Even tho man is yet in his noetic or spiritual infancy the external world, let alone the visible universe, is old enough to have matured into an intelligent organism. Certain structural utilities and functional economies, we know, have long ago emerged from the peirastic stream and become expressions of habitual tropism. We have even recognized with Svante Arrhenius the spiritual analogy between vitalism and progress, between natural specialization of type and the electronic repulsion of radiant energy from ancient universes beyond the galactic star-streams of our own. So it is in the relation of parent organism and offspring that we should consider the Universe and the mind of man. And if Philosophy is the highest intelligent expression of mind then such spiritual functions as purpose, aspiration, improvement and sublimation are no less appropriate to the evolution of universes than they are in the life of man and Nature.

We cannot always have such good fortune with our apriori's as to find them sufficiently accurate and inclusive as to cover and completely harmonize with empirically built up conceptions. Nature has not yet developed her material relations to such a point of maturity, such a degree of functional economy, as we presume our minds and their rationalizing or predicative apparatus capable of. The poetic imagination and the proud claims of our personal equations may suit well in romantic documents meant for popular interest and consumption, but in science and philosophy there must be exact measurement, precision machines, and careful methods of analysis and generalization. Here is one instance where the mechanical is superior and more reliable than the merely sensory and personal observation; and we consequently place great trust in the accurate and detailed revelations of bolometer, telespectroscope, photo-radiograph, ultra-microscope, etc.
There is little doubt in the foremost minds of this century regarding the close analogy between the birth and evolution of stellar systems and Darwin's gemmation theory of the reproduction of organic life; and it is a growing probability that the Universe could boast a genealogy whose general lines of development vary little from those which cooperate to produce a genuine philosopher. We are just coming to understand and demonstrate some of the reproductive functions of crystals, the spontaneity of chemical reaction, and the elaboration of inorganic physiology. Even some degree of probability is given to the venerable subject of Christian controversy, parthenogenesis, by Prof. Loeb's chemical experiments with the eggs of sea-urchins and by Dr. Carrel's transference of tissues kept alive artificially and even producing new cellular growth thru mechanical stimulation. Here are creative functions of two distinct worlds (organic and inorganic, vital and mechanical) which strangely may be caused to operate on the same level of fertility if not of the same degree of efficiency. The moral here indicated is that we are not far wrong in holding that our philosophical principles are, or, to be strictly valid, should be wholly replical of and uniform with the various laws and orders, cycles of truth and phases of reality in the Universe.

The genetic viewpoint now causes us little anxiety in applying it to all the aspects of Nature, to organic as well as inorganic, to vital as well as mechanical functions. The physical processes of cosmic evolution are no different in principle from the physiological processes of cellular and, in a way even mental, development. To be conceived as genetic or creative, not merely the result of action be free of finite exceptions and doubts the notion of evolution must and reaction between detached forces and inert masses of matter. We are members of no inert, dead or purposeless Universe, but of one which is living rather than mechanical, spiritual and intelligent rather than material and inane; one which, in its very extravagant efforts to improve its products, supplies the melioristic patterns of all our aspirational thoughts and inquiries. The prospects of immortality would certainly be questionable in a universe no nobler than the bare mechanism of its material parts in cold decadent inertia.

In 1915 Prof. Baldwin published his "Genetic Theory of Reality" in which he sought to present all the various philosophical connections of this viewpoint. But I think many of his views and arguments were antedated so long as 75 years ago by his famous
predecessor Feuerbach who wrote a brief but very fertile outline of "analytico-genetic philosophy" in his *Grundsätze der Philosophie der Zukunft* (1843), showing that particular things are really existent, not in their own right, but only by virtue of our ideal projection of particularity into the external world, and that both speculative thought and thoughtless bigotry are decided by the private character of our passional nature. As in his previous volumes on *Thought and Things* Prof. Baldwin applies geneticism (as a viewpoint less romantic and more rationalistic than that which Bergson's *Creative Evolution* presented) to logic, epistemology, ethics and religious aesthetics and finds his highest value as an original and fascinating thinker in his development of genetic morphology as comprised in the logical presentation and aesthetic (or pascalistic, he calls it) solution to the problem of philosophical Interpretation.

