

# BOOK TWO

## CHAPTER V

### COSMIC PROGRESSION OF PERIODIC PATTERNS OF PERIODIC MOVEMENT

#### i. THE FUNDAMENTAL COSMIC-TYPE PERIODIC PATTERN OF PARALLELEPIPEDONSPERIODIC MOVEMENT

And, while its cohorts seek that which is constantly, dynamically, progressively and cumulatively organizing, still others seek the structural manner of that organization, and still others seek some relationship between the structural manner of organization and the living state. The phenomena that comprise the living state comprise, among others, the progressive and cumulative organization of space relationship. Within the integrator or human gamut of the total manifestation that progressive structural organization begins with the beginning of its manifestation by each human being. Within the cosmic gamut it begins with the six-dimensional lattice that is the golden, flowing potence and the fundamental cosmic-type periodic patterns of periodic movement in their movement of autotranslation.

Whether it be pertinent or no, in the Rezu mdv nttr, hieroglyphic, system, the geometric ideogram for the cosmic gamut was a square,  $\square$ , a fact which, at the time of the observation of the lattice, I did not nor for some years thereafter come to know. If I am right in interpreting the golden flowing right-angled lattice as the evolving cosmic gamut of the total manifestation, and if I correctly saw its flow as a polarized flow, and if I correctly deduce that flow to be comprised of the evolving fundamental cosmic-type of periodic patterns of periodic movement, then those periodic patterns of periodic movement are polarized and at least one part of their total external movement is a polarized movement

of translation, and the pattern occurs as a mutation at that stage of the allurance of the ability eternally to cause periodicity eternally to become by way of movement, in which periodic patterns of periodic movement autotranslate themselves as such through the continuum. This fundamental type of periodic pattern of periodic motion the continuous evolvement of which comprises the evolving cosmic gamut of the total manifestation of the one eternal becoming produces its ensuant mutations within the flowing potence that is the three-dimensional right-angled lattice that they have produced within the continuum by means of their automotive movement of translation through the continuum. In the cosmic gamut of the continuous genesis that is the manifestation of the one eternal becoming, the law and order of this continuous, dynamic, progressive and cumulative mutation of this fundamental cosmic light pattern inheres in the interrelationship of the structural pattern of the fundamental cosmic-type of periodic pattern of periodic movement, the internal mutation of movement which these periodic patterns of periodic movement produce, the polarized movement of translation which they generate, the structural dynamics of the golden flowing right-angled six-dimensional lattice which they interrelatedly produce.

These discrete periodic light morphs which are the fundamental cosmic-type of periodic patterns of periodic movement with their inner organization autochthonously produced, individual periodic mutation of periodic movement which is expressed in an external movement of translation of the light morph through the continuum exist as individual self-sustaining, self-functioning viable entities collectively forming dynamic space which is the golden flowing lattice. These light morphs that are the fundamental cosmic-type of periodic pattern of periodic movement create this new, discrete, periodic field which is not the great periodic continuum but exists within the continuum formed there of those of the periodicities of the continuum that have been continuously, dynamically, progressively and cumulatively patterned by all of the processes of the allurance up to and including the formation of the fundamental cosmic-type of periodic patterns of periodic movement. The periodic movement and the continuous mutation of periodic movement caused by the allurance of light manifesting in a periodic continuum up to and including its formation inheres in this fundamental discrete morphotic organization that is the fundamental cosmic-type of periodic pattern of periodic movement.

## **ii. SPACE AND COSMIC MORPHOSIS**

### **a. The Allurance**

The allurance of the ability eternally to cause periodicity eternally to become, called El in the Hebrew, Lil in the Sumerian, l in the consonantal ideophonic branch of the proposed Naqi zr science terminological system as it manifests

in the cosmic gamut is called manu, the law maker, in some of the Sanskrit works. In the Sankhya Sara philosophy, mahat, the great intelligence, is the cosmic organizer. St. James version using the manufactured word God as an English equivalent of the Hebrew El, translates whatever the author of the work now called the Book of Genesis of the Bible called the cosmic organizer as the spirit of God. In Vishnu Purana it is Vishnu. In the Rk<sup>1</sup> Veda, Vishvakarman is the artificer of the cosmic complexities, the cosmic creative intelligence, the cosmic patterner. As such, Vishvakarman, the one sacrificer, performs the great sarva medha ceremony and ends by sacrificing itself.<sup>2</sup> At Ellora, India, a prehistoric temple built to Vishvakarman still stands. Its walls are inscribed. This would be the book of the science of the progressive organization of the

cosmic gamut? In the Rezu mdv ntrr  $\square \bigcirc \text{⊗}$ , said in English Ptah, is called the great artificer of all three gamuts.

## b. The Lattice

This Rezu mdv ntrr geometric ideogram for the cosmic gamut,  $\square$ , is a square. A square is a two-dimensional abstract of a cube. A cube is six-dimensional. The lattice is right-angled and it is six-dimensional; the intersections of the lattice are cubical; they are right-angled and six-dimensional. The evolving fundamental cosmic-type of periodic patterns of periodic movement that comprise the lattice are polarized and translate themselves. Collectively they produce a flow that does not reverse itself. If this six-dimensional latticed flow do be the cosmic gamut comprised of fundamental cosmic-type periodic patterns of periodic movement as its mechanism of constant engenderment then the cosmic gamut has a shape of its own within the continuum, a fundamental, unchanging shape. The continuous cosmic genesis will not occur by means of destruction of that shape: it will occur by way of constant, dynamic, progressive mutation of the fundamental cosmic-type of periodic patterns of periodic movement that, in the collective expression of their fundamental movement of translation, comprise that shape; and the overall cosmic shape will undergo not external alteration but constantly increasing internal organization within the conditions of the unchanging external shape.

Since the key to this law and order of a continuous cosmic genesis that is a continuous, dynamic, progressive and cumulative morphosis manifesting as the evolving of the fundamental-type light pattern of the cosmic gamut is to be sought in the progressive mutation of numbers and of morphed moving geometrical relationships as these beginning with that stage of organization that is the fundamental cosmic-type of periodic pattern of periodic movement proceed genetically as the sequences of mutation achievable by that organization within and by way of the contexture of the matrical morph which is a six-dimensional right-angled lattice of golden flowing potence that is dynamic

space, then it may be that as these genetically evolving fundamental cosmic-type of periodic patterns of periodic movement are forming the flowing lattice, the prodromal stage of cosmic evolution of material morph is to be found to be occurring in the right-angled intersections of that flow where this fundamental cosmic-type of periodic pattern of periodic movement would undergo a first cosmic alteration tantamount to a mutation. These places of intersection of the latticed flow would afford the conditions for such further manifestation of the evolving inherence that is the cosmic gamut of the law and order of the one eternal becoming.

Possibly then an approach to an understanding of that phase of the law and order of the constant, dynamic, progressive and cumulative mutation of periodic patterns of periodic movement which proceeds as the cosmic gamut of the total manifestation of a one eternal becoming of light and periodicity, that is of an ability eternally to cause periodicity eternally to become by means of a specific type of movement produced by the ability eternally to cause eternally to become manifesting in a periodic continuum, needs to be sought in the intersections.

When a polarized non-reversing potency is flowing three right-angled ways into a common intersection of a six-dimensioned lattice of flow, the flow in the intersection swirls; the outer form of the swirl will be spherical within a cubical superstructure; the direction of the swirl will be a spiraling of the polarized, non-reversing on-flow, and the spiraling on-flow will tend to leave the intersection via those three bars of the golden flowing lattice that are opposite the three entrance ones. This, then, would be a first consideration in an attempt to come by an understanding of that phase of the cosmic gamut of the law and order of the one eternal becoming that manifests in these intersections.

### **iii. UNIVERSE AREAS AND FIRST MODIFICATION OF FUNDAMENTAL COSMIC-TYPE PERIODIC PATTERN OF PERIODIC MOVEMENT**

The philosopher and research scientist, Kapila, of the Hindu Kali yuga, known as the age of the deluge, came down with the Ganges from the heights of its source through Kapila Pass to Gangadvara, the place where and at the time when sagara, the ocean, washed the feet of Himalaya, the place called, also, Kapilasthan because after his descent Kapila sat there at the mouth of the Ganges in India through some years in meditation. Today the Ganges flows into sagara, the ocean, where sagara laves the shores of the Bay of Bengal, to which level, through the 5,000 intervening years, it has receded across the plains of India leaving Gangadvara which is in English called Hardwar something over 1,000 feet above sagara's present level. In those days following upon his sojourn in the heights of the source of the Ganges during which Kapila sat

in meditation at its final shores at Kapilasthan, he worked out his method of presenting the phylum's age-old science. As he told it, it is known as the Sankhayana philosophy, a system which became one of the canonical systems of India.

As Kapila told that portion of the story which concerns the cosmic gamut of the total manifestation in its progressive organization, purusha and pradhana become akasa and akasa is the basis of prakriti and prakriti is the basis of matter. Purusha is organizing intelligence. The two, akasa and purusha, produce prakriti and prakriti and purusha interrelatedly evolve. Together they mount continuously, progressively and cumulatively through the cosmic allerance. Prakriti is the evolving material substance. Purusha is the law and order of the dynamic, progressive and cumulative organization which is the eternal becoming as it manifests in the cosmic gamut of the total manifestation.

Akasa is moving, it is radiant, it is light manifesting. That radiant light which the akasic moieties emit is an akasic-conditioned radiant light known in the Sankhayana terminology as the akasic light. Akasic light fills cosmic space.

The fundamental cosmic-type of periodic pattern of periodic movement would be Kapila's pradhana. Veda Vyasa, compiler of the Rk Veda, wrote concerning indra, agni and varuna, three asuras which collectively form devamatri in their collective effect upon pre-akasic pradhana. This would concern the total allerance up to the formation of the fundamental cosmic-type of periodic patterns of periodic movement. The asuras form pradhana, they do not form material substance. Devamatri produces the cosmic devas, the cosmic heirarchies of motion. The suras succeed the asuras. The suras and the devas produce the evolving material substance - the akasic particles and then the prakriti. The asuras precede the suras.

Since the external movement of the fundamental cosmic-type of periodic pattern of periodic movement is one of polarized, non-reversing translation, some change of this motion of translation in the direction of the flow, some alteration without destruction of motion of translation will be an early effect of the intersection. Call the periodic pattern of periodic movement so affected, the first modification of the fundamental cosmic-type periodic pattern of periodic movement. As to the nature of that alteration of direction: an equal flow from three directions into a six-dimensional, right-angled intersection would produce an external spiral movement of translation of the periodic patterns of periodic movement. Since the flow is polarized the spiral movement of each periodic pattern of periodic movement is polarized. The first modification, then, is a periodic pattern of periodic movement of the fundamental cosmic-type in which the external, straight, non-reversing, polarized movement of translation has become transformed into a spiral, non-reversing, polarized movement of translation.

The motion is the result of the individual polarized movement of translation of the self-translating fundamental cosmic-type of periodic pattern of periodic movement. Here the polarized pradhanic periodic pattern of periodic movement

moves in translation over an added determination of direction; whereas in the bars it moves straight ahead transversely and/or perpendicularly, here it moves ahead in a spiral. And the interrelationship of the polarized, self-translating, forward moving, periodic patterns of periodic movement is altered. Whereas in the bars of the flow polarized homogeneity ☰☷ prevails, here in the intersections a polarized heterogeneity is the status. And the basic pattern of an intersection is a swirl.

