THREE

3.1 Introduction to the Study of the Matter Aspect

[1]All matter in the cosmos consists of atoms. This is an esoteric fact, which the knowledge schools taught thousands of years ago, thus long before science discovered the atoms.

[2]Democritus (fifth century B.C.) and other ancient thinkers made the teaching on the atom known outside the schools. The originally esoteric doctrine was simplified and so distorted. They assumed that atoms lacked consciousness. They assumed that physical atoms were indivisible and the only kind of atoms there were.

[3]These two erroneous assumptions were to lead Western philosophers astray for 2500 years.

[4]The assumption that consciousness did not inhere in the very atoms themselves resulted in materialism. Consciousness was assumed to arise as a secondary phenomenon and solely in matter of a particular organization, namely in nervous systems. The assumption that physical atoms were the only kind of atoms resulted in both physicalism and subjectivism, strange as it may seem.

[5]Physicalism is the assumption that matter equals physical matter, thus that there is no material reality beyond the physical. Physicalism was the necessary logical consequence after they had understood that matter consists of atoms but had not understood that there are other kinds of atoms beside the physical kind.

[6]Yet the tradition of a superphysical reality survived in "idealist" philosophy and in religion. According to physicalism, however, the superphysical reality could not be material. Therefore they assumed the existence of a solely "spiritual", immaterial reality beyond the visible physical. The foundation was laid for subjectivism, which was to separate invisible and visible reality by an insurmountable chasm.

[7]This was indeed unavoidable, as the philosophers lacked the facts of esoterics about the material nature of superphysical reality. Esoterics alone can provide a rational explanation of "spiritual reality" by its doctrines of the three aspects of reality, the existence of many material worlds beyond the physical, and the universal presence of consciousness.

[8]The important, decisive knowledge which the philosophers lacked was that physical atoms are divisible, are made up of finer, non-physical atoms. Had they abandoned the dogma of the physical atom being indivisible and uncompounded, then they would have understood that there is no cleavage between visible and invisible reality, the "material" and the "spiritual" but, on the contrary, a necessary connection.

[9]The first step towards that understanding has been taken by exoteric researchers in modern times. They have discovered that chemical atoms are divisible. They hold that the atom consists of finer, so-called subatomic particles and these of finer particles still. Therefore, some researchers have concluded that the atom is infinitely divisible. This assumption, however, is mathematically and logically absurd, since infinitesimal particles could not even in the greatest quantity compose the least material magnitude.

[10]Thus there are some sort of least possible particles. In hylozoics, those are called monads or primordial atoms. They are the original building blocks of all the other, composite atoms. Primordial atoms are not composed of, or divisible into, lesser atoms. They are the true atoms in the original sense of the word "atom": indivisible entities. However, even primordial atoms must be made of something.

3.2 Primordial Matter

[1]This "something" is primordial matter. It is matter of an entirely different kind than all matter existing in the cosmos. Such cosmic matter consists of particles and void between them. Primordial matter, however, is entirely homogenous. It is absolutely dense and, at the

same time, absolutely elastic, which might seem a paradox.

[2]Primordial matter has no limit. It is true, endless space. Primordial matter is eternal in time. It has never come into being and will never cease to exist. It is eternally the same. It never changes.

[3]In primordial matter all those qualities exist potentially, which appear in atomic matter. Primordial matter is the basis and the material of everything that is.

[4]Primordial matter is eternally unconscious. No consciousness can awaken in that homogenous and immutable matter. Only in monads and in the matter composed of them is the development of consciousness possible.

3.3 Dynamis

[1]Primordial matter endures in all eternity and is, as primordial matter, immutable. Primordial matter is immensely charged with force and activity. What is unceasingly active in primordial matter is its dynamic energy, which Pythagoras called dynamis.

[2]Like primordial matter is the stuff out of which all other matter is composed, so dynamis is the cause of all motion, change, force, energy in the entire universe. Dynamis is the primordial force. Dynamis has never come into being and will never cease to exist. Dynamis is eternal, limitless, and immutable. Dynamis is omnipotent. However, dynamis is also blind, eternally unconscious like primordial matter.

