

the wondrous unitariness of all existences, will be that we shall come upon that thrice mysterious contrivance—the Heart of Divinity, the Kosmic Space-Center in which abide the roots of the *Great All* in a marvelously indescribable unity and infinite originality.

We may conclude, then, that hyperspatiality and all its appurtenances are but the toys of the childhood of humanity. But, as the years pass and the days of maturity come on apace, it, toy-like, will also be discarded. And the mind will seize then upon the seriousness of reality just as the matured youth responds to the stern realities of life and manhood responsibilities. But no one can say that the toys of childhood are wholly useless; no one can say that the joys which they bring are entirely fatuous and unreal nor shall we attempt to intimate that mathetic contrivances are without utility, without purpose and significance in the life of the growing mind of humanity. But they, too, will pass away.

CHAPTER VIII

THE MYSTERY OF SPACE

The Thinker and the Ego—Increscent Automatism of the Intellect—The Egopsyche and the Omnipsyche—Kosmic Order or Geometrism—Life as Engendering Element—The Mystery of Space Stated—Kathekos and Kathekotic Consciousness—Function of the Ideal—The Path of Search for an Understanding of the Nature and Extent of Space Must Proceed in an Inverse Direction.

THE fragmentariness of the Thinker's outlook upon the universe of spatiality is due to the inhibitive action set up by the constrictive bonds which his complicate mechanism of intellectuality interposes between himself and reality. The Thinker, who stands back of and uses the various media of objective consciousness, such as the neural mechanisms, brain, emotions, his individualized life-force and the mind which together make up the instruments with which he contacts the sensuous domain, by adapting his consciousness to these means, as the artisan utilizes his tools, constitutes his own intellectuality. The intellectuality, then, is the totality of media by which consciousness effects its entrance into the sensuous world and by which it receives impressions therefrom. In other words, it is the sum of all those qualities, operations, processes and mechanisms which are recognized as constituting the *modus vivendi* of man's intellectuality,

and these are, in reality, nothing more than the ego himself.

Many have been inclined to regard that which has been called the ego as the highest sovereign power in the state of manhood. He has been looked upon as the final consideration in the constitution of the human being. But the ego is an evolutionary product and the concomitant of self-consciousness which is the I-making faculty in man's psychic life. It is that quality of consciousness which makes man conceive of himself as a separate, detached and independent being. It is a purely intellectual or tutional product, and, as such, is to be differentiated from the intuitional or life-quality which is the essence of man's real selfhood. With respect to the Thinker, the ego occupies precisely the same status as the agent to his principal. As the agent is the representative of the principal in all matters which come within the scope of his prescribed jurisdiction so is the ego the agent of the Thinker who is a spiritual intelligence. Accordingly, from an ethical viewpoint the Thinker is responsible for the acts of the agent and can in no wise escape the penalties accruing as a result of the agent's violations. Just as a commercial firm sends out a representative for the collection of data concerning certain phases of its business or it may be of any business or the entire world market so the Thinker projects his own consciousness into the mechanisms which are in their totality the egoic life. That is, he sends out his agent, the ego, into life and into the objective world of facts and demands that he shall convey to him, from all points of the territory which he is expected to cover, reports of his findings. Of course, these reports which

are transmitted by the ego (the intellectual mechanism of the Thinker) are more or less well prepared summations of his individual observations and deductions. These are the percepts which the ego presents to the Thinker's consciousness. Concepts are formed by the Thinker in his treatment of these sense-presentations. It very frequently happens that the ego transmits reports which, for one reason or another, give very imperfect knowledge of the matter which his reports are designed to cover. Often it is necessary that additional and supplemental reports be made about the same thing, and even then, it is well-nigh impossible, if not quite so, for him fully to cover every detail of the matter under consideration and in no case is it possible for him to do more than report on the superficialities of the question under scrutiny. If the ego, in his operations, be imagined to be hampered by similar circumstances and difficulties as those which would ordinarily beset a commercial attaché it will then be clear that his reports must ever be fragmentary because of the inaccessibility of much of the data which would be necessary for a full report, and further, because of the inadequacy of his methods and means of gathering data due to the inherent limitations of his capabilities, endurance and perspicacity and innumerable other limitations and difficulties which must be faced in all search for the real. So that, while the sufficiency of the means which the ego enjoys at this stage for all practical purposes is granted no hesitancy is entertained when it comes to a discovery of the reals of knowledge in declaring their insufficiency.

Then, too, when it is remembered that these egoic reports are in the nature of neurographical communi-

cations which are similar to telegraphic despatches and must pass through several stations, as ganglia, etc., often being relayed from one to another, it will be quite apparent that much, even of the original quality of the missives forwarded, will have been lost or radically changed in some way before it is finally delivered for the inspection of the Thinker himself. It not infrequently happens, even in perfectly normal beings, that the ego in filing, recording, transcribing, interpreting, translating and otherwise preparing these data for the Thinker's use, lets a cog slip, misplaces some of the data, loses or destroys fragments of it and so is unable to maintain a complete portfolio of his materials.

As the Thinker is entirely dependent upon his agent, the ego, for the trustworthiness of his information covering the matter of the sensuous world it is obvious that at best his information is very fragmentary indeed, and necessarily so when it is considered that the *modus operandi* of his agent and the difficulty of his operations are so complicate as to magnify the obstructions in the way to complete freedom in this regard.

To continue the similitude of principal and agent it may be asserted that it is also true that the commercial house that sends out its attaches frequently will send letters containing directions as to procedure, sometimes censuring for past delinquencies and sometimes commending for praiseworthy deeds; and this, too, in addition to the original instructions which were given at the outset. It even comes to pass that the home office, because of some meretricious accomplishment, as the marked increase of efficiency shown by

the agent's close application to his duties and the consequent success of his operations, confers certain favors upon the agent or removes some of the restrictions which were originally imposed, gives an increase in salary or promotes the agent to a higher and more lucrative office with larger powers and greater authority. This is analogous to what the Thinker does for the ego. For he not only receives reports from the ego, but often, in the shape of intuitions, gives additional information as to the proper manner of doing things, sheds more light upon some obscure operation, commends for duty well performed, condemns for failures or for wrong-doing, rewards arduous toil with greater powers of vision, keener insight, greater capabilities; in fact, promotes the ego in the sight of other egos by marking him out as an exceptional ego. But the curious aspect of this procedure is that, in time and after the ego has been repeatedly commended and promoted and otherwise favored by the Thinker, he begins to think that he owns the firm, that he is the life and main support of the whole corporation. He becomes arrogant, self-willed and finally falls into the illusion that he alone is responsible for the phenomenal success of the firm. This is the source of that illusion of the intellect which makes itself think that it, the ego, is all there is to man, that his instruments of operation in the objective world are the only kind of instruments that may be used; that his method of gathering data about things is the only safe and sure method; and so it develops that the intellectuality is the source of man's separateness, his individuality and his apparent aloofness from other men and things. It is, of course, needless to point out that in this way

the intellect comes to be the tyrant of man, ruling with a rigid monopoly and as an all-exclusive autocracy.

From the above implications it would appear that the intellect and the intuitive faculty are two separate and distinct processes, and so they are. One is the inverse of the other. The tendency of the egoic life or the intellect is for the external while the intuition is an internal process. The intellect acts from without towards the interior while the intuition acts from within outward. The intellect is the product of the intuition which is another term for the consciousness of the Thinker on his own plane. Just as the child lives a separate and distinct, though dependent, life from the parents so the intellect has a *modus vivendi* which is distinct and separate from that of the Thinker, and yet it is in all points dependent upon the life of the Thinker. Here again, we find an analogy in the relation of the child to the parent. As some children are more amenable to the will of the parent than others, so, in some persons, the intellect is more amenable to the action of the intuition than in others. Yet it is a certain fact that the more the outward life is governed by the intuition, i.e., the more the intellect responds to the intuitive faculty of the Thinker, the higher the order of the life of the ego and the more accurate his decisions and judgments. In fact, it assuredly may be asserted that the place of every individual in the scale of evolution is determined in a very large measure by the degree of agreement between the intuition and the intellect or by the ease with which the intuition may operate through the intellect as a medium. At least, the quality of one's life may be determined directly by these considerations.

The Thinker being himself a pure spiritual intelligence, living upon the plane of spirit and therefore unhampered by the difficulties which the ego meets in his operations in the objective sensorium, and possessed of far greater knowledge, is correspondingly free from the limitations of the ego and very naturally closer to kosmic realities. Hence, he is better situated for the procurement of correct notions of relations, essentialities and the like. It is believed, therefore, that in the proportion that these two processes, the intellectual and the intuitional, are brought, in the course of evolution, to a closer and more rigid agreement, in the proportion that the Thinker is able to transmit the intuitograms in the shape of concepts or that the intuition is made more and more conceptual, in just that proportion is humanity becoming perfect and its evolution complete. The difficulty found to inhere in the conceptualization of intuitions so that they may be propagated from man to man seems not to lie in the Thinker himself, but more essentially in the ego, in the intellectuality and its complicate schematism or plan of action. It would appear, therefore, that the only way of escaping or transcending this difficulty is for the ego so to refine his vehicles or so facilitate his plan of action by eliminating the numerous relays or sub-stations intervening between the consciousness of the Thinker and that which may be said to be his own that the transmission of intuitograms may be accomplished with the greatest ease and clearness. While no attempt will be made to indicate the probable line of action which the ego or objective man will adopt for this purpose, it is believed that it may be said without pedanticism that the only

true method of attaining unto this much desired state of things is, first of all, by assuming a sympathetic attitude not only towards the question of the intuition itself but to all phenomena which are an outgrowth of, or incident to, the manifestations of the intuitive faculty through the intellectuality, and second, by the practice of prolonged abstract thought, this latter procedure effecting a suspension of the intellectuality temporarily at the same time allowing it to experience an undisturbed contact with the intuitional consciousness, thereby laying the basis for future recognition of its nature and quality. It would seem that these two conditions are absolutely necessary in order that a more congruent relationship may be promoted between these two cognitive faculties. Ordinarily, it would appear that the philosopher who is undoubtedly inured to the necessities of continuous abstraction or the mathematician whose most common tasks naturally fall in this category would be among all men most apt to develop to the point of conceptualizing intuitograms readily, yet it seems that this is not the case. And there is good reason for it. The mind of the philosopher and the mathematician is intellectual rather than intuitional and is, therefore, wedded to matter, to the action and reaction of matter against matter and hence operating in a direction at variance with the trend of an intuitional mind. And this condition is undoubtedly due to a lack of a sympathetic attitude towards this species of consciousness. At any rate, it is thought that a too great anxiety in this respect need not be entertained by humanity at all, for the reason that in the case of a faculty, the rudimentary outcroppings of which are so marked and

universally observable and existing in greater or lesser degrees in various human beings, there is ample evidence for the belief that it is being carefully and duly promoted by a well-directed evolution of psychic faculties and powers, so that at the proper time, determinable by the state of perfection reached by the intellectuality or the ego in the operation of his cognitive processes, the much desired agreement of these two faculties will have been realized and the conceptualization of intuitograms into propagable conceptions an accomplished fact. Until this goal shall have been reached and the intuition shall have overshadowed the intellect as the intellect now overshadows the intuition; or the consciousness of the ego, derived from the interplay of the Thinker's consciousness among the various elements which constitute the ego himself, shall have been merged with that of the Thinker, the outlook must remain fragmentary, only becoming a well-ordered whole as the barriers of dissidence are broken down in succession.

The evolution of consciousness, from the simple, undifferentiated *moneron* to the differentiated cell and from that to the cell-colony and from the cell-colony to the organism, traversing in successive paces through all the stages of lower life—mineral, vegetable and animal—to the stages of the simple, communal consciousness of the higher animals, to the self or individual consciousness of the human being, each requiring millions of years for its perfection before a more advanced stage is entered, has been one continuous relinquishment of the lower and less complicated for the higher and more complex expression of itself through the given media. When a newer and

higher stage of consciousness is being entered by humanity its appearance or manifestation is first made in the most advanced of the race and that only in a dim, vague way. This rudimentary condition persists for some time, perhaps many thousands of years, then the faculty becomes more general in appearance, the number of advanced individuals increases, and consequently, as in the case of the intuitive faculty, it becomes universally prevalent in all humanity; becomes transmissible as so-called "acquired characters," and then appears as the normal faculty of the entire human family cropping out in each individual. Thus, in passing from the few advanced ones in the beginning to that stage where it becomes the common possession of all, a faculty requires many thousands of years for its perfection, and especially has this been true in the past history of the development of human faculties. But it is believed that the sweep of the life current as it proceeds from form to form, from faculty to faculty, gains in momentum as it proceeds, so that in these latter years due to the already highly developed vehicular mechanisms at its disposal not so great a period of time as formerly is required for the *out-bringing* of a new faculty. It might well be that while in the past hundreds of thousands of years were necessary in the perfection of organs and faculties, in these latter days only a few thousand, perhaps hundreds, may be necessary and that in the days of the future not even so many years may be required to universalize a faculty. And especially does this appear to be true in a state of affairs where so large a number of persons are beginning consciously to take their evolution in hand and by volitional activities are

supplying greatly increased impetus to their psychic processes which under ordinary, natural methods would be considerably slower in their development. It is quite obvious that all cultural efforts when applied to the betterment of a given plant, animal or faculty result in a corresponding hastening of the process of growth far in excess of what that growth would be under normal, natural conditions. All the present faculties possessed by man are remarkably susceptible to cultural influences; in fact, the standing edict of ethical and social law is that the human faculties must be cultivated as highly as possible, thereby giving the spirit a more perfect medium of expression. These observations, therefore, lead irresistibly and unavoidably to the conclusion that the time for the upspringing of the intuitional faculty in the human organism is even now upon us, that undoubtedly in certain very advanced ones it has already reached a notable degree of perfection and is rather more general than would appear in the absence of careful investigation.

Now, just as the intellect has made for individuality, has emphasized the separateness of the Thinker's existence from that of other thinkers, has developed self-consciousness to a very high degree, even pushing it far over into the domain of the higher consciousness to the temporary obscuration of the latter, so the intuitional will make for union, for the brotherhood of man, for co-operation and for the common weal. Through it man will come gradually into the consciousness that fundamentally, in his inner nature, in every respect of vital concern, he is at-one with his fellowmen and not only with the apparent units of life but with all life as expressed in whatsoever form

throughout the universe. Then, too, he will be closer to the reality of things, of actions and natural processes; in fine, he will have begun the development of the space-mind which will bring him to the knowledge that he is one with space also and, therefore, with the divine life of the world.

