

WHO? WHENCE? WHERE?

A PHILOSOPHICAL ESSAY

BY
PEDRO BATISTA, M.D.



BROADWAY PUBLISHING CO.
835 Broadway, New York

BI 523
.B3

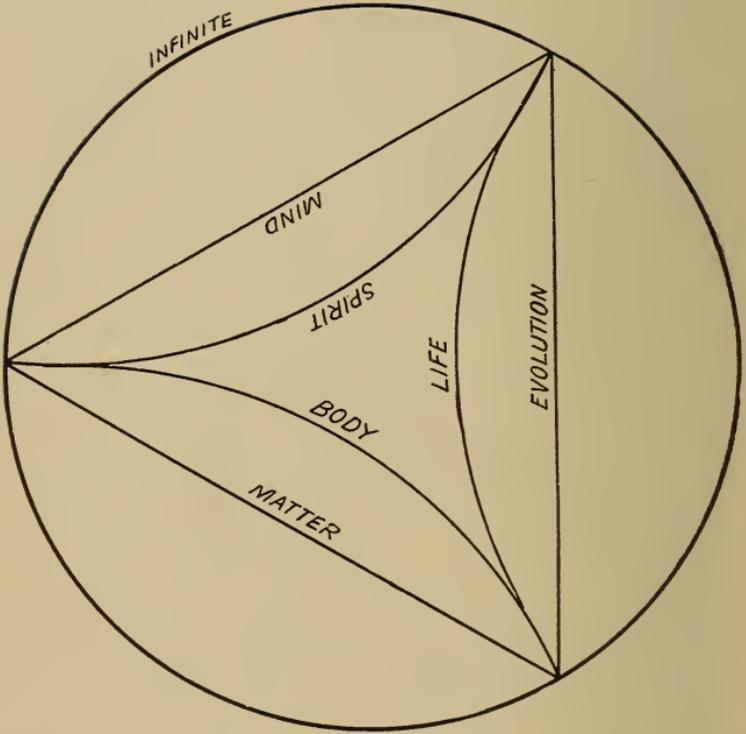
Copyright, 1911,
BY
PEDRO BATISTA, M.D.

01

\$1.00

©Cl.A297792

No. 1



CONTENTS

CHAPTER	PAGE
I. The Causeless Cause	7
II. The Causeless Cause—Nature	12
III. The Life-giving Principle	13
IV. The Need of Diversified Structure for the Functions of Life	18
V. The Similarity of Life	20
VI. Matter and Force	22
VII. The Spirit	26
VIII. The Spirit Location	32
IX. The Evolution of the Spirit	34
X. Matter, Force, Life, and Spirit	37
XI. Nothing is Lost, Nothing is Added	40
XII. Time and Eternity	44
XIII. The Space	46
XIV. The Creation of the Universe was Necessary	48
XV. The Universe is Evolutive	50
XVI. The Object of Man on the Earth	51
XVII. To Be and Not to Be	53
XVIII. Deductions of the Precedent Chap- ters	55
XIX. Résumé	60
XX. Some Points of Controversy	60

TO THE READER.

The purpose of this booklet is to show that the three-fold manifestation of energies, matter, life and spirit act harmoniously together in the making up of the human personality, and that they never work asunder, as matter in any form is the medium of the manifestation of the other two. In a like manner the Infinite is expressed by a three-fold manifestation, viz.: matter, evolution, and mind; and as there is no opposition but apposition between the former, so it is with three-fold manifestation of the Infinite. *Three and one.*

From nothing, nothing is created.

This philosophical essay is written on the theory that the substance or material substratum in which the visible phenomena are manifested is uncreated; on the contrary, the theory falls by its base.

Who? Whence? Where?

CHAPTER I.

THE CAUSELESS CAUSE.

The uncreated, eternal mindful ordering energy of all existing things is called God. Everything is the theatre of his operations. If there were something out of his control He would not be then the ordering energy of all existing things, and would not be in everything; consequently He would not be infinite. That there is such eternal, infinite and mindful ordering energy is absolutely proved by the every-day manifestation of His creations.

The universal gravitation of the stars running in their mathematical course without blunder; the diversified organs of plants and animals, though different in structure, harmoniously combined to keep on not only their life and propagation, but to give expression to arts and science, cannot be the result of a blind energy.

Nature as a mirror reflects God, and we have no other means of thinking and knowing of this infinite essence than those offered to us by the study of nature's laws.

Who? Whence? Where?

This study carries us to a single conclusion, and this one is the existence of a supreme ruling power, "God." To attribute to matter and force alone, or the unmindful energies, the wonders of this universe, would be like to attribute the works of Shakespeare to a mere accidental aggregation of letters and words without any conceptive mind.

The wonders, harmony and order of this universe cannot be the result of mere casualty. Ask of a casuist which was prior, the egg or the hen? If he answers the hen, this presupposes the rooster and a design; if he says the egg, he has to resort to a series of changes or evolutions without excluding some primary phenomenon to commence with; if this primary phenomenon is due to a casualty, all the phenomena depending on it must be due to a casualty; but nature teaches us that created things are subjected to invariable laws, then this primary phenomenon is not due to a casualty, but to a design.