Intellectual growth and spiritual power are products of the creative genius innate in human nature. They are subject to a progressive morphology which, in the aspect of operating in the philosophical function of man's mind, may be observed first as presented in individual and racial interpretations of life; secondly as presented historically in the development from early prelogical or racial, thru the logical or mediate, to the hyperlogical or immediate interpretations; and thirdly as presented in the extra-logical (pascalistic) theory of aesthetic immediacy. Under stress of such a progressive morphology empirical immediacy loses face with all but its aesthetic aspects, where all experience of things other than that of the beautifully good and true is considered illusory, degrading, and hence to be repudiated from the good man's philosophical standpoint. Baldwin's palingenesism of individual back to racial interpretations does not, however, account for the inevitably keno-genetic period when the racial viewpoint was being rough-hewn and shaped by the individual courage of a few original thinkers. The world-structure, at least as it is now constituted and perhaps also as it was from the very beginning divinely ordered, permits of both progressive and atavistic development; it all depends upon whether we choose to perfect and follow our good or evil tendencies, our melioristic or our pejoristic aims. How differently Macchiavelli might have written *Il Principe* had he not so eagerly and deliberately sought the favor of the Medici!

The doctrine of cosmic vitalism with its decisions in favor of a living creative Universe has none of the sterility, obstinate irre-
ducibles or promiscuous blanket-terms of the monistic theory. Even the venerable tokens of materiality, mass and velocity, gravitation and inertia, are now being mathematically investigated and interpreted as functions of matter. Lodge and Soddy, Russell and Poincaré, have long ago broken down the old material earthly conception of the visible universe, replacing it with the energetic structure of things etheric and dynamic, functional and creative. Mathematical morphology rejects the value of mere quantitative analysis and indicates the superior relation of qualitative proportions between things to the evolutionary ascent of Nature's infinite procedure. We look upon Nature darkly as thru a glass and think that she is playing coquettishly with us from behind her veil. But the real veil is that of our own sensory dependence which limits much of our experience to mediate physical things. It is not Nature who plays us false, but ourselves who lack the power to see and feel the actual significance of her charms.

Recent considerations point to the possibility of the evolution that we know moving itself to a grander process of unfoldment. Everything which is in the universe, at least so far as we can observe and know it, is the particular result of the evolution which prevails in that universe. While we are included in this “everything” yet we can surmise a perhaps, an almost sort of otherness, in the way of a divergent code of natural phenomena. Commonly we limit evolution to but one method of endogeny or realization, and yet may not this process be but one mere factor in some greater coordination of two or more realities, between several more divine and august phases of cosmic existence? If we could some day just happen to run across the proof that there is another schedule on the cosmic itinerary, we would then have the probability that we do not contemplate the only universe, that evolution itself serves under a greater sovereignty, that our possibilities do not range only within the finite sphere of functional economy and structural perfection but have a destiny beyond our promissory heaven.

Aesthetic immediacy means that our experience gives us immediate knowledge of the things we love, cherish or aspire to take into spiritual embrace. There is causal but no transitional identity between the subject and the object of knowledge. And what we hold to be evolution stops (for us as mere units of consciousness) with the acquisition of this faculty of immediate knowledge, for this power, or rather its possession, becomes possible only with the knower becoming identical with the thing or principle known.
Beyond this acquisition of identity there remains nothing to realize but the evolution of evolution. And why not? On what ground should we swear allegiance and agree that the law of evolution must enjoy a stagnant reign over all existences for all eternity? What about the evolution of the law of evolution? At some past time it must have been more primitive, less regal than now, and in all analogy of reason there is bound to be probably educed from it a future exalted application, a sublimation of its processes; a condition where processes of metamorphoses and becoming will give way to perfection and pure being.

The Lokayatika of the world will never know those finer feelings that constitute the Yogi’s spiritual life; the ugly Kalmucks of morality will never know the sweet beneficence of Kuan Yin’s mother-love. Nor will those who have not reached in and brought out from the depths of their own minds some realization of man’s possibilities ever know the inspiration of Philosophy and soul development. No period of intellectual labor can flourish for long if entirely aloof and averse to the influence of surrounding spheres of thought and inquiry. There is enough pride and bigotry in the lay world without carrying them into the observatories of science or the studious hermitage of Philosophy. We should not aim to set forth apologetics for our cherished but unfounded theories when they have been justly refuted; this is but an expression of dogmatic obstinacy. We should rather have courageous purpose to sift out all chaff, whether personal bias or popular foible, and get at the few kernels of truth difficultly separable throughout the experience of a lifetime.

