will it be at the close of the twentieth century? A hundred years hence shall we acquiesce in the resolution of the material universe into a swarm of rushing electrons? This fatal quality of atomic dissociation appears to be universal, and operates whenever we brush a piece of glass with silk; it works in the sunshine and raindrops, and in the lightnings and flame; it prevails in the waterfall and the stormy sea. And although the whole range of human experience is all too short to afford a parallax whereby the date of the extinction of matter can be calculated, Protyle, the 'formless mist,' once again may reign supreme, and the hour hand of eternity will have completed one revolution." (Quoted in *Light* from the *Westminster Gazette*.)

Nor is this theory of a Prakriti or Protyle very much different from that of the "creating and directive power" of Lord Kelvin, as will be evident on a perusal of the quotation from the *Times*. The crux of the situation is whether or not this power can be regarded as all-wise and all-good, in a word, as God. Here, in view of the objections pressed in by Mr. Mallock and Prof. Ray Lankester, the solution offered by the Sankhya philosophy seems to us not at all unsatisfactory.

According to the Sankhya philosophy atoms are not final causes, but, are born of Prakriti, which is neither force nor matter, but the Womb out of which these are manufactured. Prakriti has a two-fold existence, those of homogeneity and heterogeneity. When she is homogeneous, there is no manifestation,

no phenomenon. All is hushed in sleep in the Great Mother's being. The beginning of disturbance in Prakriti starts heterogeneity or evolution.

Purusha is without beginning, subtle, omnipresent, eternal, seer, spotless, not producing. Its mere proximity disturbs the homogeneity of Prakriti. Purusha is many. There is a different Purusha in each body, but its nature is the same everywhere.

Prakriti is insentient by herself and Purusha inactive. Prakriti is blind and Purusha lame. The lame Purusha rides on the back of the blind Prakriti and evolution sets in. The Purusha is all-sentient, all-perfect, and is therefore without desire and without need of action. But his light informs Prakriti and permeates her being. When the latent forces in her wake up at the dawn of evolution, she becomes heterogeneous and assumes all the different states of grossness and fineness of existence. Naturally all these different states cannot reflect the light of Purusha in the same degree. That is why all the forces in Nature do not show a uniformity of purpose, that is why some of them are more perfect than others.

The whole of Nature partakes of the sentiency of the Purusha and the insentiency of the Prakriti. Thus every atom is an outcome of the interaction of these two, Purusha and Prakriti and has a dual nature. Its evolution is the ever-progressing attempt to reflect the light that is in it in its pure fulness. The evolution of an atom is the growing perfection of its lower insentient material nature. When it knows the light in it truly and fully, it has attained the

goal of evolution.

Thus according to the Sankhya philosophy there is not exactly "a creating and directive power" in the Universe, but the whole of Nature is the net-work of the play of powers of different states of perfection and sentiency—albeit each of one of them is the submerged ray of an all-sentient and all-perfect Purusha—struggling ceaselessly on to recover and realise itself by striking off the chain forged between Purusha and Prakriti.

REVIEWS

THE SAYINGS OF SRI RAMAKRISHNA.
Compiled by *Swami Abhedananda*.
The Vedanta Society, New York, 1903.*

The volume, neatly printed on excellent paper, contains 503 sayings and 51 parables from the lips of Bhagavana Sri Ramakrishna, englished from the original Bengali in which the Master spoke. The sayings are divided into three chapters, headed 'God,' 'Saviours, Sages, and Spiritual Teachers,' and 'Spiritual Life.' An attempt has been made, in this volume, "for the first time to classify and arrange in logical sequence the Sayings which were published in the "Brahmavadin," "The Awakened India," as well as in "Ramakrishna, His Life and Sayings," by Professor Max Muller," by grouping them under 127 marginal headings, "all having been carefully compared with the original and revised." Swami Abhedananda had the privilege of sitting at the feet of the Lord and was inspired by their divine touch. The Sayings, themselves uttered with the

* Vide advertisement on cover page iv.

power and genuineness of a Divine Soul, strike as they do right at the very core of things, when they come from a direct disciple of His, must, without doubt, exert the most beneficial spiritual influence upon the reader's mind. We commend the book to all who are earnestly seeking to acquire true spiritual life. To quote the words of Sri Ramakrishna, if they live up to one-sixteenth part of what He said, they will surely reach the goal. The index of the marginal headings and the parables will greatly facilitate reference. The compiler has shewn splendid judgment in naming the headings and is to be congratulated for the excellent work he has turned out.