To deny this design and affirm that casualty was the cause of this primary phenomenon, is the same as to affirm that plants could exist before water, animals before plants, carnivora before herbivora, that death was prior to life. A chain of phenomena adapted to some end in view cannot be the result of a mere casualty, as this cannot produce a chain of well-established facts.

The universe is a real, permanent and well-established fact, its laws invariable, and cannot reflect an accident as its mere cause, but an immutable and eternal designer.

Life changes inorganic matter into an organic

Who? Whence? Where?

and living matter, and death turns the organic into inorganic; we are unable to account for these phenomena without having a design or intelligence in a creator. To attribute to an accident the alternation of these two phenomena, life and death without a design, it is to take for its cause a mere phenomenon; if an accident has given to matter the power to organize itself, another accident was necessary to destroy that power.

The power of matter to organize itself is temporary and limited to definite forms, and we observe here two laws, one that limits the organization of matter to definite forms, and other that limits the lifetime of their organization; if there were not a law inhibited in matter to control this mechanism of self-limitation, then it would happen by a mechanism of accidents. Nothing in human industry is due to a mechanism of accidents, then it would be left for nature, the most wonderful industrial work ever existing to be due to a mechanism of accidents.

We may illustrate the former reasoning by means of an egg. This is composed of two substances—the white and the yolk, the former is to form the chicken, the latter is a provision for his nutrition; and here is a design: the white is to be divided into several structures of different shapes and functions working altogether with one end in view: life, form, and a distinction in sexual organs for the perpetuation of the species. If we exclude a design for the explanation of these two phenomena, then we have to recur to a series of accidents without any end in

Who? Whence? Where?

view subjected to invariable laws, which seems absurd, since accident is not invariable.

If the human mind refuses to admit a primary ruling power, it finds itself as a traveler in a road without end; and as nothing definite can be done without an end in view, we shall have no plausible theory to explain this wonderful universe.

Take arithmetic, and unit is the foundation of the mathematical science as the point is that of geometry; both the unit and point are conventional. Nothing in the world is an absolute unity, everything is an aggregation of unities. All bodies are composed of molecules, these of atoms, and the atom is theoretical, conventional, and to explain the harmonious phenomena and laws of this universe, we need a conventional unity, not the unconscious atoms, because they are unlimited, but the conscious God.

The universe is an aggregation of unities subjected to laws, and we cannot have as a God the one that is subjected to laws, but the one that subjects everything to laws.

Matter is the subordinate energy, and mind the ruling one, and both are not in opposition, but in perfect harmony as mind and body in man are in agreeable consort. Matter is something upon which the mind works and has control; mind is wisdom, will and power, and the wisdom, will and power of God can work and control the uncreated matter.

Matter is immutable in itself, though its manifestations are innumerable, and the supreme ruling

Who? Whence? Where?

power is immutable, too, in Himself, though His designs are in eternal action.

A blind energy may explain a mere phenomenon, but a series of them bound to accomplish an end in view cannot be the result of a mere accident, but absolutely the effect of an ordering mind.

CHAPTER II.

THE CAUSELESS CAUSE—NATURE.

The nature of the eternal and mindful ordering energy is psychical. We cannot form any idea of the nature of a psychical entity, though its acts are realized in a material medium, as the human mind in the brain.

The designs of God are realized in the universe as a medium of His manifestation, and if we are not, through our lack of knowledge, able to understand His psychical essence, we may, by the study of nature's laws, grasp some of His designs. One of the essential attributes is His will, and as everything in the nature of God is eternal and immutable, His will is immutable. The will of God is not a simple caprice, a changeable determination, but the immutable identification of His wisdom, power and design. We cannot get any knowledge of Him by the study of His own nature, because it is beyond our conception, but by the study of nature's laws we can learn some of His wisdom, power and design, and as we do not see any distinction between Him and His attributes, we say, to know His attributes is to know Him.

CHAPTER III.

THE LIFE-GIVING PRINCIPLE.

Our life, as our bodies, are not absolutely ours, they depend for their actual existence upon laws to which they are completely subordinate. We do not live as long as we wish, but as long as we are allowed to live. The body's form disappears after death, but every particle, every atom of its components parts is indestructible. Neither is the force that animates the body annihilated. What we observe in our daily experience is the mutation that is constantly going on in all force and matter manifestation, but the force and matter itself are indestructible. If we take a piece of wood and burn it, the change of form and new chemical compounds that takes place with the exhibition of light and heat is a mere manifestation of forces that are set free, in contradistinction of the same forces before the piece of wood was burned, being named "latent force." The equilibrium of the forces has been broken, and the atomistic arrangement changed, but nothing is annihilated of what is substantial or cause; the whole matter and force of the piece of wood is unchangeable in itself, and will

Who? Whence? Where?

forever exist in nature. One thing is perishable in the burning piece of wood, and that is the momentary manifestation of light and heat, but the causes of these manifestations are as eternal as nature itself.

The theory that the vibrations of the atoms are transmitted through a subtle medium called ether, is the most acceptable. Any break in the equilibrium of the body's molecules finds expression in some of those agents called heat, light, magnetism, gravity, attraction, etc.

