## THE DOCTRINE OF COSMOSES

## A REVALUATION (CONT.)

To judge from the questions that reached me before the weekend, several groups at least have taken a good big step forward. But we still need to think methodically and rigorously in order to understand cosmoses. Mr. Ouspensky (in the month before he died) drove us very practically in reconstructing the System in a certain order: 'first question first, next question second, then third question, fourth question'; and now our approach to Cosmoses must be like that.

A good lead-in to the subject certainly was Mr. Ouspensky's period or *Scale of Dimensions*. When G. first introduced the 'doctrine of Cosmoses' to the Moscow group, he asked O. to give them a resumé of his views, which we in London could study in the 1930's after the publication of the English translation of *A New Model*. Briefly that scale of 6 dimensions starts with a point, the zero dimension; an infinite number of points makes a *line* – 1st dimension; an infinite number of lines a *surface* – 2nd dimension; and the 3rd dimension is the *solid* – an infinite number of surfaces.

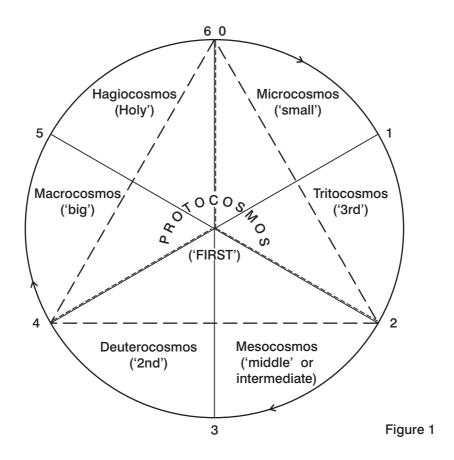
Now this is where the Scale of Cosmoses begins, for each cosmos is 3-dimensional for itself. The cosmos next bigger and the cosmos next smaller introduce another dimension – a 4th dimension; cosmoses two away from the observer are 5-dimensional for him, and three cosmoses away are 6-dimensional. There the scale ends. Mr. Ouspensky proved that there can be no more and no less than 6 dimensions; for a 7-dimensional world would be outside of any conceivable space-time and therefore undefinable.

So, dividing our symbol of a circle into six equal divisions (for it can show us any complete period as a single whole), and starting with individual man as the small or 'microcosmos' 3-dimensional for himself, let us put in the classical scale of 7-cosmoses (Figure 1, overleaf). Here the zero dimension is a 3-dimensional body, a *point* in relation to time. The cosmoses are separated by 6 radii rays representing certain fixed ratios of time-magnitude; but in addition there are dotted radii representing places where something *new* enters, and we must enquire what those could be. What is it really that divides the physical from the subtle, the subtle from the causal, and all those three from the Pure Consciousness itself?

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How do we begin to 'think rigorously' and in an up-to-date way about this ancient topic, connecting it with Self-realization and not harking back to the ancient Greek philosophers of 25 centuries ago, or to the 'system' account which has stayed 'on ice' since 1915?

The 1930s (when our groups were beginning to enlarge) was also a most interesting time for the physicists and mathematicians who were working out Einstein's relativity theory, and the quantum theory of Max Planck, Rutherford and Niels Bohr. One of the most lucid exponents of the subject was Sir Arthur Eddington (one of whose books of published lectures, *The Nature of the Physical World* came out in 1935). Mr. Ouspensky was impressed by it and sent me to see Eddington to put some questions to him at one of his lectures in London. He was very accessible, answered lucidly any questions he could, but if he didn't know the answer, said so at once.



We can safely begin then with a quotation from p.178 of that book, to establish a way of thinking by which we can pass from the point 0, to points 1 and 2 of Figure 1:

Planck's constant (h) is of the nature of energy multiplied by time (erg-seconds) = a quantum or atom of energy. Now in practical life it does not often occur to us to multiply energy by time. We often *divide* energy by time (horse-power, kilowatts per hour, etc.). Quantities such as energy, which we think of as existing at an instant, belong to three dimensions of space, and they need to be multiplied by a duration to give them a thickness before they can be put into the four-dimensional world. Consider a portion of space, say Britain; we should describe the amount of humanity in it as 40 million men [in 1935!]. But consider a portion of space-time, say Great Britain, between 1915 and 1925; we must describe the amount of humanity in it as 40 million men multiplied by 10 years = 400 million *man-years*.

