Light*

Ian Gordon-Brown

Light, energy, substance, matter, particles, triangles—one begins to see a linking thread binding the diverse concepts held by science, philosophy and religion into a coherent fundamentally simple whole.

Part I

It is said that there was once an inmate of a mental institution who strongly objected to darkness. Every evening at dusk he took a bucket, began filling it with darkness and emptying it out of the window. He would work without pause until the dawn. When it was fully light in his room, he sank back exhausted on the bed saying: 'Thank, God, I've done it again'.

There are, I suppose, many in the world today who believe, as did this deluded but industrious inmate, that light is simply the absence of darkness; though I think it would be more correct esoterically to say that darkness is the absence of light. Be that as it may, the subject of light is one of the most fascinating in the world today. When we understand all there is to be known about light, we shall have penetrated to the inmost secrets of the manifested world. I cannot do more this evening therefore than string together some thoughts, culled from a variety of sources, which will help to illumine this question and which will be relevant to the theme and keynote of this conference.

There are many fascinating statements and definitions about the nature of light. 'Light' says the Tibetan, 'is the substance of things hoped for, the evidence of things not seen'. He goes on to say that this is one of the most occult definitions of light that has yet been given and mentions that the use of the word 'faith' instead of 'light' is a good instance of the method of rendering 'blind' some of the ancient truths so that their significance may not be prematurely revealed. The true meaning and significance of light is intended to be revealed in the next two generations, namely in our time. (The Bible says: Faith is the substance . . . .)

Let me quote again from the book Glamour: A World Problem.

'Light and substance are synonymous terms. Soul and light are equally so, and in this equality of idea, on light, substance, soul, you have the key to fusion and to the atonement which Christ expressed so fully for us in his life on earth.'

Light of course is also known by what is revealed and the absence of light produces the fading away into apparent non-existence of the phenomenal world. Light is the result of the creative interplay between spirit and matter. It is the soul or middle principle and one of the basic postulates of occultism is that the object for which life takes form and the purpose of manifested being is the unfoldment of consciousness and the revelation of the soul. This idea has been called 'the theory of the evolution of light'. It is as a result of the interplay of the poles and through the friction of the pairs of opposites that light flashes forth. The goal of evolution is found to be a gradual series of light demonstrations, for veiled and hidden by every form lies light, and as evolution proceeds matter becomes increasingly a better conductor of light.

We can see therefore that light is closely related to tension and that by the fusion of the higher and the lower comes the shining of the light. As we increasingly penetrate into higher and profounder levels of awareness, the light of consciousness and of the soul moves progressively onwards along the evolutionary path.

Generally speaking science has preceded esotericism in its recognition that energy is a dominant factor in all form expression. The fact that all 'forms' are forms of energy and that the true human form is no exception is a gift of science to humanity and not a gift of occultism, although occult theory has always taught this truth. The findings of

science are especially relevant to the theme of light and there are some profoundly interesting and important aspects of light now being revealed and accepted by modern science which confirm the teachings of esotericism.

One of the dualities that we can usefully help to resolve and fuse is the duality between science on the one hand and religion and philosophy on the other. It has been said that the scientists of our time will form a linking body of occultists, and the work at present being done in the field of atomic physics and in the study of light by modern science is proving the truth of this prediction. The revelation that all is energy and that all substance is a form of light energy, a revelation of science, is along its own line of equal value to the statement that God is Love. The primary difference perhaps is that in the one case, the case of Love revealed by Christ, the revelation came as a result of the tension and fusion of one man with the reality of the Father. Revelations along the line of science are largely the result of group tension eventually focused in one intuitive recipient, a fact which incidentally protects the revelation from too rapid a distortion.

According to science the entire electromagnetic spectrum, that is to say all the many types of radiation known in the natural world, all represent one single basic phenomenon. The difference lies simply in wave length, or the energy of the photons (particles). Visible light, that is to say the light known to man through the eye, falls approximately midway on this electromagnetic spectrum, between long-waves and short-waves. One authority has said: 'Light includes the entire range of radiation known as the electromagnetic spectrum'. Recent research has demonstrated that electrons, protons and other elementary particles of matter show an analogous behaviour to light and that they all possess wavelike characteristics.

Thus we have a demonstration at the most fundamental physical level that light and substance and matter are all different words for describing the same phenomenon. In fact one of the most revolutionary, and also the most quoted formulae of the 20th century, \( E=mc^2 \), involves the use of a constant \( c \), which constant as you will know represents the speed of light, a constant which according to modern science is one of the very few fundamental, universal, and unchangeable constants of the known physical universe.

Most of us are probably unaware of the part that light plays in biological evolution. The process of photosynthesis for example which has two aspects, the conversion of inorganic into organic matter and the conversion of light energy into chemical energy is the largest single chemical process on earth. Biologically speaking life on earth can be maintained only by a constant supply of solar energy (light) and its utilisation through plant photosynthesis. In the photosynthesis process the only ingredient which cannot be regenerated is light. This means that light gives its substance so that life, biological life in form, may develop. We should carefully weigh the esoteric significance of this fact. Are we saying that light is 'life in Form'? We are not far off it.