Since each intersection is a universe area, this first modification of the fundamental cosmic-type periodic pattern of periodic movement is the fundamental type of periodic pattern of periodic movement of the universe areas of the cosm. This would be Kapila's akasa; each periodic pattern of periodic movement an akasic particle; their radiance in its totality called the akasic light. They are the basis of prakriti, the evolving cosmic forms which purusha, the law and order of cosmic evolvment, causes to evolve continuously, dynamically, progressively and cumulatively.

In one Chinese cosmology, tsi tsai or dzi dzai, the self-radiant, is the root of wu-liang-sheu, boundless age.<sup>3</sup>

#### **iv. UNIVERSE AREAS AND THE SECOND MODIFICATION**

##### **a. Mass**

That part of the American canon that is called physics circumlocutes much concerning but does not define a quality which it calls mass. That which is endowed with mass holds together. Or, to put it differently, that which is massed is caused to be held together. Massing movement and movement in translation are antithetical: the greater the mass effect the less the movement of translation of the mass affected. Something here about movement and antithesis; as though mass were an absorption of movement of translation and movement of translation were movement unabsorbed. And duration evolving by means of the two. Something about duration and continuum, time within duration and space within continuum. Something about organized bits of duration and continuum. Would not then this be periodic patterning of periodic motion?

This much is known in American cosmo-physics, at least in the region of the earth planet: the greater the mass of any considered morph the less the velocity of translation; the lesser the mass the greater the velocity of translation. Size, which in French is *largeur*, is the amount of that which is massed. Magnitude is the inner potential of that which is massed, a heightened potential produced by the massing effect. Modern subatomic cosmo-physics is familiar with the fantastic relative greater velocity of the morph of lesser mass that escapes from

or is ejected by a complexly organized containing morph of greater mass as compared with that of the mass from which it erupts. Is this greater velocity of translation a fabrication of the mass of the complex periodic pattern of periodic movement with which the speeding erupt is therein endowed? Mass is related in some way to the organization of periodic patterns of periodic movement. Could not one say, thus, that mass is the result of that quality which forms and retains periodic patterns of periodic motion, and anti-mass is the result of that quality which resists formation of any specific periodic pattern of periodic movement, tends to uniform. And could not this statement then be made: the tendency toward massing is that phase of ordered periodic movement which tends toward the formation of periodic patterns of periodic movement. And deduce the law: the order of periodic movement induced in a periodic continuum by the allowance of the ability eternally to cause periodicity eternally to become manifesting in that periodic continuum is an order comprised of two antithetical elements: an element of periodic movement that induces the formation of periodic patterns of periodic movement and an element of periodic movement that contraduces the formation of periodic patterns of periodic movement, which play and interplay continuously, dynamically, progressively and cumulatively.

This law can be propounded: massing of periodic patterns of periodic movement is a mutual relative nullification of distance of excursion of the movement of translation of periodic patterns of periodic movement in which varying portions of the free individual movement of translation of each of the patterns involved becomes relatively transformed into a movement of mutual cohesion. And this correlary submitted: the greater the transformation into movement of cohesion in the formation of mass the lesser the distance of excursion of movement of translation through continuum of each of the massing periodic patterns of periodic movement.

## **b. Fundamental Modifications of the Two Elements of Ordered Periodic Movement**

The internal movement of a periodic pattern of periodic movement is a complex of the various periodic movements of its structural components as these are modified by the conditions imposed upon them by their mutual organization in the periodic pattern of periodic movement and the massing element of ordered periodic movement which induces the formation of the periodic pattern of periodic movement: a complex, then, of these various modifications of the massing and of the anti-massing elements of ordered periodic movement.

The periodic mutation of periodic motion produced by, within and by means of the structural organization of a periodic pattern of periodic movement is a periodic integration of the results within the periodic pattern of periodic movement of the components of this complex.

The movement of autotranslation of a periodic patterns of periodic movement is a modification of the antithetical anti-massing element of movement.

The excursive movement of the periodic mutation of periodic movement which induces its radiation is an expression of the anti-massing element of periodic movement enhanced to the point at which it overcomes the massing tendency of the n d n from which it so escapes.

### **c. Progressive, Dynamic and Cumulative Massing**

The massing element of ordered periodic motion is an immanent constant causative in the furtherance of the allurance, inducing not only the formation of periodic patterns of periodic motion but the progressive and cumulative massing of periodic patterns of periodic motion in such relation with each other as to form more complex periodic patterns of periodic motion in an ordered sequence of transpirings. Progressive and cumulative massing is the expression of the tendency of already formed periodic patterns of periodic movement to move toward each other over the fundamental laws of the massing element of ordered movement as these are modified by the periodic patterns of periodic movement and the tendency of each to repel the too close encroachment of each upon the other operating over the fundamental laws of the anti-massing element of movement as these are modified by the periodic patterns of periodic movement. As a result of either the simultaneous or the alternate expression of these two tendencies some portion of the individual autonomous movement of autotranslation through the continuum of each of the periodic patterns of periodic motion that are involved in any given single limning materialization of the massing process is interrelatedly transformed into a mutual, more powerful, reciprocally organized movement of autotranslation of each in relation to each other. Each so formed new organization of massing periodic patterns of periodic motion is, again, a periodic pattern of periodic motion, a more complexly organized massing pattern of greater quantity: a mass in which the potential of the mass and the potence of the mass and the potentiality of the mass and the endynamei of the mass vary directly with the amounts of excursion of movement of translation of the participating periodic patterns of periodic movement that have undergone the massing mutation of movement, increasing directly as the extent of the excursion of the movement of translation through the continuum of each participating periodic pattern of periodic movement decreases in the process.

Constantly, dynamically, progressively and cumulatively massingly organizing, disorganizing and reorganizing periodic patterns of periodic movement comprise the matter of the total manifestation. Were one to say with Einstein that matter is light mass, one would be speaking of these periodic patterns of periodic motion which progress in cumulative complexity and organization by means of massing.



#### **d. Progressive Massing and Morphosis**

Morphosis is the continuous, dynamic, progressive and cumulative evolvement of morph. Progressive and cumulative massing produces progressive and cumulative morph. In review: morph means form; the consonants are m r f or m v r f, the latter of which translates ideophonetically, something concerning an interrelationship of light = the ability eternally to cause eternally to become, manifestation, integration and mutation. A mutation is a transiently stabilized structural arrangement of the components of a complex periodic pattern of periodic movement produced by the reorganization of an immediately prior pattern as a result of an equation of the element of ordered movement that induces the formation of periodic patterns of periodic movement and the contraductive element of ordered movement which has occurred involving the immediately prior periodic pattern of periodic movement and has produced a pattern which acts as a determinant in the further progressive formation of more and more complex periodic patterns of periodic movement: a structural pattern within the structural arrangement of which are inwrought the possibilities of the emergence of a next stage, and a next, etc., of morphosis by means of this particular mutation.

In its etymological sense, morphosis, the progressive and cumulative emergence of form is the progressive and cumulative emergence of the manifestation of the ability eternally to cause eternally to become by means of integration and mutation. Massing, then, is a preliminary stage in the production of integration and mutation. Progressive integration and mutation are the ingredients of morphosis.

That which is to be comprehended by means of measurement is l s, the allurance of the eternally increasing potential, that is, the allurance of the eternally increasing ability eternally to become that which will be by way of that which is. In the measurement of l s this increase of potential will be found to be transiently stabilized in the mutation. The difference between the total potential of the morph that mutates and the mutant morph is the amount of increase of potential. A comparison of the measurement of the total potential of the morph that mutates and that of the mutant morph would give the actual amount of that increase in any given instance.

#### **e. Effects of Massing of Periodic Patterns of Periodic Motion**

As massing periodic patterns of periodic motion move in interrelationship they form a discrete organism of which they are the periodically moving structural units. Interrelatedly these periodically moving structural units form a complexly organized structure of periodic patterns of periodic movement, the results of the integration of which are unique to the discrete organism. These results are known as quantity or numbers of periodic patterns of

periodic movement involved in mass, coherence, external form, largeness, density or compactness, magnitude, internal timing, internal organization, structure, external movement of translation of the total mass, velocity of external movement of translation of the total mass, potence, potential and potentiality. Quantity is the number of any considered periodic patterns of periodic movement of lesser organization which are involved in the formation of the massing organism under consideration. Coherence or cohesion is the tenacity with which the constituent lesser organized n d n interact in the formation of the more complex periodic patterns of periodic motion. Largeness is the amount of measurable extent in all directions of continuum which the massing organism at any given instant occupies. Density or compactness is the exact degree in which the two elements of movement as modified by the involved periodic patterns of periodic motion have equalized each other; it is the specific status of approach to each other which the involved patterns have achieved and which the equalizing of the antimassing tendency of each and the massing tendency maintains; it is degree of mass in relation to space. Three similar periodic patterns of periodic motion, each composed of three massed simpler periodic patterns of periodic motion, in one of which former the massing simpler massed moieties are more closely organized so that the morph fills one-third the amount of space which this one of the other two does is more densely massed than this other but this other is larger than it.

The magnitude is the inner validity of the massing organism. Internal timing is the modification of the excursive movement of translation through space of each involved periodic pattern of periodic movement as these move in interrelationship with each other in the massing organism. Internal organization is the result of density and internal timing. Structure is comprised of motifs which are the involved periodic patterns of periodic motion and the manner in which these are involved in the internal organization. Potence, potential and potentiality are correlatives of structural organization.

## **f. Increase of Potential, Potence and Potentiality**

### **1. *Excerpt From BOOK ONE, CHAPTER XXII, Mutation, Section i, The Ability Eternally to Become, Subsection c, Work, rg***

The organization, the authoritative accomplishment of genesis, is called ergon, ... which translates into Anglo-Saxon English as work: that which is accomplished by rg, by change manifesting: that activity which is the manifestation of l f g in connection with g n, manifesting: ... the interrelationship of change and the proceeding of the one eternal becoming of light is the interrelationship of periodicity and change. Alteration of periodicity without destruction of periodicity.

**2 .Excerpt From BOOK ONE, CHAPTER XXII, Mutation, Section i, The Ability Eternally to Become, Subsection d, Organism**

In the Naqi zr system of terminology, an organism is that which produces r g n, manifestation of periodic change. The manifestation of the one eternal becoming in its production of periodic change is an organism.

In paraphrase of modern American rendition of these following terms: an organism is a whole of independent parts, "a structural ... totality of correlative parts in which the relationship of part to part involves a relationship of part to whole, thus making it self-inclusive and self-dependent" [*Webster*]. The potential of an organism is defined as the amount of ergon, work, that has been done in the moving of all points of an organism from a stipulated proposed infinity to their actual considered position as structural units of the organism and which therefore inheres in the organism by way of its organization, that is, by way of its structural pattern. Its potency is defined as the capability of the organism to continue to develop according to its specific organization, its specific structural pattern. Its potentiality is defined as that which because of its specific organization, its specific structural pattern, it is capable of becoming. The potential and the potency and the potentiality, collectively, are called the latent energy of the organism.

As the complexity of organization increases, the potential increases; as the potential increases, the potency increases; as the potency increases, the potentiality increases.

In the massing stage of the evolvement of the cosmic gamut that which is further organized is comprised of first modifications of fundamental cosmic-type periodic patterns of periodic motion, space, time, and dimensions, as this occurs in all, each, or any of the universe areas.

