READING 6

Part 1

Your discussion groups seemed to need to get back to first principles so as to understand the meaning of the teaching on cosmoses. So I am quoting from the short enunciation given at the big meeting last Monday which you might want to hear again:

As so many are here today I would like to talk a little in general about that part of the System which is called the 'Doctrine of Cosmoses'. This is a way of looking at the world which is a complete teaching in itself – which is self-sufficient, and which is said to be the 'beginning and the end of all knowledge'. Moreover, it is exceedingly suitable for today's scientific line – all that – and indeed a great deal of the misery of humanity brought about by misunderstanding important things could be relieved if our leading scientists could really understand the idea of cosmoses.

What is it about?

From time immemorial it has been noticed that there are certain resemblances in levels of the universe of different magnitude. I mean, very primitive peoples have seen the stars in the sky; later they studied the planets which appear to be replicas of the fixed stars, but with a regular motion; and then they slowly got a picture of the round earth, although it was not till Copernicus that the beginnings of a correct picture of our solar system were laid down. Studying the apparently solid earth under their feet they had seen tiny grains of matter (like spores and seeds) grow into plants or animals; and in more sophisticated times they have seen cells as similar (but very much smaller) replicas; they have inferred the presence of invisible atoms, and even split them; and questions have arisen such as whether atoms are miniature solar systems or not. More recently still, physicists have studied nuclear particles, electrons, and even the 'ultimate particles' free in the universe, the matter of cosmic rays.

There seems to be some 'principle of similitude' or of 'dynamical similarity' such as that first enunciated by Galileo some 300 years ago. He gave a wealth of examples (but only within a limited sphere) which showed certain resemblances on different scales of magnitude, and Prof. D'Arcy Thompson pointed out the importance of this principle in Chapter 2 of his *Growth and Form*.

It was however Mr. Ouspensky who worked out a 'table of time in different cosmoses', and now today we realise that the way we see these different structures in the universe is due to the way our psycho-sensory mechanism is made. Those different 'worlds within worlds' are not in the least like we see them even with the aid of telescopes and microscopes, because always at one end of the telescope and the microscope is the sensory apparatus of man and the mind containing his receptive centres; and this is not realised. Due to the way we are made we compare everything in magnitude and in time with our own magnitude and our own time, and every form which has any kind of consciousness must be doing the same thing in order to keep alive. Consequently human beings as a whole must see things in the same way according to their structure, but their views vary very much in detail depending on how much they know themselves and what the stretch of their consciousness can take in. Also on

their education – a savage sees a different world from a professor of physics – though he is looking out at the same world, yet he interprets very differently what he sees.

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Part 2

Let us now recall how Mr. Ouspensky set to work: In the spring of 1916 he first heard the teaching on cosmoses. Apart from the general Principles, his group in St. Petersburg were given certain hints:

For example, take note that *time* is different in different cosmoses. And it can be calculated exactly, that is, it is possible to establish exactly how time in one cosmos is related to the time of another cosmos. I will add only one thing more: Time is breath – try to understand this.' He said nothing further; but later a pupil in Moscow mentioned that he had heard it said that the *sleep and waking* of living beings and plants (that is, twenty-four hours or a day and a night) constitute the 'breath of organic life'.

(In Search of the Miraculous, p.213)

A year later, when looking through some notes, he paused at the mention of cosmoses and remembered those hints. For a long time he could make nothing of them until he asked himself:

'What is breath? *Three seconds*. Man in a resting state takes about twenty full breaths (that is inhalations and exhalations) to the minute. Consequently a full breath takes about three seconds.

Why are 'sleep and waking' the 'breath of organic life'? What are sleep and waking? For man and for all organisms commensurable with him and living in similar conditions (even plants) this is *twenty-four hours*... By dividing 24 hours by 3 seconds I got 28,800; by dividing 28,800 (days and nights) by 365 I got (within a small fraction) 79 years. This interested me. 79 years is what we would call man's 'expectation of life'...