[3]The omnipotence of dynamis appears in the fact that it creates primordial atoms, or monads. No other force in the universe can do that. At every moment, innumerable monads are in this manner created in limitless primordial space. This is done in such a manner that dynamis "digs holes" in primordial matter, makes "bubbles" in that absolutely dense substance, which is possible thanks to its elasticity. Thus monads are voids in primordial matter.

[4]Dynamis acts in every primordial atom that it has created. If this primordial force ceased but for a fraction of a second, then the monads would dissolve and the bubbles would coalesce with homogenous primordial matter. The monad endures as an individual as long as dynamis acts in it. No external force can dissolve the monad, it truly is immortal.

3.4 The Primordial Atoms (the Monads)

[1]Primordial matter with its dynamic energy is the cause of the monads (primordial atoms). And the monads are, in their turn, the building blocks of all other matter, composite matter. The monads are the least possible parts of matter. We might conceive of them as exceedingly small points of force.

[2]The monads manifest the three aspects of existence. The primordial atoms, or monads, have originated from primordial matter, they contain and express omnipotent primordial force, and they have the potential of consciousness.

[3]The monad is eternal and indestructible. All material forms dissolve. They break up into their constituent parts. The monad, however, is simple, uncompounded, and indivisible. What should it break up into?

[4]The monad has within itself an exhaustless energy. It is the primordial force of the monad, its own force. It is eternal, dynamic (self-active), omnipotent. However, dynamis is in itself blind, has in itself no purposive or intelligent control.

[5]In spite of being so exceedingly small, the monad nevertheless is the great potentiality. It has within itself the possibility of all qualities and faculties. Its potentiality is the basis of everything that eventually manifests itself in the cosmos.

[6]The monad has a potentiality of everything. Thereby it also has the potentiality of consciousness. In the cosmos, the monad's potential consciousness is sooner or later roused to life, is actualized. Once actual, consciousness will develop more and more. The monad

eventually becomes a conscious being, an individual that feels, thinks, and acts. The monad thereby becomes a self. Now we are ripe for the complete hylozoic definition of the monad:

[7]The monad, or primordial atom, is the least possible part of matter and the least possible firm point for an individual consciousness.

3.5 The Cosmos

[1]As long as the monads exist free and uncompounded with each other in primordial matter, their potential consciousness cannot be actualized (be roused to life). Only when they have united with each other and so have entered ever grosser material forms can they be influenced by each other, can they be reached by countless vibrations that force them into activity, which actualizes their consciousness.

[2]The free state of the monads in primordial matter was called "chaos" by Pythagoras. The opposite of it he called the cosmos, an ordered whole of monads. Chaos is unlimited in space and time. The cosmos has a limited extension in space and a limited duration in time. It has the form of a globe.

[3]The cosmos comes into being, grows to reach a definite extension, exists as long as is necessary for the complete development of the consciousness of the monads making up the content of the cosmic globe. Then the cosmos is dissolved. All this is ruled by immutable laws.

[4]There is a generic term for all these processes that make up the life-cycle of the cosmos: manifestation. Besides the building and dismantling of the cosmos, manifestation includes all greater and lesser processes within the cosmos, all formation and dissolution of matter, all transference of energy.

[5]Most important in the process of manifestation is that consciousness, existing potentially in every monad, is roused to life (actualized), subsequently to reach ever greater clarity. When the monad finally has knowledge of all the laws in the whole cosmos, it is omniscient in cosmic respect. Then it has also learnt how to apply all the laws with perfect precision, which makes the monad cosmically omnipotent. When all monads in the cosmos have reached cosmic omniscience and omnipotence, then the cosmos has achieved its purpose and is dissolved.

[6]In our cosmos there are monads (primordial atoms) at all stages of the development of consciousness – from dormant to cosmically omniscient and omnipotent. The highest developed monads in the cosmos form that collective being which directs the process of manifestation towards its intended final goal.