**v. UNIVERSE AREAS AND A FUNDAMENTAL NIDAL MASS MORPH AS A FIRST COSMIC MUTATION**

**a. Cosmic Matter**

That which in American science is known as matter is only the matter, the evolving periodic patterns of periodic movement, of the cosmic gamut, and should be known not as matter but as cosmic matter. Cosmic matter is comprised of cosmically massing fundamental cosmic-type periodic patterns of periodic motion in which the cosmic rendition of both, the massing and the antimassing, elements of movement are modified by the structure of the cosmic gamut which

causes them to become organized constantly, dynamically, progressively and cumulatively in the cosmic manner, forming specific cosmic periodic patterns of periodic motion of ever increasing complexity and organization. The first tendency toward progressive and cumulative organization of cosmic matter would be the first stage of the interrelationship of akasa and purushu.

This first stage of the process of cosmic massing occurs in the universe areas after the formation of the first modification as the onset of a next stage in the evolvement of the fundamental cosmic-type periodic pattern of periodic movement. It begins to occur in the universe areas. As they form within these areas of universes, these first modifications of the fundamental cosmic-type periodic patterns of periodic motion are not further organized in relation with each other. The massing of cosmic matter is a progressive massing of these first modifications of the fundamental cosmic-type periodic patterns of periodic movement of the intersections of the lattice of the cosmic gamut, beginning with a tendency toward a massing condition of these light patterns that are a first intersectional modification of the fundamental cosmic-type of periodic patterns of periodic movement.

Since each intersection is spatially limited, the freedom of the spiraling polarized automotive translation through space becomes encroached upon. The encroachment will continue to the point where the more centrally placed fragments will tend toward a spiraling round each other, with the result that the polarized spiral movement of translation has become a polarized spiral movement in which each involved fragment has modified its individual movement of spiral translation through space into the tendency toward a spiral massing movement. Thus this fundamental polarized spiraling modification of the fundamental polarized cosmic flow superposed upon the first modifications in the intersections produces a new, a second, modification of these periodic patterns of periodic movement that occurs only in these universe areas. Call this the second modification.



This modification will occur in the more central region of the swirling intersection. Within the universe areas the identity of each periodic pattern of periodic movement is retained even though its movement of translation has become conditioned into the beginnings of an unalterable tendency to spiral around another or other second modifications.

## **b. A Fundamental Nidal Mass Morph**

Again, according to the current rendition of the American canon, groups of photons by further alteration of movement become interrelatedly organized and form a cosmic material particle which is the ultimate discrete cosmic material organism of the teachings of Leucippus and Democritus who, harking back to a more ancient system of science, did their individual best in a seriously attempted exposition of what they may have learned concerning this part of it.

As the massing periodic patterns of periodic movement that are the primordial material particles proceed in their dynamic, progressive and cumulative manifestation of the law and order of the eternal becoming as it manifests in the universe areas of the cosmic gamut of the total manifestation of the one eternal becoming, they arrange themselves dynamically, progressively and cumulatively over the dynamic progression of cumulating mutation patterns produced by periodic movement of mutation of the fundamental cosmic-type of periodic pattern of periodic movement. These polarized second modifications, their massing tendency conditioned by the intersectional conditioning of the matrical flow, tend to combine in the production of a new discrete light- morph, a complex periodic pattern of periodic movement each comprised of a group of dynamically functioning, interrelatedly organized, second mutations the interrelated organization of which is a unit impress of the fundamental pattern of the universe area in a massing condition. These complex periodic patterns of periodic movement would be the first mutation of the evolving cosmic-type of periodic patterns of periodic movement and would occur only in the universe areas. Call them the fundamental mass morph. Their component second mutations are dynamically conditioned morphologically in relation to each other by the dynamic morphology of the intersection.

The morphology of the intersection and the polarized whirl of the flow and the convergence in the intersection of the flow from three directions calls for three

of these second modifications arranged either  or , dependent upon the direction of the flow, arranged at right angles to each other, all moving around each other in the spiral direction of the flow and an organism which is a discrete spherical field of influence formed of three second modifications spiraling in a polarized flow around each other and all manifesting a tendency to reach and an equal tendency to escape a mutual central point of the field of influence results. This is the meaning of cosmic nidal mass. And this would be the structure of the morph here called the fundamental cosmic nidal mass morph: a complex periodic pattern of periodic movement with specific internal movement of its own, organized by the movement of the universe area, composed of three cosmically-evolved periodic patterns of periodic movement here called second modifications, each of which latter has an internal movement of its own which is that of the fundamental type of periodic pattern of periodic movement, and an external movement which is the now progressively complexly conditioned movement imposed upon the original movement of translation of that fundamental cosmic-type of periodic pattern of periodic movement: all of which is but the progressive showing forth, the progressive allowance of that part of the ability eternally to cause periodicity eternally to become manifesting in a periodic continuum which inheres in the fundamental cosmic-type of periodic pattern of periodic movement and is a stage of the constant, dynamic, progressive and cumulative engenderment of the cosmic gamut of the total manifestation.

The external movement of the fundamental cosmic nidal mass morph is a

polarized spiraling spin of the total organism within a polarized spiraling movement of translation.

The specific cosmic nidal massing movement is an ever tightening spiral movement of interrelationship of the involved periodic patterns of periodic movement of spiraling translation through a nidal space of a spiraling universe area of an intersection of the flowing cosmic lattice of the periodic patterns of periodic movement becomes an interrelated complex spiraling movement of the n d n mutually involved, and the velocity of the complex spiraling movement increases directly as the spiral tightens.

Now forming the total cosm are the fundamental cosmic-type of periodic patterns of periodic movement with their self-engendered periodic mutation of periodic movement, the specific movement of translation through continuum which this periodic mutation of periodic movement generated by this type of periodic pattern of periodic movement manifesting in a periodic continuum produces, the basic cosmic patterning of these as they manifest interrelatedly forming dynamic space, the lattice which is its basic structure, the polarized golden flow of the lattice which is its potency, the potentiality of these; the polarized swirl of the intersections, the polarized swirled modification that is the first cosmic modification of the fundamental cosmic-type periodic pattern of periodic movement; the basic type periodic pattern of periodic movement of the intersections, here called the ...<sup>4</sup>; the massing mutation of these ..., here called the fundamental mass morph, occurring in the intersections.

The fact of the existence within the intersections of these light morphs that are the fundamental mass morphs alters the dynamics of the intersection. Created by these dynamics as a result of the materializing morphogenetic potentiality of these dynamics manifesting as material morphosis, altering space and the dynamics of space. The process is innovated and sustained by the inherence within the fundamental cosmic light pattern of the law and order of the eternal becoming as that law and order manifest in its cosmic gamut.

If Kapila's pradhana is the fundamental cosmic-type of periodic pattern of periodic movement, and his akasa the first mutations in their viable, moving, autonomous, self-sustaining, self-radiant state, then the second mutations are the first stage of the interaction of purusha and akasa and the fundamental mass morph is the first prakriti.

In Biblical terminology collectively they would be the Latin firmamentum of the Vulgate of Jerome's 4th century A.D. translation of the Greek στερωμα, steroma, of the Septuagint translation of the Hebrew sacred canon, both meaning literally something solid, and both having been used to render a Hebrew word which meant that portion of the expanse of the universe that is composed of solid matter and is the firming support of its law and order. Something firm. In the Sanskrit the word becomes dharman. The Sanskrit word dharman is used to mean law and order and also that which holds fast: that which is firm and holds fast. The word dharman is the Sanskrit rendition of some more ancient word of which ferme was the Middle English rendition, ferme the French

rendition, firmus the Latin and firm the modern English rendition. Firm means closely compressed, compact, dense; actually, it means massed. In the Sanskrit dharman, the two abstractions law and order and mass are bound up as one. In Kapla's rendition prakriti and purusha mount interrelatedly.

In the King James English version of that book of the sacred canon of the Hebrews which in the Christian Bible is called the Book of Genesis the author relates that that which is translated God and hence is el, the allerance, produces a constant genesis in seven progressive and cumulative stages, called the seven days of creation, including this current, the seventh day on which He rested. Is still resting? Depending upon humanity to fulfill that seventh day? The book begins with slight discussion of general genesis, as produced by el = the allerance, continues with an equally slight discussion of cosmogenesis and should have been rather of cosmology, says a word about the human being, relates something about the origin of the human physical organism and confines the balance of a large and ponderous book to a history of the genesis and exigencies of the Hebrews: a tribal history.

According to the King James English rendition of this author's recounting, there was something that is translated darkness and then that which is translated as the spirit of God, and would therefore be either el, the allerance, or dn, periodic movement, moved over the face of something translated the waters and would, then, probably be periodicities. And also there was light. Following upon this movement there was a separation of the waters-equals-periodicities into a part above, now equated with something called heaven, which would be the extracosmic gamut, and a part below now equated with earth which would be the cosmic gamut and a formation of human beings in the image of this el or dn that is translated God. These three gamuts of the total periodicities. After that somewhere in the sequence of cosmogenesis which should be cosmology, the allerance or dn formed the steroma, the firmamentum in the midst of the waters-equals-periodicities of the cosmic gamut. Sara referred to the cosmic gamut as the firmament, in contradistinction to the extracosmic and integrator gamuts.

In their progressive evolvment, the fundamental cosmic-type of periodic patterns of periodic movement produce firm forms: a massing of the second modifications, here called fundamental nidal mass morphs<sup>5</sup>, in their formation of the fundamental cosmic mass morph produces the firmamentum, the firmament. The law and order of the cosmic gamut is the law and order of constant, dynamic, progressive and cumulative massing. The cosmic massing type of organization differs from all other types of organization.

The first modifications around the periphery of a universe area will not have become endowed with a strong tendency toward massing; for here the tendency toward a spiraling of the movement of translation is less than the automotive straightaway movement of translation. These fragments will therefore have a tendency to continue with the straightaway flow along the bars of the lattice opposite to the bars entering the intersection. These are not endowed with the

first stages of the massing movement, although at any succeeding intersection they may so become. These are not, then, primordial material particles of a universe area that have undergone only a tendency toward the first stage of conditioning in a universe area moving into the general cosmic flow between the universe areas.

## **vi. INCREASE OF POTENTIAL OF A SYSTEM OF UNIVERSES**

### **a. Internal Dynamics of a System of Universes**

The discrete inner organization of the fundamental mass morphs in their incipient materialization of the unit motifs of the basic cosmic pattern and the basic intersectional pattern in numbers and periodicity and geometric dimensional relationships and motion, and the periodic mutation of periodic motion which this inner organization produces and emits creates a new potential which is the essence of the nidus of a system of universes: a potential which does not otherwise exist. Its organization is the potential of a nidus. Its capability to continue to develop according to its specific organization is its potency. Its potentiality is that which because of its specific structural patterning it is capable of becoming. The capacity of this organism that is the nidus of a system of universes for further work which the totality of its structural interrelationships can perform because and by means of these interrelationships is its energy, en-ergia, the innate capacity to perform work, ergon; to perform those interrelationships of change and the allowance of the ability eternally to cause periodicity eternally to become by alteration of periodicity without destruction of periodicity. Its energy is the result of its endynamei, its inner dynamics. The potential and the potency and the potentiality collectively are called the latent energy of the organism: the energy that will produce its mutations in the process of its becoming that which it will become by way of that which it is. Increase of the potential of a system of universes occurs by means of constant, dynamic, progressive and cumulative mass morphosis.