How and why is any universe at all possible? How and why does it so operate as to be self-sustaining and in perennial flower? What are its antecedents, nature, aims and destiny aside from our poor humanisms of what they seem to be? These questions are older than Ionian philosophy; they aggravated the speculative minds of the earliest Vedic singers and the legendary founders of Chinese civilization; they were the first eidolons urging Aristotle to draw up his many principles of philosophy and science. Those who seek to answer the How are scientists; those who would answer why become religious moralists; while those who attempt to systematize their knowledge into syncretisms or conciliations of these two answers are called philosophers. Religions of a positively asserted moral law and spiritual salvation like Christianity are not systems like Buddhism or Vedantism set up in opposition to Philosophy and
the Universe, but rather have based their very arguments and anagoge on what has been found of highest and most inspiring signification in the domains of Science and Nature.

Is there such a thing as a universal negative, a cosmic illusion? Are we justified in taking Prof. Clifford’s romantic obscurantism of cosmic emotions as suggesting a correlative delinquency in the form of a cosmic hysteria? How large a measure of the idea is made up of the negative nominalism of our own imperfect thought processes? So many of our words are but negative prefixes of positive words, e.g. unnatural, immaterial, endless, infinite, agnostant, irrational, and so on. The positive conception comes first and we merely prefix the negative syllable to represent the negative conception. Illusions and negative ideas are usually products of our own torpid brains; they are always coexistent with a weak and constipated intellect. This is why we always find so much folly and misconception in a thoughtless age, so much debauchery and extravagance in the vulgarian world. However, one thing is certain: the modern notion of an orderly Universe full of innumerable worlds and internal forces making them worlds is at least a larger and more scientific conception than that of a pagan universe full of gods and devils all in chaotic conflict with one another. A well-posted Philosophy will not only “be all round like a sphere and joyously hold to its orbit,” but it cannot help at times coming into opposition, conjunction or quadrature with other spheres of interest and influence. There will be perturbation but no desertion of its orbital path. It is now a coign of common sense to disbelieve the old theological cosmogony and even a large part of the romanti­cist theocracy which saw deity in everything from trees to toads, from alcohol to stellar constellations. We do believe, however, that our modes of experience and our apparatus of verification are very human, finite, and hence not always valid as strict procedure for obtaining truth.

What hero of science will discover to our knowledge the super­spectrum of our life with all its mystic lines of thought and courage, faith and love, aspiration and integrity? Is that uncertain and unproved afterlife which we hope to find after we pass thru the portal of Death’s transition to be still individual, conscious and affective in recollections of our present life or is it to be more grandly merged in the vaster-cycled Life of the Universe and thereby lose sight of its petty worldly interests? If so, that would be our first real Revelation, our first true spiritual Apocalypse. The
religion based upon the reification of our Christian ethics is paramount only when a specific balance between divine derivation and human destiny is revealed and practiced. Under code of intelligence and noetic immediacy the Universe has adequate if not perfect means for meeting every exigency; it has no partiality for either particular or collective value apart from the structural use and functional purpose of its parts; and it seeks no destiny per ambages altho we in our feeble observation read therein much extravagance and useless mediacy.

Our interpretations of the Universe are but single items in its sublime exhortation to the soul of man. Whatever we do or think, seek or aspire to imitate, is just that much a phase of cosmic functioning, an expression of universal life. And while no amount of rationalizing synthesis in our systems of cosmology which attempt to interpret natural phenomena can argue the open mind into a fixed attitude, nor can a focused fancy magnify any one celestial specimen or pattern of type-phenomena beyond the representative power of that fancy, yet idealists have invariably held that imagination is the constructive power of the world. Of course we must admit that imagination is largely responsible for both the elaboration and the acceptance of the nebular hypothesis, the third body, and capture theories in that it fancied the logical organization of scientific physical observations into systems patterned after the nature and procedure of their subject—the birth and evolution of worlds, as Prof. Eddington calls it.

But where is the mirror that can reflect what is behind it? Who can make intimate communication to others an understanding of the source, means and tendency of his own intuition? The relative ultras marking the limitations of human mental power constitute its most obstinate problem; even the very fascination of an occasional psychic nuance may be one of the unsuspected aspects of this limitation. How can we know or have experience of something beyond our sentient reach? We cannot even be sure that our proud generalities really cover everything we claim they do. How much automorphism or at least anthropomorphic analogy is actually behind our conception of the dissipation of energy in the Universe? Is it difficult to see how the Universe can expend moral energy to no purpose when it has, apart from human vice and debauchery, a constant equilibrium and functional continuum of purpose, law, development, justice, intelligence, beauty and benevolence? These questions do not dissolve by simple recourse to pragmatic sanction
any more than they become more complex by association with ignorance, folly or impotent faculty. They are deeper and more fundamental to our mental life.