The life-giving principle pervades all organic matter, and wherever its surroundings are adequate for its development and propagation the phenomena of life are manifested. The essential difference between the bodies endowed with life and those that lack this principle is that the former grow by inside affinity through the phenomena of osmosis, and the latter by the aggregation of new molecules outside of its surface. The organic bodies only propagate themselves by parent cells. The appearance of the first cell or cells on the surface of the planet was congruent with some of the geological periods of the earth.

Life did not appear until the earth was ready for it.

Life has no end in its manifestations, and the medium of its operation are matter and force. The lesser forms with which life manifests itself is to subserve the higher forms of it. The vegetable kingdom is the great laboratory where the simple elements are combined and turned into organic mat-

Who? Whence? Where?

ter to give life to the zoölogical kingdom. Life is the foundation of a series of phenomena that otherwise could not be manifested, but in the organic matter.

The fundamental property with which it is endowed is the irritability. We observe this irritability to the action of light, heat, dampness, air, etc., in the seed developing at their influence. The vital principle is latent in the seed, and the above surrounding influences awaken it to action. Some plants show this irritability in another form, viz.: by the folding of the leaves at the contact of the hand, exhibiting at the same time a contractile power, which phenomena in the lower forms of life is called sensation, because we suppose they have felt the contact. To the irritability and contractility follows the impressionability, which faculties need the presence of special senses, and these are the ones that place the living being in relation with its surroundings and the subtle forces of nature. The sense of touch, the most universal sense in the living being, tells it of the presence of any body other than itself. As there is no leap in the phenomena of nature, that sense does the transition from some plants to the animal. The muscular sense, by which an animal is conscious of its bodily activity is common to all of them. The sense of temperature also. The sense of smell, hearing and sight are impressed by more subtle forces, as odoriferous gases, sound waves and light. The external senses are connected by means of nerves with the brain, where the organs of perception of the external impressions are

Who? Whence? Where?

located and converted into images, ideas, conceptions, volitions, etc. The lower animals, endowed only with a system of ganglionic nerves, are exclusively ruled by instincts. No leap either in the evolution of the nervous system, which structure is developed by a natural scale from the ganglionic form to the spinal, and then to the cerebral with their adapted functions. The association or dissociation of ideas with its desires provoked by the external impressions in a large or small degree is what makes the intellectual difference in the zoölogical kingdom. Life had to provide animals with a nervous system for the manifestation of mental phenomena. The life that provides a plant with a nutritive power, growth and form is the same life-giving principle that provides an animal with organs of *relation* and mental manifestations, as that of perception, ideas, memory, hate, love, etc. What varies is not the principle, but its instrumentality. These last manifestation of life is called *Soul*. Life in a tree has the roots to absorb from the earth the mineral elements, the leaves to absorb the carbon during the day and exhale the oxygen, and vice versâ during the night, the branches to carry the flowers and fruits, and all these different functions belong to the same life principle. In the animal there is a finer structure, "the nervous system," through which life shows its intellect. This last faculty is to the animal what blooming is to the plant, another higher manifestation of life shown by a new structure.

That this principle does not manifest itself out

Who? Whence? Where?

of the living bodies is not a proof against its existence, as it is not a proof against the atomistic vibration that heat, light, electricity and magnetism do not manifest themselves separated from the bodies, but always start from them. To the life-giving principle is due then the animation of matter.

CHAPTER IV.

THE NEED OF DIVERSIFIED STRUCTURE FOR THE
FUNCTIONS OF LIFE.

That all manifestations of life cannot be expressed by a single structure is proved by the histological formation of the organs. The cell is the foundation of all them, and adopts the form, appropriates the materials and builds the tissues according to the functions assigned to it. The bone cell is to build hard tissues for the holding of muscles and the muscular cell contractil tissue to move hollow organs and bones. The cell of the visceras is endowed with a special secretive and excretive function that helps the work of general nutrition of the body. The fat cell to round the form, and as a provision for the nutriment of the tissues.

In the cerebro-spinal system, though apparently similar in structure, each part has its peculiar cell and function, and the loss of one is not substituted by the other. The hearing nerve cannot substitute the optic nerve, nor this one the olfactory nerve, and so on.

It is seen that the functions of life are not only to animate the organic matter, but to produce or-

Who? Whence? Where?

gans with especial faculties for the conservation and perpetuation of it, and its relations with the subtle forces of nature. Life alone, with its variations in form and structure, is sufficient to explain all the physical organic and mental phenomena of animal life. The forms and organs of life supervene with the medium of its development. The fish is provided with gills for its respiration, and fins for locomotion; birds with feathers to fly; mammalia with feet to walk. In the struggle for life, those that adapt themselves better to the medium in which they live have a chance to survive other species. Life works here indirectly for the supremacy of its best forms.

Who? Whence? Where?

CHAPTER V.

THE SIMILARITY OF LIFE.