One of the peculiarities of the vital force which shows itself in the consciousness as man's intellect, is its growing *automatism*, or that tendency which enables the consciousness to perform its functions automatically and thus allow opportunity for the development of newer and higher faculties. Actions, oft repeated, tend to become automatic. This is also true of thought and consciousness. It is one of the beneficent results of abstract thought that it develops, or tends to develop, a kind of automatism whereby a marked saving in time and energy is effected. This affords opportunity for other things. It is undoubtedly true that in the days of the truly primitive man his consciousness was more completely engaged in the execution of the ergonic functions of cells, organs and tissues; that all those processes which are now said to be involuntary and reflexive were at one time, in the distant past of man's evolution, the results of conscious volitions. This is a condition which must have preceded even the development of the intellect itself. Indeed, there could be no intellect in a state where the entire modicum of consciousness was being utilized in the performance of cellular and histologic functions.

The rise of the intellect must have been in direct ratio to the development of automatism among the cells, tissues and organs, so that as these came

gradually to perform their special labors reflexively the intellect began to be formulated and to grow, at first only incipiently, then more and more completely until it reached its present state. At the present stage of its evolution, a great deal of the labor of the intellect is beginning to fall into a kind of increscent automatism, although only rudimentarily, in many instances. Yet, as a result of this tendency, quite the whole of the phenomena of perception is characterized by a sort of automatic action. And the mind perceives without conscious volition. Many of the steps of conceptualization are automatic, in part, if not wholly. Certain it is that impulses once set in operation whether consciously or unconsciously continue to act along the same line until exhausted or until the end has been attained. Consequently, it is a proven fact that often serious mathematical and philosophic problems have been solved by the mind long after any conscious effort to solve them had ceased. Often solutions have been arrived at during sleep. Many such cases might be cited, but the phenomenon is now so common that almost every one can cite some experience in his own life that will substantiate the claim.

There is no doubt but that these phenomena are evidences of a reflexive development in the intellect. The time will come undoubtedly, and necessarily so if the intellect is to give way to a higher faculty, which shall be as much above the intellect in its grasp of things as the intellect is now above the simple consciousness of the lower animal, when quite the entirety of our intellectual processes will become automatic or self-performing. What then remains of

the egoic schematism, after its transmutation or elevation as the organ of the intuitional consciousness will be utilized as the organ of the Thinker's involuntary cognitive processes. This will mean that all of that laborious ideation which is now the abstract thought of the Thinker will be performed automatically, leaving the higher aspect of the egoic consciousness free to conceptualize or intuitograph the intuitions. Perceptualization then will be replaced by conceptualization. This latter will occupy about the same status as the former does now. And necessarily, perception will become more complex. In other words, while we now perceive simple percepts which are again arranged into concepts making a composite picture of the object, we shall then be taking in the composite picture of the object at first hand, thereby dispensing with the rather slow process of perception as it now operates. We shall still be perceiving, but what we perceive will be concepts rather than percepts, as at present.

The increased powers of intellection gained as a result of the increscent *automatism* in the intellect, the flowering forth of the intuitive faculty and the general enhancement of the intellect throughout all its processes will enable it to entertain concepts or composite picture of things just as readily and as perfectly as it can at present deal with a single percept. Concepts will be replaced by super-concepts or intuitographs. Increased perspicacity will enable the Thinker to manipulate the concepts and intuitographs with the same ease and readiness and withal the mind will have attained unto an almost unrealizable freedom in its search after truth.

The outcome of this new adjustment which, of course, will not spring up at once, but by insensible degrees, will be the clarification and unification of our knowledge. It will mean also the simplification of it; the obviation of diversities of opinions, the springing up of a new and winnowed system of philosophy which shall be the true one; further, it will imply the lessening of the probability of error in our judgments and conclusions; the removal of illusion to a much larger degree than to-day is possible and the realization by every one of something of the essence of things, of causes and effects, of actions, operations, natural forces and laws; in fact, a condition of mind which will present to the consciousness the simple truth above every conceivable phase of kosmic life which may come within the scope of the Thinker's observation.

The further implications of this view are that there is a difference between the Thinker and the intellectuality. The Thinker is eternal and partakes, therefore, of the very essence of primordial originality while the mentality is an artificial process, the resultant of the adaptation of the Thinker's consciousness to his vehicular contrivances of objective cognition and the interplay of his life among them.

If the appearance of a choppy sea disturbed by the passage of a brisk breeze over its surface be imagined, a similitude of the great ocean of life may be envisaged. The wavelet crests symbolize the egos; the base of the wavelet which is one with the great sea of water represents the Thinker which is one with the divine life and consciousness of the kosmos. Just as wavelet crests are continually springing up and falling back into the sea, so are egos continually being

cast forth and reabsorbed into the universality of life only to be recast, as a wavelet crest or ego, upon the surface of the moving ocean of life. *And so, in this respect, the universum of life and consciousness which are essentially one is in a constant state of ever-becoming, un-becoming and re-becoming.*

Another implication is that, on account of the diversity and complexity of the means of contact with the external world, it is not possible for the ego to arrive at more than a fragmentary understanding of even the latent geometrism of life, mind and materiality. In our examination of the sensuous world, we are very much like the three blind men set to examining an elephant. One set to scrutinizing his trunk by means of his sense of feeling. When asked for his judgment as to what the elephant was he declared it was a snake; a second who began with the legs found it to be like huge pillars; and a third who caught hold of the elephant's tail and declared the elephant to be like a rope. Each one of the blind men described what he was able to perceive. To each what he felt was all there was upon which he could render judgment. And so, artists, philosophers, mathematicians, musicians, mechanics, religious seers, metaphysicians and all other types of mind, are just so many blind men set to the examination of an elephant, or the sensuous world. Each one confidently believes his view to be correct; each one is satisfied with the deliveries of his senses. Yet no one of them is wholly correct, no one of them has seen every phase and aspect of the problem. Does it not, therefore, appear to be the more reasonable and urgent that the view which synthesizes the judgments of all the possible

examiners thereby constructing a composite idea of the entire mass of judgments is the more reliable and the more correct?

Referring again to the dual intelligence, the ego and the Thinker, which together constitute man, it is deemed necessary, in order to present the concept of this duality to the mind of the reader in the way that shall enable him easily to recall it, to designate the egoic intelligence as the *egopsyche*, and the Thinker's intelligence as the *omnipsyche*.

The egopsyche is the I-making faculty, the faculty of self-consciousness and the synthesis of all those psychic states and functions known as the intellect or mind and includes the ethical aspect of man's nature. The omnipsyche is the organism of kosmic consciousness, the space-mind, or man's higher self and that which connects with or allies him to all life; it is the basis of human unity and of unity with divinity, just as the egopsyche is the basis of separation and individuality; it is the organ of direct and instantaneous cognition and the permanent essence which has persisted through every form which the being, man, has ever assumed and through every stage of human evolution. In it are stored up the memories of the Thinker's past, the secrets of life, mind, being, reality, and the history of life from the beginning; in it also the plan of action for the future of the life-wave as it passes from plane to plane, from stage to stage, and from form to form. It is the spark from the flame that is never quite free from its source; it is the continuous spark, the prolonged ray which does not go out and cannot be extinguished. It is that in man which when

full union therewith has been attained makes him a god in full consciousness.

The omnipsyche is really a neglected and overlooked factor in the doctrine of evolution. Evolutionists, while they claim life to be continuous and that man has come through all the kingdoms of nature in succession and has spent millions of years in the perfection of his various organs, faculties and stages of consciousness, make no ample allowance for what is in reality the basal element in evolution—a continuous, persisting, permanent life-force which does not lose its identity from the beginning to the end of the process. This fact—that that spark of life which set out upon the evolutionary journey as a moneron has glowed steadily from that stage to manhood, maintaining meantime its original purposiveness and intent—seems to be the most obvious consideration of the whole doctrine, yet it has been more or less completely ignored. The elementary requirements of evolution would seem to establish clearly the necessity for some such eternally persisting principle as the omnipsyche which is capable of such subtle adaptations to every conceivable form of life and in which should be gathered up the evolutionary results of every life-cycle. For this purpose the omnipsyche or unifying principle in man was designed from the beginning and it is that which constitutes the basis of his intellectual nature while in a far larger sense it is the divinity in man himself. It is indeed strange that so important a factor as the omnipsyche should have been omitted by evolutionists. Yet it can be accounted for upon the grounds of the purely mechanistic character of all intellectual attempts at solving the problems of vital

manifestations. But so long as men rely upon mechanical explanations of such phenomena so long will they be prone to overlook the very essentialities of the problems which they devoutly wish to solve. The continuity of the physical germ-plasm of the human species,¹ now quite generally admitted, would suggest, it seems, an analogous condition to the continuity of the psychic plasm called the omnipsyche, the only difference being that the omnipsyche is an intelligent factor while the physical plasm is a medium of transmission though non-intelligent. The omnipsyche is, therefore, the psychic reservoir of evolution into which are stored the transmuted psychics of moneron, amoeba, jellyfish and every other form which it has ensouled and acts as the storeroom of man's psychic operations as well as the source of his intellectuality.

We turn now from the study of a sketch of the mechanism of man's consciousness which gives at its best only a fragmentary view of the universe of spatiality to a consideration of space itself in the light of its interrelational bearings upon the question of intellectuality.

In the chapter on the "Genesis and Nature of Space" we have, in tracing out the engenderment of space, proved it to be basically one with matter (and indeed the progenitor of matter), also with life and consciousness. Further, it has been shown that all the characteristics of materiality are due to the adaptation of consciousness to it and that out of this adaptation grew the intellectuality. A close approximation to

¹ See *The Germ Plasm; A Theory of Heredity*, by A. WEISSMAN.

this view was maintained by KANT when he discovered that our faculty of thinking or the intellect only finds again in matter the mathematical order or properties which our faculty of perceiving or consciousness has deposited there. It appears, therefore, that when the intellect approaches matter or spatiality it finds always a ready yieldance to its demands simply because intellectuality has previously established therein the delineation or map of the path over which it necessarily must traverse in its examination of the object of its pursuit. In other words, the kosmic mind in engendering materiality and spatiality has set up therein a kosmic order or geometrism. Both motor and intellectual progress, therefore, can be made through the world of spatiality because of the immanence of this kosmic geometrism which lies latent in the very fabric of the world of substance fashioning both the character and the nature of the intellect as well as of space itself. So that there is a perfect congruity subsisting between spatiality and intellectuality. Accordingly it is impossible for either one or the other to transcend the grim grasp of the mathematical order which binds them in such lasting and fundamental agreement. Extra-spatiality may degrade itself into spatiality, and indeed in the very nature of the case, does so degrade itself, yet spatiality can never raise itself beyond the limits set by its engendering parent. Materiality may become more and more spatialized and consciousness more and more intellectualized, but they must proceed hand-in-hand one not superseding the other.

Being the essence of the natural geometry which is everywhere immanent in the universum of matter, space becomes an organized and ordered extension,

in fact is the totality of such organized and ordered extension, which conforms to the latent geometrism the engenderment of which it is the sole cause in the last analysis. Does it not appear then that all that mass of artificial geometry which has sprung up as a result of departures made from this natural geometry is utterly baseless and most certainly lacking in the kosmic agreement which spatiality lends to our primary conceptions? Of course, it is admittedly possible to devise certain conventional forms of logic and endow them with all the evidences of a rigid consistency but which, because of their purely artificial character, will fall far short of any real conformity to the potential geometrism which has been established in spatiality. And this fact is of utmost significance for all those who seek to find justification either logically or naturally for the existence of a multi-dimensional quality in space; for, if a clear, discriminative conception as to the categorical relationship, each to each, of the two kinds of geometry be carried in mind, it will not be easy to confound them neither will it be difficult to discern where the one ends and the other begins.

Now, the fourth dimension and the entirety of those mathematical speculations touching upon the question of hyperspace, dimensionality, space-curvature and the manifoldness of space are purely conventional and arbitrary contrivances and do not meet with any agreement or authority in the native geometrism which we find inhering in space and which the intellect recognizes there. This²⁴ conclusion seems to be obvious for the reason that, in the first place, the non-Euclidean geometries have been constructed upon the basis of a

negation of the latent geometrism of space and intellectuality; and if so, is it reasonable to expect that either they or any of their conclusions should accord with the nature of that form of geometry so admirably delineated by EUCLID? Obviously not. It is a matter of historical knowledge that the whole of the artificial non-Euclidean geometries consists of those purely conventional results which investigators arrived at when they denied or controverted the norms supplied by the natural geometry. When metageometricians found that they could neither prove nor disprove the Euclidean parallel-postulate they then set upon the examination of idealized constructions which negatived the postulate. The results, thus obtained, although self-consistent enough, were compiled into systems of geometry which naturally were at variance with each other and with this inherent geometrism which is found in spatiality and answered to by the intellect both normally and logically.

Furthermore, there is another consideration which to us seems to be equally if not more forbidding, in its objections to the coördination of the two systems of geometry, and that is the fact that the geometry of hyperspace is denied the corroborative testimony of experience and this is true of practically the whole of its data. Indeed, there is perhaps no single element in its entire constitution which claims the authority of experience. This is undoubtedly the weakest point in the structure of the hyperspatial geometries. Contrarily, such is not the case with the natural geometry; for, in this, the intellect in retracing its steps over the path laid out by that movement which has at the same time created both the intellect and spatiality, finds an

orderly and commodious arrangement into which it naturally and easily falls. So exact is this agreement of the intellect with the kosmic order that if it were possible to remove the whole of spatiality and materiality there would still be left the frame work which is this latent geometrism of kosmogogenesis. But the fact that the intellect naturally fills all the interstices of materiality and spatiality, fitting snugly into all of them as if molded for just that purpose, by no means warrants the assumption that it would or does also fit the engendering factor which has created these interstices. The frame work, the order or the geometrism of the kosmos has been established by life acting consciously upon the universum of materiality. And in order to establish this geometrism life had to be mobile, active, creative. It could not remain static, immobile, and accomplish it. Being mobile, dynamic, creative, it passes on. It is like a fashioning tool which the cabinet makers use in cutting out designs upon a piece of wood. It moves, and keeps moving until the design is finished, and then it is ready for more designing. Life is like that. It cuts out the designs in materiality, fashions the form, molds the material, and passes on to other forms. The intellect fits into these designs gracefully. But what it finds is not life itself, only the design which life has made. Hence, as there is neither an empirical spatiality nor materiality in conformity with which the artificial geometry of the analyst may be said to exist, and as it may not be said to conform to the path which life has made in passing through either of these, it is absurd to predicate it upon the same basis as the natural geometry. And so, we are forced, in the light of these considera-

tions to deny the validity and hence the acceptability of the non-Euclidean geometries as either reasonable or warrantable substitutes for the Euclidean, and denying which we also formally ignore the claims of the fourth dimension, as mathematically designed, to any legitimate anchorage in either our vital or intellectual movements.