HINDU FEASTS, FASTS AND CEREMONIES.
By *Pandit S. M. Natesa Sastri B. A.*
Madras, 1903.*

It contains lucidly told descriptions of twenty Hindu ceremonies, particularly as they are observed in southern India, with interesting accounts of their origin. Ceremonies, gone through in blind ignorance of their meaning and purpose, instead of benefitting, degrade the performer to a machine. Unfortunately, such is the case with Hinduism in the majority of instances at the present day. Books like the one under review, written in a spirit of no injudicious and unfriendly criticism, furnishing the *raison d'être* of practices, are great helps to people to *know* what they do. Again the spirit of many ceremonies has been lost sight of and only the form remains. Well may Mr. Sastri complain that "now these *Kalakshepas* have multiplied like mushrooms and in

* G. A. Natesan & Co., Esplanade, Madras. Price Re. 1-8.

many cases persons with no pretensions to learning stand up as preachers." But the preachers, "however low they have fallen from the standard of the ideal preachers of old, still have some power of God in their hands, provided the Hindu public" who cater for these professionals "learn to be discriminating in the bestowal of their patronage and exacting in their judgment of the qualifications and capabilities of the preachers." The book enables the foreigner to have a peep into the inner Hindu life. It begins with an appreciative introduction from the pen of Mr. Henry K. Beauchamp, C. I. E., editor of the "Madras Mail" and ends with an appendix on the Kali-Yuga and a glossary.

A PRIMER OF HINDU PHILOSOPHY.†

The book is an attempt to inform the general reader with the essential truths of Hinduism. On the warp of the famous discourse between Maitreyi and Yajnavalkya, have been woven doctrines and dogmas from various sources, ancient and modern, orthodox and heterodox. The performance is not much of a success.

THE New York *Mind* has always been one of our valuable *new thought* exchanges. Mr. J. E. McLean, who used to edit it before and who had lately been sharing its editorial labour with Mr. C. B. Patterson and that of the *Arena* with the latter and Mr. B. O. Flower, has severed his connexion with both papers since May last. Mr. McLean has our best wishes in the new field that awaits him.

The June *Mind* is an excellent number. We particularly like Mr. Patterson's 'Med-

† Warman and Nephew, Bareilly, U. P.

itation' and 'Feel,' 'Think,' 'Act' in it. We have no doubt under Mr. Patterson's care *Mind* will reach a still higher state of efficiency and be the medium of the clearest, best and loftiest thoughts.

The *Arena* keeps up to its high standard as usual.

THE GOKHALE TAX

"THE Hon'ble Mr. Gokhale has been deeply convinced of the necessity of imposing a five per cent. tax for the good of our country....Of the hundreds of graduates who are coming out of our Universities, says he, are not there a few even who will offer themselves at the altar of the fatherland? Let five men out of every hundred or four or three or two, or even one, choose this life of sacrifice for their country. Mr. Gokhale calls this a tax on our young men. The percentage may be very small, but it must be something positive. It will be disgraceful if, of the thousands of young men and women, there are not found some who will offer themselves for the service of their country. Unless some such men are forthcoming, national regeneration is impossible." Thus writes our contemporary of the *Lahore Tribune*.

In writing and speaking, publicly or privately, this was an oft-repeated theme with the late Swami Vivekananda. Of all the steps that can be taken for the uplifting of our motherland the finding of hands to attempt it is undoubtedly the initial one. The great voice which rang through the continents is hushed now: the number of hearts is yet small indeed in which it found an echo compelling enough 'to give up and follow' the Master. When would our countrymen wake in response to the call of the great ones sent to them?

NEWS AND NOTES

AFTER 120 years of colonization, Australia has a smaller population than London.

THE city of Toronto counts on getting 125,000 horse-power from Niagara Falls, although its distance from the great cataract is ninety miles.

THE interior of a gold-bearing rock was inspected in an Oregon town by means of the Roentgen rays, and veins of gold were as plainly visible as if they were on the surface.

THERE is always something great in that man against whom the world exclaims, at whom every one throws a stone, and upon whose head all attempt to fix a thousand crimes.—*Great Thoughts*.

TOM Burrows, the champion club-swinger of the world, has just concluded, at Cape Town, a performance which breaks all records. He swung a pair of Indian clubs continuously for forty hours and a quarter.

To encourage the erection of beautiful residences in Paris the authorities award three gold medals annually to the designers of the most artistic dwellings. The owners of these homes are relieved of half their annual taxes.

IN Hawaii, one of the Sandwich Islands, there is a spot called the Rock of Refuge. If a criminal reaches this rock before capture he is safe so long as he remains there. Usually his family supply him with food until he is able to make his escape, but he is never allowed to return to his own tribe.

SWAMI SIVANANDA of our Ramakrishna

Advaita Ashrama, Benares, acknowledges with thanks the receipt of Rs 6 from Mrs. C. E. Sevier for a time-piece for the Ashrama, Rs. 13 from Mr. Basudeo Sahai for clothes for the Ashrama Brahmacharins and Rs. 5 from Mr. Jadupati Chatterji for the Ashrama.