Man has a life in its fundamental operations common with all living organizations, from the monera to the quadruman. The main function of all living beings is the osmosis, which belongs to both the vegetable and animal kingdom. In the organic matter the chemical elements are combined in ternary and quaternary groups. (The chemical inorganic affinities only combine two or three chemical elements.) Under the vital principle four or more chemical elements may be combined and produce compound radicals. Only life is endowed with such property: the growth of minerals is unlimited, the organized bodies are self-limited. There is for this differentiation an absolute different agent, the vital principle "Life." This is divided into two great functions, viz.: the vegetative and animal functions, which are correlative, the former undertakes the growth, form and reproduction of the being, the latter, motion, sensation and intelligence.

From the seed the vegetative life is awakened by moisture, soil, light and heat, and the plant is developed with its flowers and fruits. As the transi-

Who? Whence? Where?

tion from plant to animal life is not abrupt, as it is observed in the sensitive plant, whose leaves, possessing retractility and motion, fold when its branches are touched. The lower forms of animals, such as worms, have only retractility, motion and sensation. The senses in the zoölogical scale develop gradually from the sense of touch to the highest form of them, "the sight." The nervous system develops gradually, too, there is no leap in the evolution from the simple nervous ganglion to the human brain. No one doubts the similarity of the nutritive functions between animal and man, the digestion, circulation, respiration and calorification to keep on and reproduce the tissues are similar; the digestive canal develops from a simple tube to the complicated apparatus of man. The mental faculties develop gradually, too, in the zoölogical scale, and it is a less difficult matter to differentiate from the physical character to the hand, between the quadruman and man, than intellectually between the highest family of monkeys, bushmen and other savages. There is no jump in nature, but the gradual evolution of every energy.

CHAPTER VI.

MATTER AND FORCE.

In the real world we know only bodies, which manifest to us in three different forms, solid, liquid and gaseous, and they act on our senses, creating as many ideas as are the impressions conveyed to the brain and perceived by it. Nothing called matter is revealed to our senses. Matter is a subjective idea, an abstract noun, derived from the analytic faculties of the mind, but in the physical nature itself this subjective noun has not any objective representation. If we abstract mentally from the bodies the properties through which they act upon our senses, nothing is left to our conscious mind to perceive, but a conception, viz.: the abstract noun matter, which we suppose is the substratum in which all physical, vital and psychical energy is manifested. All its properties are only manifestation of those energies. No force is manifested out of matter, but in matter. Deep, wide, long, small, hard, soft, smooth, rough, etc., are qualities without any meaning out of the bodies. All these properties are the way in which matter is manifested to the mind. The color of the bodies depends on the light

Who? Whence? Where?

reflected by them. All the said properties are what makes matter appear as bodies.

Some chemists think that the specific heat of the bodies constitutes their differences.

The agent that produces motion is called force. Gravity, electricity, magnetism, heat, light, affinity, cohesion, are the most common manifestations of the matter force. They are the results of the vibrations of the matter atoms. Their number and rapidity give place to its different effects. There is no matter without force, as it is the centre of it. Any disturbance in the atomistic arrangement of a body is always accomplished with a production or change of force, which is subjected to invariable laws. From the substance starts all energy and in it, too, they end. It is not recognizable by the senses, but recognized only by the superior faculties of the mind, viz. : an analysis and synthesis. Matter acts on our senses in the bodily form, through the agency of its forces. The different action in its operation depends on the state of its atomistic vibration. Any change in the atom is followed by some on the energy of the body. If a piece of iron is heated, it expands first and melts after, cold causes its contraction and makes it more dense, and the lowest degree of cold brittles it. Water changes from the liquid to the vapor state as it is heated and frozen hard by cold. Any chemical change in the body starts in motion its energy, and when it is in a state of repose is called *latent force*, and when in motion, *free force*. In the former case it is in a state of equilibrium, in the latter that state is

Who? Whence? Where?

broken. The forces interchange; electricity into light and heat, these again into electricity; magnetism is a form of electricity, the different manifestations being correlative. The electro-chemical theory supposes the atom surrounded by an electrical atmosphere and all change in the polarization of it gives place to a chemical decomposition or composition of the body, setting free some form of energy, or accumulating it in the new body. No energy is lost. The heat of the sun is accumulated by the growing seed into the trunk and branches of the tree, which subsequently serves to heat our rooms during the fall. The ether, that theoretical fluid that pervades all nature, is the medium of transmission of the vibration of the atom by its waves, which according to their size and number are exhibited as heat, light, magnetism, etc. This theory proves that the body's matter is a centre of forces, and that the body's change and motion is due to the undivisible nature of both, matter and force, and the one cannot act without the other; in other words, "the bodily existence is due to the vibrating substance." As the senses cannot perceive the substance itself, the only thing perceived by them is the state of vibration, or what is called properties. When the waves of ether affects the eyes, and impresses the optic nerve, it is called "light"; the air waves when perceived by the acoustic nerve "sound"; when the waves of ether impress the sensitive nerves of the skin, causing a warm sensation, "heat"; the tact and muscles perceive the adhesion of the body's atoms by their resistance to roll upon

Who? Whence? Where?

themselves. With the above explanation it is clearly seen that the only thing shown to the senses is energy, the substance itself being left to the metaphysical conception of the mind. In a word, the direct relation of the senses is with the energies.

CHAPTER VII.

THE SPIRIT.