### **b. The Potentiality of a Nidus of a System of Universes is Greater Than**

Each periodic pattern of periodic movement at any stage of its evolutionary progress produces an internal periodic movement which is that periodic pattern of periodic movement's individual periodic mutation of periodic movement. Expressed, this is a radiant emission. All periodic patterns of periodic movement emit a radiance. In the cosmic gamut, this radiance so



emitted is that which in the terminological system of this work is termed evolving vibratory energy-forms. The evolving periodic patterns of periodic movement are that which in this same terminological system are called evolving material energy-forms.

The second modifications which having combined in the formation of the fundamental mass morph and now endowed with reciprocal numerical periodic relationships and geometric dimensional relationships move interrelatedly within the organism that is the fundamental mass morph, forming moving numerical and geometric dimensional relational patterns, creating an internal vibratory energy-form which is a complex of this movement. This so dynamically functioning fundamental mass morph is a discrete replica of space, a discrete immense organism within the great cosmic department of the total organism that is the manifestation of a one eternal becoming: to use a trite phrase, a microcosm manifesting within the macrocosm.

Since the potential of an organism is the result of its organization, its structural pattern, it therefore increases directly with the increasing complexity of that organization. Since the primordial mass morphs are individually more complexly organized than the balance of the universe area, they are individually of a greater potential than is the balance of the universe area. When the polarization is identical, polarized movement manifests a tendency to flow from a greater to a lesser potential. The potential of the mutation of periodic movement produced within and by means of the periodic pattern of periodic movement that is the fundamental mass morph is greater than that of the surrounding medium. Because the new potential which is created by this organism is greater than the surrounding potential of the intersectional space, part of the new potential, the new mutation of periodic movement, is emitted by the organism. The organism becomes self-radiant. The fundamental mass morph is a polarized, moving, autonomous, viable, self-sustaining, radiant organism. That which radiates is of a greater potential than that of the surrounding space into which it is emitted. This immense periodic pattern of periodic movement that is the fundamental mass morph and the periodic mutation of periodic movement that it emits and that surrounding portion of the central region of an intersection into which its radiance penetrates is the nidus of a system of universes. A nidus of a system of universes is a periodic pattern of periodic movement of definite inner organization, definite genesis, definite potential, potency and potentiality, definite endynamei. The potential of this periodic pattern of periodic movement that is a nidus of a system of universes is greater than that of any balance of the central region of a universe area that is not involved in a nidus. Its potency is therefore greater. Its potentiality therefore exceeds that of the non-nidal regions. The more highly organized it becomes, the greater its potential becomes. Its potentiality will cause it to become ever more and more complexly organized over the progression pattern of its inner organization.

## **vii. UNIVERSE AREAS AND SYSTEMS OF UNIVERSES**

### a. According to the *Book of Dzyan*

Of the hundreds of books that comprise the Northern Buddhist canon, that one of those that deal with cosmology which is called the *Book of Dzyan*, using some groups of signs that are pronounced, respectively, oi ha hou or ae ao hoo which implies the grand cycle, and svabhavat,<sup>6</sup> and a group pronounced fohat which translates freely as motion, presents in ideograms a discussion of the cosmic engenderment which is called Dzyu. Interrelatedly oi ha hou, svabhavat and fohat form the dynamic phantom of the evolving cosmic gamut as that evolvment will occur during one cycle of dzyn. In any one such cycle, Dzyu organizes the cosmic evolution in seven successive progressive and cumulative stages. At first, the two, oi ha hou and svabhavat produce bright space: this would be the golden flowing latticed potency. Within bright space fohat creates permanent dynamic areas of nyingpo or tsang which remain as long as one cycle of the evolution of the cosmic gamut continues. This cycle is called the dragon of dzyu, one grand cosmic evolutionary cycle. Within its continuous manifestation the allowance of the one eternal becoming produces many grand cosmic evolutionary cycles, continuing seriatly, one after the other. The areas of nyingpo or tsang would be the intersections. Fohat proceeds spirally through the permanent dynamic areas of nyingpo or tsang, and moves from area to area. While proceeding along its spiral way within these areas, fohat causes the areas of nyingpo or tsang to become dynamically, progressively and cumulatively organized internally into sub-areas, sub-sub-areas, sub-sub-sub-areas, etc., of regularly varying fields of evolvment.

As the formation by oi ha hou, svabhavat and fohat of this dynamic phantom which is the great evolving cosmic gamut proceeds, dzyn and bright space form the first immaterial particles from which all matter generates: this would be the akasa, the ultimate material fragments. These produce a form which fohat then firms: these would be the primordial material particle and its mutation, the fundamental mass morph. In these areas of nyingpo or tsang, the spiraling of fohat and the firmed forms that would be the fundamental mass morphs proceed with the progressive, dynamic and cumulative materialization of the cosmic phantom.

While doing this, fohat causes the firmed forms that would be the fundamental mass morphs to become progressively and cumulatively organized in relation with each area, and from sub-area to sub-sub-area to sub-sub-sub-area. In Blavatsky's free interpretation of the text of the *Book of Dzyan*, the spatial manifestation which is cosmos alternately mounts to a maximum and recedes to minimum of viraj in and in between permanent centers of nyingpo or tsang: and the flow which is dynamic space moves forever and always, creating these, sustaining these, joining these, purveying from one to the other in an established pattern.

### b. According to the z q r Science

In the lesson which I take to have been a presentation of a part of the Naqi zqr science by one of its savants, the intersections of the lattice would be the universe areas, the areas in which systems of universes evolve, the lines of the lattice between the intersections would be the parts of the cosm between the universe areas, and the dynamic flow seen as a golden flowing, potent, three-dimensional, right-angled lattice within the total manifestation is bright space, the intersections of flow forming these universe centers of nyingpo. The flow of intercommunication between the centers is right-angled, six-dimensional; the centers are right-angled, six-dimensional, that is, cubical. A potence thus flowing into such an area would create a spiraling movement of the periodic patterns of periodic movement within the area which would then be the fohatic spiral movement of the areas called permanent centers of nyingpo or tsang.

The total cosm is the golden flowing potence which is the latticed web. Each intersection of the lattice is an area in which systems of universes evolve; a universe area, then, or, an area of universes. All of the universe areas of the total cosm are interrelated by means of the golden flowing potence that is the latticed web. The total cosm is a system of interrelated universe areas. The basic structural pattern of each area of universes would be that of a spherical spiralization within the cube form of the intersection of the lattice. Within each area of universes, systems of universes evolve. Within each universe of a system of universes, systems of galaxies evolve. Within each galaxy of a system of galaxies, systems of solar systems evolve. Each solar system is composed of a sun and its system of planetary systems. Each planetary system is composed of the planet and its system of moons.

### **c. According to the Modern American Canon**

One such universe of one such system of universes of one such area of universes would be that which modern American astronomy in its limited consideration of the cosm believes to be the total cosm and refers to as the universe. In the current American system of tenets, this universe exists as space which is differentiated into space centers within each of which galaxies revolve and space areas between these centers in which no galaxies revolve. The dynamics of the intragalactic space centers and the intergalactic space areas differ. The intragalactic space centers are areas of maximum field or space energy. The intergalactic space areas are areas of minimum field or space energy. The intragalactic centers of maximum field or space energy collectively are known as stellar or galactic space; the intergalactic areas of minimum field energy, collectively, as interstellar or intergalactic space. The gradations from maximum to minimum energy are regular and orderly and correlate directly with the degree of organization, that of the intragalactic centers being immensely greater than that of the intergalactic areas.

This system knows galaxies in which are seen suns and their solar systems. Knows our galaxy, our sun within this galaxy, our sun's planetary systems, calls these the solar system. Knows satellites of the planets, calls them moons.

Thinks our sun has ten planets of which one is the earth. Knows the earth has one visible moon.

One of the schools of astronomy of India, however, teaches each planet to be not a lone planet, but the currently visible one of a system of seven planets in seven successive stages of evolvement, only one of which is currently in that stage of its evolvement which causes it to be visible to the human retina.

#### **d. Nidus of a System of Universes**

As they form themselves the fundamental massed morphs of any universe area become widely organized in relation with each other. Because the potential of the radiance which they emit is greater than the potential of the surrounding medium, this radiant periodic motion passes from each fundamental mass morph out into that central part of the universe area in which they are formed, producing a network of that specific periodic motion: vast, tenuous, but real, existing within the overall motion and among the periodic patterns of periodic motion that now comprise the intersection; that is, among the inflowing, fundamental, cosmic-type, periodic pattern of periodic movement, the first modifications, the second modifications and these fundamental mass morphs in their moving, viable, autonomous, self-radiant state. This emission sets up a state of interrelationship among these fundamental mass morphs, an interrelationship that is, in effect, a trabecular network of a specific mutation of periodic movement that is produced by a massing periodic pattern of periodic movement that each fundamental mass morph produces within and by means of its own organization and emits as a radiance, and that does, in effect, influence the further evolvement of those periodic patterns of periodic movement that within a universe area have not undergone the massing mutation which produces the fundamental mass morph.

Thus each such interorganized group of fundamental mass morphs by way of its radiant emission organizes that portion of its environ into which the radiant emission of the interorganized group extends. This becomes the nidus of a system of universes within the great intersection that is the area of universes within which the phenomenon is occurring. These are spots of great magnitude within the spiraling swirl that take a spiral motion of their own within the great spiral which are interrelated via the vast, tenuous, but real, trabecular network of periodic movement that is a mutation of periodic movement produced within and emitted by the fundamental mass morphs.

The fact of the immensity of the intersections as areas in which systems of universes evolve bears in on the imagination, as does the immensity of each fundamental cosmic-type periodic pattern of periodic movement, each

primary modification, each secondary modification, each fundamental mass morph, each such interrelated grouping of fundamental mass morphs as with its radiant emission it forms the nidus of a system of universes within its particular intersection.

#### **e. A Universe**

Since radiant periodic movement emitted by each interrelated and interorganized grouping of fundamental mass morphs surrounds it, then the interorganized group of fundamental mass morphs is in the center of that radiance. Since the interorganized group of fundamental mass morphs and its radiance form the nidus of a system of universes, then the interorganized group of fundamental mass morphs is the center of that nidus. The internal configuration of the interorganized group of the fundamental mass morphs is the prefiguration of that center. The basic structural organization of any system of universes is, then, a center comprised of an interrelated, interorganized group of fundamental mass morphs surrounded by an area that is organized by the radiant emission of that center.

Because of the dynamics of an intersection, the effect these dynamics have upon the evolvement of the fundamental mass morph, these niduses occur in the more central region of an intersection. Since the intersections are comprised of an outer, more or less tangential, zone, a next, first inner zone and a central zone which grades gradually from the first inner zone to the center of the intersection, these niduses will vary with the gradation of the central zone in which they occur, and the evolving systems of universes which are the evolving niduses will vary similarly. Hence no two systems of universes will evolve identically.

Within any given nidus comparable variations will occur, so that no two universes of any system of universes will be exactly the same. And also each evolving universe will show regional variations. Thus systems of galaxies within a universe occur that vary in their modifications of a fundamental basic organization, and solar systems within galaxies vary, and like that. Each variance in each system of universes, in each universe, each galaxy, etc., is but an expression of that particular feature of the law and order of the one eternal becoming as that becoming proceeds in the cosmic gamut: a proceeding that occurs by means of mutations produced by continuous, dynamic, progressive and cumulative organization.

