COSMOSES 2

Last week we heard the original introduction to Cosmoses, at first using Greek names, Protocosmos etc, and then their identification with different levels of structure in the universe, galaxy, solar system, earth, man, cell, molecule, atom, elementary particle.

The original exposition of Cosmoses continued as follows:

"... the interrelation of the cosmoses is permanent and always the same. That is to say, one cosmos is related to another as *zero to infinity*. This means that the relation of the Microcosmos to the Tritocosmos is the same as that of zero to infinity; the relation of the Tritocosmos to the Mesocosmos is that of zero to infinity; the relation of the Mesocosmos to the Deuterocosmos is that of zero to infinity; and so on.

In order to understand the meaning of the division into cosmoses and the relation of cosmoses to each other, it is necessary to understand what the relation of zero to infinity means. If we understand what this means, the principle of the division of the universe into cosmoses, the necessity of such a division, and the impossibility of drawing for ourselves a more or less lucid picture of the world without this division will immediately become clear to us."

Remembering the physical levels of cosmoses -- what does zero to infinity' mean?

[Pause for discussion]

Possibly an interpretation is that there is a *qualitative difference* between different cosmoses – they do not differ just in size. The expression 'worlds apart' is relevant. In science it is recognized that in evolution or creation from the very small to the very big, more complex structures and possibilities emerge, and new laws. This is referred to as 'emergence'. It would be hard to predict from the structure of the atom that there would be a molecule like DNA serving as the basis of inheritance. On the other hand something, a kind of magic that is found in the atomic world, the quantum world, is lost or obscured in higher cosmoses.

To continue with the original statement:

"The idea of the possibility of broadening man's consciousness and increasing his capacities for knowledge stands in direct relation to the teaching on cosmoses. In his ordinary state a man is conscious of himself in *one cosmos*, and all the other cosmoses he looks at from the point of view of one cosmos. The broadening of his consciousness and the intensifying of his psychic functions lead him into the sphere of activity and life of *two other* cosmoses simultaneously, the one above and the one below, that is, one larger and one smaller. The broadening of consciousness does not proceed in one direction only, that is, in the direction of the higher cosmoses; in going above, at the same time it goes below.

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if a man begins to feel the life of the planets, or if his consciousness passes to the level of the planetary world, he begins at the same time to feel the life of atoms, or his consciousness passes to their level. In this way the broadening of consciousness proceeds simultaneously in two directions, towards the greater and towards the lesser. Both the great and the small require for their cognition a like change in man. In looking for parallels and analogies between the cosmoses we may take each cosmos in three relations:

1. in its relation to itself,

2. in its relation to a higher or a larger cosmos, and

3. in its relation to a lower, or a smaller cosmos.

[Pause for discussion]

One last extract from the original formulation:

"The manifestation of the laws of one cosmos in another cosmos constitutes what we call a *miracle*. There can be no other kind of miracle. A miracle is not a breaking of laws, nor is it a phenomenon outside laws."

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There are definite hints in this that our consciousness is in some way connected to different cosmoses. How is the perceived by us? What does consciousness on the level of the planets feel like?

One way to expand one's consciousness is to get a sense of the hugeness and grandeur of the universe. It's difficult to see the night sky in central London, but if the opportunity arises it's worth going out at night somewhere where light pollution is not too bad, and remind oneself of some salient points about the size of the universe, how what we see is mainly the Milky Way with a billion stars and beyond our galaxy are a billion other galaxies and, who knows, beyond that maybe a billion universes like ours.

There are many accounts of the emotional impact of the universe on humans. One of the best (and for its time not a bad shot scientifically) is by Blaise Pascal, the French religious philosopher and physicist, written in 1660:

...I wish that, before entering on deeper researches into nature, he [i.e. man] would consider her both seriously and at leisure, that he would reflect upon himself also, and knowing what proportion there is... Let man then contemplate the whole of nature in her full and grand majesty, and turn his vision from the low objects which surround him. Let him gaze on that brilliant light, set like an eternal lamp to illumine the universe; let the earth appear to him a point in comparison with the vast circle described by the sun; and let him wonder at the fact that this vast circle is itself but a very fine point in comparison with that described by the stars in their revolution round the firmament. But if our view be arrested there, let our imagination pass beyond; it will sooner exhaust the power of conception than nature that of supplying material for conception. The whole visible world is only an imperceptible atom in the ample bosom of nature. No idea approaches it. We may enlarge our conceptions beyond an imaginable space; we only produce atoms in comparison with the reality of things. It is an infinite sphere, the centre of which is everywhere, the circumference nowhere. In short, it is the greatest sensible mark of the almighty power of God that imagination loses itself in that thought.

--Returning to himself, let man consider what he is in comparison with all existence; let him regard himself as lost in this remote corner of nature; and from the little cell in which he finds himself lodged, I mean the universe, let him estimate at their true value the earth, kingdoms, cities, and himself. What is a man in the Infinite?

--But to show him another prodigy equally astonishing, let him examine the most delicate things he knows. Let a mite be given him, with its minute body and parts incomparably more minute, limbs with their joints, veins in the limbs, blood in the veins, humours in the blood, drops in the humours, vapours in the drops. Dividing these last things again, let him exhaust his powers of conception, and let the last object at which he can arrive be now that of our discourse. Perhaps he will think that here is the smallest point in nature. I will let him see therein a new abyss. I will paint for him not only the visible universe, but all that he can conceive of nature's immensity in the womb of this abridged atom. Let him see therein an infinity of universes, each of which has its firmament, its planets, its earth, in the same proportion as in the visible world; in each earth animals, and in the last mites, in which he will find again all that the first had, finding still in these others the same thing without end and without cessation. Let him lose himself in wonders as amazing in their littleness as the others in their vastness. For who will not be astounded at the fact that our body, which a little while ago was imperceptible in the universe, itself imperceptible in the bosom of the whole, is now a colossus, a world, or rather a whole, in respect of the nothingness which we cannot reach? He who regards himself in this light will be afraid of himself, and observing himself sustained in the body given him by nature between those two abysses of the Infinite and Nothing, will tremble at the sight of these marvels; and I think that, as his curiosity changes into admiration, he will be more disposed to contemplate them in silence than to examine them with presumption.

--For, in fact, what is man in nature? A Nothing in comparison with the Infinite, an All in comparison with the Nothing, a mean between nothing and everything. Since he is infinitely removed from comprehending the extremes, the end of things and their beginning are hopelessly hidden from him in an impenetrable secret; he is equally incapable of seeing the Nothing from which he was made, and the Infinite in which he is swallowed up.

--What will he do then, but perceive the appearance of the middle of things, in an eternal despair of knowing either their beginning or their end. All things proceed from the Nothing, and are borne towards the Infinite. Who will follow these marvellous processes? The Author of these wonders understands them. None other can do so.

Pascal Pensées