The spirit is the ruling essence embodied by the human flesh through the vital principle. Its instrumentality is the reasoning act, which is attended by the following faculties: 1. Analysis. 2. Synthesis. 3. Induction. 4. Deduction, with its conclusions and consequences, assisted by axiom and corrolary. 5. Reflection, with its modality, conscience.

The analysis is the tracing of things to their source and the resolving of knowledge into its original principle.

Synthesis, composition, or that process of reasoning in which we advance by a regular chain from principles before established or assumed and propositions already proved till we arrive at the conclusion.

Induction, a kind of argument which infers respecting a whole class what has been ascertained respecting one or more individuals of that class. It is the direct reverse of logical deduction. It ascends from the part to the whole, and forms the general analogy of nature or special presumptions in the case, conclusions which have greater or less degree

Who? Whence? Where?

of force, and which may be strengthened, or weakened by subsequent experience. It relates to actual existence, as in physical science or the concerns of life.

Deduction descends from the whole to some included part; its inferences are necessary conclusions according to the laws of thought, being merely the recognition of some particular, as included or contained in something general. The inference of some general truth from all the particulars embraced under it, as legitimated by the laws of thought and abstracted from the conditions of any particular matter. This may be called metaphysical induction, and should be carefully distinguished from the illations of physics spoken of above. The conclusion or inference drawn from a process of induction.

Reflection, the operation of mind by which it turns its views back upon itself and its operations, the review or reconsideration of past thoughts, opinion or decisions of the mind, or past events.

Conscience is a modality of the reflection, the general principle of moral approbation or disapprobation applied to one's own conduct and affections and our notions of right or wrong are not to be deduced from a single principle or faculty, but from various powers of the understanding and will.

Axiom, a self-evident truth or a proposition whose truth is as evident at first sight that no process of reasoning or demonstration can make it plainer, as the whole is greater than a part.

Consequent, that which follows from propositions by rational deduction, that which is deduced

Who? Whence? Where?

from reasoning or argumentation: a conclusion or inference.

Corollary, an inference from a preceding proposition, a consequent truth which follows immediately from some preceding truth or demonstration.

Among the most elaborated ideas of the mind are the abstract ideas, which without preëxistence in the spirit could not be awakened by any process of the vital principle.

The causeless cause conception with its attributes, viz.: uncreated, infinite, eternal, immutable, is preëxisting in the spirit. The divinity idea is the result of all these abstract conceptions striking at once at the contemplating spirit. Nothing else than a ruling essence can possess metaphysical conceits—like produces like. By induction the mind faculties pass from the known to the unknown, from the visible to the invisible, from the particular to the general, and from the objective to the subjective ideas. The idea of God preëxists in the spirit, and is awakened by the mind faculties. Everything in contact with the senses is finite, limited, and the conclusions drawn by them cannot awake the idea of God were He not preëxisting in the spirit. The boundaries of the animal soul are the limited, finite and objective ideas. The boundaries of the spirit are the abstract and the causeless cause ideas.

Another definition of the spirit would be: "The essence that conceives the infinite." This infinite conceit is not an atom, or a molecule, or a force phenomena which are manifested by weight and

Who? Whence? Where?

motion. It is only the unique light of the Divine essence reflected on the spirit, the only one pre-existing in Him. The abstract ideas which do not include the conceit of the infinite, as the idea of order, beauty, justice, virtue, harmony, etc., are the result of the high faculties upon those of the animal soul. Those abstract ideas to be created need the linking chain of the spirit with the outer world through the vital principle or animal soul. The communion of the spirit with the human brain is through the vital principle, and the creation of the ideas of second order is through the exercise of the highest faculties on the faculties of the soul, by which the spirit is brought in contact with the physical bodies. The analysis of the regular disposition or methodical arrangement of things creates the idea of order. The one of beauty by an assemblage of graces or properties in the form of the person or any other object which pleases the eye, other senses or the understanding. That of justice by the virtue which consists in giving to every one what is due. The idea of virtue by moral goodness or the practice of moral duties and the abstaining from vices, or a conformity of life or conversation to the moral laws. The one of harmony by the just adaptation of parts to each other in any system or composition of things intended to form a connected whole.

It is seen that the reflective power of mind working on the objective ideas of the soul born from the direct relation through the senses with the world creates the abstract conceits possessed by the spirit.

Who? Whence? Where?

The animal soul is to the spirit what a window is to a room lighted by the sun. If the window is open and the sun's rays enter it, the eye can see every object in it; if the window is shut and the room thrown into darkness, the eye, though keeping the sight, sees nothing. The senses' centres in the brain are the storehouse of objective ideas, the soul the window, the high faculties the light, and the seer the spirit.

With the vital principle departing from the body, all connection of the spirit with the outer world is broken, and as the animation of the vital principle relates immediately with the brain matter and its physiological functions, all interference with the brain substance and its functions interfere with its vitality, and the alteration of its vitality and functions interfere with the carnal influence of the spirit.

The living brain is the instrument of the soul, its physiological function is in direct relation with the mind faculties, and the soundness of these faculties with the normal operation of the spirit.

The sleep is a state of brain's functions in which mind is in abeyance. Dream is the awakening of one or several centers of the brain with their corresponding outer sense in repose.