#### **viii. A NIDAL SYSTEM OF UNIVERSES AND A FUNDAMENTAL MATERIAL PARTICLE**

### **a. Organization vs. Arrangement**

Organization does not mean arrangement. Arrangement can be futile. Deeper and deeper arrangement can be productive of deeper and deeper futility. Organization is that infutile arrangement of parts which can produce an infinite sequence of continuous, dynamic, progressive, cumulative self-mutations.

### **b. Massed Morph**

Morph is m r f: the interrelationship of the manifestation of the ability eternally to cause eternally to become and mutation. The Anglo-Saxon word for morph is form. Morphosis is the constant, dynamic, progressive and cumulative genesis of form. Form is the result of inner organization of constituent periodic patterns of periodic movement. Cosmic morphosis proceeds over the law and order of constant, dynamic, progressive and cumulative evolvement of mass. Mass is the effect of the alteration of the automotive movement of translation through space of two or more periodic patterns of periodic movement into a reciprocal movement in relation to each other. Automotive movement of translation through space is an effect produced upon some periodic patterns of periodic movement by that mutation of periodic movement which it, by means of its structural organization, produces and emits as a radiance. Massed morph, or massed form, is that condition of the interrelationship of the ability eternally to cause eternally to become and mutation in which the structural organization of the periodic patterns of periodic movement producing that mutation is such that the internal mutation of periodic movement produced by that organization of those particular periodic patterns of periodic movement and emitted and effecting a movement of translation of the periodic pattern of periodic movement is such that after its expression it becomes wholly or in part transformed into a reciprocal movement involving one or more other periodic patterns of periodic movement.

In the central portions of the intersections that are the areas in which systems of universes evolve, the massing movement is that of a mutual spiraling of the mutually involved periodic patterns of periodic movement that are here called the second mutations in their formation of the fundamental mass morphs. Therefore the massing movement of the fundamental mass morph is an internal mutual spiraling of its component structural parts. Hence the massing movement of the central area of a nidus of a system of universes is a mutual spiraling of its structural components. The generalization, then, concerning a basic principle of this phase of the law and order of the cosmic gamut of the one eternal becoming, holds: the organizing tendency of the central area of a system of universes is that of spiral massing. As a correlary: the balance of the nidus of the system of universes will be organized as a spiraling radiance of this central area in which spiraling radiance the overall tendency toward massing prevails.

### **c. A Fundamental Nidal Periodic Mutation of Periodic Movement**

The fundamental periodic mutation of periodic movement of a nidus of a system of universes is a periodic mutation of periodic movement produced by the nidus by means of its structural organization and retained within that nidal system of universes.

### **d. A Fundamental Cosmic Nidal Material Particle**

An entire nidus as such constantly produces an internal periodic mutation of periodic movement that is not emitted as a radiance but which, due to the massing tendency of the entire nidus, becomes constantly organized into massing periodic patterns of periodic movement within the great nidus that is an evolving system of universes formed by and within and retained within the nidus. Immensely small as compared to the nidus, immensely numerous, produced constantly by the nidus, a first nidal mutation; call this basic nidal type mutation of periodic pattern of periodic movement, the fundamental material particle. These periodic patterns of periodic movement that are the fundamental material particles of a nidal system of universes are of a specific structural pattern: a basic pattern. Because of the variations within the nidus these fundamental p=cosmic nidal material particles vary with these variations. This is a variation produced upon a basic structural pattern, a change, an alteration produced upon that basic pattern without destruction of that basic pattern.

These various renditions of the fundamental cosmic nidal material particle would be those variations of an ultimate discrete moiety, the incessant movements of all of which produce all of the phenomena of nature of which Leucippus and Democritus had learned in some teachings of this part of the ancient Naqi zqr science and concerning which they in turn attempted to teach.

Constantly formed by the evolving system of universes and constantly massing more and more intensely under the continuous massing tendency of the system, these fundamental material particles became, have become and do become the most highly potent organizations of periodic patterns of periodic movement in the total cosm up to and including the completion of their formation.

As the internal periodic mutation of periodic movement of the nidus continues, the massing of the fundamental material particle increases until it is fully formed. Fully formed it is less in size than during the stages of its formation, and greater in potential and greater in mass. The less space any given massing periodic pattern of periodic movement occupies, the greater its mass. The potentiality of mass in a massing periodic pattern of periodic movement is inversely proportional to its size. This is due to the fact that the movement of translation through space of the n d n movement becomes more and more

transformed into the mutual movement of interrelationship. Rapidity of co-spin increases directly as movement of translation decreases. Potential increases directly with rapidity of spin. Rapidity of spin is a mutation of excursion of translation.

**ix. THE FUNDAMENTAL P, MEANING COSMIC, NIDAL MATERIAL PARTICLE AND A FUNDAMENTAL P NIDAL VIBRATORY ENERGY-FORM**

Periodic patterns of periodic movement produce an internal periodic mutation of periodic movement. Each fundamental material particle is a periodic pattern of periodic movement. These massing periodic patterns of periodic movement that are the fundamental material particles produce and emit as a radiance a periodic mutation of periodic movement. Its specifications are exact. They are unlike all other periodic mutations of periodic movement.

In the allurance of the ability eternally to cause periodicity eternally to become, each type of periodic pattern of periodic movement produces its specific type of periodic mutation of periodic movement. The type of periodic mutation of periodic movement produced by the basic structural pattern of the fundamental material particle is specific to that structural pattern. Since the fundamental material particles of a nidal system of universes produce variations upon the basic structural organization within the regions of the system of universes in which they are evolved, the periodic mutation of periodic motion which they produce will show corresponding variations upon the basic design of the mutation. This periodic mutation of periodic motion produced by the basic nidal type mutation of periodic pattern of periodic movement that is the fundamental material particle is then the fundamental material periodic mutation of periodic movement: a periodic mutation of periodic movement produced by, within and emitted as a radiance by a material, a massing, morph: the first emissary mutational product of matter. And matter has become the engenderer: massed periodic patterns of periodic movement produce periodic mutation of periodic movement and the ability eternally to cause periodicity eternally to become. Thus in this stage of the eternal becoming in the cosmic gamut of that becoming, the mechanism of that becoming has been taken over by matter.

The periodic mutation of periodic motion that the fundamental material particle radiates is the first prakriti-purushu: purushu that is produced by a material form: a first vibratory energy-form produced within and by a material energy-form and emitted by it. It is of a potential greater than that of the surrounding space of the nidus of the system of universes into which it is emitted. Purushu, the governing intelligence, from here on out is prakriti-purushu, the intelligence produced by matter.

A vibratory energy-form is a radiant emission of a material energy-form: a



specific radiant emission. Such radiant emissions are called radiant vibratory energy-forms; their energy is called radiant vibratory energy.

## x. PROGRESSION OF COSMIC MATERIAL ENERGY-FORMS AND COSMIC VIBRATORY ENERGY-FORMS

### a. Two Fundamental Nidal Types of Energy-forms

An energy-form, *n r g m r f*, is that periodic pattern of periodic movement the innate capacity of which causes it to perform that phase of the allurance of the ability eternally to cause periodicity eternally to become by means of periodic change, which is a manifestation of the ability eternally to cause eternally to become by means of mutation. Two types occur within a nidal system of universes, a massing type of energy-form and a non-massing type of energy-form. The periodic mutation of periodic movement that is the radiant emission of a fundamental mass morph into the nidus is a massing energy-form. The periodic mutation of periodic movement which a nidus of a system of universes produces and retains within the system is a massing energy-form. The general massing tendency of the intersection enhanced by the massing tendency of the fundamental mass morph and re-enhanced by the massing tendency of the total nidus causes these periodic mutations of periodic movement to become organized into massing periodic patterns of periodic movement, here termed the fundamental material particle. The fundamental material particle is a massing energy-form. The periodic mutation of periodic movement that is the radiant emission of a fundamental material particle is a non-massing energy-form. Massing nidal energy-forms are material energy-forms; non-massing nidal energy-forms are vibratory energy-forms. Within a nidal system, these two types of energy-forms are being produced: material energy-forms and vibratory energy-forms. The fundamental material particle is the fundamental material energy-form of a nidus; the radiant emission of the fundamental material particle is the fundamental vibratory energy-form of a nidus.

Each of these two fundamental types of nidal energy-forms shows a typical basic scheme of organization and both show typical regional and sub-regional, etc., variations upon this basic scheme. The first would manifest a prevailing tendency toward progressive massing; the second would show movement of translation through the space of the nidal system contrary to the massing movement of the first with an added, lesser, tendency to be conditioned by the overall massing tendency of the nidus. Each has its effect upon the further allurance within a nidal system of universes.

### b. Two Streams of Evolving Nidal Energy-Forms

Thus as this nidal system of universes evolves over its inherent motif of the overall law and order of the allowance of an ability eternally to cause periodicity eternally to become, it produces two streams of evolving cosmic energy-forms: one which produces ever more and more complex, more highly organized, discrete massing organisms which is the stream of evolving material energy-forms called prakriti in the Sanskrit of Kapila, and one which evinces no tendency so to do but produces ever more complex and more highly organized patterns of evolving vibratory energy-forms which is the stream of vibratory energy-forms of Kapila's prakriti-purushu. The one proceeds by way of morphosis, the continuous, dynamic, progressive and cumulative production of material form, by progressive and cumulative massing; the other does not. Purushu, the cosmic intelligence, exists but purushu is said to mount on the shoulders of prakriti. The evolving vibratory energy-forms are produced by prakriti.

Interrelatedly the material energy-forms progress aeonically through level after level of complexity and organization, produce each level, show forth the patternings of that level in their inner structure and outer form, become a materialization of those patternings. The process is continuous, dynamic, progressive and cumulative. The laws of each lesser level are transmuted and can be found in their transmuted form within the laws of the next successive higher level. But the expression of the laws found in the higher level cannot be found so expressed in the lesser level. The understanding comes with an understanding of the modulation of the lesser levels of expression into the greater level of expression. The laws of modulation are implied within the lower level, expressed within the higher level. At each progressed level of morphosis material energy-forms produce a corresponding vibratory energy-form.

Since the fundamental material particles so vary, both, material energy-forms and vibratory energy-forms, vary in the various universes of a system of universes of a nidal system, vary in the various systems of galaxies of a universe of galaxies, within the various intergalactic spaces, within the various solar systems of a galaxy, within the various intersolar intragalactic spaces, within the various planets of a solar system, within the various interplanetary spaces, each producing its variation upon the fundamental material particle of a nidal system.

The continuous evolvment of these variations of the fundamental material particle through an aeonic series of mutations eventually produces those invisible to the naked eye but chemically demonstrable iotas which at the end of the 18th century were known to science as atoms and which Dalton called the atomic elements. Current subatomic physics, called also nuclear physics, having known the atomic nucleus and the proton as the first atomic nucleus, beginning its research there, moves backward through the evolutionary mutations of that particular variation of the fundamental material particle that has been and is constantly being formed in our solar system of our galaxy of our system of galaxies of our universe of our nidal system of universes. And although it has not yet come upon the particle itself, it has come upon a number of intermediate

particles that are various expressed stages of continuous, dynamic, progressive and cumulative mutations and evolutionary organizations of this galaxy's variety of the fundamental material particle of this nidal system. Those of these stages that have been recognized have been termed mesons, neutrinos, protons and neutrons. This branch of modern science has come upon the manner in which the material particle called the meson and something called a neutrino, organizing interrelatedly, form the proton and nibbles currently at the manner in which a meson is organized internally.