AUTOMATIC machines, to be called "Everybody's Doctor," are to be placed in the boulevards and principal thoroughfares of Brussels. By putting a penny in the slot one will be able to obtain a remedy and also the prescription for such ailments as sick headache, cold, lumbago and toothache.

OUR hearty thanks are due to Srimati Nathi Bai of Mahaluxmee Warden Road, Bombay, for her kind gift to the Ramakrishna Sevashrama, Kankhal, of 1 almira, 1 table, 7 bedsteads, several cotton mattresses and pillows, utensils lanterns, bed-sheets, medicines and many other house-hold articles during her recent visit to Kankhal.

SILK is known to be the secretion of two glands of the silkworm alongside of the digestive canal. These glands which consist of tubes in numerous coils terminate in the spinning-wart, and open in a common orifice from which the secretion of the consistency of honey issues forth, promptly hardening into a thread on exposure to the air.

THERE is at Cassel a library probably unique in the world. It is bound in timber, printed on timber pages—possibly from wood blocks—and deals exclusively with timber. The library in question is the Holzbiblistek, which was compiled at the end of last century by Karl Schieldbach, and is composed of about 500 volumes made from trees in the park at Wilhelmshohe.

THE effect of music on animals was recent-

ly tested by a violinist in a Berlin menagerie. The influence of the violin was greatest on the puma, which became much excited when quick steps were played, but was soothed by slower measures. Wolves showed an appreciative interest, lions and hyenas were terrified, leopards were unconcerned, and monkeys stared in wonder at the performer.

IN the tropical northern territory of South Australia, travellers need not carry a compass. Nature has provided a living compass for them. The district abounds with the nests of the magnetic or meridian ant. The longer axis of these nests, or mounds, is always in a perfect line with the parallel of latitude, pointing due north and south. Scientists cannot explain this peculiar orientation.

SUCCESS grows out of struggles to overcome difficulties. If there were no difficulties, there would be no success. If there were nothing to struggle or compete for, there would be nothing achieved. It is well, therefore, that men should be under the necessity of exerting themselves. In this necessity for exertion we find the chief source of human advancement—the advancement of individuals as of nations.—*Smiles.*

A CURIOUS sight in the streets of Tokio is to see an old man seated on a smooth piece of ground, having round him little piles of sand of different colours, red, blue, yellow, black, etc. Placing a pinch from each pile in his right hand, he will draw on the smooth ground the figure of a man or woman, the dress all properly coloured by the sand trickling through his fingers. It is done with great rapidity and shows remarkable dexterity

THERE are several species of fish, reptiles and insects which never sleep during the whole of their existence. Among fish it is

positively known that pike, salmon, and goldfish never sleep at all, also that there are several others in the fish family that never sleep more than a few minutes a month. There are dozens of species of flies which never indulge in slumber, and from three to five species of serpents which also never sleep.

IN the ocean of life how many there are who are drifting to an unknown destination—that undistinguished multitude, who are only “toiling to live, and living only to die”—who drag on through a weary life, with their eyes half open; lacking principle, moral independence, stirring decision, generous resolves, or even the slightest ambition; whose lives are purposeless, aimless, defenceless; and who live more from mere indolence than from calculation.—*James Ellis.*

DISCUSSING the preservation of eggs in silicate of soda, the *Lancet* mentions a report that chickens have been hatched from eggs preserved for 12 months in this way. This extraordinary result shows that not only are chemical changes prevented, but that also the conditions of the vital processes in the egg remain unimpaired. The chicken thus hatched from a twelve month old egg is reported to be a quite strong and attractive bird. The recently reported success of this method, by which life would appear to be suspended, so to speak, would seem to open up many possibilities in regard to the transportation and supply of food.

THE VIVEKANANDA Memorial House, a boarding house for Hindu students of all castes and denominations, has been started by the Vivekananda Society of Calcutta, at 64/1, Mechuabazar Street, Calcutta. It shall be the special care of the Society, as well as of the leading members of the Ramakrishna

Mission at Belur, to look after the physical, intellectual, moral and spiritual welfare of the boarders. The boarding house will be conducted along strict Hindu lines and will be supervised by some of the well-known public men of the city. Other particulars will be furnished, on enquiry, by the Secretary, Vivekananda Society, 45/1, Beadon Street, Calcutta.

SOME curious statistics have just been published upon what an insurance actuary would describe as the “expectation of life” in animals. Among the larger species of cattle there is some approach to uniformity. Thus for the horse and the ass the extreme limit is about thirty-five years, and for horned cattle about thirty. For the dog it is given as twenty-five, while sheep, goats, pigs and cats are grouped at fifteen. But there are stranger disparities among birds. While a goose may live thirty years, a sparrow twenty-five and a crow as many as one hundred, ducks, poultry and turkeys die of old age at twelve years. The palm for longevity is divided between elephant and parrot. Both pass the century.

Just out.—part XLIV.

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