

Vivekananda Lectures – The Cosmos, The Macrocosm (New York, January 19th, 1896)

The flowers that we see all around us are beautiful, beautiful is the rising of the morning sun, beautiful are the variegated hues of nature. The whole universe is beautiful, and man has been enjoying it since his appearance on earth. Sublime and awe-inspiring are the mountains; the gigantic rushing rivers rolling towards the sea, the trackless deserts, the infinite ocean, the starry heavens--all these are awe-inspiring, sublime, and beautiful indeed. The whole mass of existence which we call nature has been acting on the human mind since time immemorial. It has been acting on the thought of man, and as its reaction has come out the question: What are these, whence are they? As far back as the time of the oldest portion of that most ancient human composition, the Vedas, we find the same question asked: "Whence is this? When there was neither aught nor naught, and darkness was hidden in darkness, who projected this universe? How? Who knows the secret?" And the question has come down to us at the present time. Millions of attempts have been made to answer it, yet millions of times it will have to be answered again. It is not that each answer was a failure; every answer to this question contained a part of truth, and this truth gathers strength as time rolls on. I will try to present before you the outline of the answer that I have gathered from the ancient philosophers of India, in harmony with modern knowledge.

We find that in this oldest of questions a few points had been already solved. The first is that there was a time when there was "neither aught nor naught", when this world did not exist; our mother earth with the seas and oceans, the rivers, and mountains, cities and villages, human races, animals, plants, birds, and planets and luminaries, all this infinite variety of creation, had no existence. Are we sure of that? We will try to trace how this conclusion is arrived at. What does man see around him? Take a little plant. He puts a seed in the ground, and later, he finds a plant peep out, lift itself slowly above the ground, and grow and grow, till it becomes a gigantic tree. Then it dies, leaving only the seed. It completes a circle--it comes out of the seed, becomes a tree, and ends in the seed again. Look at a bird, how from the egg it springs, lives its life, and then dies, leaving other eggs, seeds of future birds.

So with the animals, so with man. Everything in nature begins, as it were, from certain seeds, certain rudiments, certain fine forms, and becomes grosser and grosser, and develops, going on that way for a certain time, and then again goes back to that fine form, and subsides. The raindrop in which the beautiful sunbeam is playing was drawn in the form of vapour from the ocean, went far away into the air, and reached a region where it changed into water, and dropped down in its present form--to be converted in vapour again. So with everything in nature by which we are surrounded. We know that the huge mountains are being worked upon by glaciers and rivers, which are slowly but surely pounding them and pulverising them into sand, that drifts away into the ocean where it settles down on its bed, layer after layer, becoming hard as rocks, once more to be heaped up into mountains of a future generation. Again they will be pounded and pulverised, and thus the course goes on. From sand rise these mountains; unto sand they go.

If it be true that nature is uniform throughout, if it be true, and so far no human experience has contradicted it, that the same method under which a small grain of sand is created, works in creating the gigantic suns and stars and all this universe, if it be true that the whole of this universe is built on exactly the same plan as the atom, if it be true that the same law prevails throughout the universe, then, as it has been said in the Vedas, "Knowing one lump of clay we know the nature of all the clay that is in the universe." Take up a little plant and study its life, and we know the universe as it is. If we know one grain of sand, we understand the secret of the whole universe. Applying this course of reasoning to phenomena, we find, in the first place, that everything is almost similar at the beginning and the end.

The mountain comes from the sand, and goes back to the sand; the river comes out of vapour, and goes back to vapour; plant life comes from the seed, and goes back to the seed; human life comes out of human germs, and goes back to human germs. The universe with its stars and planets has come out of a nebulous state and must go back to it. What do we learn from this? That the manifested or the grosser state is the effect, and the finer state the cause. Thousands of years ago, it was demonstrated by Kapila, the great father of all philosophy, that destruction means going back to the

cause. If this table here is destroyed, it will go back to its cause, to those fine forms and particles which, combined, made this form which we call a table. If a man dies, he will go back to the elements which gave him his body; if this earth dies, it will go back to the elements which gave it form. This is what is called destruction, going back to the cause. Therefore we learn that the effect is the same as the cause, not different. It is only in another form. This glass is an effect, and it had its cause, and this cause is present in this form.

A certain amount of the material called glass plus the force in the hands of the manufacturer, are the causes, the instrumental and the material, which, combined, produced this form called a glass. The force which was in the hands of the manufacturer is present in the glass as the power of adhesion, without which the particles would fall apart; and the glass material is also present. The glass is only a manifestation of these fine causes in a new shape, and if it be broken into pieces, the force which was present in the form of adhesion will go back and join its own element, and the particles of glass will remain the same until they take new forms.