Man reaches with manhood that high light of perfect conscience, in which the relation of the spirit with the inner and outer world is most complete. In the embryo, life is almost vegetative; in the infant it is animal. The idea or knowledge of the spirit comes with the approach of the full maturity of the reasoning act. The spirit is known concep-

Who? Whence? Where?

tively to himself when the highest power of mind faculties unfold it. Life is transmissible, but not the spirit. Life, like fire, though exhausted in a body, is communicable to others. The spirit only takes possession of the body through the medium of life, and is manifested through the high faculties of reasoning.

CHAPTER VIII.

THE SPIRIT LOCATION.

The spirit being somewhere in the body, and its relations wholly confined to the animal soul, it necessarily must be located where the functions of the animal soul are exercised. The external senses are in direct relation with the outer world and in communication with the inner senses of the brain where perception is realized. The perceptive organs of the brain are the seat of the objective ideas, or pictured ideas; and the circumvolutions on the brain the seat of them and of the will. As the relation of the spirit is with the animal soul and the brain the centre of the impulses, emotions and pictured ideas, it follows necessarily that the place for the spirit to rule and guide is where its influence may be felt, and its influence is felt in the cerebral circumvolutions.

The brain is like a central phonographic station, from where every wire starts, and in which all wires end; to which all news is sent, and from which all orders depart. Through the motor nerves goes all command of the will or desire; through the sensitive and special nerves go all external impressions

Who? Whence? Where?

to the brain's centres where they are perceived, and as the perception is made the desire reacts, accepting or repelling the perception as it is favorable or detrimental to the preservation or perpetuation of life. The brain being the centre of perception of the animal impressions, it is there where the objective ideas take place.

The spirit, that high and noble essence, has for his object to preside upon the faculties of the animal soul, ruling and controlling them, and necessarily must have his seat where its controlling influence can be felt, and as this controlling influence resides in the circumvolutions of the brain, then these organs must be the seat of the spirit in the body.

CHAPTER IX.

THE EVOLUTION OF THE SPIRIT.

The evolution of the spirit follows that of the mind, and this one that of the brain, and the brain that of the senses.

From the lowest to the highest form of life the relation of the brain with the outer world is established through the senses, and the scale of relation is more broad as the number of them increases. The association of two or more ideas perceived by the brain give place to judgment and the animal is guided by it.

The animal intellect has for its field the concrete or objective ideas produced by the sensations and impressions of the external senses—the spirit through the high faculties has for its field the abstract ideas elaborated from the correlation of the centres of the perception, conception and judgment, and these abstract ideas go to constitute the storehouse of the psychical mind.

Science is the result of these intellectual operations applied to a certain order of phenomena. The accumulation through centuries of scientific knowledge acquired by observation, experience and inves-

Who? Whence? Where?

tigation, and that actually added, makes the vastness of abstract ideas for the spirit's choice, and determines the line of its progress. The objective lesson comes from the outer world and perception, and the subjective knowledge from the operation of the high faculties on those of perception. The correctness of the latter is the fundamental base of exact knowledge. The knowledge called science has been accumulated by the higher specimens of mankind, and it is not the result of a single individual, but of thousands. Science had a beginning, and its progress has followed the entire course of evolution of the inner senses with the outer world through the external senses. The evolution of the faculties follows that of the brain.

To civilized man there are thousands of things of artistic and industrial work that strike his mind and make him think, indirectly developing his mind. The development of the brain and its functions follows their exercise, and the spirit in its evolution follows them in their course.

The antropological science shows the above statement clearly. In the collections of skulls in some national museums, if some one were to try to point out in a classified row of human skulls since the post-glacial era of the earth to the present time where the man's skull ends and that of the animal begins, none except an expert naturalist could point out the limit. This is because there was no leap in the scale, and the evolution of the facial angle between the past and present human races was very gradually done. It cannot be denied that the pro-

Who? Whence? Where?

gressiveness of science and the plane of the spirit's progress in the different races is in accordance with the brain's development. The more numerical are its circumvolutions the higher the power revealed by the spirit.

CHAPTER X.

MATTER, FORCE, LIFE, AND SPIRIT.

In the real world, the only one known to man, nothing exists as matter, only as bodies, which acting upon our senses create as many ideas as are the impressions conveyed to the brain and perceived by it. What is called matter is the result of the analytic faculties of the mind, a subjective idea, but in nature itself this idea has not any real representation. If the body's energy is mentally separated from them, nothing is left but a conception.

Matter acts upon our senses not by itself, but through its energies, the only one that impresses them. There is no matter without energy, or what is called attributes, which is nothing else but the manner in which they affect our senses.

No such thing as color existing as an independent entity, but only colored bodies, being the purpose of the abstract noun "color" to simplify the language.

It is proved by the above reasoning that matter and force are correlative ideas, and we are only cognizant of the impressions made upon our senses by the material body through its energy, but are absolutely ignorant of matter itself as centre of energies.

Who? Whence? Where?

Life is a kind of energy with which all living organized bodies are endowed. This energy is not common to every combination of chemical elements, but only peculiar to the combination of some of the chemical elements recognized by the inorganic chemistry, and they are sixteen in number. The rest are not susceptible of organization, and consequently of vitalization. That property is what makes life energy very distinct from all other energy. Life endows matter with self-limited organization, impressionability, impulse, instincts, sensation, emotion, memory and objective and associated ideas with judgment based on them. Life, like fire, is transmissible, pervades all the planet, and is always impelling the organizable elements to take living forms.

