

CONVICTIONS OF A SEPTUAGENARIAN

BY F. LINCOLN HUTCHINS

I WAS but thirteen years of age when my attention was first attracted to metaphysics. One day our grammar-school teacher startled the scholars by the statement: "There is nothing new under the sun." This was astonishing coming as it did when we still held in memory that surprisingly new thing, a horseless carriage, a high-wheeled buggy propelled by steam, that had passed the school yard during a recess some years previously; so we sat up and took notice as the teacher went on to instance many things known to the ancients, which had been lost, of which some few had been recently re-discovered. We considered that teacher an oracle, because he bore upon his forearm an elaborate sailor design tattooed in India ink which indicated travel in foreign lands; also because he was studying law. He was later admitted to the Massachusetts bar and a few years later shot himself. I wonder if it was because he found nothing new in life that he committed suicide.

I have a very vivid recollection of going home from school that memorable day, throwing myself down upon the grassy bank encircling the small pond upon my father's place, a pond that was vocal with: "You'd better go home!" or "Paddy got drunk!" And full of slim, green, young frogs among whom I had often been precipitated from a hastily prepared raft. As I lay there looking up into the cloudless blue there kept ringing: "There is nothing new under the sun!" If that was true then I must always have been, but how and where? How came I to be in my present form? What was I born for?

During the sixty-three years that have since passed, in spite of all distractions and strenuous efforts to make a living, these ques-

tions have been uppermost with me. I have eagerly sought and absorbed every scientific fact as it was discovered, and the past fifty years have been remarkably full of them, with the result of vitally altering the conceptions of men. I have also read everything that I could get hold of regarding the theories of the mysteries of Nature and God; particularly those of past ages which have been widely accepted; considering them all without prejudice or predilections, and have finally arrived at conclusions that banish all mystery and give a clear understanding of the simple and natural steps through which the universe and the human race have reached their present status. Each new discovery in the sciences that has occurred during the last ten years has strengthened, clarified and added additional proof to those convictions.

Scientists have quite recently come into virtual agreement as to the electron being the smallest particle of matter, yet it has been proved to be the basis upon which all material forms rest. The fact that the chemical elements are altered by the addition or subtraction of electrons proves that all forms, the gaseous, fluid and solid, are but different combinations of positive and negative electrons. The basis of this fundamental element is the imponderable quality, known as energy, the conservation of which is one proof of the attribute we call immortality. The genesis and content of the electron still remains in the field of theory and conjecture.

Physicists have demonstrated the existence of other universal, imponderable qualities, such as order, rhythm, harmony, affinity, and repulsion, with a relativity common to them all.

I have the conviction that material forms were evolved to make possible the manifestation of these imponderable qualities, moreover, that the only real, eternal objects in the cosmos are these qualities of the Supreme Essence, together with others that we know not of. It is demonstrable that only through manifestation of those elements was it possible for them to have developed to the extent they have now attained or have been apprehended. All of our knowledge comes through observation of manifestations, nothing can be really known except through stimulations from material objects, although a synthesis of such sensations may enable man to form abstract conceptions that may approximate truth. From the phenomena of the physical universe we obtain all the facts of the physical sciences; from inferences are deduced the imponderable qualities that are as eternal as energy, as imponderable as the ether, as persistent as life,

as orderly as the movements of the planets, as consistent as theorems in mathematics, as esthetic as beauty in form and color, as just and impartial as nature's laws, as courageous as a lioness defending her whelps, as loving as a mother to her babe, as repulsive to distortion or over-dominance of any one quality as are negative and positive electrons, as universal as the urge to manifest the inner nature which is evident in all material forms.

Because of this urge to manifest, the electron was sent whirling into the void. Because there were other qualities than energy to be manifested, combinations of electrons were evoked and inanimate forms were produced. Through endless friction coarser forms were refined or sublimated until some of the particles became susceptible to irritation from objects in the environment and life began. After other ages had done their work under the stress of the fundamental urges, the algae appeared, then the fishes, plants, amphibians, reptiles, birds, mammals and the human race. During all of this progression there was a gradual gain in capacity to manifest the imponderable qualities; for those forms which were unsuited to advance or maintain this progression were ruthlessly exterminated, while the somewhat defective were driven to slough off impediments by suffering punishments for the evils that followed their imperfections. Such development was necessary for the evolving of better instruments for apprehending and manifesting higher qualities. In the human form we can understand this progress from the first simple results, only a shade above the brutes, to the sensibility of the most highly endowed individual who is sensitive to the finer impulses of the imponderable qualities; and the end is not yet. No limit can be set to the further improvement of the human instrument and its capacity to respond to yet unknown qualities of the Supreme Essence; that God which mankind has been seeking during all historic time.