The evolving stream of vibratory energy-forms is the stream of periodic mutations of periodic movement which, produced by and within the progressively evolving stream of massing nidal material energy-forms, is emitted by them as a radiance. Any successful search into the identity of the vibratory energy-forms of a system of universes would eventually come upon this emitted by the fundamental material energy-form as the fundamental vibratory energy-form of the system of universes within which the search progressed.

### **c. The Difference Between Material Energy-Forms and Vibratory Energy-Forms**

Material energy-forms are massed morphs; they are massing periodic patterns of periodic movement. Vibratory energy-forms are not massed; they do not mass; they are the emissary product of matter, the periodic mutation of periodic movement produced within and by means of massing periodic patterns of periodic movement, and emitted by them as a periodic radiance.

### **d. Vibratory Energy-forms**

#### ***1. Vibratory Energy-Forms***

The periodic mutation of periodic movement which the fundamental material particle produces is a periodic movement. The emission of this periodic movement as a radiance by the fundamental material particle is a periodic emission; it recurs at intervals: intervals determined in the structural organization of the periodic pattern of periodic movement that is the fundamental material particle. These periodic mutations of periodic movement periodically emitted by the fundamental material particle, do, upon emission, translate themselves through space; they have an excursion of movement of translation through space. These periodic mutations of periodic movement periodically emitted by the fundamental material particle have a certain strength of excursive movement, a certain definite intrinsic power of movement of translation. The periodic mutation of periodic movement periodically emitted by the fundamental material particle occupies space; irrespective of its movement of translation and its strength it has spatial

dimensions. This is the fundamental vibratory energy-form of a nidal system of universes. Variations of the fundamental material particle which is the fundamental material energy-form of a nidal system of universes produce variations upon the basic pattern of this fundamental vibratory energy-form. These variations involve the periodic recurrence, the excursion, the strength, the spatial dimensions: some one or all of these.

By means of its variation of the fundamental material energy-form of a nidal system of universes, a universe of a nidal system of universes produces its variation of the fundamental nidal vibratory energy-form. A system of galaxies within a universe similarly produces its variation upon the fundamental nidal vibratory energy-form: and a galaxy within a system of galaxies, does likewise, as does a system of solar systems within a galaxy, a solar system of a system of solar systems, a system of planets, a planet, a system of satellites, a satellite.

Vibratory energy-forms are polarized: they have a 'going-ahead end and a tag-along end'. Each vibratory energy-form moves in the direction taken by its going-ahead end. In a nidal system of universes with the polarized spiral massing movement of its fundamental mass morph as its fundamental movement, and its polarized massing fundamental material particle as its fundamental massing expression of that movement, all components of the polarized periodic patterns of periodic movement that, entering and circulating through an intersection, find their way into a nidal system, will therein manifest a tendency to be impelled toward the polarized, spirally massing, fundamental material particles that are the fundamental material energy-forms, in all of their variations; since this is the fundamental action pattern of the nidal system. This is a polarized movement. Upon emission the fundamental vibratory energy-form moves away from the massing material energy-form. This is a polarized movement. Thus, surrounding each curvingly-moving fundamental material energy-form in any of its variations there is a complex field of force comprised of a nidal, polarized, spiral massing movement toward the curvingly-moving, fundamental material energy-form and an emissary, polarized, non-massing, excursive movement away from the fundamental material energy-form. The nidal massing movement moves toward the fundamental material particle; the emissary excursive movement moves away from the fundamental material particle of which it is a radiance. The combined effect of the polarized excursive tendency of the emissary vibratory energy-form away from the material energy-form of its origin and the polarized, massing, discursive, spiraling tendency of the internal nidal movement toward that material energy-form produces a wave: a specific mutation of periodic movement that is a result of the polarized radiant energy of these radiant emissions that are the vibratory energy-forms as these vibratory energy-forms move in excursive translation away from the material energy-form of their genesis and emission through the discursive spiral massing movement of the nidal system toward that source of its origin, some fundamental material energy-form.

## 2. *Waves*

A wave is a transient pleating, a folding, a doubling back upon itself, a buckling produced by the contending, in close contest, of an excursive movement of translation through space with a discursive movement occurring in the same section of space: a specific type of halting effect produced upon the excursive movement of translation by the discursive movement. When the full energy of the excursive movement of translation is not dissipated in the first pleating, the excursive movement continues onward and engages in a second, a third, etc., contention until the energy of the one or of the other of the two contending movements is dissipated: thus producing a clutch of waves, a hatch of waves, produced by a single emission. The formation of the clutch is a rhythmic formation, a rhythmic repetition of the first wave form. The number of such waves that are produced by a single excursive movement in contention with a discursive movement comprise the total effect of the wave impetus of that excursive movement in that context. The wave impetus is the result of the effect upon the radiant vibratory energy-form in direct relation to the radiant energy. Call the rate at which a single excursive movement produces its clutch of waves in its so-contended progress, the frequency of recurrence of wave. When a specific type of excursive movement is projected periodically into the same discursive movement, periodic recurrences of the entire wave clutch are produced. Call each such recurrence, a periodic pulsation: a specific periodic pulsation with a specific internal rhythm of wave frequencies.

A vibratory energy-form is a radiant energy-form that produces waves in its excursive passage from its emitting source through the nidal discursive spiral massing movement. The fundamental vibratory energy-form then is a radiant energy-form that, in its excursion from its emitting source through the surrounding nidal massing movement, buckles and proceeds by successive progressive buckling: in other words, forms waves. Each wave so formed is a mutation of a straight excursive movement of translation through space: a mutation of a radiant energy-form. And a wave, then, is a specific mutation pattern of a specific excursive movement. As it folds, the contending excursive movement produces transverse width of the fold, perpendicular height of fold, and longitudinal length of base of fold. In occurrence, these waves occur in periodic pulsations of internal rhythmic frequencies. The transverse width of the fold is that of the excursive vibratory energy-form as it is emitted as a radiance by the fundamental material particle. The height of the fold is the result of the excursive power of the vibratory energy-form multiplied by the discursive power of the nidal spiraling massing movement. The base length of the fold is the distance which the excursive vibratory energy-form carries this result through the discursive nidal movement; it would, therefore, represent the excess of the power of the excursive movement of the vibratory energy-form over the power of the discursive movement of the nidal massing tendency. The height of the fold is the intensity of the wave; the base length is the linear distance through which that intensity operates; the width is the lateral distance through which that intensity operates.

**2.a** *Excerpt, BOOK ONE, CHAPTER XXII, Mutation,  
Section ii, The Power of the One Eternal, Becoming*

The connotation of danger, *dn gr*, manifestation of alteration of periodic movement without destruction of periodic movement, the ever progressive formation of eternally becoming variations of patterns of periodic movement, is that of authoritative power in a state of manifestation.<sup>7</sup> Authority is the inherence of that condition which is an interrelationship of the one eternal becoming, movement, change, the ability eternally to cause eternally to become and the orderly and regulated outward movement in a directed procedure over a course that is a methodical prosecution of design determined in the source ability eternally to cause periodicity eternally to become and that source ability. An autonomous legality. The self-organization of the one eternal becoming over the inherent law and order of that becoming that is an expression of the design inherent in the ability eternally to cause periodicity eternally to become.

The authoritative power of the one eternal becoming is the ever progressively forming, eternally becoming alteration of periodic patterns of periodic movement. By means of *dn gr* in the production of *n dn*<sup>8</sup>, the source ability eternally to cause periodicity eternally to become, becomes the power of that eternal becoming; and that power manifesting produces *n dn r*, periodic patterns of periodic movement manifesting as such. The power of the one eternal becoming inheres in the periodic patterns of periodic movement manifesting as interrelated units of manifestation of the one eternal becoming. These latter produce the entire becoming, stage by stage, cumulatively: they are the mechanism of constant engenderment of the one eternal becoming wherein inheres the power of that engenderment.

... This authoritatively powered manifestation of the allurance is produced by means of dynasties of *n dn r*, periodic patterns of periodic movement manifesting as such. They are the powered executors of the legislated design ... the separate dynasties of the *n dn r* are the lineal progression of specific basic organization patterns: the kingdoms of its dynasties are the possibilities of variations wrought upon its basic motif which each dynastic pattern affords.

In rehearsal: within this great organism which is the total manifestation of the one eternal becoming of the ability eternally to become in relation with periodicity of a periodic continuum, movement and alteration of periodicity have produced periodic patterns of periodic movement, *n dn*; these are the power, the mechanism of engenderment of realization of its potentiality. Altogether these periodic patterns of periodic movement form the structural pattern of the organism. They

are its potency, its capability to continue to develop according to its specific organization. The total amount of ergon that produces their formation and their structural interrelationships within the organism is the potential of the total organism, its ability eternally to become: its esse. Here, then, the ability to cause eternally to become is transformed into the ability eternally to become and the ability eternally to become is transformed into that discipline of the eternal becoming which is productive of its realization.

As the powered mechanism of engenderment of realization of the potentiality of the great organism that is the one eternal becoming manifesting, the periodic patterns of periodic movement progressively show forth three basic structural motifs of its legislated design: a cosmic motif, an extracosmic motif and an integrator motif. Each of these three basic structural motifs is a department of its organization. In each department a basic phase of the engenderment proceeds dynamically, progressively and cumulatively. That phase of the discipline of the eternal becoming which is carried forward by the cosmic-type periodic pattern of periodic movement producing the cosmic motif, does progressively and cumulatively produce thereby that series of mutations of structural arrangements which now have produced the nidus, its internal pattern of periodic movement, the fundamental material energy-forms, the vibratory energy-forms and the waves. Each is a more highly organized pattern of periodic movement than its immediate predecessor.

**2.b** *Excerpt, BOOK ONE, CHAPTER XXII, Mutation, Section i, The Ability Eternally to Become, Subsection d, Organism*

Energy, en + gia, means the capacity to produce active manifestation of change. That which is possessed of this capacity to produce active manifestation of change is, in Greek, organon; Latin, organum; English, just plain organ. With the suffix, ism, affixed, the radix, r g n, becomes the ablaut of the inflectional word, organism. The inflectional suffix, ism, implies that which so does. According to the proposed Naqi zqr system of terminology, an organism is that which produces r g n, manifestation of periodic change. A periodic pattern of periodic movement in its engenderment of periodic change is an organism.

In paraphrase of modern American rendition of these following terms: an organism is a whole of interdependent parts, a structural totality of correlative parts in which the relationship of part to part involves the relationship of part to whole, thus making it self-inclusive and self-dependent.<sup>9</sup> The potential of an organism is defined as the amount of ergon, work, the authoritative accomplishment of genesis: that activity which is the manifestation of l f g, the interrelationship of change and the allurance of the ability eternally to cause eternally to become in

connection with gn, periodic change manifesting - - the amount of this authoritative accomplishment of genesis that has been done in the moving of all points of an organism from a stipulated proposed infinity to their actual considered position as structural units of the organism and which therefore inheres in the organism by way of its organization, that is, by way of its structural pattern. Its potency is defined as the capability of the organism to continue to develop according to its specific organization, its specific internal structural pattern. Its potentiality is defined as that which because of its specific organization, its specific structural pattern, it is capable of becoming. The potential and the potency and the potentiality collectively are called the latent energy of the organism: the energy that will produce its mutation in the process of its becoming that which because of its nature it will become. Kant defined the organism as a possibility only through the relationship of all that is contained in it to something else as end and means.