It has been shown that the flow of life, as it describes that movement which we call evolution, engenders simultaneously and consubstantially spatiality, materiality and intellectuality, and these, in turn, the natural order or geometrism everywhere immanent in the universe; and that automatically, one out of the other and each out of the all, these constitute the totality of kosmic fundamentals. Also we have sketched the mechanism of man's consciousness and discovered how, in its evolutionary development it has divided into two aspects, the egopsychic and the omnipsychic, and these two factors ally him definitely and adequately to the world of the senses and to the world of supersensuous cognitions. And thus we have cleared up some of the misconceptions which had to be confronted and made more easy the approach to the central idea, thereby conserving the substantiating influence which a general and more comprehensive view of the whole would naturally give.

The totality of kosmic order is space. It is circumscribed by an orderless envelope of chaos just as the germ of an egg is surrounded by the egg-plasm. The organized kosmos is the germ, kernel or central, nucleated mass, enduring in a state of becoming. Involuntary kathekos or primordial chaos is the egg-plasm which nourishes the germ or the kosmos and

is that out of which the germ evolves. Kathekos or chaos is the unmanifest, unorganized, unconditioned, unlimited and undifferentiated plasm. Space is the manifest, limited, finite, organized germ that, feeding upon the enveloping chaos, exists in a perpetual state of alternate manifestation and non-manifestation—appearing, disappearing and reappearing indefinitely.

The appearance of the kosmos as an orderly elaboration of the involutionary phase of kosmogogenesis, in so far as kosmic order may be said to be an accomplished fact, marked the turning point in that procedure whose function it was to make manifest a universe possessing certain definite characteristics of orderliness; but the kosmos, as it now stands, may not be thought of as having attained unto a state of ultimate orderliness. The idea meant to be conveyed is that between the point of becoming and the actually pyknosed, or solidified stage in the process of creation there is a more or less well defined line of demarkation cutting off that which is spatiality from that which is non-spatiality. Beyond the limits of spatiality is an absence of geometric order. Here geometry breaks down, becomes impotent, because it is an intellectual construction; at least, it is not so apparent as in the manifested kosmos. It is a state about which it is utterly futile to predicate anything; because no words can describe it. The most that may be said is that it is absence of geometric order as it inheres in space. And if so, all those movements comprehended under the general notions of spatiality, materiality, intellectuality and geometricity have both their extensive and detensive or inverse movements nullified in their approach to it. Involutionary *Kathekos*, therefore, may

be said to be the primordial wilderness of disorder which outskirts the well laid-out and carefully planned garden of the spatial universe. We may excogitate upon some of the obvious functions of this kathekotic world-plasm; but in doing so we must leave off all attempts at a description of its appearance, its magnitude, extent or other qualities, and think only of its kosmic function. We cannot say that there is back of it a spatiality nor can we say that it is a spatiality; for whatever may be its extent or volume, it suffices that it may not be said to be space. It is chaos. Space is order, organization, geometricity. It cannot be said that there is a latent geometrism in chaos; because geometric order is found only in spatiality and is that which distinguishes spatiality from kathekosity or non-spatiality. Chaos is the lack of spatiality. This, of course, implies that it is impenetrable to the intellectuality or to vitality. All inverse movement such as is discovered as taking place in spatiality and which results in the phenomenalization of space runs aground when it strikes against the rock-bound coast of kathekosity. We can only say that it is both the point of origin for the evolving universe of life and form and its terminus. It is the nebulosity out of which the whole came and into which all is ultimately occluded.

A great and far-reaching error is made in all our thinking with respect to the kosmogonic processes when we postulate the complete absorption of chaos as an early act of kosmogony. Customarily, we think of kosmic chaos as a primordial condition whose existence was done away as soon as the universe came into active manifestation. This because it has been exceedingly difficult, if not quite impossible, for those whose

privilege it was to determine the trend of philosophic thought to free themselves from the bondage of a dogma which owed its existence to a traditional or legendary interpretation of facts that ought never have been so interpreted. Chaos IS and EVER SHALL BE, so long as the universe itself lacks completion, fullness or perfection in purpose, extent and possibility. It is undoubtedly being diminished, however, in proportion as the kosmos is approaching absolute perfection. And when the last vestige of chaos disappears from the outskirts of the maturing kosmos there shall appear a *glorified universe* of indescribable qualities.

Space being a perception *a priori* cannot be determined wholly by purely objective methods. The yard-stick, the telescope and the light-year are objects which belong exclusively to the phenomenal and with them alone never can we arrive at a true conception of the nature of space. We can no more demonstrate the nature of space by the use of objective instruments and movements than we can measure the spirit in a balance. Certainly, then, it cannot be hoped that by taking the measurement of space-distances in light-years, or studying the nature of material bodies, we shall be able to fathom this most objectively incomprehensible and ineluctable thing which we call space. It is such that every Thinker must, in his own inner consciousness, come into the realization of that awfully mysterious something which is the nature of space both as to existence and extent by his own subjective efforts unaided, uncharted and alone. When we measure, weigh, apportion and otherwise try to determine a thing we are dealing with the phenomenal which is no

more the thing itself than a shadow is the object which casts it.

What does it matter that metageometricians shall be able to demonstrate that space exhibits itself to the senses in a four- or n -dimensional manner? Granting that they may be able to do this, if merely for the sake of the discussion, when they have finished, it will not be space that they have determined, but the phenomena of space, its arborescence, while space itself remain indeterminate and unapproachable by phenomenal methods. If there are curvature, manifoldness and n -dimensionality these are not properties of space, but of intellectuality in its cultured state and when it is, therefore, removed from the native state of conception. Scientists may be able to weigh the human body, count every cell, name and describe every nerve, muscle and fiber; they may even be able to know it in every conceivable part and from every physical angle and relationship, and yet know nothing of the life which vitalizes that body and makes it appear the phenomenal thing that it is. So it is not by instruments which man may devise that we shall be able to determine the true nature and purpose of space. We must adopt other methods and means and assume other angles of approach than the purely objective in order to comprehend space which, being the sole inherent aspect of consciousness, can be understood best by applying the measures which the latter provides for its understanding. It would appear, therefore, that the best study of space is the consciousness itself, knowing which we shall know space.

The universum of space, including the phenomenal

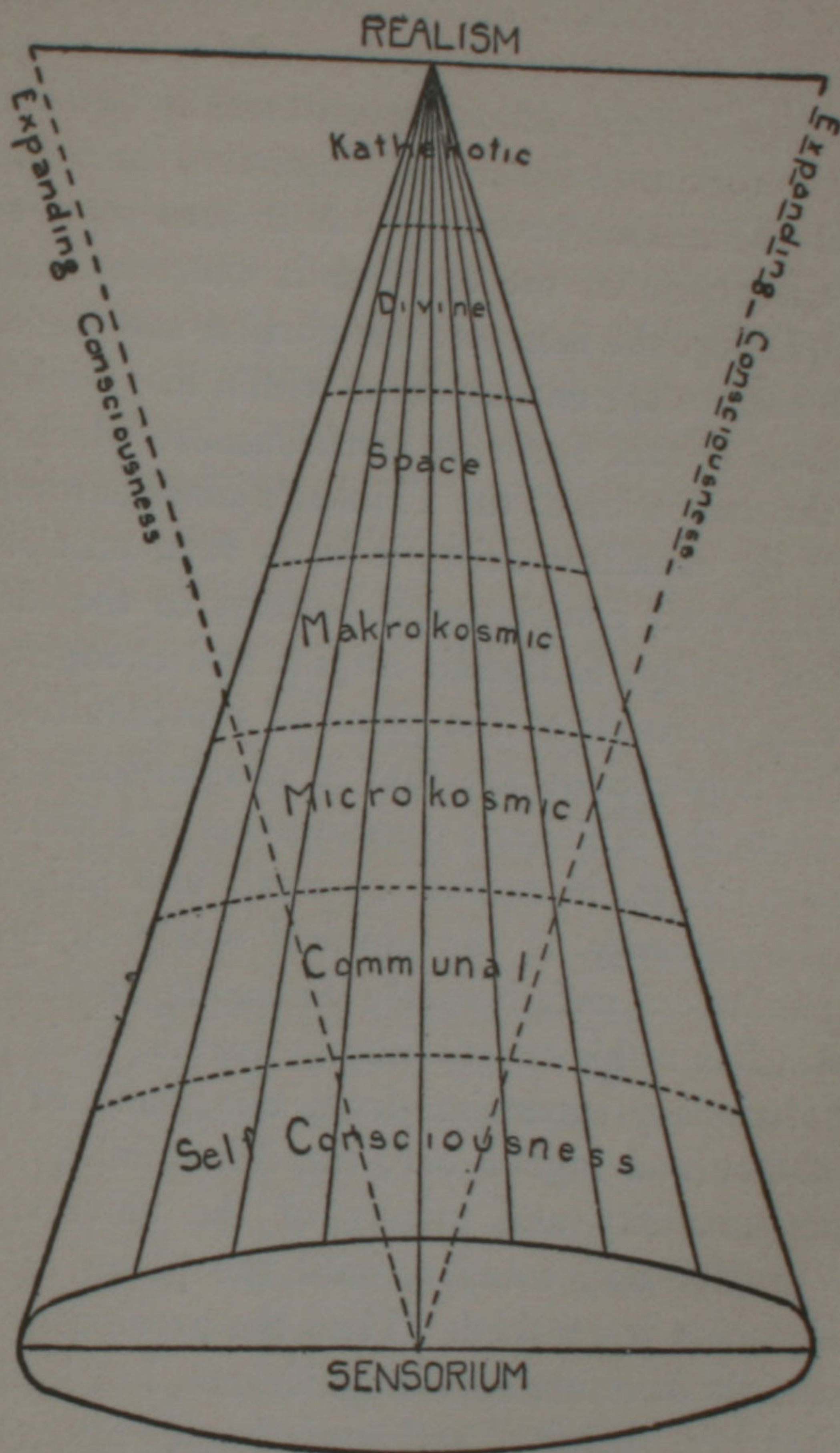
universe, and its relation to consciousness may be likened to a conical funnel whose base represents the phenomenal world of the senses and whose apex or smallest point represents ultimate reality.

In Figure 20, we have endeavored to symbolize graphically this conception of space. The base marked "Sensorium" represents the sensible world. That marked "Realism" symbolizes the ultimate plane of reality, the inner essence of the world, the plane of "things-in-themselves."

The cone arising from the base "sensorium" symbolizes the objective world as compared with consciousness; the subverted cone, with apex in the sensorium, represents the evolving human consciousness.

The successive bases have the following symbology: Self-consciousness, Communal Consciousness, Mikrocosmic Consciousness, Makrokosmic or Universal Consciousness, the Plane of the Space-Mind Consciousness, Divine Consciousness, Kathekotic Consciousness, or the Plane of Final Union with the Manifest Logos.

Self-consciousness is that form of consciousness which enables the ego to become aware of himself as distinguished from other selves or the Not-self; the Omnipsychic or Communal Consciousness is that form of consciousness from which arises the realization by the Thinker of his oneness with all other thinkers and with others forms of life. Mikrocosmic consciousness denotes a still higher form of consciousness, as that which enables the Thinker to become conscious of his living identity with the life of the world or the planet on which he lives. It represents a stage in the expansion of consciousness when it becomes one with the consciousness of the planet upon which it may



[FIG. 20.—Kosmos and Consciousness

be functioning. Makrokosmic consciousness accomplishes the awareness of the Thinker's unity with the life of the kosmos or universe. The space-mind and the consciousness which constitutes it enable the Thinker to comprehend the originality and the terminality of kosmic processes. It is archetypal so far as the life-cycle of the universe is concerned because the beginning, the intermediate portion and the ending of the kosmos are encompassed within it. Divine consciousness is that form of consciousness which arises upon the unification of the Thinker's consciousness with that of the manifest deity; it is, in fact, omniscience. The kathekotic consciousness belongs to the ultimate plane of reality; to kosmic origins and chaogeny, and therefore, pertains to the plane of non-manifestation.

The implications are that in comparison with the sensorium, the Thinker's consciousness is a mere point in space. It is, in reality, so small and insignificant that the extensity of the physical world or universe seems unlimited, unfathomable in meaning and infinite in extent. But as his consciousness expands, as it passes, in evolutionary succession from one plane of reality to another and higher one, the illimitability, the incomprehensibility and infinity of the universe grow ever smaller and smaller, until the plane of divine consciousness is reached. Then the previously incomprehensible dwindles into insignificance, lost in the real illimitability, infinity and unfathomability of consciousness itself. Kosmic psychogenesis, as exhibited and specialized for the purposes of the evolution of the Thinker, can have no other destiny than the flowering forth as the *ne plus ultra* of manifestation which

is nothing short of unification with the highest form of consciousness existent in the kosmos.

It is not to be considered really that the scope of space is diminished but that the growing, expanding consciousness of the Thinker will so reduce the relative extension of it that illimitability will be swallowed up in its extensity. Consciousness, in becoming infinite in comprehension, annihilates the imaginary infinity of space. Accordingly, that which now appears to be beyond mental encompassment undergoes a corresponding diminution in every respect as the consciousness expands and becomes more comprehensive. *The mystery of space decreases as the scope of consciousness increases.* As the Thinker's consciousness expands the extensity of the manifested universe decreases. Thus the mystery of every aspect of kosmic life lessens, and fades away, as the intimacy of our knowledge concerning it becomes more and more complete. There is no mystery where knowledge is. Mysteriousness is a symbol of ignorance or unconsciousness, and that which we do not understand acts as a Flaming Sword keeping the way of the Temple of Reality lest ignorance break in and despoil the treasures thereof.