While the imponderable, eternal qualities are evidently stable and unchangeable; material forms are in a continuous flux, even the most durable granite is subject to a process of disintegration. The duration of forms depend upon their obedience to immutable laws, not the least of which are those connected with the supreme qualities. It depends upon the capacity of forms to sense the laws relating to its being, adapting themselves to them, and to overcoming sudden changes in the environment for their existence to the limit of the period that is set by their heredity. Man himself is but short-

lived, but his sensitiveness acquaints him with the laws of his life, and to the impulses from the eternal qualities these he is able to hand on to the social complex which transmits, from generation to generation, such knowledge and deductions as have come to be common achievement.

We all have proof of the existence of eternal qualities within us. Every one has feelings that he cannot express in any language, of which he can form no conception; he has moods that cannot be avoided, the source of which he does not know, but to which he is compelled to yield. Who can describe a taste, an odor, a touch, or convey to another the patterns caused by a stimulation of the optic nerve? The best we can do is to compare them to some other common experience. Yet, notwithstanding our inability to communicate the reactions to the impulses from our sympathetic system, we feel the urge to manifest, we feel harmony, beauty, truth and love. These imponderable qualities drive us to attempt, in a poor and unsatisfactory way, to express them in actions and in misinforming words. Very great differences exist in individuals with respect to such feelings and in respect to the ability to express them, ranging from the brutish nature to that of the most sensitive who are susceptible to stimulations from the supernal qualities; also with respect to ability to clearly dictionize them.

Psychologists have made stupendous strides during the past twenty-five years; they have unearthed a mass of facts with respect to the inner nature of man which has created a new science. A synthesis of these new facts goes to show that each human being has two distinct but interrelated nerve systems, known as the sympathetic and the sensory. The sympathetic, comprising the nerve system of the glands, heart, stomach, liver, kidneys, or, in short, of the entire viscera, is an unconscious, automatic organism. We have no definite sense reactions from its manifestations, we can neither see, hear, smell, taste or touch the springs of its action; we know them through the manifestations of fear or confidence, affection or dislike, love or hate, egotism or altruism, miserliness or liberality, selfishness or charity, truthfulness or falsehood, social or anti-social impulses.

This sympathetic system is the real driving power in man although its operations are wholly unconscious; it has no sensory nerves through which alone we are conscious; we know little about it other than its impulses induce feelings; we realize that its existence

has always been felt. It has been misinterpreted as the "heart," the "soul," the "spirit," the "God within us." In other words, there has always been an apprehension of the eternal, imponderable qualities. This system is still an imperfect instrument, it is defectively organized, and there are prodigious differences in its constitution as between human beings. This organism is a discrete and unique growth in each individual. Its constituents and powers are due to the permutations of combinations of chromosomes in the cell from which each one comes. When this cell is fructified the hereditary elements in the ovum and sperm unite and split in such a way as to equally combine the characteristics of the maternal and paternal line of ancestry, that is, if both lines carry a predominant element, it will be redoubled in the progeny, but if they carry divergent elements their combination will produce unlike progeny. Brothers and sisters do not necessarily agree in temperament because at fructification of the cell different characteristics may vary in dominance. Thus if both lines carry the elements susceptible to influence of the quality, the manifestation of which is known as acquisitiveness, the offspring will develop the passion of greed and bring punishment either upon himself or upon some other in the social complex. If the hereditary element in one line carries the altruistic tendency and the hereditary element in the other carries an anti-social tendency, the offspring will partake of both in an unknown combination that will make the child unlike either of his parents and compel him to pursue a different course in life.