The spirit is an entity whose energies are manifested by the ruling of the animal soul, and as all other energy does not disclose itself out of the organized living body, of which the highest type is the human species. It needs matter under some form of organization to manifest itself. The wonderful elaborated structure of the living organism is to serve their minds, and to affirm that their minds can act separate from their bodies is like affirming that matter can act separate of its energy, viz.: a carpenter cannot make a piece of furniture from a log without tools, but with tools he can do it. Such is the case with matter, life and spirit, and consequently they are correlative.

There are in nature three entities playing the totality of its phenomena, viz.: the vibrating mat-

Who? Whence? Where?

ter, or matter and force, the life-giving principle, and the ruling energy or spirit.

The ether conveys the atomistic vibrations of the bodies as the air waves the sound. Dust is the plastic substance that is organized and informed by the life-giving principle. The spirit rules and controls the animal passions and instincts in contradistinction of the animal soul that follows and obeys them. Each of these energies subserves the other; matter and force subserves life and life the spirit. No one of them has a meaning without the other. Matter has no meaning without force, matter and force without life, and life without spirit. The existing energies combine to form a grand total, and they move eternally in harmony.

CHAPTER XI.

NOTHING IS LOST, NOTHING IS ADDED.

That nothing is lost in nature means that everything since the formation of this planet is still in it; nothing has disappeared, nothing has been added, and what is said of the atoms is also said of the energies.

Chemistry has solved the problem, that the simple elements of matter when they enter into the composition of a body, the same quantity and quality is to be found after the decomposition of the body; e. g., water, the composition of it is H_2O , as proved by analysis and synthesis. The analysis separates the elements that enter into the water composition, hydrogen, two volumes, and oxygen, one, and the synthesis combines and reproduces them. In this way, it is seen that two volumes of hydrogen and one of oxygen make water. That chemical truth shows that the materials that have entered into the composition and formation of the vegetable and animal kingdom at the beginning of organized matter are the same materials that enter to-day into their composition.

It is known by our daily experience that a new-

Who? Whence? Where?

born child weighs about nine pounds, and when he reaches the adult age weighs from one hundred and fifty to two hundred pounds, which increase in weight is represented by the assimilated vegetable and animal food during his growth. The organic substance forming the human body decays after death, turning back into its primary chemical elements, which when dispersed in the soil and air are taken up by the plants endowed with new life to feed back again higher orders of life.

The earth feeds the plants and the plants the herbivora, the herbivora the carnivora, and these last again the earth. That constitutes the definite circle in which nothing is lost, nothing is added.

It is seen that the materials which enter into the composition or structure of the present life's forms are those that formed the bodies of the past ones, and certainly will be the ones to form the future forms of life.

Death alone does not cause these changes. It is kept on during the life of the organic bodies. They assimilate from the food all they need to convert it into motion and sustain life, and the residue is turned out into the soil to be used again. We see in this process the eternal work of the vital principle, and the transitory life of matter.

The heat of the sun raises the surface of the water of the ocean, rivers and brooks in the form of vapor; it forms clouds that fall in drops, called rains, these rains after flooding the rivers, lakes, brooks and feeding the plants run to the ocean, to be raised again on the same mission. The water that

Who? Whence? Where?

a man drinks to-day was drunk by another one before. It is always the same amount and runs the same circle.

The energy that converts through the plants the inorganic chemical elements into a living organic substance is in proportion to the materials it is to be converted into, the demand for the creation of more not being necessary. It is known that light, heat, electricity, climate, soil, humidity, air, carbonic acid and ammonia are all, or in part, necessary environment for the healthy growth of the plants, but we are in darkness about that intrinsic energy called life, that limits the growth, form, existence, qualities and properties of plants and animals.

Certainly there is no more life energy in the planet to-day than there was at its beginning. Logically it must be supposed that the giving life principle since the formation of this planet was the one needed for the conversion of its inorganic elements, that had to be converted into organic substance, otherwise the creation of this energy would be in daily demand.

Our planet does not take from the sun more light and heat than that necessary for the preservation, growth and perpetuation of the living entities in it.

As there is no more energy existing since the appearance of the planet than that corresponding to its material subtractum, and no more life-giving principle than that needed for the materials to be converted into living organic substance, so there is no more ruling energy than that needed for the ma-

Who? Whence? Where?

terial subtractum to be converted into living human brains.

The belief that the spirit existed since the beginning of all things is more acceptable than that of their daily creation.

All energy and substance existing to-day has existed before, the change being only in the form and action, the moving circle being the law. Nothing is lost, nothing is added.

CHAPTER XII.

TIME AND ETERNITY.