Figure 21 is a graph showing a sectional view of consciousness on all planes represented as seven concentric circles. This describes the analogous enveilment of the consciousness when it ensouls a physical body or when bound to the purely objective world of the senses. The overcoming of the barriers of reality, represented by the circumscribing circles is the work of the Thinker who is forever seeking to expand and to know. For only at its center, as symbolized here, is the consciousness at-one with the highest aspect of

kosmic consciousness and there alone is the mystery of space despoiled of its habiliments.

Accordingly, as consciousness or the Thinker is more and more divested of carnal barriers and illusions there develops a gradual recognition of the unitariness of spatial extent and magnitude; there arises

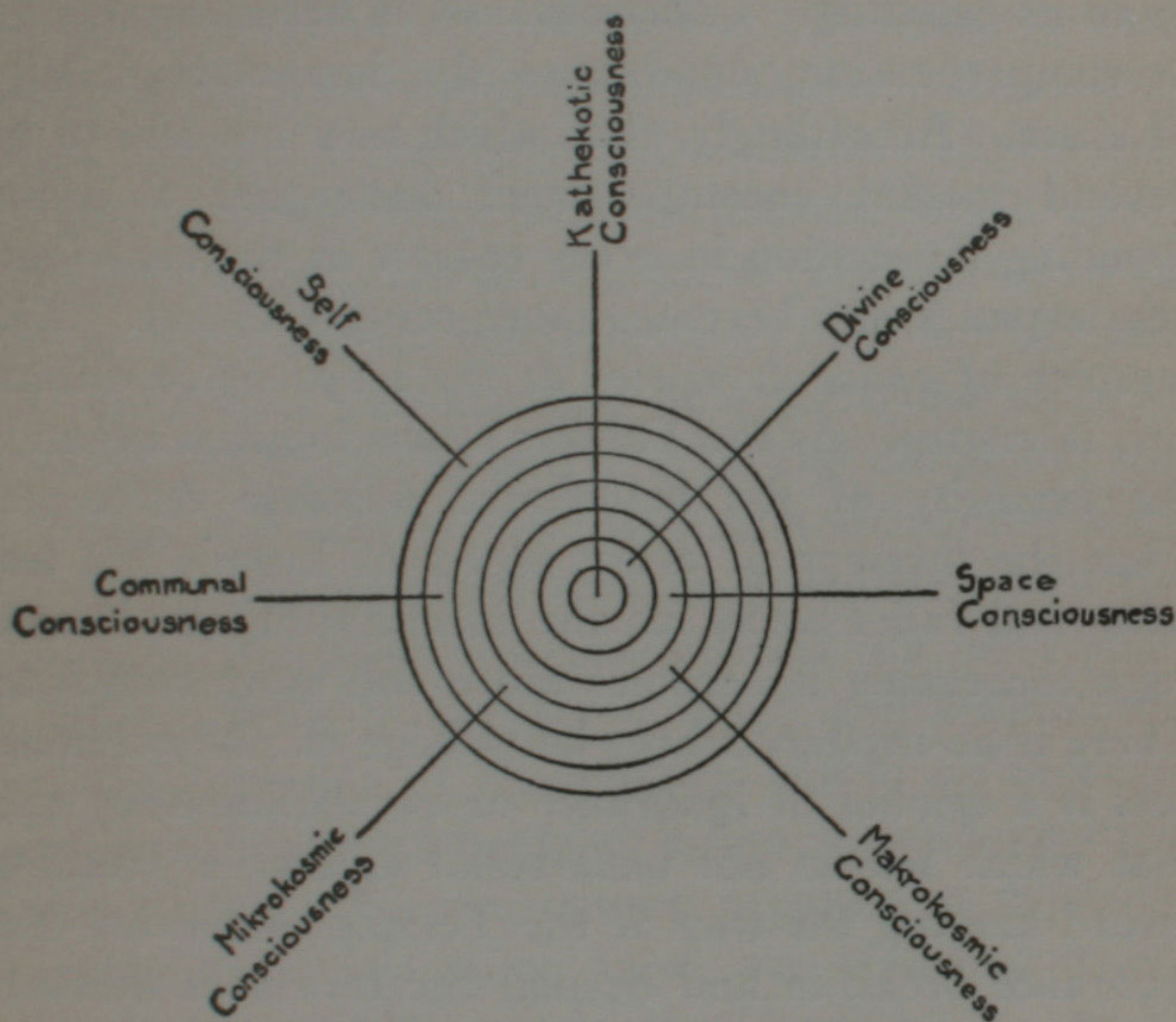


FIG. 21.—Septenary Enveilment of Consciousness

the certain knowledge that space has but one dimension and that dimension is sheer *extension*. The Thinker's sphere of awareness is represented as if it begins as a point in space and develops into a line which divides into two lines, the boundaries of the space cones. Thus it may be perceived that the ancients had a similar conception in mind when they symbolized kosmogogenesis with the dot (.), the line, and the circle with

diameter inscribed, which together represent the universe in manifestation.

We realize the impossibility of adequately depicting the full significance of the inverse ratio existing between the extensity of space and the increscent inclusivity of consciousness by means of graphs; for neither words nor diagrams can portray the scope and meaning of the conception in its entirety. Yet they aid the intellect to grasp a ray of light, an intimation of what the Thinker sees and understands interiorly.

In this connection it is interesting to note the function of the ideal in the evolution and expansion of consciousness. The ideal has no perceptual value; it has no status in the world of the senses. It is unapproachable either in thought or action, and therefore, lies beyond the grasp of both the intellectuality and the vitality. It is indescribable, inconceptible and searchless; for the moment that we describe, define, or approach the ideal, either intellectually or vitally, in that moment it ceases to be ideal, but actual. It flees from even the slightest approach; it never remains the same; it cannot be attained, at least its attainment causes it to lose its idealty. It is then no longer the ideal. It is like an *ignis fatuus*; the closer we come to it the farther away it recedes. It hangs suspended before the mind like the luscious grapes which hung before the mouth of the hungry Tantalus. As the grapes and the water receded from his reach at every effort he made to seize them so the ideal remains eternally unseizable and unattainable. Whatever, therefore, is in our thought processes, or in our knowledge, that may be said to be *ideal*, does not really exist. The ideal is a phantom growing out of the

nature and essence of the intellectuality. Its purpose is to lead merely the mind on; to allure it, to tantalize, and compel it to grow by exertion, by the struggle to attain, by the desire to overcome. In this respect, it serves well its function in the economy of intellectual evolution. It is a mysterious aspect of the original and eternal desire to live which is the kosmic *urge* present in all organized being and has its roots hidden in the divine purpose of creation.

Idealized constructions, then, are like Arabian feasts conjured up by a famishing mentality. They are like the dreams of a starving man in which he actualizes in phantom-stuff the choicest viands in abundant supply for his imaginary delectation. The mind that is satisfied never idealizes, never makes an idealized construction. It is only when an "aching void" is felt, when a longing for the realization of that which it has not arises within itself, when a feeling of distinct lack, a want, a hankering after something not in its reach, takes possession of the mind that it begins to idealize. That is why some minds are without ideals. It is because they are satisfied with what they have and can understand. They feel no hungering for better and grander things; they have no desire to understand the unknown and the mysterious; hence they do not idealize; they make no attempt to represent unto themselves a picture of that which is beyond them. Such minds are dormant, hibernant, asleep, unfeeling and unresponsive to the divine urge.

But the ideal is neither obtainable objectively nor subjectively, neither phenomenally nor really, so that when we come upon the ideal in our mode of think-

ing we have arrived not at a finality or end, but at that which is designed to lead us on to something higher, to nobler accomplishments and more extensive conquests. When we have devised idealized constructions, therefore, we should not therewith be content but should scrutinize them, examine and study them for their implications; for thereby we may discover the path and the guide-posts to a new domain, a new ideal, following which we shall, in time, come to a point in our search for the real where the fluxional is at a minimum; we shall reach that something which will admit of no further struggle—the last chasm between the phenomenal and the real—and standing on the bridge, consciousness, which engages the twain, shall have a complete view of that Sacred and Imperishable Land of Kosmic Realism where like a fleeting cloud of sheerest vapor shall be seen the phantom-ideal deliquescing and disappearing in the cold, thin air of the real and the eternal.

Since space is judged to be infinite by the intellect occluded in such clouds of illusion and hampered by such constrictive bonds of limitations, as it now endures, we have no right to conclude that the concept of infinity would still linger before the mind's eyes when the illusionary veil is removed; in fact, there is ample reason to believe, nay for the assertion, that the recession of the veil will reveal just the opposite of this illusion, namely that space is finite, and even *bounded* by the fringe of chaogenetic disorderliness. Either we perceive the real or we do not; either the pure *thingness* of all objects can be perceived or it cannot be perceived. If not, granting that there is such a thing as the real, it must be within the ultimate

range of conceivability. It also seems reasonable that realism exists somewhere, and if so, must be sought in a direction inverse to that in which we find the phenomenal and the approach thereto must necessarily be gradual, continuous and direct and not by abrupt breaks, by twists and turns. The phenomenal must lie at the terminus of the real, and *vice versa*. So that by retracing the path blazed out by the real in coming to phenomenalization we shall perhaps find that which casts our shadowy world, just as by tracing a shadow in a direction inverse to that in which it extends we may find the object which projects it.

It is not out and beyond that we shall find the end of space; it is not by counting tens of thousands of light-years that the supposed limits of space shall be attained. The path of search must project in an opposite direction—not star-ward but Thinker-ward, toward the subtle habitation of the consciousness itself. We err greatly when we think that by measuring distances we shall encompass space; for that which we measure and determine is but the clouds caused by the vapor of reality. It is, therefore, not without, but within, in an inverse direction that the search must proceed. Going back over the life-stream, beginning where it strikes against the shores of solid objectivity, deeper and deeper still, past the innermost mile-stone of the self-consciousness, back into the very heart of the imperturbable interior of being where the Thinker's castle opens its doors to the Great Kosmic Self, from that open door-way we may step out into that great mystery of space—limited, yet not limited, multi-dimensioned, and yet having only one dimension, veritably real and fundamental, the Father-Mother of

all phenomena. Here the great mystery of mysteries is revealed as the citadel of the universal and the ultimate real. In this citadel, the plane of kosmic consciousness, space loses its spaciousness and time its timeliness, diversity its multiplicity and oneness alone reigns supreme.

But the movement towards the center and circumference of space, after this manner, requires aid neither from the notion of space-curvature nor that of the space-manifold, except, indeed, only in so far as a state of consciousness or a degree of realism may be said to be a tridimensional manifold. The feeling that space is single-pointed, and yet ubiquitously centered, has been indulged by mathematicians and others in a more or less modified form; but they have imagined it in the terms of an indefinite proceeding outward until in some manner unaccountable alike to all we come back to the point of origin. It has been expressed by PICKERING when he says that if we go far enough east we shall arrive at the west; far enough north we shall come to the south; far enough into the zenith we shall come to the nadir. But this conception is based upon a notion of space which is the exclusive result of mathematical determinations and subject to all the restrictions of mathetic rigorlessness. It requires that we shall allow space to be curved. This we decline to do for the reason that it is both unnecessary and contrary to the most fundamental affirmations of the *a priori* faculty of the Thinker's cognitive apparatus. It would seem to be necessary only that we should extend our consciousness backward, revert it into the direction whence life came to find that which we seek. By extension of conscious-

ness is meant the ability to function consciously upon the various superkosmic spheres or planes just as we do on the physical. Yet it should be quite as easy to devise an idealized construction which would imaginify the results of this ingressive movement of the consciousness as to represent the results of a progressive outward movement star-ward. Having done so the examination of them could be conducted along lines similar to those followed in the scrutiny of objective results.

What would it mean to the Thinker if he were able to identify his consciousness with the ether in all its varying degrees; what would it mean if he were able to identify his consciousness with life and with the pure mind-matter of the kosmos; and lastly, with the spiritual essence of the universe? What if his various vehicles of awareness were available for his purposes of cognition? What, indeed, if he could traverse consciously the entire gamut of realism and consciousness from man to the divine consciousness? Does it not appear reasonable that as he assumed each of these various vestures of consciousness, in succession, he would gradually and finally, come to a full understanding of reality itself? It seems so. This view is even more cogent when it is considered that the limitations, and consequent obscuration of consciousness are proportional to the number of vehicles or barriers through which the Thinker is required to act in contacting the phenomenal universe. Common sense suggests that freedom of motility is determined by the presence or absence (more particularly the latter) of bonds and barriers; that the less the number of such

barriers the greater the scope of motility and consequently greater the knowledge.

PLATO evidently had this in mind when he imagined the life of men spent in cave-walled prisons in which their bodies were so fixed that they were compelled to sit in one prescribed position, and therefore, be unable to see anything except the shadows of persons or objects as they passed by. He conceived that men thus conditioned would, in time, suffer the diminution of their scope of consciousness to such an extent as to reduce it to identification with the shadows on the walls. Their consciousness would be mere shadow-consciousnesses the entire data of which would be shadowgraphs. So that for them the only reality would be the shadows which they constantly saw. A similar thing really happens to man's consciousness limited to the plane of the objective world. Things which are not objective do not appear as real to him, if they do appear at all. It is not that there are no other realities than those which appear to the egopsychic consciousness or that fall within its scope; but that this form of consciousness is incompetent to judge of the nature and appearance of those realities which do not answer to the limitations under which it exists. And so, with men whose data of consciousness or whose outlook upon the world of facts, or rather life, are confined to the narrow bounds of mathematic rigor and exclusiveness, there may appear to exist no realities which may not be defined in the terms of mathematics. Similarly, to the empiricist, used to measurements of magnitudes, weights, and rates of motion, there may also appear to be no realities which are not amenable to the mold of his empirical con-

trivances—the balance, the chromatic and the scalpel. All of these are shadow men constricted to the metes and bounds of shadows which they observe only because they are ignorant of the realities which lie without their plane.

Life has so many ways of exhibiting its remains to the intellect; and these remains have so many facets or viewpoints from which they may be studied, that nothing short of a panoramic view of all the modes of exhibition and of all the facets and angles of appearances will suffice to present a trustworthy and comprehensive view of the whole. Then, life itself is so illusive, so unseizable by the intellect that the testimony of all investigators are required to summarize its modes of appearance. And, therefore, eventual contentment shall be secured only when the mass of diverse testimonies is reduced to the lowest common divisor, and for this purpose the operations of every class of investigators must be viewed as the work of specialists upon separate phases, facets and angles of life's remains.