[7]Our cosmos is already a perfect organization.

3.6 The Composition of Matter

[1]Since the monads, or primordial atoms, are the least possible parts of matter, everything in the cosmos ultimately consists of monads – directly or indirectly. Those grosser particles which science knows and studies – what it calls atoms and subatomic particles – are built from finer ones, which in their turn are composed of finer particles still. So continues the series which ends with the primordial atoms, or monads, being the very finest atoms.

[2]These different kinds of particles are called atomic kinds in hylozoics. The various atomic kinds form an unbroken chain from monads to physical atoms. The highest atomic kind, or number 1, is the monad. The lowest, or number 49, is the physical atom.

[3]Atoms of a lower kind thus consist of atoms of all the higher kinds, and the higher atoms therefore penetrate all the lower atoms. A 49-atom consists of a number of 48-atoms, each 48-atom of a number of 47-atoms, etc. The atoms of kind number 1, the monads, thus penetrate all the atomic kinds 2–49 in the cosmos. The atom of kind number 49, the physical atom, is the kind of atom that is composed of most monads.

[4]Each atomic kind is the building material for its own particular kind of matter, which is called atomic matter. We have already seen how higher atomic kinds compose and penetrate all the lower atomic kinds. Higher atomic matter thus penetrates all lower matter, and all the 49 atomic matters occupy the same space, the cosmic globe.

[5]The 49 atomic kinds interpenetrate also in another manner. After monads (1-atoms) have combined to form 2-atoms, free monads still remain everywhere between the 2-atoms. And when 2-atoms have composed 3-atoms, free 2-atoms remain everywhere between the 3-atoms.

[6]The same is true of the composition of all lower atomic kinds, so that, finally, when emotional atoms (48) have composed physical atoms (49), there are free 48-atoms left everywhere between the 49-atoms.

[7]There is no void in the cosmos. Even such physical matter as to us appears entirely solid mostly consists of vacuum between sparse particles. Hylozoics teaches that the apparent void there is in lower matter is always filled up with higher matter.

[8]In order to have some conception of higher kinds of matter, you might start from an analogy in the physical world. A piece of iron is an instance of solid physical matter. If you heat it enough, it starts to glow. The iron emits light, which is matter, albeit of another kind than that of the iron atoms: less composed, finer particles – higher particles in hylozoic parlance. Light can penetrate some solid matter, can occupy the same space as it. And yet light is physical matter.

[9]Superphysical matter of all its various ever finer kinds has far greater powers of penetration, has even more than physical light the character of being "immaterial", as it were. But it is matter all the same. There is nothing immaterial.

3.7 Worlds in the Cosmos

[1]Every kind of atomic matter is its own world. We have already seen that these different atomic worlds have different kinds of matter – relatively fine or gross. Moreover, each one of them has its own kind of motion: energy, vibrations. Each kind of matter and world makes a peculiar kind of consciousness possible, a kind entirely different from all the others. Just think about the difference between physical, emotional, and mental consciousness!

[2]All the different worlds interpenetrate. They occupy the same space, are different dimensions of this common space and have different lapse of time or duration.

[3]The 49 atomic worlds together form a globe. This globe is our cosmos. In the physical world (49) it corresponds to our galaxy with its trillions of stars.

[4]In infinite primordial matter there is room for an unlimited number of cosmoses. Such cosmic globes exist at all stages of manifestation. Some are being built out, have not formed their physical world yet and are thus invisible to us. Others, considerably older, have achieved their purpose and are in process of being dismantled, likewise invisible.

[5]A cosmos such as ours makes up – from the human viewpoint – an unsurveyable totality of globes within globes: aggregates of solar systems, solar systems, planets.

3.8 Solar Systems

[1]The 49 atomic worlds, which together make up our cosmos, have been built out according to a definite plan. They form seven series of seven worlds in each series.