Each periodic pattern of periodic movement is then in itself an organism. An organized unit within the great organism. All periodic patterns of periodic movement have potential, potence and potentiality. Along with this, because of this, because these organisms are organized patterns of periodic movement, these organisms produce, internally, new periodic mutations of periodic motion, which are the product of periodic motion. This is the inevitable result of the organization, the endynamei. Periodically the periodic mutation of periodic movement which is the product of periodic movements that comprise the periodic pattern of periodic movement is expelled by the organism as a radiant emission. And, along with this, the cosmic-type periodic pattern of periodic movement has an extrinsic polarized automotive movement of translation through space, as do all of the periodic patterns of periodic movement produced by the continuous, dynamic, progressive and cumulative organization of these.

Even though it be a massing morph, the periodic pattern of periodic movement that is the fundamental material energy-form has a certain external, polarized automotive movement of translation through nidal space. So that, while it is forming and emitting the periodic mutation of periodic movement that is the fundamental vibratory energy-form, it is also moving automatically in translation through its region of the nidus. Hence the source of the vibratory energy-form is a moving source; the periodic emissions of the vibratory energy-form occur at those various places in the nidal region at which the automotive movement of translation has carried the fundamental material energy-form at that instant: and the waves produced by each such periodically emitted, pulsatory, vibratory energy-form occur in the excursive movement



of the pulsatory, vibratory energy-form through that place within which it is emitted.

Considered alone, as such, a material energy-form is an organism; a vibratory energy-form is an organism. A wave produced by a fundamental vibratory energy-form is an organism: an internally organized periodic pattern of periodic movement, a mutation organism: an internally organized periodic mutation pattern of periodic movement; a specific mutation organism: an internally organized periodic mutation pattern of periodic excursive movement.

The potential of this specific organism that is a wave of a clutch of waves produced by the movement of excursion of the vibratory energy-form through the discursive nidal movement is the summation of the amount of work, ergon, r g, manifestation of change, alteration of periodicity without destruction of periodicity, that has produced this organism by moving all of its periodic components dynamically, progressively, cumulatively from a state of homogenous periodicity in a periodic continuum by means of movement, change and mutation caused by the ability eternally to cause periodicity eternally to become manifesting in a periodic continuum into that actual considered position, that structural arrangement which with its intrastructural interrelationships comprise this organism that is a wave. A tremendous potential which inheres in the wave by way of its organization. Its potency is the capability of this organism to continue to develop according to its specific structural organization. Its potentiality is that which, because of its specific organization, its specific structural pattern, it is capable of becoming. The potential and the potency and the potentiality of the wave, collectively these are its latent energy. The latent energy of a wave is magnitude of the wave. The magnitude of the wave is expressed in the [extent] of its transverse width, height and base length. What periodic mutation of periodic movement the wave will produce within itself because of this which it is, this is the periodic function of the wave. What this magnitude can do, the effect upon the total manifestation of the one eternal becoming which, because of its specific latent energy of organization and the relative placement of this specifically organized latent energy within the nidus, this wave can produce is its kinetic energy.

The velocity of a wave of a clutch of waves produced by a periodic vibratory energy-form would depend upon the excursive intensity with which the vibratory energy-form is endowed as it is emitted and upon the discursive tendency of the environment into which the vibratory energy-form is emitted.

### ***3. Continuous Heightening of Potential as it Occurs in a Nidal System***

As is the engenderment of the total manifestation of the one eternal becoming, the engenderment of the cosmic gamut is a constant, continuous, never-ending genesis. The mechanism of this continuous engenderment is periodic patterns

of periodic movement. The engenderment of the cosm occurs as constant, dynamic, progressive and cumulative organization of the fundamental cosmic-type of periodic pattern of periodic movement. The potential is equivalent to the organization. As the complexity of organization increases the potential of the organism increases. The net result of a constant, dynamic, progressive and cumulative engenderment that occurs as constant, dynamic, progressive and cumulative organization of the fundamental cosmic-type of periodic patterns of periodic motion is a constant, dynamic, progressive and cumulative heightening of potential. Beginning with the fundamental mass morph the heightening of potential occurs by means of mass morphosis and anti-mass morphosis, that is, by means of the continuous, dynamic, progressive and cumulative evolvement of material energy-forms and the constant, dynamic, progressive and cumulative evolvement of those vibratory energy-forms which are the excursive radiant emission of the periodic mutation of periodic movement which the material energy-form produces within and by means of its structural organization.

#### ***4. Fundamental Wave of a Nidal System***

The fundamental wave of a nidal system, the wave and all of its nidal variations produced by the fundamental vibratory energy-form of a nidal system and all of its nidal variations, is a periodic pattern of periodic movement engendered by the excursive movement of translation of the mutation of periodic movement produced by and within and emitted as the radiant product of the fundamental nidal massing material energy-form of a nidal system in all of its nidal variations as a fundamental radiant non-massing, excursive vibratory energy-form and the discursive nidal spiral, massing movement into which the fundamental non-massing excursive vibratory energy-form is emitted.

From here on, the nidal continuity of the cosmic phase of the engenderment of the one eternal becoming occurs by means of the progressive genesis of mass morphs, the progressive genesis of non-massing vibratory energy-forms, the formation of progressing types of waves by these progressing generating types of vibratory energy-forms and the progressive interaction of progressively organizing massing, material energy-forms and these progressively forming types of non-massing wave forms. All of the evolving massing morphs of an evolving nidal system of universes are produced by means of the constant, dynamic, progressive and cumulative organization of the fundamental material energy-forms. In each stage of nidal morphosis the material energy-form of that stage produces and emits a periodic mutation of periodic movement specific to that stage. Thus all cosmic morphs, from these fundamental material particles through the pre- and proto-atomic nuclei, the atoms, the molecules and from there on up, produce and emit a specific radiant vibratory energy-form. Each such type radiant vibratory energy-form is periodic in occurrence, excursive in movement, produces a specific clutch of waves of a specific width, height, base-length and frequency, recurs in specific periodicity, as these pulsations

of this specific internal frequency rhythm.

Measure the distance which a clutch achieves; call the rate at which its pulsatory impulse carries the vibratory energy-form this distance through the contending medium its velocity. Divide this pulsatory velocity by the number of waves in a pulsatory clutch and call this the wave velocity.

### e. Types of Movement in a Nidal System<sup>10</sup>

... Two basic types of periodic mutation of periodic movement occur within a nidal system of universes: the periodic mutation of periodic movement produced by, within and emitted as a radiance from the fundamental mass morph into the surrounding region of the nidus, and the fundamental periodic mutation of periodic movement that is formed by and within the nidal organism and is retained within that organism.

Massing, material energy-forms have an extrinsic movement of translation.

When material particles occupy the space in which the contest occurs, these material particles undulate with the buckling movement of a single wave but they do not move in translation as the movement of translation progresses, they fall back into a former position as the excursive movement proceeds.

### h. American Canon re Fundamental Material Energy-forms and Fundamental Vibratory Energy-forms and Waves

Aristotle echoing this phase of the Naqi zqr science, called the fundamental material of a universe  $\alpha\theta\eta\rho$ , aither, and taught that aither was the fundamental material of all of the celestial bodies. The Latins called Aristotle's  $\alpha\theta\eta\rho$ , aether. And aether was the fundamental material not only of all of the celestial bodies but of all celestial space, hence of all of the space of the universe. American physics of the third quarter of the 19th century A.D. taught that aether, which it began to spell, ether, filled all known space and all known celestial bodies and the terrestrial body as well and all gases and all fluids and all solids, etc.: a cosmic substance the properties of which were unlike those of the gaseous and liquid and solid and any other then known condition of matter, yet, a substance which interpenetrated or existed within all of these: a basic cosmic matter. During the last quarter of the 19th century American physics was talking about something it called ether waves, and the transmission of these waves through the ether. Ether and ether waves were two distinct phenomena. Ether was the fundamental substance of the universe; ether waves were waves of movement passing through the ether. The ether, then, would be Aristotle's  $\alpha\theta\eta\rho$ , aither, which would be the fundamental material particle, the fundamental material energy-form, in all of its variations. The ether waves would be related in some way to the excursive movement of translation of the fundamental vibratory energy-form of a nidal system of universes in all of its variations. The ether

itself was discussed as being endowed with a peculiar incessant movement of its own that was part of its very existence: not a straightaway movement, not a wave-like movement and not a spiral movement. This would be the external automotive movement of translation of the fundamental material energy-forms: these fundamental material energy-forms in all of their variations together with their external automotive movements of translation through space would be the ether and its own incessant movement. Since this movement of translation occurs within a nidal polarized spiral massing movement then it will take on a curved path which would be a complex of the straightaway tendency of the one and the spiral tendency of the other. The fundamental extrinsic movement of the fundamental material energy-form is the fundamental movement of the ether. The ether has this movement of its own, a ceaseless never-ending extrinsic movement of translation of the fundamental material energy-forms: a curving movement. Within this ether composed of the fundamental material energy-forms and their fundamental curving motion of translation: a new type of motion occurs: a wave type which is caused by the excursive movement of translation of the periodic mutation of periodic movement that is produced by, within and emitted as a radiance by these curvingly-moving, fundamental material energy-forms of a nidal system of universes in all of their variations; that is, they would be fundamentally related in some manner to the fundamental vibratory energy-forms: a wave motion produced by their excursive movement through the discursive nidal movement.

In modern physics the tendency of another moiety to move toward or away from a polarized mass is said to be the result of magnetism. Magnetism is defined as the property of a polarized mass to cause other moieties to move toward it or away from it in a polarized direction, i.e., to become polarized and to move within the field of influence of the polarized mass or away from it. Such a polarized mass is called a magnet. According to this a massing fundamental material particle is a magnet. The field of influence of a magnet is called a magnetic field. A magnetic field is said to be comprised of waves, called magnetic waves. The ether waves of the late 19th century discussions came to be known as electromagnetic waves. An electromagnetic wave of the ether would be the wave result produced as the combined effect of the polarized massing tendency of the internal nidal movement in relation to the fundamental material energy-forms and the polarized excursive tendency of the vibratory energy-forms emitted by that fundamental material energy-form: a result of the polarized radiant energy of these radiant emissions that are the vibratory energy-forms as these vibratory energy-forms move in excursive translation through the discursive movement of the nidal system.

In current [1960s] post-middle 20th century American science, electromagnetic waves are discussed in terms merely of height and length of base and frequency of recurrence and velocity. Transverse width apparently hasn't been thought of although a wave without a transverse dimension is not a wave but an impossible hypothesis. The cosmic gamut is spatially dimensioned. In the cosmic gamut a two-dimensional entity does not exist. No matter how minute

the transverse dimension, a wave is possessed of it. Nevertheless, a single wave is still postulated, in this post-middle 20th century, to be comprised dimensionally of height and length of base. This is all that is considered dimensionally concerning any type of wave: a hypothetical two-dimensional proposition. Also, the nature and implication of the hatch, i.e., the brood, and the pulsation with the internal rhythm seem not to have been noted. Only the frequency of a wave's recurrence is considered. Possibly the frequency so considered is not the frequency of recurrence of an individual wave but the frequency of the recurrence of the periodic emission that produces a clutch of waves, the frequency, then, of the pulsation, the pulsatory frequency of a family of waves: in which case a brood of waves would have to be considered as a single wave.