The development of the human race indicates the process of growth in the sympathetic system. In the early days the dominant urges in men were those of the primary passions which had been evolved during the long brute animal period; they were necessary to self-preservation; then, through the helplessness and longer nurture of the human kind, there came a gradual apprehension of the finer qualities of affection and social amenities; then a growth in apprehension of beauty, harmony and love.

The permutations in combinations of characteristics are beyond comprehension. Such mixtures of elements may bring forth any result, from that of the most ineffective to that of the highest potency in manifestations of the highest qualities. The perfect life awaits an unseen future when the development of the human instruments or its successor is so endowed with balanced impulses, that restrain all manifestations caused by a predominance of any one

quality, and work together in unison and harmonious accord.

The course of development of instruments has been governed by punishments; it is fundamental nature to flee from evils and to seek the good. All manifestations that were in accord with the universal qualities found no hindrances and persisted, while those which violated those qualities were prevented or restrained by all sorts of distressful punishments. All known evils are due to imperfections in the forms evolved to manifest the eternal qualities or to lack of sufficient susceptibility to apprehend them. It has been a long and painful process, still in its infancy, to evolve the obviously imperfect instruments of the present age with man standing as the acme already accomplished.

The imponderable qualities are not inherited, they are above all forms, they are the only real, external existences in the cosmos. What is inherited are the specific constituents of the nervous system; those elements that predispose the organism to respond to the urges of the universal, omnipresent essence. The temperament depending upon the susceptibility to impulses from this, or that, or the other quality.

The sensory system, on the other hand, I conceive to be a purely environmental configuration; it is newly organized in each and every person. It is but a passive instrument for the conduction of energy as it is aroused by movements in the environment and by the impulses from the sympathetic system. The brain is merely a registering and a passing on of energy mechanism by which the muscular system is activated. The latest scientific discoveries indicate that when an end organ of any of the senses is stimulated, the nerve fibrils, that are susceptible to the stimulation, are decomposed, their energy passes on to the connected neuron where a similar decomposition occurs, the process continuing from neuron to neuron, accumulating force and drawing in elements from sympathetic fibrils in surrounding neurons through their connectives, until the stream of energy enters the central cells that have been organized to receive it. These focussing cells become overcharged and the energy is discharged into the efferent nerves which transmit it to the muscles where it is transformed into heat and motion, much as electricity is transformed in the Leyden Jar.

The organization or coördination of the focussing cells may be watched in the evolution of any and every individual. The newly-born infant is wholly controlled by his sympathetic system; his

breathing, sucking and defections are uncontrolled by his sensory organs: all of his movements are uncoördinated; it is only through training, imitation and personal experiences that paths are made in the nerve organism to specific centres in the cerebro-spinal structure, from which accumulated energy may be transformed into definite action through the muscles. The child is said to learn how to control his muscles and to acquire responsive action to stimulations. Continual use of any specific nerve element causes it to suck in more nourishment from the blood stream and increases its power in like manner as muscles are strengthened by exercise.

The infant must likewise coördinate the vibrations that stimulate his auditory nerves, and form centres that are connected with the vocal muscles before he can comprehend words. As those words that he hears are associated with the patterns in the brain caused by stimulations of other sensory elements they come to represent them however misleading or false they may be.

The discharge or transformation of energy is apprehended, that is, each person is aware, feels the disturbance in his muscles which invariably follows an energy discharge from the nerve cells; this apprehension is consciousness. Interpretation of patterns follows the words that have been laboriously associated with them, and expressions of consciousness are mainly given in such words. Because words are largely misnomers, because they do not truly represent the pattern with which they are connected; because fallacies are transmitted to each generation by words coined in a more ignorant age; because of the persistency of the set to which the patterns are associated in the plastic stage of childhood, the conceptions that flow into the consciousness of the great majority of people are not based upon actual facts; and this is not confined to the illiterate who often have a clearer awareness of the real nature of their patterns, than do those who have been "educated" to conventional word associations. Even the scientist is apt in many cases to carry about with him many misrepresentating interpretations, particularly in lines outside of his specialty. Thus our so-called knowledge is but a mess of interpretations that misinterpret the real patterns. True knowledge consists of demonstrated facts with respect to which all demonstrators concur in associating the same interpretation, all else is mere jugglery with words.