[2]The seven highest worlds in the cosmos, 1–7, make up the basis of all the lower manifestation, 8–49. The next septenary of worlds, 8–14, is like a scaled-down replica of the highest seven worlds, also with much more limited possibilities for consciousness and motion in these worlds. The third septenary, 15–21, is analogously a scaling-down, or dimensional reduction, of the worlds 8–14, and so on.

[3]The lowest septenary of worlds thus is 43–49. It is in this matter that solar systems are built. Solar systems are globes, replicas of the cosmos immensely scaled down with

everything which that implies as to reduction of the expressions of consciousness and will in this extremely composite matter.

[4]The lowest world of the solar systems thus is world 49, the physical world. Billions (10^9) of solar systems have not yet reached physical materiality in their manifestation. Billions have finally dismantled their physical world. The stars of our galaxy that are visible to us are only a fraction of the total number.

[5]Like the cosmic worlds 2–42, the lowest seven atomic worlds, 43–49, are formed in and from higher atomic worlds. World 43 is the starting point and material for the successively lower worlds "down" to world 49.

[6]The seven solar systemic worlds have been given their own names:

43 the manifestal world
44 the submanifestal world
45 the superessential world
46 the essential world
47 the causal-mental world
48 the emotional world
49 the physical world

[7]Otherwise, these worlds as well are most simply denoted by figures.

3.9 Molecular Matter

[1]Within the solar systems, their atomic matter, 43–49, is composed to form molecular matter. Each atomic kind forms six successively lower molecular kinds. Thus there are 42 molecular kinds in the solar system.

[2]Molecular kinds are denoted by figures 2-7, atomic kinds by 1. In the solar systems there are thus 49 main kinds of matter: 7 atomic kinds and 42 molecular kinds. They are denoted as follows: 43:1-7 (manifestal matter), 44:1-7 (submanifestal matter), etc., to 49:1-7 (physical matter), inclusive.

[3]The molecular kinds have been composed by analogy with the cosmic atomic kinds. A number of manifestal atoms (43:1) form a 43:2-molecule, a number of 43:2-molecules form a 43:3-molecule, and so forth. The lower the molecular kind within the series 43:2-7, the more 43-atoms enter into the molecule. The corresponding is true of 44:1-7; 44:7 contains the greatest number of 44-atoms.

[4]The following definitions are the only esoterically tenable ones: Atoms are composed of monads, or primordial atoms; the lower the atomic kind, the more monads enter into the atom. Molecules are composed of atoms; the lower the molecular kind, the more atoms enter into the molecule.

[5]The six molecular kinds 49:2-7 have been given individual names:

(49:1 atomic)
49:2 subatomic
49:3 superetheric
49:4 etheric
49:5 gaseous
49:6 liquid
49:7 solid

[6]It is worth keeping in mind that what science calls atoms are not the true physical atoms, 49:1, but etheric molecules ("chemical atoms"), 49:4. By its present methods physical science will not be able to reach the true physical atoms.

[7]Atomic matter and molecular matter are different in structure and function.

[8]The 49 atomic matters exist everywhere in the cosmos, and the 48 superphysical atomic worlds thus occupy the same space as the physical world, world 49.

[9]The 42 molecular matters exist only in the solar systems and are within them limited to the planets and the suns. Space between these globes is not void, however, but consists of atomic matter (1–49).

[10]The sun consists of atomic and molecular matter. The planets are built up of essential (46:2-7), causal-mental (47:2-7), emotional (48:2-7), and physical (49:2-7) molecular matter.

[11]The molecular matters within each planet form concentric spheres. The largest sphere is 46:2-7; within it follow in turn 47:2-7, 48:2-7, and 49:2-7, three successively smaller spheres, the larger encompassing all the smaller. Higher molecular matter penetrates all the lower kinds, its sphere extending beyond the spheres of the lower matters. The physical visible sphere (49:5-7), the planet visible to us, therefore is the inmost, grossest nucleus of the planet proper, which is thus considerably larger. An analogy in a smaller scale is the relation between man's organism and his higher envelopes, which together form his aura. Every planet has its "aura".