The height of a wave is also called its amplitude. The intensity of this periodic occurrence called an electromagnetic wave, its innate power, is said to be expressed in terms of height or amplitude. The length of base is called the wavelength. Wavelength is measured in linear units standardized at one linear unit = one one hundred millionth of a centimeter which is in close approximation to one two hundred and fifty millionths of an inch. This is called an Ångstrom unit, written Å, and used only in the metrical system in which a meter is supposedly, and actually within close approximation, 1/10,000, one ten thousandth part of a quarter length of a meridian of the earth. In inches, a meter = 39.370432+ inches. The table of the metric system of linear measurement is given in footnote 11:

A kilometer is 39,370.432+ inches; a mile is 63,360 inches; a kilometer, then, is approximately 5/8 of a mile. A micron [micrometer] which is 0.039370432+ of an inch is equated at 1/25 of an inch. The length of an Ångstrom unit, 1/10,000,000,000, one ten-billionth part of the estimated quarter length of a meridian of the earth, one one hundred millionth of a centimeter is equated at one two hundred and fifty millionth of an inch. In wavelength measurements and related computations, the metric system of linear measurement is used exclusively.

## 1. *So-Called Light Waves*

In late 19th century American physics, whatever it is that reacting with certain molecules produced by the rods and cones of the cells of the retina of the human eye produces that awareness in the human upeprosencephalon that is known as light was called light: the result of the reaction and the cause of the reaction being given the same name. Finally the cause of the reaction was called light; the upeprosencephalic result of the reaction is called the awareness of light. Then it became dogmatic that some form of radiant energy caused this reaction. Newton had proposed that this radiant energy was a radiant emission of corpuscles, that is, of discrete units, that were material particles emitted by luminous material bodies. Now it became dogmatic that the ether waves that are the electromagnetic waves are waves of immaterial radiant energy. Then

it became dogmatic that waves of immaterial radiant energy are light waves: and ether waves, electromagnetic waves, immaterial radiant energy and light waves became synonymous terms in this terminological system.

With devised instruments a wave velocity of 300,000 kilometers, which is approximately 186,300 miles, per second was identified. This was the only velocity so identified. In that scientific limbic borderland in which a profusion of ideas - - -ultimate discrete moieties, all the phenomena of nature are produced by incessant movement, matter is light mass, mass is some kind of movement, - - - would mutually unshroud, thinking they had come upon a velocity which was the only velocity and which could not be superseded, scientists decided that this velocity was the speed of light and the dogmas arose that all ether waves or electromagnetic waves or radiant waves traveled at this velocity and that nothing could exceed this velocity.

The frequency with which a type of wave recurs was calculated by dividing this velocity, 300,000 km per second, by the wavelength. The number of waves succeeding each other in any given 300,000 km was computed by dividing 300,000 km by the individual wavelength. Varying wavelengths would have varying frequencies: and the lesser the wavelength the greater the frequency: to maintain the same velocity.

Gradually it was discerned that a seemingly infinite number of wavelength variations seemingly display this velocity; hence a corresponding number of variations of frequencies. These wavelengths were found to range from those longer than 12 kilometers, which is 12,000,000,000,000 Å, to those shorter than 0.2 Å: how much longer and how much shorter has not been determined. Altogether these are said to comprise the electromagnetic spectrum.

Among these, those variations that come within the range from wavelengths 7,600 to 4,000 Ångstrom units are the ones that affect those certain molecules of the rods and cones of the human retina that set up the chain reaction which ends in the creation of the uperprosencephalic effect that is known as the awareness of light. These are referred to as comprising the visual portion of the electromagnetic spectrum, loosely referred to as the visual spectrum.

Now, with even finer instruments it gradually becomes known that wave velocities vary, that all of these wavelengths do not actually travel at a uniform rate of 300,000 km per second approximately; but with individual type variations of that rate which the earlier apparatuses that had been devised had not detected, variations so closely approximating this rate of speed as to have been indistinguishable by means of the previous methods of measurement, but as compared to the infinitesimal differences in wavelengths, for instance, not approximating it at all.

Within this system of thought the intensity of these waves with this velocity of 300,000 km per second has been considered to vary with the wavelength; those with lesser wavelength have been considered to have a greater height or amplitude and therefore a greater intensity and, since the frequency was

considered to vary with the wavelength, then intensity varied also with frequency. Here, again, with finer, more accurate instruments of mensuration, it has now been found that often waves of the same frequency and wavelength vary in intensity.

The waves of the entire electromagnetic spectrum are now considered to be radiant emissions of material energy-forms, of all material energy-forms from the least subnuclear organism through the atoms and molecules, etc., but let it be said, rather, that they are waves caused by such radiant emissions in their excursive contention with a discursive medium. The intensity of the wave depends upon the intensity of the vibratory energy-form of its causation and the intensity of the vibratory energy-form depends upon the endynamei of the material energy-form that produces and emits it and is the result of the intensity of the resistance of the nidal massing discursive tendency upon the intensity of the excursive tendency of the vibratory energy-form.

Newton had proposed the theory that light is not these postulated confluent electromagnetic waves but is composed of corpuscles or discrete units of material particles emitted by luminous bodies. That portion of Newton's idea of a periodic material radiant energy, a material corpuscle, a material particle periodically emitted as a radiance by a material morph, which postulates a periodic emission of a radiant energy by a material energy-form, coincides with the fact of a periodic pulsatory emission of a radiant energy-form by a massing material particle, but in the balance of his idea, he mistook the nature of the radiant emission, mistaking a radiant vibratory energy-form to be a radiant material energy-form. He considered the radiant energy-form to be a massing material energy-form whereas it is an anti-massing immaterial vibratory energy-form. As concerns electromagnetic waves these are immaterial energy-forms but they are not this immaterial radiance that is periodically emitted by vibratory energy; they are wave formations set up by the excursive tendency of this immaterial radiance in its movement of translation through the discursive nidal massing movement. And although neither of these is light in the Naqi zr science terminological meaning, each is a correct idea concerning some part of the origin of electromagnetic waves. Newton's discrete moiety periodically emitted would be the discrete periodic mutation of periodic motion that each material energy-form produces and periodically emits as a vibratory energy-form: electromagnetic waves are produced by this discrete periodic emission. But neither one nor both of these is light.

In the Naqi zr science, light is the ability eternally to cause periodicity eternally to become. Light manifesting is the ability eternally to cause periodicity eternally to become manifesting in a periodic continuum, thereby causing motion of a specific order which produces alteration of periodicity without elimination of periodicity, constantly, dynamically, progressively and cumulatively. Electromagnetic waves, waves of radiant energy, are the result of that phase of this constant, dynamic, progressive and cumulative alteration of periodicity produced by periodic motion of a certain order in which that definite stage of this progression of ordered movement in which an alteration

of periodic motion produced of, within, and emitted by those periodic patterns of periodic motion which are the primordial material particles of a system of universes, the variations of this basic pattern, and the progressive and cumulative evolutionary mutations of these primordial material particles and their variations. A vast multitude of kinds of discrete dimensioned periodic emissions, each kind engendered with a discernable but not as yet fully discerned timing, or frequency, with a discernable intensity and excursion of translation through space. Immaterial radiant vibratory energy-forms are produced and emitted by the fundamental material energy-forms of a nidal system in all of their nidal variations and by all of the evolving massing morphs that occur by means of the constant, dynamic, progressive and cumulative organization of these fundamental material energy-forms in all of their nidal variations.

## *2. Vibratory Energy-forms*

Vibratory energy-forms may be defined as those evolving energies of the cosmic gamut of the total manifestation which do not so form themselves into the pre- and proto-atomic elements and their derivatives and manifest no such tendency but cause the evolving material energy-forms continuously to form themselves and unform themselves and reform themselves and transform themselves into cosmo-material organisms, dynamically, progressively and cumulatively, level after level, into ever more qualitative, more complexly organized and more potent systems which show forth ever more complex and more highly organized patterns of inner structure. The vibratory energy-forms augment each other, pass through each other, interfere with each other, produce waves that manifest periodicity, frequency, excursion or wavelength, intensity or wave amplitude, translation through space.

These vibratory energy-forms occur in a mathematically ascending series which is wholly relative to the time unit of measure used: one vibration in a million million years; one million million vibrations per second: beyond these in both extremities of the scale: between these, bridging the extremes.

And now in this current series of decades physical science comes to know that these electromagnetic waves of the ether are not the only movement within the cosm. Comes to recognize the excessive, free movement of excursion of molecules and atoms, atomic nuclei, subnucleic forms. Knows that the electromagnetic waves that affect the rods and cones of the human retina are not to be found above a certain height above the surface of the earth and knows therefore that human retinal sight is a seeing of the earth's planetary region, adapting the cosmic human organism of anthropo homozoa anima sapiensis to these particular radiations of this earth planetary region of this solar system of this galaxy of this system of galaxies of this universe of this nidal system of universes for the retinal portion of its visual awareness of this cosm that



has produced it. Knows something called cosmic rays. Knows a movement of translation of an extremely high energy proton at altitudes of 18-22 miles above the surface of the earth that it calls one type of cosmic ray. Seeks methods of coming by knowledge of galactic radiation and the movement of translation of mesons. Knows the aurora borealis as movement of electrons from the sun to the earth. Knows cosmic rays arriving 10 minutes past midnight, December 3, 1963, in the atmosphere over Volcano Ranch near Albuquerque from some galaxy other than our own.

<sup>1</sup>Rk written Rig in English.

<sup>2</sup>H. P. Blavatsky, *The Secret Doctrine*, (London: The Theosophical Publishing House Ltd., 1893), Vol. 2, p. 640.

<sup>3</sup>As cited and translated by Blavatsky, *op cit.*, Vol. 1, p. 381.

<sup>4</sup>"Primordial material particles" crossed out in manuscript. {Ed.}

<sup>5</sup>"Fundamental nidal mass morph" replaces "primordial material particle" at this point in manuscript. {Ed.}

<sup>6</sup>Blavatsky, *op. cit.*

<sup>7</sup>Book One, Chapter XXI, "Change," sec. viii, "To Endanger."

<sup>8</sup>n dn = periodic pattern of periodic movement.

<sup>9</sup>*Webster's New International Dictionary*, s.v. "organism."

<sup>10</sup>The manuscript for subsection e is incomplete and fragmentary but does contain two outlines for material thjat Dr. Weaver had planned to include in subsection e. The outlines are as follows:

- e. Types of movement of a nidal system of universes.
  1. Movement that produce a nidal system.
  2. Movemens that are a nidal system.
  3. Movement produced by, within a nidal system.
  4. The complex of these.

These kinds of movement

- 1.
- 2.
- 3.
- 4.
5. External movement of translation of the missing particle.
6. Internal movement of the components of the missing particles.
7. Radiant movement of

The titles intended fo subsections f and g are:

- f. The difference between nidal movement and vibratory energy-forms.

g. Difference between vibratory energy-forms and other types of movement in a tidal system.

<sup>11</sup>Table of the metric system of linear measurement:

1 myriameter = 10 kilometers

1 kilometer = 10 hectometers

1 hectometer = 10 decameters

1 decameter = 10 meters

1 meter = 10 decimeters

1 decimeter = 10 centimeters

1 centimeter = 10 millimeters

1 millimeter = 1,000 micro-millimeters; called, also, a micron; written  $\mu$  [or a micrometer, written  $\mu\text{m}$ ]

1 micron = 10,000 Ångstrom units, written Å

In reverse:

10,000 Å = 1  $\mu\text{m}$

1,000  $\mu\text{m}$  = 1 mm

10mm = 1 cm

10 cm = 1 decim

10 decim = 1 m

10 m = 1 decam

10 decam = 1 hm

10 hm = 1 km