Aspects of Mâyâ in Modern Science

The complacency with which not only the scientific world but the public at large have welcomed in the last few years the series of discoveries in the field of atomic studies; the complacency with which all events have been linked up with the current ideas of progress, civilisation, the greatness of modern man, needs to be somewhat deflated.

The real victories of man are not those of science but of thought. No scientific discovery, no matter how extraordinary it may be, is in itself able to change the cognitive relation between man and the world unless man himself acts with his interior forces on that relation.

The indefinite number of discoveries on the physical plane may increase my knowledge of the phenomenology of the physical world, it may also increase the number of the mechanisms that add to the comfort of my external life, but they change nothing in the spiritual relation between me and the object. They do not make me better than I was; they may at most increase my conceptual patrimony in so far as I am capable of exercising an interior activity in the experience.



The multiplication and the complication of sensorial perceptions does not imply a qualitative alteration in the relation between the world of thought and the world of perceptions. That relation places thought activity before events that develop on the same plane, that is to say within the same sphere of values, whatever may be the differences in their content, whether cigar-lighter or atomic bomb.

This is a truth which, perhaps owing to its very simplicity, is forgotten by most people. In our times the mental habit prevails which leads us to consider that the progress of science will end by improving the nature of man. People trust in a future in which the technical organisation of the material world will at last offer man a comfortable,

peaceable life, free from worries.

In this way, scientific progress is confused with "knowledge". But knowledge, which consists in the capacity of making the inner essence—the soul—of things live within us, can gain nothing from an enquiry that scrutinises the physical world but is almost always devoid of the premises of knowledge itself. Thus it thinks it will find "behind matter" an "energy" beyond which it may at last find the spirit, conceiving the spirit as though it were this same energy in a subtilised form waiting there, ready itself to become the subject of a laboratory experiment. Nor do these scientists ask themselves whether atomistic phenomenology may not be something "below" rather than "beyond" matter, something yet more distant from the spirit than matter itself.

As we have hinted, limited knowledge of a rationalistic and materialistic nature is freed from none of its limitations by the mere fact that new features of the physical world are unfolded before it. Indeed, should this knowledge draw its nourishment from the quantity of the phenomena belonging to this category, and should it let itself be formed by that quantity, it is safe to say that it will lose that little of its already tenuous inner vitality that it still has, and will end by nourishing itself on that world of appearances of which external life is woven. And this may account for that weakening and loss of those moral impulses which can derive inspiration and nourishment only from real knowledge.

Now, it would be very salutary for men if they were to begin to accustom themselves to the idea that this "passionate enthusiasm" with which science scrutinises the tiniest particles of matter until it discovers in them new scientific aspects, denotes incapacity to penetrate below the appearances of matter itself; it implies fastening oneself yet more tightly and deeply to the limitations of matter. The error does not, of course, consist in the enquiry, nor in its undeniable results, but in the animus with which the enquiry is made and in the value ascribed to it.

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This rationalistic thought believes it has now attained a degree of autonomy that enables it to find an explanation for everything, and this is the root of the evil, for it is precisely this explanation which prevents intimate contact with the things studied. This discursive mode of thinking which so readily adapts itself to all forms of dialectics, is incapable of freeing itself, for instance, from the suggestion of matter. It believes, indeed, that matter exists per se, and it fails to perceive that what exists is only a body of perceptions that are constantly being transformed in accordance with the outward aspect of reality.

Now, when it is believed that matter is at the basis of these perceptions, we confuse perception with that which gives rise to it. And when of the series of possible perceptions we accept as real and "decisive" for knowledge those that can be expressed by mathematical formulae, i.e. those related to extent and movement; and when we base on them an enquiry and build on them a science, we are giving an appearance of reality to something which is not in itself a reality; in other words, we are forgetting the real entity which, among its exterior modifications, counts also extension and movement, and without which those qualities would be devoid of meaning.