The Laser

Up till quite recently man had to take light as he found it. He could generate physical light, he could transmit it, but there was a limit to the extent to which it could be 'manipulated'. Just as the average man working in mental substance does little more than respond to the patterns and forms already there, so the scientist was only able to do a limited number of things with the light substance of the physical world. The advanced thinker, however, the yogi, the disciple and the initiate are able actually to modify and change the mental substance in which they work because they bring to it a higher form of energy and power. It is interesting therefore to note that modern science has recently broken through to a new ability to manipulate light. Many of you will no doubt have heard of the amazing laser, that instrument which makes it possible to focus and project light so that all the particles are coherent and monochromatic and are therefore given a penetrating power and an ability to cross great distances without becoming dispersed, an ability not possessed by ordinary light. This light has
unique qualities. A single laser beam has the inherent capability of carrying all the information transmitted by all television and radio stations, and all teletypewriters and telephone lines in the whole world at the same time. And a laser beam has been projected to the moon, where it made a spot only 3 kilometres in diameter. A beam has also been converged to a fine hot point by a microscopic lens for use as a scalpel to remove a tumor from the retina of a human eye. The modification of primordial substance that has been achieved is as revolutionary in its implications as the release of atomic energy. I won't go into the details, because they are easily available. But I would recommend that you read about the laser both because of what it may be in the everyday world, and also because of the profound esoteric implications.

It seems very clear that we are not only entering a new atomic age and a new space age, an age of speed and an age of the universal man, but we are also entering into a new age of light. It is my belief that we are only at the beginning of the discoveries that science will reveal in the field of light. For example they are building another bridge between science on the one hand and religion, philosophy and occultism on the other, by some very recent discoveries which suggest that the basic structure of matter (light) is in fact a triple or a triangular one. You will understand that from a scientific point of view we enter a speculative area here and it would be a great mistake for esotericists to run around stating that their pet theories have currently been proved by science, for science will not support them in these views. The good scientist is usually cautious and tends to understate his case rather than overstate it and we should do well to observe the same respect for the truth. However, let me give you the facts so that you may draw your own conclusions.

Buckminster Fuller, a famous American designer, inventor and planner, has shown that when one wishes to build a dome or a sphere, the most economical and structurally strong method is to build the sphere of uniform struts built up into patterns of triangles, grouped in fives and sixes in order to give a spherical form. Such a dome-like structure is self-supporting and since the strength lies in the very triangular structure itself, it can be made literally of any size. Buckminster Fuller has quite seriously suggested that domes constructed according to his principles should be built over the central areas of big cities in order to give protection from the elements. It is a practical engineering proposition, even though some would shudder at the thought.

I was fascinated to learn therefore that medical biologists, investigating the structure of viruses, have discovered that spherical viruses are built on exactly the same structure as Buckminster Fuller's dome. They are built up of simple rod-like particles arranged into equilateral triangles and grouped in fives and sixes. In order to make this discovery the viruses had to be magnified by 500,000 times, a thing which only an electron microscope can do.

The Signature of God

Buckminster Fuller has called the triangle 'the signature of God'. Now not all viruses are spherical and not all are patterned in this way, but it begins to look as if science will prove the triangle and the Trinity to be as basic as the esotericist claims.

I remind you that we have been told that light and substance are synonymous terms. At the beginning of this year there was another major breakthrough in the field of the investigation of sub-atomic particles, in which a theory called 'unitary symmetry' was proved. Scientists have shown that when two of the properties of certain particles are plotted on a graph one obtains one of two patterns, each based upon a triangular structure. Final proof of the theory of 'Unitary Symmetry', and therefore of the existence of these triangular patterns, depended on finding a most unusual, and even improbable type of particle, and until it was found some two months ago many scientists remained extremely sceptical. But it was found in February and the validity of the theory proved. The same group of scientists is now suggesting that the ultimate particles of matter are probably three in number. A tri- licy, a trinity, a triangle?

Light, energy, substance, matter, particles.
triangles—one begins to see a linking thread binding these diverse concepts held by science, philosophy and religion into a single coherent and fundamentally simple whole. We are surely on the edge of a most marvellous and creative fusion and synthesis of ideas and reality. The Psalmist says: 'In thy Light shall we see Light'. It is being shown today that in the light of an intelligent esotericism we shall see the light of truth about the material and substantial world. We can see that as scientists increasingly penetrate the intangible and the immaterial worlds they will prove to an amazed humanity the truths of occultism, truths which, if we keep our heads, we shall be able to relate in acceptable ways to scientific discovery and therefore help to fuse and link one of the basic dichotomies in humanity's thought life, the dichotomy between religion and science, between what one might call the materialist and the spiritual world views.

It is interesting to note in passing that this will produce a new type of unity in man's thinking. No longer will the spiritual and material be regarded as separate, distinct and alien to one another. I mention again one of the quotations I have already used:

'Style and substance are synonymous terms. Soul and light are equally so, and in this equality of idea, light, substance, soul, you have the key to fusion and to the atonement which the Christ expressed so fully for us in his life on earth.'

All will be seen and known as energy, one living lighted substance of varying vibrations, carrying the different qualities of thought, desire, of soul and spirit which man develops upon the path of conscious evolution.