Nature-lovers are ever alert to see the intimate affection of their feelings reflected in everything they observe or cherish. It is a perfectly normal emotion, natural as mother-love or the love of beauty and truth. It is at least encouraging and soul-satisfying for anyone to find that his efforts to understand and obey Nature's code have not been in vain. And even when the value of exertion is only personally recognized it still has promise of external verification, vindication and the recommendation of astral example; its true validation is revealed only when serving as fruitful action-pattern for the relish and conduct of others.

By Nature I mean all things possible of human contact and observation, which includes both the external and internal worlds of life and all those stellar systems which astrophysics claims are homogeneous with our own. Nature is obviously another name for the sentient universe or that phase of reality which we know to exist by the sensory permission of empirical possibility. Experience only can be called immediate; not the after-gathering of mental powers such as memory, association, utility-analysis, or organization into logical synthesis. The inquiry into and systematic understanding of Nature then make up the proper aim and function of science. But when we apply philosophical methods of speculative possibility and creative anagoge to Nature by way of science and the humanities, we are aiming to introduce exaltation, certainty, validation and exemplary power to all her processes and her needs; and we are consequently aroused to the romantic situation of what otherwise appears to be a tight mechanical circuit of thought and action, cause and effect. The romantic element, therefore, puts a new permutation upon the already versatile accuracy of science, and shows that human faculty may limit the proof of our postulates, but in no wise runs counter to the speculative tolerance for and serious consideration of those metaphysical possibilities of cosmic grandeur and upstepped measures of magnificance. This attitude is purely an assumption perhaps, but it is nevertheless one of the most delightful resorts openly attended by our intellectuels degages. Together with generous conduct and the genuine impersonal love of truth it constitutes the true Triskelion as a symbol of philosophical progress and an actually operative intellectual brotherhood in the circles of science, religion, ethics and art.
Science investigates the structure while Philosophy investigates the functions of the Universe, and by dealing with the broader features and principles of cosmic processes Philosophy has interest in the less familiar relations of experience and physical contact. Its aim is to give fairly accurate and consistent, rather than absolute and dogmatic, conceptions of reality, truth, possibility, law, spirit, life and mind. Philosophy offers us an amplitude of mental power, an aspiring generosity of outlook upon the whole infinitude of a vast and ever-widening Universe, and seeks to purify and exalt, reify and validate our inward processes of experience. Whereas, science on the other hand, being more conservative and careful of its empirical deliverances, its predicates and hypotheses, gives shelter occasionally to monism, pluralism, romanticism, absolutism, materialism or other specious humanisms of world-patterned observation, but always seeking more narrowly and demonstratively to prove the utile connections and validity of our most cherished conceptions by resort to the supple analogies of type-phenomena in this world. Both Philosophy and Science know but little of reality as an otherness in far-off universes beyond.

Hence it is the special function of Philosophy to keep down the mortality rate of intelligence and to minister physic to our torpid brains. Sloth and slavery are both unnaturalized in the elite community of active wisdom and benevolence where any sort of chauvinism or muggletonian inspiration are strictly taboo. We should seek to aid the maintenance of that only genuine prestige which is born of energy, freedom, honesty, and versatile talent. In the daily practice of any truly achieving intellectual power, like that so thoroly cultivated by the Shinshu Buddhists in Japan, we should always rank personal integrity and benevolence above mere formalism and ceremony. This latter sect, so devout and refined in their strict attention to the "three baskets" (Tripitaka) of Discipline, Discussion and Metaphysic, ascetically acknowledge, but certainly make no effort to encourage, such worldly and sensually significant customs as that of the obigo ron sash-wearing fetish which a selective comparison held recently in Tokyo proved to be the leading diversion and fond ambition of the feminine majority in Japan. It even ranked higher in their code of personal charms than classical learning, poetry, art, or the dance.