Thus we find that the effect is never different from the cause. It is only that this effect is a reproduction of the cause in a grosser form. Next, we learn that all these particular forms which we call plants, animals, or men are being repeated ad infinitum, rising and falling. The seed produces the tree. The tree produces the seed, which again comes up as another tree, and so on and on; there is no end to it. Water-drops roll down the mountains into the ocean, and rise again as vapour, go back to the mountains and again come down to the ocean. So, rising and falling, the cycle goes on. So with all lives, so with all existence that we can see, feel, hear, or imagine. Everything that is within the bounds of our knowledge is proceeding in the same way, like breathing in and breathing out in the human body. Everything in creation goes on in this form, one wave rising, another falling, rising again, falling again. Each wave has its hollow, each hollow has its wave. The same law must apply to the universe taken as a whole, because of its uniformity. This universe must be resolved into its causes; the sun, moon, stars, and earth, the body and mind, and everything in this universe must return to their finer causes, disappear, be destroyed as it were. But they will live in the causes as fine forms. Out of these fine forms they will emerge again as new earths, suns, moons, and stars.

There is one fact more to learn about this rising and falling. The seed comes out of the tree; it does not immediately become a tree but has a period of inactivity, or rather, a period of very fine unmanifested action. The seed has to work for some time beneath the soil. It breaks into pieces, degenerates as it were, and regeneration comes out of that degeneration. In the beginning, the whole of this universe has to work likewise for a period in that minute form, unseen and unmanifested, which is called chaos, and out of that comes a new projection. The whole period of one manifestation of the universe--its going down into the finer form, remaining there for some time, and coming out again--is, in Sanskrit, called a Kalpa or Cycle. Next comes a very important question especially for modern times. We see that the finer forms develop slowly and slowly, and gradually becomes grosser and grosser. We have seen that the cause is the same as the effect, and the effect is only the cause in another form. Therefore this whole universe cannot be produced out of nothing. Nothing comes without a cause, and the cause is the effect in another form.

Out of what has this universe been produced then? From a preceding fine universe. Out of what has man been produced? The preceding fine form. Out of what has the tree been produced? Out of the seed; the whole of the tree was there in the seed. It comes out and becomes manifest. So, the whole of this universe has been created out of this very universe existing in a minute form. It has been made manifest now. It will go back to that minute form, and again will be made manifest. Now we find that the fine forms slowly come out and become grosser and grosser until they reach their limit, and when they reach their limit they go back further and further, becoming finer and finer again. This coming out of the fine and becoming gross, simply changing the arrangements of its parts, as it were, is what in modern times called evolution. This is very true, perfectly true; we see it in our lives. No rational man can possibly quarrel with these evolutionists. But we have to learn one thing more. We have to go one step further, and what is that? That every evolution is preceded by an involution.

The seed is the father of the tree, but another tree was itself the father of the seed. The seed is the fine form out of which the big tree comes, and another big tree was the form which is involved in that seed. The whole of this universe was present in the cosmic fine universe. The little cell, which becomes afterwards the man, was simply the involved man and becomes evolved as a man. If this is clear, we have no quarrel with the evolutionists, for we see that if they admit this step, instead of their destroying religion, they will be the greatest supporters of it.

We see then, that nothing can be created out of nothing. Everything exists through eternity, and will exist through eternity. Only the movement is in succeeding waves and hollows, going back to fine forms, and coming out into gross manifestations. This involution and evolution is going on throughout the whole of nature. The whole series of evolution beginning with the lowest manifestation of life and reaching up to the highest, the most perfect man, must have been the involution of something else. The next question is: The involution of what? What was involved? God. The evolutionist will tell you that your idea that it was God is wrong. Why? Because you see God is intelligent, but we find that intelligence develops much later on in the course of evolution. It is in man and the higher animals that we find intelligence, but millions of years have passed in this world before this intelligence came.

This objection of the evolutionists does not hold water, as we shall see by applying our theory. The tree comes out of the seed, goes back to the seed; the beginning and the end are the same. The earth comes out of its cause and returns to it. We know that if we can find the beginning we can find the end. E converso, if we find the end we can find the beginning. If that is so, take this whole evolutionary series, from the protoplasm at the one end to the perfect man at the other, and this whole series is one life. In the end we will find the perfect man, so in the beginning it must have been the same. Therefore, the protoplasm was the involution of the highest intelligence. You may not see it but that involved intelligence is what is uncoiling itself until it becomes manifested in the most perfect man. That can be mathematically demonstrated. If the law of conservation of energy is true, you cannot get anything out of a machine unless you put it in there first. The amount of work that you get out of an engine is exactly the same as you have put into it in the form of water and coal, neither more nor less.