When the atom is scrutinised, the reality in esse is lost in a series of perceptions which do not lead the experimenters to any real knowledge of the mystery of the manifestation, even if they allow of reproducing chemically the process from which they (the perceptions) originate. No step is taken beyond the limitations of matter, that is to say beyond its appearances; indeed, such scrutiny only promotes that modern superstition which sees in matter a self-contained world, complete in itself. So we get even further away from reality while under the illusion that we are penetrating its mysteries. Thus $M\hat{a}y\hat{a}$ gains a new hold on man thanks to the "progress" of science.

We note this of course without prejudice to the positive and practical results that mankind may secure from the utilisation of atomic energy.

Thought need not be less accurate and acute because it has an intimate relation to the world of sensorial perceptions. Indeed, it is the lack of clarity and of the scientific spirit in thought that makes it still blind to the value of the exterior aspect of "being" and of physical enquiry.

It is just this absence of awareness of its own real possibilities that leads modern thought to accept as final a physical image of the world which is offered primarily by sensorial perceptions; an image that lacks soul only because the soul is not present as something palpable.



We read recently on a well-known weekly an article entitled "They have invented life", which informs us that in the laboratories of the University of California an experiment has been carried out which has made it possible to generate some molecules of nucleous acid which should give birth to other living molecules. The author of the article has evidently only recorded objectively the fact, and if this fact should show, under the appearance of a scientific experiment, a radical contradiction this cannot be charged to him nor to any scientist in particular, but to a mentality which prevails in some scientific circles and more especially in those where discursive materialism is cultivated.

Now-a-days, unfortunately, we often read books or articles of a scientific content, in which, on the strength of accounts of ever more daring enquiries and experiments, the imminent possibility of recreating life in the laboratory is announced with much complacency. When we read such assertions we are led to the conclusion that man has been endowed in vain with the gift of mental intuition; that in vain Oriental wisdom has given us the Vedanta; in vain Aritotle constructed his system of logic, and Thomas Aquinas created that system of spiritual thought that enlightened his age; and in vain Hegel gave us that Vedanta clothed in the attire of modern philosophy, that is his "Science of Logic".

Let us examine at close quarters the theme of "vital force" and the hypothesis of the possibility of its recreation. In the case above referred to it should be stated at once that formaldehyde and nucleous acid are indeed organic molecules, but are not themselves living, and indeed, in the report to which we refer it is said that nucleous acid acts as the "midwife" of the proteic molecule which is the "mother". We may therefore suppose that organic substances—nucleous acid and formaldehyde—have been formed but in this case one cannot speak of living molecules.



But setting this aside and returning to the general problem relating to the attempt to create life—an attempt which seems to be at the centre of contemporary scientific enquiry—it should be made clear that here a confusion is made between vital force and the medium in which it displays itself. Using the tantric language we should say that Shakti is confused with Mâyâ. And here a refinement of thought is needed which would free the enquirer from the materialistic myth. "Organic life", "vital force" are concepts corresponding to realities not perceptible to the senses; realities of which only an intuitive knowledge can be had which sees them working within a physical garment, but not in themselves perceptible to the senses nor such that they may be obtained from other sensorial elements.

It should be clear that I cannot deduce the composed substance from the physically perceptible data of certain elements; from them I can only obtain its manifestation which gives me the corresponding idea. It is by the inner activity of my thought that some factors are recognised as "elements", and another as "a body composed of them"; it is my thinking capacity that draws a comparison between them. The concept of element and that of substance do not receive their content from perception but from thought. And it is so with the concept of "vital force".

It is indeed the perception of a body endowed with life that conveys to me the idea of vital force; but I could never attain that idea from the perception of the chemical elements that are held together

by that force. Such a claim arises from the confusion between a concept that I form on the strength of a datum perceptible to the senses, and that which I form on the strength of an ideal—or intuitive—datum which does indeed arise from sensorial perception but is not itself per-

ceptible to the senses.

In so much as "vital force" does not come within the range of our senses, i.e. does not come within the sphere of our direct experience as do the things belonging to the inorganic world, we cannot create it chemically. Let us suppose that we have not the possibility of the physical perception of water, but that we are able to handle normally hydrogen and oxygen. If, by catalysis, the two elements were compounded they would, as far as we are concerned, vanish into nothing.