(*ibid*, p.329)

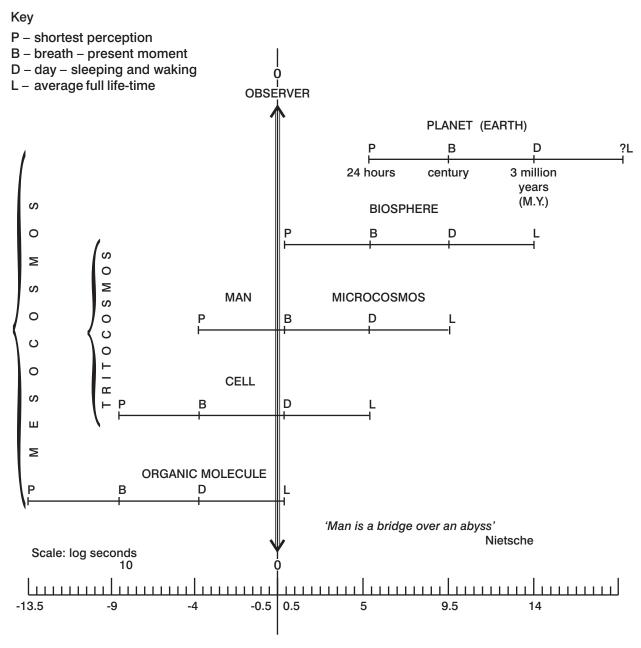
Taking only round numbers, that is, multiplying or dividing by 30,000; and using only two coefficients, 3 and 9, he constructed a 'table of time in different Cosmoses', which all the discoveries in the fifty-five years between then and now have only amplified and confirmed.

The figure (opposite page) shows the way we should express part of his table nowadays, using a scale of 'common logs' (base 10); the log of his ratio, 30,000, being 4.5. Bits of this table and its extensions in both directions keep getting filled in by different branches of science. Thus Calder's book *Restless Earth* fills in the tiny part around the 'breath of earth' – about ½" only on this scale. Last week also I got a small monograph (Nuffield Chemistry Special) by N. N. Greenwood, called *Periodicity and Atomic Structure*, which helped to fill in another tiny part of the table. It is so important today to establish a correct framework of knowledge, that it is imperative that each of you who possess any specialised knowledge of any branch of science should make your contribution without delay.

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Part 3

All of us, however, should use this figure chiefly in a different way – namely for Self-realization through expansion of our own consciousness. Down the middle of the diagram you will see a



firm line through zero points. As in other cases, we can take this line as representing Pure Consciousness. During meditation and at other times of peace and quiet, we look neither to right nor to left but concentrate completely on this central line of Consciousness. If we do this truly and honestly, our own reflection of Consciousness will inevitably expand from the tiny point in the Microcosmos to take in other worlds both larger and smaller, and at times other than meditation to relate every little detail of knowledge that we come across to one single scheme. For time is not the only set of units to which this table can be made to apply, since it represents the way our central nervous system is made to 'count, store and compare all incoming impressions'.

While we look at this diagram, I would like to recall a bit of the conversation we had at Colet on Monday, 7th February:

Mr. Bullough: In the Shankaracharya's teaching, the individual reality is pure Consciousness. How do we relate this to Cosmoses? Does it mean that only the Protocosmos is real and that, for the rest, we are studying a sort of wonderful dream?

Dr. R. You can put it that way if you like; but another way of putting it is that the cosmoses are all a changing show, and that only the Observer who knows it all, but remains unchanging and apart from it, is real – as in the quotation sent me by Mr. Healey this week:

I am the eye with which the Universe
Beholds itself and knows itself divine;
All harmony of instrument or verse,
All prophecy, all medicine is mine,
All light of art or nature; – to my song
Victory and praise in its own right belong.

(from Shelley's Hymn of Apollo)

This eye beholding itself is everywhere, but distinct from the magic show of the cosmoses, which are occasioned on the one hand by the space-time sense with which man is constructed, and on the other by the same law by which the universe is constructed...

- Q. Does this mean that the causal level also is illusion?
- Dr. R. Yes, all three are illusion, but the causal level is close to the Truth. It is like an architect's plan; part of it is being put into operation while most of it remains unmanifested; but it can show you the Mind of the architect and something of his intention.

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