[The same applies nowadays to the concept of *man-hours*.]

'Erg-seconds' or 'action' belongs to the world of Minkowski, which is common to all observers and so it is absolute. It is one of the very few absolute quantities noticed in pre-relativity physics.

That account contains a valuable hint about thinking of cosmoses in terms of energy which has been reinforced by some current views, for Professor Dyson of the Institute of Advanced Study in Princeton, began his article in the *Scientific American* of September 1971 on 'Energy in the Universe' (p.51), (to which I referred in one of my New York lectures), with this quotation from the poet William Blake – 'Energy is eternal delight'.

To revert to our diagram and our enquiry into what new conception must enter at point 2. So far, Eddington has not described any movement or progression – he has simply spoken of 'man-years' – three dimensions of space and a duration or stretch of time which puts a limit to the 4-dimensional universe of Einstein. There was no suggestion of a population increase or explosion; no suggestion of progress or its reverse, nothing about development or expansion of energy which we begin to see as we pass from point 1 to point 2. But when we study *change or movement in time* we are bound to come across cycles or the repetition of cycles. 'Time is a circle' – this is the new conception that must enter at point 2. As the year progresses from winter through spring to summer, autumn and again winter, we are reminded that this succession repeats year after year. The pattern is the same, but every year is different in detail. When we think of the Tritocosmos – the Biosphere – we study cycles, epochs and ice-ages, the origin and disappearance of species and the like.

And all this is just as true of our inner life as of the outer. We see points 0, 1 and 2 as an observer who regards himself as just a physical body and 3-dimensional specimen of the species *Homo* of organic life, or as a creature who goes through those 'seven ages of man' immortalised by Shakespeare.

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In this kind of way we can be proceeding round the circle of Figure 1 carefully establishing what these changes from point 2 to point 3, etc. *feel* like in our inner world, and *look* like in the big universe outside. Then, if you wish, we can give the exact ratios and units of measurement which accompany a change of dimension from one cosmos to the next.

But for now, let us look more simply at Figure 1, taking just the threefold division shown by the triangle (which corresponds to His Holiness's conception of physical, subtle and causal worlds). The right-hand side of the triangle thus shows the single cycle of change which a solid body has to undergo in 'time'; the base of the triangle will be 'repetition in time'; and the left-hand side will be 'repetition in eternity'.

We now need to look with the eyes of a Being on the causal level, who sees without involvement the whole chain of cosmoses as a progression through successive veils of illusion. As so often happens, we recently received a public talk by the Shankaracharya at the end of this year's annual religious festival which is exactly on this point, and which I will now paraphrase from the translated synopsis:

In the ageless continuum of time, it seems so futile to take account of all the events that go on making and unmaking themselves in an unending chain. A little while ago we were preparing to set up all these tents for the festival on this spit of sand. Now we are preparing to wind it up; in a little while the water will again cover the whole place and nothing will remain – until we set it up again next year. Thus anything that begins has to end, and anybody who comes into this world has to go.

Many people say there is no rebirth. Actually each birth writes down the destiny of death, and each death writes down the destiny of birth. The *Gita* says that there is neither any 'birth' nor any 'death', but they are merely points in a change, an *apparent* change, which is going on all the time. One who sees the changelessness through all the apparent changes, sees correctly.

It is a body (clothed in the temporary 'personality') that is born and dies. The Conscious Being (Atman) which inhabits this temporary body is birthless and deathless.

It is enough to understand just this much; because in trying to understand everything, we often end by understanding nothing at all!

(23 January, 1972)

[Pause for silence and meditation, and then read that again. His talk with its vivid examples and stories will be continued in our next.]

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