The work I am doing now is just what I put into me, in the shape of air, food, and other things. It is only a question of change and manifestation. There cannot be added in the economy of this universe one particle of matter or one foot-pound of force, nor can one particle of matter or one foot-pound of force be taken out. If that be the case, what is this intelligence? If it was not present in the protoplasm, it must have come all of a sudden, something coming out of nothing, which is absurd. It, therefore, follows absolutely that the perfect man, the free man, the God-man, who has gone beyond the laws of nature, and transcended everything, who has no more to go through this process of evolution, through birth and death, that man called the "Christ-man" by the Christians, and the "Buddha-man" by the Buddhists, and the "Free" by the Yogis--that perfect man who is at one end of the chain of evolution was involved in the cell of the protoplasm, which is at the other end of the same chain.

Applying the same reason to the whole of the universe, we see that intelligence must be the Lord of creation, the cause. What is the most evolved notion that man has of this universe? It is intelligence, the adjustment of part to part, the display of intelligence, of which the ancient design theory was an attempt at expression. The beginning was, therefore, intelligence. At the beginning that intelligence becomes involved, and in the end that intelligence gets evolved. The sum total of the intelligence displayed in the universe must, therefore, be the involved universal intelligence unfolding itself. This universal intelligence is what we call God. Call it by any other name, it is absolutely certain that in the beginning there is that Infinite cosmic intelligence. This cosmic intelligence gets involved, and it manifests, evolves itself, until it becomes the perfect man, the "Christ-man," the "Buddha-man." Then it goes back to its own source. That is why all the scriptures say, "In Him we live and move and have our being." That is why all the scriptures preach that we come from God and go back to God. Do not be frightened by theological terms; if terms frighten you, you are not fit to be philosophers. This cosmic intelligence is what the theologians call God.

I have been asked many times, "Why do you use that old word, God?" Because it is the best word for our purpose; you cannot find a better word than that, because all the hopes, aspirations, and happiness of humanity have been centred in that word. It is impossible now to change the word. Words like these were first coined by great saints who realised their import and understood their meaning. But as they become current in society, ignorant people take these words, and the result is that they lose their spirit and glory. The word God has been used from time immemorial, and the idea of this cosmic intelligence, and all that is great and holy, is associated with it. Do you mean to say that because some fool says it is not all right, we should throw it away? Another man may come and say, "Take my word," and another again, "Take my word." So there will be no end to foolish words. Use the old word, only use it in the true spirit, cleanse it of superstition, and realise fully what this great ancient word means. If you understand the power of the laws of association, you will know that these words are associated with innumerable majestic and powerful ideas; they have been used and worshipped by millions of human souls and associated by them with all that is highest and best, all that is rational, all that is lovable, and all that is great and grand in human nature. And they come as suggestions of these associations, and cannot be given up. If I tried to express all these by only telling you that God created the universe, it would have conveyed no meaning to you. Yet, after all this struggle, we have come back to Him, the Ancient and Supreme One.

We now see that all the various forms of cosmic energy, such as matter, thought, force, intelligence and so forth, are simply the manifestations of that cosmic intelligence, or, as we shall call it henceforth, the Supreme Lord. Everything that you see, feel, or hear, the whole universe, is His creation, or to be a little more accurate, is His projection; or to be still more accurate, is the Lord Himself. It is He who is shining as the sun and the stars, He is the mother earth. He is the ocean Himself. He comes as gentle showers, He is the gentle air that we breathe in, and He it is who is working as force in the body. He is the speech that is uttered, He is the man who is talking. He is the audience that is here. He is the platform on which I stand, He is the light that enables me to see your faces. It is all He. He Himself is both the material and the efficient cause of this universe, and He it is that gets involved in the minute cell, and evolves at the other end and becomes God again. He it is that comes down and becomes the lowest atom, and slowly unfolding His nature, rejoins Himself. This is the mystery of the universe. "Thou art the man, Thou art the woman, Thou art the strong man walking in the pride of youth, Thou art the old man tottering on crutches, Thou art in everything. Thou art everything, O Lord." This is the only solution of the Cosmos that satisfies the human intellect. In one word, we are born of Him, we live in Him, and unto Him we return.