Man's mind, with all its numerous contending world-conceptions and ideal rifacimentoes of the Cosmic Order, is a unique instrument strangely set to measure life's fortuitous concourse. It
is both microscope and telescope if we but use it in such wise as to magnify the small or reduce the distance of the great. Thus in turn we have witnessed the actual events of a stirring chronicle covering a hundred centuries. We are right now taking part in the grand spectacle of facts and fancies cut into all the unimaginable designs of dream-analysis and élans-vitals. We have seen and perhaps marvelled at the actual working apparatus, the wheels so to speak, of La Mettrie's mechanical universe. We were somewhat awed so recently as 45 years ago by Fechner's almost Brahmanical system of panpsychism (temperized as psychophysic) whose elite spiritual community embraced all the various ideal differentia of our sentient existence, and is still used as an argument to counter Darwin's cancellation of our divine or spiritual pedigree.

And roughly by decades since then we have been loudly counselled to observe that the nominal abstractions and terminology-conflicts, which are eschewed so carefully by speculative as well as scientific monism (Goethe and Haeckel or Lewins and Carus), still make up the fashionable milieu of our popular dilettantism in Philosophy and Science. The journals are still thrashing away at the controversial question whether the radical truth-sanctions in James' empiricism and the utility-values in Dewey's instrumentalism are intellectual functions or integral sums of feelings and noetic intentions. In the clearest of all academic terminology we are advised by Professors Lovejoy and McGilvary that the pragmatic humanism of James and Dr. Schiller are mere biologic empiricisms of natural law and voluntaristic metaphysic. Why are we not told that Bosanquet's aesthetic progression of philosophical equations or Baldwin's pascalistic interpretation of the genetic universe are but the dignified anagoge or metonymy of plain ordinary historical experience and evolution?

However, after witnessing all the vast and various credentials of debate, and weighing carefully the tedious chronicle of man's chaotic efforts at inquiry and verification, we are still as yet able to count the reliable terms of our philosophically valid procedure one by one on the fingers of one hand. These might be itemized as logical consistency, the affective probability of external fact, the moral psychosis of aspiration, the impersonality of justice, and the predication of reality as a cyclic series of existents both above and below the human phase. Even with this radical simplification generalizing the elements of our speculative situation we must remember that there are but few items of logical distinction and
metaphysical favor which do not still concur with, if not actually arise from, our own personal opinions and prejudices. It is then only with extreme difficulty that we are able to freely and totally depart from the entrancing circle of sense-deliverance and the fanciful reality of our private dreams.

Occasionally, however, we can postulate non-human values and post-mundane destinies on the external world. But bare predications of infinity on the Cosmos are futile and improvident if we do not pronounce them with decidedly impersonal inflection, and not be too solicitous for their success as items of ego-sanction, eristic argument, and so-called self-evident knowledge. Still, if these postulates and predicates can be validated as axioms apart from man's historical significance and the specious prestige of his intellectual traditions, then our future stands a fair chance of pre-existence, and of getting into truer philosophical touch with that phase of the Universe whose reality is experienced as being more immediate to human life.

Hypotheses and speculations are theoretical or practical just as we choose to make them. But it is quite possible that in a truly infinite (or even to us, in point of time, good as infinite) Universe there are innumerable phases of reality, cycles of existence, and evolutionary processes of function quite super-human, even super-Natural and super-Divine. The scientist does not often concern himself to look this far, but an honest and courageous philosopher, especially after he gets his private methodology under supply control, will always feel free-minded and will be alert to consider such possibilities. His one reliable maxim, like that truly pre-Raphaelite anticipation of Nature-love (even to the point of conquest thru eternal devotion and inquisitive fidelity) which took shape in Trecento days and found such gorgeous flourishing in the Victorian Romanticism of the 19th century—or is it more a doctrine of philosophic policy than a maxim of intellectual conduct?—is that the Universe is non-humanly disposed in aim, many-cycled in reality, multi-phased in function, and knows no hegemony of particular creeds and canons, of finite codes of interest.

The philosopher, if he is a genuine thinker, does not rest with the analysis and interpretation of one world-conception alone, unique and instructive as that might prove to be, but seeks to fly among the very cycles of innumerable realities, up and into the
very infinity of the empyrean where a thousand universes swarm in phases of existence beyond the subtle power of man's imagination to conceive. Such thinkers know that any system of values is only a system of the elements of human response to the stimuli of life, and that the fascinations of sentient existence indicate a vast surcharge of spiritual power which may some day carry us far out beyond the physical threshold of our finite personal desires.