And so it is manifestly absurd for the empiricists, by taking note of the dimension, extent, quality and character of the shadows, or one single class of angles, to hope to predicate any trustworthy judgments about either the realities which cast the shadows or underlie the angles; because whatever notion or conception they may be able to gain must of necessity be merely fragmentary and entirely inadequate. Despite this fact, however, we still have the spectacle of men who, studying the sensible universum of space-content, endeavor either to make it appear as a finality in itself, or that the world of the real must necessarily be con-

formable to the precise standards which they arbitrarily set up in their examination of the objective world. It can be said with assurance that we shall never be able even so much as to approach a true understanding of the unseen, real world until we shall have changed our mental attitude towards it and ceased to expect that it shall necessarily be fashioned and ordered in exactly the same way as the world of our senses, or that it shall be understood by applying the same methods of procedure as those which we use in our examination of the phenomenal, sensuous world. It is a matter of logical necessity that, as there are no senses which can respond to the real, as there are no organs which vibrate in accord with the rates of vibration of the real, there can be no reasonable hope of understanding it by means of sensuous contrivances and standards.

Let the consciousness, therefore, be turned not outward, but *inward* where is situated the temple of divine life; let there be taken away the outward sheaths which enshrine the pure intelligence of the Thinker; let him grow and expand his sphere of awareness; let there be an exploration of the abysmal deeps of mind, of life and consciousness; for buried deeply in man's own inner nature is the answer to all queries which may vex his impuissant intellectuality.

CHAPTER IX

METAGEOMETRICAL NEAR-TRUTHS

Realism is Psychological and Vital—The Impermanence of Facts—On the Tendency of the Intellect to Fragmentate—The Intellect and Logic—The Passage of Space, the Kosmometer and Zoometer, Instruments for the Measurement of the Passage of Space and the Flow of Life—The Disposal of Life and the Power to Create—Space a Dynamic, Creative Process—Numbers and Kosmogony—The Kosmic Significance of the Circle and the Pi-Proportion—Mechanical Tendency of the Intellect and its Inaptitude for the Understanding of Life—The Criterion of Truth.

KOSMIC truth has many facets. The rays of light which we see darting from its surface do not always come from the core. Often they are reflections of rays whose light stops short at the surface; and these, in turn, are reflections of deeper realities. Thus the reflected light may be traced to its source by following the lead of external reflections. It is now known that moonlight, and perhaps, in many cases, starlight, are reflections of sunlight, if not of our sun, some other in the universe. But it is only at certain times and under certain conditions that we can see the sun which is the source of the other kinds of light. The stars which owe their light to suns are so many facets of sunlight. The moon is a facet of sunlight also. Facts are facets of truth. They are

so many faces of eternal truth. They represent the many ways reality exhibits itself, or rather its effects, to the consciousness. When we, therefore, become aware of facts we have not in virtue thereof become aware of the reality which produces the facts. We have come to know only something of the termini of realism while the complexities and internal ramifications which lie between realism itself and these termini altogether elude our cognition.

Let us examine briefly an icosahedron, for instance. An icosahedron is a figure comprehended under twenty equal sides. These various sides are so many faces by means of which the figure presents itself to the consciousness. These faces, however, are not the real object. The figure may be examined by viewing it from any one of its sides; yet, by simply examining a single face, or any number of faces, less the total number, we arrive at no satisfactory knowledge of the magnitude or its substance. We must first become conscious of all the faces, holding them in mind as a composite picture, before we can even begin to have anything like a complete notion of the icosahedron. Then by continuing the examination we may find that the magnitude is composed of wood fiber or stone or metal, as the case may be. In this way we might carry the examination to indefinite limits and finally arrive at a very comprehensive knowledge of the icosahedron and yet be unaware altogether of the forces which have been at work in the production of the magnitude or of the reality which lies back of it.

Realism is psychological and vital. In essence it is mind, spirit, life. Yet these three are one. Mind

is the outward vehicle of life; spirit is the form or the interior vehicle which life assumes in order to express itself. Realism, then, is life. Is the logician dealing with reality when he collects and coördinates the various modes of interpretation by which we learn to understand the symbolism of life? Obviously not. The data of logic are simply a collection of rules for interpreting concepts. It is a compendium of indices for the Book of Life. It is no more the book itself than a table of contents is a book. But logic occupies about the same category as does an index to a volume. A book, however, is more than its conventional contents. It is the thought that is symbolized therein. The book of life, accordingly, is the sum total of life's expressions; but it is not life itself. That is the subtle, evasive something which the contents of the book of life symbolize. Nature, both in her palpable and impalpable aspects, may be said to be the book of life wherein are recorded the movements, the expressions, and the diacritics of life. The whole is a magnitude of many facets (little faces). We shall have to know all the faces before we can say that we have a comprehensive knowledge of nature. For so long as we have only a fragmentary knowledge of the whole, so long even as we have merely a superficial knowledge of any aspect of nature, just so long will our knowledge be in vain. Just as it frequently happens that, on account of the partial view of things, we are led to make incorrect judgments concerning them, so when we come to make assertions about life or nature in general, we are apt to fall into the error of rendering judgments upon insufficient data. And it is not at all likely that judgments thus arrived at

can possess true validity because it may happen, and undoubtedly does always so happen under the present limitations of human knowledge, that the very elements which are ignored or neglected in forming a judgment possess enough of virtue to alter the intrinsic value of determinations based upon otherwise insufficient data. Hence it develops not infrequently that our judgments repeatedly have to be changed in proportion as our data are made more and more comprehensive. Men searching eagerly for the truth sometimes allow themselves to be carried away by the enthusiasm of the moment which arises upon the discovery of a new facet of truth; but if all searchers were to bear in mind the fact that reality presents itself to consciousness in myriad ways and that there are innumerable facets all leading eventually back to the source of all they not so easily would be induced to jump to the conclusion that they had covered the entire ground. For when we have discovered a million facts, or many millions of them, about nature we may say that we have only merely begun and that what we have found is not to be compared with the totality even of the directly observable phases of nature.

Logic, therefore, deals with the symbolism existing between and among facets of truth, and not directly with truth itself, although the conclusions reached by the logicians may be true enough from an intrinsic standpoint. Logic is not truth, however; it is merely the consistence of relations and inter-relations between facts and among groups of facts. Truth is not established by logic; it stands in no need of the light of logic for its revelation; indeed, more apt than

not is logic to obscure truth. Truth is its own proof; it is self-evident. Logic is a mere modeler of facts; it is static, immobile, fixed. All truly logical processes need a starting point, a foundation, a premise, a base. Truth, being eternal, mobile, dynamic, vital, needs no starting point; needs no foundation because it is itself fundamental; it requires no premise because no premise is comprehensive enough to encompass it. There is only one way of arriving at truth and that is not to arrive at all—just to recognize it without procedure. The fact that facts are, and the fact of their relations and inter-relations, their sequence and implications, can be arrived at only by logical processes. Life, in its passage through the universum of spatiality, carefully diacriticizes between the realm of facts and the domain of truth, marking each off from the other by unmistakable signs and barriers. Truth is perceived as an axiomatic, self-evident principle and no amount of logic could prove or establish its verity. Facts are intellectual creatures; truth is intuitional, vital. The intellect conceives the consistence of facts while the intuition recognizes truth—is truth, and therefore, follows in the wake of life as consciousness.

There is no permanence in facts and the intellectual recognition of their consistence. The discovery of a single new fact may destroy the consistence of a whole mass of previously correlated facts. Thus is revealed the miracle power of logic over facts. It can take a mass of facts, related or unrelated, mold them into hypotheses, endow them with a sort of interior consistency, and make these hypotheses take the posture of truth. Hence logic is often an effective mask which the intellect commonly imposes upon its

material; but it does so instinctively and can no more escape the rigorous compulsion of this instinctive functioning than water can escape its liquidity. Wherefore, we conclude that true permanence abides alone in truth because truth is duration itself. For the foundations of the whole structure of facts in religion, science, art and philosophy which man has toilsomely built up in the last million years might easily be destroyed or overturned by the discovery of some great fact or by appreciating the true value of truth. Let us suppose it should suddenly be realized by men that they are really and truly gods capable of creating and possessing all the other virtues, powers and capabilities which we are accustomed to impute to supreme divinity; and suppose that the fact of their omnipotence and divine omniscience always had been obvious but that men were so engaged upon details and the non-essentials of life and matter that they had not noticed nor realized it before, would not this realization make a vast difference in the character of our knowledge and the attitude which we would necessarily assume thereafter towards matter, life and the problems which they present? Would not it completely revolutionize our arts, our sciences and our philosophies? How much, then, of the facts of these would be left when the light of omniscience had been turned on—when truth itself could be perceived and interiorly realized? Not much, to be sure. We should undoubtedly have to dispense with the entirety of our fact-mass, for it should then be entirely useless and meaningless in the light of the resplendent omniscience of truth. As at present constituted consciousness is focused upon the material plane for the purposes of superficial ob-

servances. But if the focus of consciousness should be changed so as to reveal conditions upon what must be a higher and more interior level, the aspect of things would be entirely changed and the whole of our theory of knowledge would have to be reconstituted. It is conceivable, yea obvious, that the stern reality of being is far removed into the Great Interior of that which is; and there is a point in the path to the interiority of being where there is no illusion, no appearance, indeed, nothing but the cold, illuminating body of reality itself. It must appear also that along the journey interior-ward there are many apparent levels or planes, each of which requires a new focus. It is unreasonable, then, to suppose that the conclusions arrived at as a result of purely logical processes, confined to the lowest levels of reality, are pertinent and valid for the entirety of realism which is neither of mathematical nor logical import. For instance, if we take the purely axiomatic assertion: x equals x , the intellect is at once certain that this is so, and cannot be otherwise, and yet a proposition of this kind is purely conceptual, conventional and arbitrary. x may also equal 1, 2, 3, 4, or any other quantity. Then, if each x in the above equation be replaced, by say, a horse, there immediately arises a difficulty. For it is not possible to find two horses which are in all respects mutually equal. So that as soon as we pass from the conceptual into the actual, whether on the side of objective reality or that of absolute reality, the validity of the axiom is immediately exposed to serious questioning. The truth of the matter is that on both sides of the conceptual it is always found that there is a variance from the standards set up by the

conceptual, this variance being more marked on the side nearest to absolute reality than on the side of objectivism. Objectively, the conformity of the sensible with the conceptual is of such approximation as to lend trustworthy utility to the conceptual in its application to the sensuous. Thus by simply eliminating the vital factors from our equations we are enabled to proceed in a reasonably safe manner with our judgments. Really, however, no such approximate congruence can be found; for on the side of reality we are dealing with an indivisible something—something that is eternally and absolutely unitary in its constitution while when we transfer the scene of our observations to the objective world we discover a contrary situation. Here we are everywhere beset by diversities, multiplicities and dissimilarities. This is so because the intellect naturally tends toward the objective where it finds a most comfortable atmosphere for its operations. The conceptual is related to the objective as a train of cars is related to the railway. That is to say, the constitution of the intellect is such that it finds its most facile expression in the objective world and is about as comfortable in the domain of realism as the same train of cars would be on the ocean.

The intellectuality is designed to deal with facets of truth; it is made to manipulate segments, parts, fractions, and cannot chart its way through a continuum such as reality. Being constitutionally a conventionality of the Thinker's own contrivance, and arising out of the subtle adaptation of his vehicles to the environment afforded by the sensuous world, it can only find congruence in that conventionality which

is the instrumentality of a higher intellectuality expressed in a diversity of forms, into which reality divides itself for manifestation. The human intellect is, therefore, the bridge over which is made the passage from the individual consciousness to the All-Consciousness; simultaneously, the medium whereby the physics of the brain are converted into the psychics of unconsciousness. It may be likened to a pair of specially constructed tongs which are so formed as to fit exactly the objects which a higher intellectuality has made. It is without the province of the intellect to take note of what intervenes between physics and psychics; it is always oblivious of interstices while taking cognizance of objects or things. In this respect, the intellect is much like a steerage passenger on board an ocean liner who sees only his port of departure and port of arrival, knowing nothing in the meantime of what happens during the voyage, nothing of what the other passengers on the upper decks may experience and taking no part in any of the passing show until he lands. So that the passage of the intellect from fact to fact is an altogether uninteresting voyage; it may as well be made unconsciously, and to all intents and purposes, is so made.

Accordingly, the advocates of n -dimensionality find it quite impossible to predicate anything whatsoever of the passage, say, from tridimensionality to quartodimensionality. They find themselves at ease in tridimensionality and have even contrived to find pleasant environs in the four-space having made therein such idealized constructions as will afford ample hospitality to the intellect. But the questions as to how the passage from the three-space to the

four-space is to be made and how the intellect shall demean itself during the passage have been completely ignored and, therefore, left unanswered. What, then, shall be said of an explorer who says he has found a new land and yet can give no intimation as to how one may proceed to arrive at the new land, what changes are to be made en route, nor the slightest suggestion as to the direction one should take in setting out for it? It is not likely that the report of such an explorer, in practical life, would be taken seriously; and yet, there are those who, relying utterly upon similar reports made by certain enthusiastic analysts, dare to place credence in their asseverations. Not only have they given wide credence to these reports, but have, indeed, sought to rehabilitate their own territory in accordance with the strange descriptions given by unhappy analytical explorers. Now the question of greatest concern, granting for the nonce that there is such a domain as hyperspace, is the *passage*. How shall we make the passage? Or, is the passage possible? In vain do we interrogate the analyst; for he does not know, nor does he confess to know. Evidently it is impossible for him to know by means of the intellect alone; for the intellect not being fitted to take cognizance of the "passage," but only the starts and stops, has no aptitude for such questions. Hence, what seems to be the most important phase of the entire question will have to remain utterly inscrutable until the intellect nourished by the intuition shall be aroused from its lethargy and brought to a certain high point of illumination where it, too, may take note of the passage.