[12]One function of the sun is to transform atomic matter into molecular matter. We see only its lowest physical molecular kind, the gaseous envelope (49:5).

3.10 Some Facts About the Motion Aspect

[1]Nothing in the cosmos stands still. Everything is in motion and everything that moves is matter. To the motion aspect belong all events, all processes, all changes. Expressions of motion are also force, energy, vibrations, sound, and light (including colour).

[2]In hylozoics, three specifically distinct causes of motion are enumerated:

dynamis
material energy
will

[3]The dynamic energy of primordial matter, the primordial force, dynamis, is the origin of all motion and the source of all power in the cosmos. Dynamis creates and maintains the monads, gives them their proper motion and inherent force.

[4]The action of dynamis in the monads is the cause of energetic action in all composite matter. The more composite the matter is, however, the more inhibited are the monads by the increasingly grosser particles and the weaker, therefore, is their energetic action. In the lowest world of the grossest matter, our physical world, motion comes almost to a stand-still. We say that matter has reached the solid state.

[5]Material energy is the same as matter in motion. All higher kinds of matter (atomic kinds) are energy in relation to lower kinds. This is due to the fact that all matter is dynamic matter, and that higher matter of course has a greater dynamic or energetic action on lower matter.

[6]Nuclear physicists believe that they dissolve matter into immaterial energy, which hylozoicians maintain not to be the case. In fact, the particles of lower matter dissolve into the finer particles of the next higher kind of matter. The latter cannot be ascertained by physical science, slipping through, as it were, the coarse-meshed nets provided by physical instruments. Their immensely greater energetic action is measurable, however, since it affects lower matter, and hence the mistake of physical science.

[7]Here too we can use our previous example of the red-hot iron. The energy emitted as radiation from the glowing metal is matter and no less material than the piece of iron itself. All energy is matter; the difference between the two which physical science calls matter and energy is a difference in the degree of dynamics between kinds of matter having different atomic composition and therefore different contents of motion.

[8]Will is discussed in Chapter 4.8.

3.11 Space and Time

[1]Space is matter. There is no void in the cosmos. What appears as vacuum between material forms of a lower kind is filled up with successively higher kinds of matter. And monads fill up the cosmic globe in all its extension.

[2]Every kind of atomic matter makes up a world of its own and has its own kind of space. The lower kinds of space enter into all the higher kinds. Therefore, it can be said that world 49 has three dimensions, world 48 four dimensions, and world 47 five dimensions. The increasing number of dimensions of the successively higher worlds and the penetration of lower kinds of matter by all the higher kinds, is the same fact expressed in two ways. Space is matter.

[3]Time is the same as motion, or change. To measure time is to compare various events, changes in matter, with each other. Without any change there is no time. That is why primordial matter is said to be "beyond time".

[4]Time has no dimension. The notion of time as a "fourth dimension" has come from the inability to separate material reality and mathematical construction. It is certainly practical to insert time as a fourth axis into a system of co-ordinates with the usual three spatial dimensions. But this does not make time a dimension in the real world. It is also possible to make two-dimensional systems where time is the second dimension. Using the same logic you could then assert that there are only two dimensions, one of space and one of time. This fact alone should suffice to expose the error in thinking. The concept of dimension belongs to space and thus to the matter aspect, cannot belong to time or the motion aspect. Any other assertion is simply irrational. The fourth dimension penetrating the physical world is the emotional world.

[5]The same confusion of time and space is reflected in the fascinating but erroneous notions that time could "flow backwards" and that you could travel backwards and forwards in time as in some sort of landscape and intervene in past and future events. For this is contradicted by the basic causal law of existence. The ignorance of reality is obviously so great that, lacking experience, they resort to abortive analogies which divert from reality.

[6]Causal law means that everything that happens is the effect of composite causes. The two pairs, past and future and cause and effect, are indissolubly united. The past reaches with its altering energies into the future, so that the present is always predestined by the immediate past and the immediate future is predestined by the present moment.