Only if man were able to develop an organ of perception which would reach the level at which the vital force is a reality per se, would he be able to reproduce it. Now, it might be pointed out that thought itself should be that organ, if thought were experienced per se, as an active force, before it consolidates into thoughts, that is to say if thought were experienced as buddhi; but it is evident that the major obstacle in the way of the development of such a possibility is materialistic thought, which is thought cut off from the sources of its strength, and therefore incapable of recognising its own inner nature, that is to say its own autonomy.



Today, scientists in general are concerned with atomic energy, with the physical vicissitudes of the cosmos, with the possibility of interplanetary flight, as if these things were the culminating point of science. But all this, it should be said, is the culminating point of the science of inorganic life, of a science dealing with that which is

deprived of life. A very narrow sphere of being.

A more arduous task for scientific endeavour would be that of awakening in man the faculty of perceiving the vital force. This would imply the need of experimenting with it and acquiring a knowledge of the real secret of the planets and the cosmos, not through the mechanical means of the so-called inter-planetary rockets—a means which obviously must be subject to physical limitations—but through direct perception, essential communion, of an order akin to the *lhag thong* of Tibetan tradition or to the *dhyâna* of Hindu metaphysics.

Just as man now possesses by means of sight the direct perception of the form and colour of things, so he may one day acquire the direct perception of *life*, that is to say a perception that penetrates beyond those forms in which life makes itself manifest. A clear distinction must be drawn between the two planes; and it is the mission of Science and of the Spirit to lead mankind to this experience. We must realise that this kind of Science comes to us from the East as a tradition, and lives in the West as the spirit inspiring its constructive philosophy.

At the present time it is the colour, form, temperature, life of a certain given body that awaken the idea of a force, imperceptible to the senses, that circulates in it. It will never be possible to extricate from the chemical elements the reality of such a constructive force.

The scientists who claim that they can produce, by means of physical substances and operations, something that cannot be physically grasped are in the same position in which one would be who endeavoured to produce an idea chemically. (In the case of man, an idea may or may not be embodied in a deed; it depends on the will of man; but in the case of a plant, idea and shape coincide).

Only he who starts from the assumption that thought is a product of the physical brain—without ever explaining by any theory of evolution from what the brain itself has been produced—is capable of coming to such childish conclusions which, however, as they have been seasoned with a pinch of scientific logic, are generally accepted.

The fact that scientists can invent machines, compose and decompose the atom, discover new devices, does not mean that they are endowed with wisdom, an inner sense of proportion, soundness of thought; even obtuse minds may make mathematical calculations and their correlative expressions on the physical plane; indeed, such minds can make them more easily than others in as much as such calculations develop along a line of progression which, beyond a certain limit, becomes automatic, in conformity with possibilities which in any case are foreseen.

But the track along which this progression must travel is that of inorganic matter; it can be attained only in the mineral world or in the inanimate aspect of objects, and its highest expression is the machine, that is to say yet another soulless creation. We are here dealing with an exterior form of creation which not only does not imply the presence of moral values, but does not even imply that of positive thought, capable of self-contemplation and of distinguishing one conceptual value from another. Proof of this is afforded by the misunderstanding of vital force of which even advanced scientists are guilty.

Scientific enquiry, technology, activism would be valueless but for the activity of thought. The limit placed on them—which is mechanical and automatic—is the self-imposed limit placed on thought when it renounced the knowledge of its own power and its own spiritual source. That source might be lucidly experienced as the essence, the soul, the inner force of things, which some vainly hope to attain one day by means of physical experiments. What is needed is to understand that life is something very different. It is Yoga, the action of the inner mind; knowledge, in the ancient meaning of that word.



These considerations, which may seem abstract, really get at the substance of the error committed by modern man; they point to the steady march of all mankind towards one of the gravest catastrophies of human history.

That which leaves us perplexed is the approval given to the direction followed by science by those very men who, aware of their spiritual mission, should be the first to realise the true origins of that materialism whose dangerous nature they perceive when it takes a political expression, while they never ask themselves to what extent their own mode of thinking may be responsible for it.

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