Space is the path which life makes in its down-

ward sweep through all the stages of pyknosis or kosmic condensation by virtue of which it accomplishes the engenderment of materiality as also the path marked out by it in its upward swing whereby it accomplishes the spiritualization of matter. It is the kosmic order which life establishes by means of its outgoings and incomings. When we look out into space we perceive that which is a dynamic appearance of life itself, and not a pure form. Nothing that is a pure form can exist in nature and in as much as space is not only indissoluble from nature but partakes of its very essence it cannot be said to be a pure form. The intellect, however, prone to follow the grooves laid out by pure logic, never fails to seek to make everything that it contacts conform to these logical necessities. But, if the analyst were to make careful discrimination as to the respective categories—that into which life falls and that in which the intellect is forced by its nature to proceed—he not so easily would be led into the fault of attempting to shape realities upon models which being strictly conventional were not meant for such uses. But neither the logician nor the mathematician can be condemned for such generosity if such condemnation were justifiable. For they everywhere and at all times insist upon *realizing* abstractions and *abstractionizing* realities, and they do this with an *insouciance* that is at times surprising. Yet it is in this very vagary that is discovered the true nature of the intellect. There is a sort of dual tendence observed in the method of the intellect's operation. A polarity is maintained throughout: the abstractive and the concretionary. It vacillates continually between the abstract and the

concrete and no sooner has it found a concrete than it begins to set up an abstract for it; and *vice versa*—as soon as it is has constructed an abstract it immediately seeks either its concrete or sets out to hew some other concrete into such shape as will fit it. And between these two extremes numerous excuses are found for exercising this peculiar characteristic, and that too, without regard to consequences. It would seem that the intellect, in thus functioning, was really engaged at a sort of sensuous play out of which it derived an intense and not altogether unselfish pleasure.

Of course, it must be granted that diversity has its specific and withal necessary uses in that it affords a field for the operation of human intellectuality and represents the adaptation of the kosmic intellect to the human for the purposes of evolution. This adaptation while necessary for the intellectual development is, however, not an end in itself. It is merely a means to a higher purpose. In fact, if we regard materiality as a deposit of life, carried by it as a kind of impedimentum, and consciousness, which is life, as being identical with the intellectuality which makes these adaptations, there should be no grounds for the statement that the one is adaptable to the other at all. And as this is really the view which we assume it would perhaps be more strict to regard the adaptation as subsisting between the human intellect and materiality both of which having been constructed by kosmic intellectuality. Pursuant to the diversity of uses to which materiality lends itself there arises in the intellect a supreme tendency to segment, to break up into separate parts, to multiply and diversify. It

is not content unless it is at this favorite and natural pastime. It delights in taking a whole and dividing it into innumerable parts. This it will do again and again; because all its muscles, sinews and nerves are molded in that mold and can no more cease in their tendency to fragmentation than can the muscles of a dancing mouse cease in their circular twirling of the mouse's body. Yet, in this it is but creating a well-nigh endless task for itself—which task must be performed to the uttermost. But in its performance, that is, in the intellect's complete understanding of the diversity of parts, in the knowledge of their relations and inter-relations and in their synthesis, it may arrive at that one ineluctable something which is called *unity*. And so doing, become ultimately free.

In view of the foregoing, it is not surprising that the intellect should have, finally, fallen upon the notion of n -dimensionality. It has come to that as naturally as it has performed its most common task. Left alone and unhampered in its movements, it has simply followed the lead of the Great Highway through the domain of materiality. And now it has arrived at a stage where it thinks it has succeeded in fractionalizing space. Time has long ago yielded to fragmentation, been divided into minute parts and each part carefully measured. Space, not having a visible indicator like time to denote its passage or parts, suffered a long and tedious delay before it could boast of a measurer. As the sun-dial measured time in the past and became the forerunner of the modern clock so n -dimensionality measures space for the mathematician. What more practical instrument for this purpose may yet be devised is not ours to prophesy; yet it is

not to be despaired of that some one shall find a suitable means for this purpose. Seriously, however, it is not without possibility that should some subtle mind devise an instrument for marking the passage of space as we have for denoting the passage of time a great stride forward would be accomplished in the evolution of the human intellect. For the general outcome of the intellect's attention being turned to the *passage of space* would undoubtedly be to recognize not only its dynamism but its *becoming-ness*, as a process of kosmogogenesis. Because such an instrument would have to be so constructed as to take note of the movement of life, and for this reason, it would have to be extremely sensitive necessarily and keyed to the subtleties of vitality and not to materiality. Mathematics shall have failed utterly in the utilitarian aspects of this phase of its latest diversion if it do not justify its claims by crowning its work in the field of hyperspace with a "Kosmometer," an instrument devised for the measurement of the movement of space or a "Zoometer," an instrument devised for the measurement of the passage of life. We should like to encourage inventive minds to turn their attention life-ward and space-ward with the end in view of constructing such an instrument. When once we have learned accurately to measure life we shall then be able to dispose of it—to *create*. It is not doubted that if ever humanity is to arrive at that point in its evolution where it can understand life; if ever it is to attain unto the supreme mastery both of vitality and materiality and to come to the ultimate attainment of divine consciousness (all of which we confidently believe to be in store for humanity) it must

be accomplished after this manner: first, by syncretizing materiality with vitality, and then, by intuitionally recognizing the truth of the implications of the syncretism.

The history of consciousness in the human family is identical with the history of man's conquest over matter and physical forces. And this is clearly indicated in the incidentals contingent upon the toilsome rise of the *genus homo* from the earliest caveman whose status denoted a comparatively negligible transcendence of material forces, to the present-day man who has gained a markedly notable conquest over these forces. Always consciousness seeks the means of adequately expressing itself in the sensible world. And to this end it engenders faculties, organs and processes in the bodily mechanism, and, in matter, devises instruments of application whereupon and wherewith it may test, analyze, combine and recombine the forces and materials it finds. The unlimited range of expressions lying open to the consciousness makes it necessary continually to devise higher and higher grades of appliances to meet its needs as it expands. It will not be gainsaid that the telescope has served actually to lay bare to the consciousness an immeasurable realm of knowledge nor that the microscope, turning its attention in an opposite direction, marvelously has enlarged and enriched our knowledge of the world about us. And similar declaration may be made anent almost every invention, discovery and conquest which man has made over natural phenomena. Thus, by externally applying mechanical implements to the subject of his consciousness, man has extended actually his consciousness, his

sphere of knowledge; has greatly enhanced its quality, and, in the process, has urged the intellect to endeavors that have wrought its present unequalled mastery of things. Nor have the spiritual aspects of our advance along these lines been the least notable. For these have enjoyed the essence of all that has been gained in the process and have, therefore, kept pace with the onward movement of the intellectual consciousness. But heretofore no advance has been made as a result of methodic or reflexive determinations. That is, men did not set out from the beginning, equipped with foreknowledge of what their efforts would bring, to develop the present quality of human consciousness. They simply worked on, their attention being absorbed by the problems that lay nearest and demanded earliest consideration. So the advance has come as a resultant of man's close application to his ever-present needs—shelter, clothing, food, protection and other preservative measures—and it has come naturally and inevitably and without prepense. Nevertheless, if man, knowing what to expect from the syncretization of matter and mind, after this fashion, should set out deliberately to accelerate the intensification, expansion and growth of his consciousness, there is no doubt but that the consequence would be most far-reaching and satisfactory.

But the path that leads to this grand consummation does not lie in the direction of diversity; it lies in the opposite direction. In vain, then, does the intellect fractionalize in the hope that by doing so it shall come to the solid substructure of life; in vain does the analyst segment space into any number of parts or orders; in vain does he ask how many and

how much; for by answering none of these queries will he find the satisfaction which he vaguely seeks.

If it be true that it is not by analysis but by synthesis that the true norm of life, and therefore, of reality shall be found it is futile to entertain serious hope of finding it in any other way. As a perisophism or near-truth, then, n -dimensionality takes foremost rank. And this is so for the reason that when we proceed in the direction of multiple dimensions, that is, one dimension piled upon another dimension or inserted between two others we are traveling in a direction which, the more we multiply our dimensions, leads us farther and farther away from the truth. This is a simple truism. If we take, for instance, a wooden ball and cut it up into four quarters, and divide each one of these quarters into eighths, into sixteenths, thirty-seconds, sixty-fourths, etc., indefinitely, we shall have a multiplicity of parts, each one unlike the original ball. But from no examination of the multipartite segments can we derive anything like an adequate conception of the original ball. Something, of course, can be learned, but not enough to enable the rendering of a correct judgment as to the nature, size, shape and general appearance of the ball. But this is precisely what happens when the analyst divides space into many dimensions. He cuts it up into n -dimensional parts and the more minutely he divides it into parts the more remote will each part be in its similarity to the original shape and form of space, and the farther away from the true conception of the nature of space he is led thereby.

Now, n -dimensionality or that phase of meta-geometry which regards space as being divisible into any

number of dimensions or systems of coördinates is a direct and inevitable product of that tendency of the intellect to individuate and to singularize phenomena. Biologically speaking, it is a peculiarity which harks back to the time when life was manifested through the cell-colony and when the individual cells began, because of increasing consciousness, to detach themselves from the colony and set out for themselves, and thus each intellect recapitulates in its *modus vivendi* the salient tendencies of phylogenesis. Let it suffice, then, to point out that this universal tendency to segment and fragmentate which rigorously characterizes intellectual operations upon every phenomenon with which it deals is a culmination of the primordial tendency among cells to divide, inasmuch as this phase of cell life must be the work of the kosmic intellect. The natural inference is that from the extreme of individualization there shall be a gradual turning, whether of the intellect *per se* or of the intellect joined to the intuition does not matter, towards that other extreme of *communalization*. And from this latter shall grow up, as one of the inevitable and ineluctable tendencies of the Thinker's consciousness a torrentious movement in human society towards coöperation, brotherhood, mutuality and union in everything. So that whereas in the past and at the present time the intellect has been developing under the dominant note of individuality it will then be coming gradually under another dominant note—*communality*. The result of this development will be the unification of all things, and instead of many dimensions of space, many measures of time, and a general diversification of all phenomena, we shall come to the only true notion of

these things and realize pragmatically the true value and extent of unity in the universe.

It is admitted that the intellect, in treating objects singly and dealing only with the starts and stops of a movement, is withal loyal to the kosmic order, design and purpose which have priorly characterized manifested phenomena by segmentation. And in this loyalty it has been following merely a natural lead which, while admitting of the widest development and experience, nevertheless at the same time beneficently obscures the underlying reality in order that in its adaptation to the sensuous world the intellect might have the greatest freedom for the development suited to the given stage of its evolution. But in thus admitting the natural congruence between the intellectuality and the phenomenal or sensuous we do not thereby unite with those who already believe that this kosmic agreement is the *ne plus ultra* of psychogenesis. On the other hand, it is maintained that this is merely a phase of psychogenesis which shall be outgrown in just the same measure as other phases have been outgrown. And notwithstanding the fact that judgments of the intellect with respect to inter-factual relations or the *ens* of facts themselves are as valid as its judicial determination of self-consciousness, no more and no less, we are, by the very rigor and exclusiveness of this logical necessity and inherent limitation, led to view the intellect's interpretation of phenomena as partial and fragmentary; for the reason that the necessitous confinement of its understanding and interpretative powers to fact-relations quite effectively inhibits the use of these powers for the contemplation of the deeper causative agencies which have operated to pro-

duce the phenomena. But it is apparent that just as the transmuted results of other phases of psychogenesis are now being utilized as a basis for the efficient operation of the intellect in the sensuous world, thereby enabling the attainment of a very high mastery over matter, so will the functional dynamism acquired by it in the pursuit and comprehension of diversity serve well when, in later days, it has acquired the power to deal directly with reality, to *create* and dispose of life just as the kosmic intellect has and is now using it in the execution of the infinite process of *becoming* through which creation is proceeding. It would seem that the necessary prerequisite to the development of any higher functional capability is that the intellect should be capable of disposing of innumerable details, indeed the totality of kosmic detail, before it can come wholly into the power and capacity to understand and manipulate life. Furthermore, it appears that the acquirement of this power quite necessarily has been delayed awaiting that time when, dominated by the intuition, the intellect shall have attained the requisite managerial ability for marshaling an exceedingly large number of details.

The supreme tendency of life is expression. And this expression, singularly enough, reaches its most perfect phenomenalization by means of that movement which results in the multiplication of forms. Despite the fact, therefore, that the comprehension of reality involves a gradual turning away from the exclusive occupation of organizing a multitude of separate and apparently unrelated facts to a monistic view which at once recognizes the unitariness and co-originality of all things, of life, mind and form, the intellect will need

the training and development which come from the mastery of diversity. It is, then, not difficult to perceive the wise utilitarianism of the present schematism of things as shown in the universal tendency in the intellect to devote itself exclusively to parts or segments of truth.

Whenever an individual intellectuality, on account of prolonged thought and the consequent inurement of the mind to higher and higher vibrations of the kosmic intellect, brings itself to such a high point of sensitiveness that it can receive so much as an intimation of some great truth, it begins to sense, in a more or less vague way, something of the substance and general tendence of the underlying reality of that which foreshadows its appearance. Then, confounded by the multiformal characteristics of kosmic truth because of the fact that it presents itself in such numerous ways and forms, men often are induced to attempt the reformation of all facts, or a great mass of kindred facts, in accordance with the newly-found fact or principle. They forget evidently that no fact in the universe can be at variance with any other fact and still be a fact. So that in the totality of facts every separate and distinct fact must be congruent with every other fact forming a beautiful, harmonious and symmetrical whole; but often the whole is made to suffer in the attempt at making it conform to the substance of a mere intimation. Moreover, it is conceivable that even the totality of facts may lack a rigid conformity with reality in all its parts and that having compassed the entire mass of facts one may fall short of the understanding of realism.