So-called thinking is discharge of nerve energy causing a concomittant response from the vocal muscles and an awareness or

consciousness of words that have become firmly associated with existing patterns. Cogitation or reasoning occurs when stimulations pursue different lines and there is a strife for dominance, with each line summoning to its aid such supporting energy as may be attracted to it; when this dominance is achieved there comes a decision in the form of words that are associated with the dominant energy.

The infant must tediously learn to associate words with the patterns that form through discharges of energy; he is dependent upon the adults about him for these associations; and as those adults do not know the character of the patterns in the infant's brain, and as their own associations are woefully misleading, it is evident that each child acquires interpretations that misrepresent many, if not most of their actual patterns, and such misrepresentations are apt to become fixed ideas that remain during life.

Thus it is that we are all creatures of habit. Why should it be otherwise? We follow and imitate the actions of those with whom we are most closely associated; we are trained to adopt their conclusions; we are stimulated by similar experiences; we react in the same way in the great majority of cases. In the last analysis, it is the usages, the conventions, the habits of the society into which we are born that regulates our actions and our conceptions. A babe born on an island and immediately losing all contact with human beings, brought up, say by a bear, would be devoid of a consciousness of anything beyond that of his fostering animal companions. An infant born in China, subject to the conventions of that country, will be dominated by Chinese habits. In any other country, savage or civilized, the children will conform to social usages, local breeding, and race taboos or superstitions. The only exceptions will be those who inherit pathological conditions that prevent normal response, or the exceptionally endowed individual who has inherited an inner passion that drives him toward some new adventure which has not been developed in his social complex; yet, even here the great majority of responses will be controlled by the social habits of his associates. The universal desire for success is a strong motive for conforming to custom and to manifest in accordance with general expectation. Those are successful who satisfy prevailing ideals, or who anticipate the coming of new conceptions.

Behind the operations of this sensory system lies the impulses

from the real self as it is constituted in the sympathetic system. The latter governs the directions in which energy shall flow. Without a subconscious interest, desire or passion all stimulations are ineffective; they are but the passing show, arousing neither accord nor resentment, neither pleasure nor anger. "Words go in one ear and out the other" without leaving a trace, but let a word be whispered that affects our inherited elements and we are up in arms at once.

That which is outside of experience, either actual or vicarious, is totally absent from sensory patterns; hence each individual is unique, for not only have each one's experience been different, but each person's hereditary endowment causes him to react differently to stimulations. Thus the differences between the adherents of Weismann's theory of an almost immutable germplasm, continuous through the generations, and those who cling to the theory of Lamarck that there is a transmission of acquired characteristics, through the entrance of those factors into the originating cell, is harmonized by the conception that transmission of elements from both ovum and sperm fix the temperament, that is, the hereditary character, and that the sensory system is organized by the physical and social environment, largely through social contagion.

It is my conviction that the attributes which have been the basis upon which have been built the ideals, the morals and religions of men are emanations from the imponderable qualities which constitute the Essence which is in all and through all. Here is found the "synergy" of Ward; the "élan vital" of Bergson; the driving power in the cosmos; the cause lying in that imponderable, universal quality, *the urge to manifest*.

The individual who accepts the foregoing synthesis of scientific facts will find himself in a new world, mysteries will fall away, and a new orientation to life be secured. Reading the great works of the past will be a fresh adventure; between the lines will spring up new interpretations, statements will acquire new meanings; the illusions and superstitions of the past will be clarified, they will be divested of their mysterious content and their fundamental truths will shine forth out of the sophistical interpretations, which lack of scientific facts permitted, and the real meaning of the great sensitive men will appear under the words by which they tried to communicate their responses to the imponderable qualities in their sympathetic systems. A newer and truer valuation will be made of the

conventional and occidental interpretations, as reported in the sayings of Jesus Christ, as given in the New Testament, which, re-interpreted in the light of the science of to-day, show a sensitiveness to the impulses of the imponderable qualities which has appealed to sympathetic organisms and has given them such preponderating influence during the centuries. The fatherhood of God and the brotherhood of man, re-interpreted in accordance with the foregoing synthesis, bring science and religion into perfect accord.

It is my conviction that this scientific estimate of actual conditions furnishes a fundamental basis for a religion that will be accepted by literate and illiterate alike, and revivify the great conceptions of men throughout the centuries.