This is practically what has happened in the mind

of the metageometrician who having received an intimation as to the real nature of space as that whose center is everywhere and yet nowhere and whose nature is psychological and vital rather than mathematical and logical, misses the great outstanding facts and clings to the intimations which he experiences as to the nature of space. He, therefore, concludes that the form of space is that of a flexure or curve. There is a valid element in the notion of the curvature of space but not enough of truth wholly to validate the notion. Since the very reality of space is a matter which can be determined only by the conformance of the consciousness with it in such a manner as to render the conception of it entirely unintelligible to the intellect except in so far as it may be able to identify itself with the space-process, there is much room for the serious questioning of the mathematic conclusion upon the grounds of its fragmentariness if not entirely upon the basis of its invalidity. Wherefore it may be seen that any search for either the center or the extreme outer limits which proceeds in a manner conformable to the external indications of the intellectual order is vain, indeed. Although it is undoubtedly true that the attainment of a central or frontier position in space does not involve any lineal progression whatsoever, the same being attainable, not by progression nor by overcoming distances, but by a subtle adjustment, yea, a sort of attachment of the consciousness to the order of becoming which binds the appearance of space, wherever one may be, it is nevertheless difficult and painful for the intellect to grasp the totality of this truth at one sweep. Indeed, it is not possible for it, alone and unaided by the intuition, to grasp

it at all. Hence, the mathematician who depends entirely upon the deliveries of the intellect which conform, in their passage from the conceptual to the written or spoken word, to all the rigors of mathetic requirements, fails utterly in perceiving the magnitude of this conception and all its connotations; he fails because his prejudices and the woof and warp of his intellectual habits prevent his assuming a sympathetic attitude toward it and thereby precluding at the start any calm consideration of it. And not only is this true of the mathematician but of all those whose endeavors are confined to the plane of purely sensuous and logical data. It would, therefore, appear that our entire attitude towards things spatial must be changed before we can even begin to perceive the reality which is really the object of all researches in this domain. But, on the surface, there is after all little difference between the ultimate facts involved in these two totally different conceptions. Mathematically speaking, all progression eastward would terminate at the west, and *vice versa*; and the same would be true regardless of the point from which progression might originate. Always the terminus would be the opposite of the starting point. Then, too, it might be said that if we sought the space-center we should arrive at the circumference. The difficulty with this view is that there is a very remote, though important, connection between it and the truth of the matter. But the partiality of this view, and the absence of either experience or intuition to intimate a more reasonable view, serve effectively to buttress it as a hypothesis acceptable to many. Thus it is ever more difficult to supplant a near-truth than it is to

gain credence for the whole truth. On the other hand, according to the view which we maintain here, it is quite true that the seeking of the kosmic space-center will reveal the circumference; that the search for the nadir will uncover the zenith; the east effloresces as the west, and a northward journey will wind up at the south, etc., but in quite a different manner from that which the mathematician has in mind when he postulates the curvature of space. Our view involves no space curvature nor any other spatial distortion. *It deals with space as reality, as a dynamic process, a flux which, like the sea, is continually casting itself upon the shores of chaos and falling back upon itself only to be recast against the rock-bound coast of its chaotic limits.* Now, that which falls back upon itself and rolls in a recurrent movement upon its own surface is *life* which, in its recession is the natural and kosmic limitations of itself, generates matter in all its varied expressions. Space, in its extensity, cannot transcend life; for it is the path which life makes in its *out-coming*, its manifestation. Of the chaotic fringe which circumscribes the manifested universe it is absurd to say that it is vital or psychological in any sense of these terms. For notwithstanding the fact that out of its very substance are engendered life, intellectuality, spatiality and materiality, it is nevertheless none of these in its primary essence. It is Chaos-Kosmos; because from its content the kosmos is evolved, and it still remains; it is chaos-spatiality; chaos-materiality; chaos-intellectuality; chaos-geometricity; because these are engendered by the movement of life in chaos while at the same time there remains a residuum of the chaogenetic substance which consti-

tutes the limitations of all these subsequent processes. In this sense, the chaogenetic fringe becomes the limits of the manifested universe so that it would appear that all those major processes outlined above are finite manifestations of the eternal chaos. But none of those possibilities of motion which are found in these major movements of the kosmos can be logically said to exist in chaos. It is the embodiment of everything that is the opposite of those qualities which may be found in them, that is, in materiality, vitality, spatiality, intellectuality and geometricity.

Apropos to this phase of the discussion let us examine briefly one of its most significant implications, both mathematical and kosmic, which arises out of the fact that space is an engendered product of life that is bound by the fringe of chaos which sustains and limits it. The chaotic fringe plus manifesting kosmos constitute the absolute magnitude of the kosmos. The manifestation factor is complemented by the chaos factor and together the two define the *full* universe. Kosmogony is the universal movement of all kosmic elements or factors in diminishing the chaotic complement and reducing it to kosmic order or geometrism. It is undoubtedly impossible to determine mathematically the exact volume of either complement or the ratio of the one to the other; yet it is conceivable that the chaotic fringe is greater in extent than the ordered portion of the kosmic uni-circle or universe. It is even conceivable that the difference, upon the basis of the meaning of the Pythagorean Tetragrammaton and the view outlined in the Chapter on the "Mystery of Space," is as seven to three wherefrom the conclusion might be drawn that the universe has

yet seven complete stages more or less of evolution before the close of the Great Cycle of Manifestation when the fringe of chaos shall have been totally used up in the work of creation. But for those who may experience impatience at the infinitude of the process when viewed in this light the terms may be reversed and the difference may be conceived as the ratio of three to seven wherefrom the conclusion would follow that the kosmogonic process is seven-tenths complete, as it will not vary the seeming infinitude either way it may be determined. The notion, despite its speculative character, offers an explanation of otherwise inexplicable conditions, and, on account of its profound connotations, may even be found to be productive of the highest good in its equilibrating influence upon our mode of thinking.

In any event, there does appear to be a subtle relation subsisting between true numbers and kosmogony. Number is a phase of the kosmogonic movement, a measurer of the intellect and the establisher of the geometrism of space, answering tentatively to the numericity of pure being. In fact, being actually expresses number and number itself is an evolution and not a thing posited once for all as a pure, invariable form in the universe. It is, like the kosmos, in a state of becoming and there may yet appear to our cognitive powers a whole series of new numbers pure in itself and altogether conformable to the conditions reigning at the time.

The symbology of the circle, in all times recognized as the true symbol of the kosmos in eternity, of eternity itself, of the archetypal, of space, duration and Ultimate Perfection, is replete with profound sig-

nifications. But it should be understood that the circle is a symbol of the *perfected universe* and not the universe in a state of evolution. It symbolizes perfection, completion and the ultimate union of the manifesting with the archetypal which results in the crowning deed of Perfection. The circle is, therefore, not a symbol of the universe as it now stands; it does not represent a snapshot view of the kosmos but the universe as a *full*. It cannot be a *full* until it has attained the *ne plus ultra* of completion; for a kosmic full is that state to be attained by the manifested kosmos upon the termination of all the fundamental processes now in operation. But it is this state that the circle really represents, and by virtue of which it possesses its intrinsic qualities and also in virtue of which the intellect recognizes these qualities. The properties of understanding and recognizance in the intellect are veritably fixed by the *status quo* of the universe during every stage. That is, the focus of the intellect, like the focus of a chromatic lens, is adjusted by the fiat of the nature and eternal fitness of things to correspond exactly with every state through which the kosmos itself passes. This is one of the obvious implications of the phanerobiogenic behavior of the kosmos and is necessarily resident in the notion of the genesis of space and intellectuality as consubstantial and coördinate factors.

Wherefore the more cogent is the reason for the belief that the inherent qualities of the kosmogonic fundamentals; as, vitality, materiality, spatiality, intellectuality and geometricity, are true variants, and that their variability is proportional to the progress of these major movements toward the ultimate satis-

faction of the original creative impulse. May it not be, therefore, that the indeterminate character of the ratio of the diameter to the circumference (3.1415926 . . .), is due to causes far more profound than the crudity of our micrometers or the mere supposed fact of the circle's peculiarity? May it not also be true that the *pi proportion* shall become a whole number, and in its integration, keep apace with the perfecting process of the kosmos, diminishing, by retrogression to one or increasing, by progression, to ten which, after all, is essentially unity, being the perfect numeral? It is not without the utmost assurance that these queries will be categorically questioned by the orthodox, creed-loyal, strictly intellectual type that we sketch these implications, but it is felt to be an urgent duty to remind all such that the most effective barrier to realization in the field of philosophy is an intolerant attitude towards all lines of thought which suggest the impermanence of conditions as we find them in the kosmos at the present time. The fact is that our lives are so distressingly short that we have neither time nor opportunity to watch the changing moods of the kosmos nor discern the gradual reduction of mere appearance to the firm basis of reality, and accordingly, the intellect tenaciously clings to those notions which it derives from the instant-exposure which the lens of intellectual conceivability allots to it. Once the view is taken it is immediately invested with everlastingness. This everlastingness is then imputed to the kosmos in that particular pose, attitude or state. Always the intellect beholds in that passing view, snatched from the fleeting panorama of eternal duration, a picture of

itself which it mistakes for the reality of the not-self.

The inclination of the axis of the earth toward the plane of its orbit is approximately twenty-three and one-half degrees. No well-informed astronomer, however, doubts now the fact that this ecliptic angle is being gradually lessened; because, as a result of centuries of observation, it has been found to be decreasing at the rate of about 46.3 seconds per century. Yet no intellect is able to perceive in any given lifetime the actual decrement of this angle. It is only by careful measurements after centuries of waiting that a difference can be discovered at all. Thus it may even be so with the ratio of the diameter to the circumference of a circle, the only difference being that it has not yet been determined whether there is a *decrement* or an *increase* in the size of the ratio.

The *pi* proportion is, then, a register or measurer of the slow, measured approach of the manifesting kosmos to the standard of ultimate perfection. Therefore, and in view of these considerations, we may not hesitate to confirm our belief in the validity of the notion that it actually and literally expresses the key to the evolutionary status of kosmogony. The mathematical determination which limits it as an unchangeable, inelastic quantity is, consequently, only partially true and leads to the inclusion of this quantity under the category of mathematical near-truths, for such it appears to be in spite of its rigorous establishment.

The formal topography into which the intellect spreads when seeking the ideal and the abstract is not a condition which is derivable from the real essence of life or matter, but, on the other hand, is a

product of the intellect itself partaking of its nature rather than of the nature of reality. There is, therefore, a very important distinction to be made between all deliveries of the intellect and the realism both of the objects and conditions to which the intellectual deliveries pertain. One of the most marked peculiarities of the human intellect is the fact that it always unavoidably stamps its own nature and features upon every datum which passes through it to the consciousness. The utmost importance attaches to this phenomenon, for the reason that it points to the necessity of carefully scrutinizing intellectual deliveries and the making of allowances for those ever-present characteristics which the intellect superimposes upon its data. Perhaps the inherent colorific quality which it imposes upon our knowledge would be better understood if a similitude were indulged at this juncture. The intellect may be likened to a color-bearing instrument which, when it has once handled an object, leaves forever its own color transfused into every cell and fiber of the object so that when the same object is presented to the consciousness for purposes of cognition it bears always the same peculiar marks and colorations which the intellect, in its manipulation of it, places thereon. In this respect the intellect may also be said to be like a potter who has but one mold and that of a peculiar formation. Hence, whatever wares it presents to the consciousness will invariably be found to be molded in conformity with that particular mold. If it were possible to view reality or the essential nature of things the difficulty which now the intellect lays in the path of direct and uncolored cognition would be obviated; for then there

no longer would be any necessity of viewing things as they are colored or molded by the intellect. The intuition, being a process of pure consciousness, will, when it has arisen to a position where it may dominate the intellect as the intellect now dominates it, so modify this tendency which we see so ineradicably bound up in the very nature of the intellect that the apparently insurmountable difficulties which it has interposed between mere perception and a direct cognitive operation will be quite completely overcome. Thus, in the above, is discovered another obstacle which posits itself between the notion of space as reality and the intellectual determination of it which the mathematician examines and to which his consciousness is necessarily limited. Furthermore, it may be perceived also how easily the mind may be deluded into thinking that the intellectual notion which it entertains of space is necessarily correct, when obversely, it is simply examining a concept which has been remade by the intellect into a form which is not at all unlike its own peculiar nature, and therefore, as much short of reality as the intellect itself is. Similarly, if the mathematical mind succeed in catching a glimpse of the reality of space in the form of an intimation, which, in itself though fragmentary, is nevertheless true, its consciousness is finally deprived of the true validity thereof simply because of the behavior of the intellect in its manipulation of it. The importance of these intellectual difficulties cannot be over-estimated for they furnish the grounds for the ineptitude of intellectual determinations made in a sphere of motility to which the intellect is a stranger. And this fact will appear more evident when it is

perceived that quite the entire content of human knowledge has been thoroughly vitiated by them. So that only in those very rare moments which (in a highly sensitive mentality) enable the intuition to gain a momentary ascendancy over the intellect is it possible for the Thinker to catch hold of realism itself, and project the truth of what he sees into the lower, intellectual consciousness. But so small is that portion of our knowledge which owes its origin to the intuition that when compared with the totality of that which we seem to understand it is well-nigh negligible. And then, when it is considered that at present there is no way of conceptualizing adequately the intuitograph so as to make it propagable the insignificance of this form of knowledge is even more notable. It can now be seen in how large a measure the notion of the curvature of space is merely an intellectual translation of a true intuition into the terms of the intellect which, in the very nature of the case, can only approximate the truth because of its colorific habits.

A similar declaration may be made of that other datum of metageometrical knowledge which postulates the ultimate convergence of parallel lines. In fact, what has been said as to the perisophical nature of the notion of space-curvature will apply with equal force to the idea of parallel convergence since the latter is a derivative of the former. But there is yet another consideration, apart from the colorific influence of the intellect, which, although it partakes of the nature of this quality, is nevertheless a near-truth of quite a different order. This may be better understood by referring to the *graph* showing the

inverse ratio of objective space to the consciousness.¹ Let us suppose that the *graph* may also represent the Thinker's outlook into the world of spatiality. It then appears that, because of that movement of consciousness in its pursuit of life which, as it expands, makes the objective world to appear to be diminished in proportion to the extent of its expansion, it is quite natural, under such circumstances, that parallel lines drawn anywhere in the limits of the objective world should seem to come to a point in the ultimate extension of themselves. While this *graph* is not meant to depict such a view, it may be found nevertheless, to be a true delineation of the topography of that state of mind into which the metageometrician brings himself when he visualizes space as *curved*; for there is no doubt but that a state of intellectual ecstasy, such as that in which the mind of the metageometrician must be functioning in order to perceive space in that form, is quite different from the normal and, therefore, in need of a different topographical survey. But, if we grant that in the creational aspects of space there is conceivable an ever-present tendency to convolution, or a rolling back upon itself, it is imaginable that parallel lines inscribed either upon its surface or in its texture need not necessarily meet but maintain their parallelism regardless of the complexity of the convolutions. The convergence of parallel lines is much like a tangent in the outgrowth of the idea from the notion of space-curvature. The more a tangential line is extended the farther away from the circumference it becomes and consequently less in agreement therewith. The more

¹ Figure 20.

subsidiary propositions or corollaries are multiplied the more remote from the truth the determinations become and especially is this true of the hypothesis of space curvature.

In the notion of the manifoldness of space, by virtue of which it is conceived as existing in a series of superimposable and generable manifolds of varying degrees of complexity, are discernible traces of that intuitional intimation which underlies the assertion that because of the necessary phenomenalization of reality for the purpose of manifestation to the intellect it appears to exist in a series of separate degrees, each one more refined and subtle than the preceding one and requiring a more highly developed species of consciousness for its comprehension. In other words, that intuitional glimpse of the essential character of reality, as viewed by the human consciousness, which impinged upon the minds of RIEMANN and BELTRAMI leading them to postulate as a corollary proposition to space-curvature, its manifoldness, is nothing more nor less than the intuition that the universum of spatiality cannot otherwise present itself to the intellect, owing to its peculiar adaptation to the sensuous, except by a series of continuous degrees which are perceptible only in proportion as the understanding is magnified to conform with it. After all, however, it is not improbable that the very objectivism of the universe in manifestation subsists in just the manner in which this intuitive glimpse implies and that the wisdom and utilitariness of the kosmogonic process which engendered spatiality are clearly demonstrated in that arrangement of the contents of the kosmos which presents the grossest elements of phenomena

first to the intellect in its most impotent state while reserving the less crass for that time when the Thinker shall have evolved a cognitive organ adaptable to its presentations. Those metageometricians who cling to the idea of the manifoldness of space, based as we have shown upon the pseudo-interpretation of a rather vague hint arising out of an unquestionably true intuition, have allowed themselves to fall into the unconscious error of magnifying the importance of the mere insinuation as to the space-nature to such an extent as wholly to obscure in their own minds and in the minds of those who think after them whatever of the true vision that may have been grasped by them. Furthermore, it is indubitably true that that same peculiarity of arrangement by which impalpable and invisible forces really subtend gross matter producing that subtle schematism in virtue of which the visible is subjoined to the invisible, the sensuous to the non-sensuous, spirit to matter, etc., also characterizes the appearance of spatiality to the human understanding. While there is a superficial semblance of separate and discrete manifolds into which space may be divided there are, in reality, no such sharp lines of demarkation between the subtle and the gross, between the visible and the invisible or between spirit and matter, each of these being capable of reduction, by insensible degrees, into the other regardless as to whether the reductional process originates on the side of the most refined or on that of the grossest. Accordingly, there are no reasonable grounds upon which the notion of a space-manifold may be justified except as a metageometrical near-truth.

In addition to the foregoing, there are yet other very fundamental considerations which would seem to debar the totality of analytical conclusions as to the nature of space from any claim to ultimate reliability and trustworthiness. These are *first*: the fact that analyses are absolutely incapable of dealing with life; that being the direct product of a sort of mechanical consistency which marks the intellectual operations it has adaptability only for dealing with fragments or disconnected parts, and that without any reference whatsoever to the current of life or the flow of reality which has produced the parts. This fact is clearly shown in that attitude of the understanding which inevitably leads it to the declaration that a line is an infinite series of points, a plane an infinite series of lines, and a cube, an infinite series of planes, and so on, indefinitely. To do this, to look upon all phenomena as a series of parts similar to each other and piled, one upon the other, or juxtaposed in the manner which they are discovered in the sensible world, is the natural tendency of the intellect and this tendency finds its most facile expression in analytics. Inadaptability of this sort is especially observable in all problems of arithmetical analysis in which the vital element is a factor. When these analyses are carried to their logical conclusion, as has been shown in the chapter on "The Fourth Dimension," invariably they end in an evident absurdity. But it is at their very conclusion where the life-element is encountered, where reality is approached, that they break down. The failure of analysis, then, to encompass life, to fit into its requirements and to satisfy its natural outcome seems clearly to establish the basis

of the perisophical nature of the entirety of analytical claims, especially that species of analysis which seeks the remoter fields of the conceptual for its determinations. *Second*: the close connection which has been seen to subsist between space and life as joint products of the same movement makes it obvious that the same ultimate rule of interpretation must be applied to both in order to insure correct and dependable judgments regarding them. How different would be the intellectual attitude towards space if it were considered in the same light as vitality, provided one really understood anything about vitality! Moreover, as it appears certain that the path of the intellect does not run in the same direction as the path which life makes, but in an inverse direction, it is clear that the judgments of the former, as to the action and essence of the latter, must necessarily be ultimately unreliable. It can readily be seen, however, that should the intellect be focused so as to follow the path of life, to attach itself to the very stream of life, it would have necessarily to neglect materiality. And such an adjustment would, of course, obviate the need of a material life at all for humanity. In fact, a physical life with an intellect would be impossible under such conditions. It is well to recognize the suitability of the present schematism and not to become unwisely restive because of it; but it is also fitting that we should discriminate between that which is possible for the intellect chained to materiality and that which is impossible for it, in such a state, when foraying in a territory foreign to its nature, and beyond its powers to master.

The predominating tendency in the intellect to account for the universe of life, mind and matter upon

a strictly mechanical basis is undoubtedly due to the constitution of the intellect which does not admit of its direct consideration of the vital essence of things. We are bound ineluctably to the surface of things. All our knowledge is therefore superficial. We are even bound to the surface of ideas, and cannot penetrate to the interior of these realities. Our art is the reproductions of superficies; our philosophies are the husks of eternalities; our religions, the habiliments of relations, and while it cannot be doubted that this arrangement is pre-eminently the best possible one for the present stage of man's evolution, it is nevertheless worth while to note that it is this very restricted activity of the intellect which shuts out from man's consciousness those very elements about which he is most concerned when he goes into the field of philosophy in search of a solution to his unanswerable queries. But some progress most surely is made when the mind is enabled to see its plight and recognize what are the difficulties and limitations that lie in its path of ultimate attainment.

It is believed that the mechanistic, or true, character of the intellect reached its zenith in the mind of LAGRANGE when he succeeded in reducing the entirety of physics to certain mechanical laws and formulæ which he embodied in his "*Mecanique Analytique*." This work is undoubtedly the capstone of intellectual endeavors and stands as a monument which marks the culmination of the present stage of intellectual development. In thus placing the *Mecanique* at the apex of intellectual endeavors it is not thereby meant to be implied that the intellect shall not make more progress nor that other formulæ, equally as marvel-

ous as those which LAGRANGE discovered, may be devised, nor that other laws, heretofore undreamed of, may be found; but what is maintained is the fact that while there will be growth and development these will run along other channels, perhaps in the realm of the intuitable, and not any longer, especially so notably as now, in an opposite direction against the current of life and reality; and further, that there will be a gradual turning away from mechanics to biogenetics, from diversity to unity, from the purely intellectual to the intuitional, and withal a final getting rid of the bonds of illusion, of that thralldom of mechanics, whereupon will slowly arise the obsolescence of all those disparities which may now be recognized in our knowledge and in the applications of the intellect to the data of the objective world.

Because the intellect is unsuited to deal with reality, and because of its peculiar adaptation for diversity, for multiplicity, due to its mechanistic *modus vivendi*, there has grown up a voluminous catalogue of systems of philosophy. These embody such a multitudinous array of beliefs, ideas, conceptions, theories and conjectures and constitute a movement in human thought which oscillates between the empiricist on the one hand and the transcendentalist on the other; between the idealist and the realist, leaning sometimes towards the Platonic, the Cartesian and the Kantian and at other times towards SPINOZA, ARISTOTLE, SPENCER and SOCRATES, always terminating by multiplying the number of diverse beliefs rather than unifying them that the conclusion is unavoidable that so marked a lack of unanimity is indicative of a profound mental prestriction. It was, therefore, inevitable that mathe-

matics should fall under the same spell and brook no let nor hindrance until it had succeeded in devising several diverse systems of geometry which it has done for the mere joy of doing something, of following its instinctive aptitudes. There is no other basis for the heterogeneity of our philosophies, our mathematics, indeed our beliefs than this mechanical, and hence, radically illusionary character of the intellect in consequence of which we have had to be satisfied with mere glimpses, hints, intimations and faint glimmerings of reality, of life, and of those kosmic movements which, if we had the ability to trace them from their source outward, would lead us unerringly to a truer and deeper knowledge of those things that under the present schematism must remain for us a closed book.

The criterion of truth for us, constituted as we are and wedged in between the stream of life and its shore of materiality, must be that which relates our knowledge both to the stream and to the shore. It must be so that all predicates which purport to approach it shall exhibit a dual reference—one that relates to materiality and another that relates to vitality, and yet a third that shall combine these two relations into one. All assertions, therefore, which pertain exclusively to either of these elements—to materiality or to life—are necessarily partial, fragmentary and perisophical in nature. Mathematics, because it relates to matter and the mechanical forces set up by matter acting against matter cannot be said to agree with such a criterion; art, because it relates to snapshots or static views of matter is even more remote in its agreement; philosophy, as it has been known in the past and is known to-day, because it seeks to deal

with a vitality fashioned after the image of materiality has failed when posited alongside of this criterion; and thus, the intellectual toil of millions of years has been in vain in so far as it has not succeeded even in raising a corner of the cover which hides reality from our view.

A near-truth is any variation from this standard, this norm or criterion. It may be either logical, cognitive, scientific or even metaphysical. To define: a logical truth is a predicate based upon and involving the coherency and consistency of thoughts themselves; a cognitive truth is the conformity of knowledge with so much of reality as is known; scientific truth is the conformity of thoughts to things and conditions. All of these are obviously near-truths. Then, too, a near-truth may be defined as an assertion based upon the criterion of truth but falling within the category of cognitive truths owing to insufficiency of data or vision. Such indeed are those metageometrical predicates—*n*-dimensionality, space-flexure, space-manifoldness and all other assertions based upon these in general and specifically. Any recognition of truth must clearly embrace both the vital and material aspects of its subject in order to be adequately inclusive, that is, it should include the causative, the sustentative, the relational and the developmental factors. These four factors are considered necessary and sufficient to determine the conformity of any view to the criterion of truth for when we are cognizant of the cause of a subject, understand the sustentative factors which keep it in existence, are conversant with its relations to other subjects and can follow its developmental variations until we come to its final status, why then, our knowl-

edge is both sufficient and ultimate so far as that subject is concerned. Is it asking too much of mathematics or of philosophy or any system of thought that it conform to these standards or to this criterion before we shall accept it as final? Or shall we be satisfied with less than this? Let us hope not.

In the foregoing presentation stress has been placed upon the fragmentary, and therefore, illusionary character of the intellect in order to arrive at an understanding of the difficulties under which real knowledge has to be acquired and to indicate the inanity of all attempts to resolve the riddle of space by means of mathematics though regarded as the most typical exemplification of the mechanistic nature of the intellect. And further, to show that, on account of the radical incongruity which estranges life, the producer of spatiality, from the intellect which returns again to scrutinize the passage of life in its outward expressions, no hope of ever gaining the true viewpoint by means of the intellect need be entertained. But in doing so, it is deemed fitting that a note of warning should be sounded against any abortive attempts that may be made to obscure or distort the results of such a close discrimination lest the true import of the examination be lost for, if we emphasize the vanity of the intellect in the pursuit of that which it is by nature unsuited to attain we also equally stress the wise utilitarianism which limits it to the performance of the tasks assigned while at the same time reserving for the function of more highly evolved powers, and indeed, for the intuition itself, the solution of the riddle of spatiality. And if we declare the futility of the mathematical method in all endeavors

aimed at unveiling the mysteries of life and mind, and of that movement which has its roots set in eternal duration from which it proceeds in an endless continuity of purpose and promise, we do also recognize that in the science of mathematics the intellect shall, as in no other method of cognition, most fully fulfill the kosmic intent of its existence; and moreover, in the pursuit thereof it shall push the frontiers of its possibilities outward until it can be said almost to be able to make disposition of life itself—at least to that point where, when the intuition shall have come into its own, the passage from the mechanics of matter to the dynamics of life, shall be comparatively easy and natural.

CHAPTER X

THE MEDIA OF NEW PERCEPTIVE FACULTIES

The Spiritualization of Matter the End of Evolution—Sequence and Design in the Evolution of Human Faculties—The Upspringing Intuition—Evidences of Supernormal Powers of Perception and the Possibility of Attainment—The Influence and Place of the Pituitary Body and the Pineal Gland in the Evolution of Additional Faculties—The Skeptical Attitude of Empirical Science and the Need for a More Liberal Posture—The General Results of Pituitarial Awakening Upon Man and the Theory of Knowledge.

EVOLUTION is a continuous process and the primal impetus back of the great on-flowing ocean of life acts infinitively. It is not terminated when life has succeeded in perfecting a form for the perfection of forms in themselves is not the end of vital activity. *The end of evolution is the complete spiritualization of matter.* So that it does not matter how perfect a form may be either subjectively or in its adaptation to environments; it does not matter how faultless a medium for the ensouling life it may be, there is ever the eternal necessity that life must drive it back over the path of its genesis until it shall be transmuted into pure spirit. Adaptation succeeds adaptation and with each there is a change in the form and this process continues until there is a more or less perfect con-

gruence between form and juxtaposed environmental conditions. But no sooner than agreement has been attained under one set of conditions new conditions arise and require a new setting, new adaptative movements. Thus there is a continuous proceeding from stage to stage, going from the grossest to the subtlest and most refined, always the form is being pushed onward and upward by life. But adaptation is not undergone for the benefit of the form, but more truly for the informing principle. It is the progression of the life-element which constitutes the adaptation of form to form and to their peculiar environs. The form is a tool or instrument of life which it discards the moment it fails to respond to its requirements. Thus forms are constantly being assumed and as constantly being relinquished. But no effort of life is lost regardless as to whether the action is performed in one or another form. The totality of matter is perpetually being acted upon by the totality of life. Every appulse of life against matter means an added push in the direction of spiritualization. The totality of such appulses of life against matter may seem infinitely small in the visible results which they produce in the process of spiritualization; but with each there is an eternal gain in that movement that shall end in the complete transmutation of materiality into spirituality. This action of life in metamorphosing matter, the nether pole of the great pair of opposites, into spirituality, its copolar factor, in its outward, visible effects, is what we vaguely call evolution. And such it is; for life is merely unfolding that which it has enfolded. Matter, having been involved as a phase of kosmic involution, is now being evolved.