Time is the succession of phenomena shown by some moving agent, the agent itself being unchangeable. Matter has always been matter, and always will remain so, its nature eternal and has never had any beginning. Its condition of existence is motion and vibration, and both the cause of all physical phenomena, time being the marking difference between them. If the earth were not round and revolving upon its axis and around the sun, it would not be a succession of days and nights, it would be always day or night, no seconds, no minutes, no hours, no days, no weeks, no years, no time. Stop all motion, stop all vibration, in a word, all change and you will suppress all phenomena, you will suppress time, you will fully come into eternity by suppressing time, by suppressing activity of matter. Matter without motion is eternity; moving matter is eternity in motion; then we are not out of eternity, but in a moving eternity. That is why we are in substance, in principle to-day, what we were yesterday and what we will be to-morrow. All the manifestations, all the coming and going of

Who? Whence? Where?

the phenomena are transient, but the essence itself, which gives cause to such phenomena is eternal, never annihilated, never disappearing, always creating and never created. Time into eternity. We are not to be afraid of our past, present and future as a constitutive entity of matter, life and spirit, they have been always matter, life and spirit, but not always in the same consort, and not always giving off the same phenomena.

Take, e. g., a human embryo. There is matter, life and spirit nucleus, in which matter grows not by creation, but by addition and development, life by action, and the spirit by manifestation. Everything as essence has been there from immemorial time, ever acting, ever giving off phenomena, but not in the way of that particular embryo. Matter is there to increase, life to develop, the spirit in a state of potentiality, in other words, the eternal bordering with the temporal, the ever-existing with the ever-changing, the eternal and the temporal—time and eternity.

CHAPTER XIII.

THE SPACE.

Space is a phenomenon identical to time. It depends on matter for its existence. Without bodies there would not be space. Matter by its vibration and motion constitutes the bodies, which have dimensions, and these and their relations are called space or distance. If there were not bodies with dimensions and relations between them, it would not be any estimation by our senses of those properties and consequently no idea of space. Our imagination suppressing the bodies does not suppress something belonging to them, to matter in action, viz.: its dimensions, without which would not be space. Space, like time, is a modality of matter. We can imagine an immense vacuum after mentally suppressing the universe, and the error of our imagination would be similar as to imagine the existence of time after the suppression of all matter manifestation. Without motion of matter there would be no time, without bodies there would be no space. Space is not independent of bodies, no object for it without matter. The known universe is full of matter. Fishes find space in the water, birds in the air, and

Who? Whence? Where?

those spaces are bodies. Every existing substance bathes itself in the ether, and this is a subtle matter that fills the universe. As matter by its motion and vibration gives place to time, so by its formation of bodies gives place to dimensions and distances which are called space; but it is wholly related to the existence of matter, as time is.

CHAPTER XIV.

THE CREATION OF THE UNIVERSE WAS NECESSARY.

The creation of the universe is not a mere whim, it obeys one of God's greatest attributes, and it is His creative power. That God could possess this wonderful attribute and not to exercise it, would be an equivalent to his nullification. His designing mind acting together with His creative power had necessarily to give forth the created universe in unison with the one designed. The exercise of his creative power is His glorification, and without this glorification He could not be known out of Himself or exteriorize Himself, and without this exteriorization it would have been impossible any glorification, and His existence would be as silent as eternity.

The following illustration will serve our purpose: If Shakespeare had not put down in writing his thoughts he would have passed through life as any other man, but the production of his works has shown and revealed the extraordinary brains he possessed, that he was a genius, and that his works consequently stand as his glorification. If he had to be glorified and immortalized it was absolutely necessary for him to exteriorize the power of his genius.

Who? Whence? Where?

God had to be glorified and necessarily had to create. The creation of this universe is His glorification and consequently necessary.

CHAPTER XV.

THE UNIVERSE IS EVOLUTIVE.

A universe absolutely still would be a magical product without any meaning, a panorama lacking in perspective, a foetus born in eternity, left in eternity and dead in eternity. Billions of years would not count a single second in a still universe. That sort of a universe would not account for any creation. Evolution means motion, and motion life. A living universe is an evolutive one, in which time and space are the formulæ of its existence. Time is the soul of evolution, is the appreciation of difference between two phenomena, and space is the dimension and distance of these phenomena. To give to himself an account of his existence is to be evolutive, that is why the universe is evolutive.

CHAPTER XVI.

THE OBJECT OF MAN ON THE EARTH.

His object is to work his perfection and accomplish what nature cannot do by itself. Nature has created the marble and the sculptor has made the Venus of Medici. Man developing the arts, sciences, and industries will in time turn the planet from a rough wilderness into an Eden. The forces that have been against him shall be harnessed and made subservient. To the darkness of superstition will follow the light of self-conscience and the knowledge of the purpose of his existence. One man or one generation in the artistic building of the surface of this planet is no more than a drop of water in the ocean. The present race of mankind possesses the knowledge and efforts of thousands of generations in the acquisition of all its artistic and industrial works. A generation has the inheritance of what the preceding one has discovered, and the accumulation of knowledge through ages enlarges the intellectual power of the following ones.

The man of the Stone Age compared with the Caucasian race of the twentieth century would be

Who? Whence? Where?

no more worthy than a beast of to-day were it not for the embryonary psychic light hidden in him.

Man has been taught to look and long for his personal existence after death in spite of the daily experience of his dissolution.'

The personal existence forever without any intrinsic change in the composition of his clay and mind since birth to death, and after death is a biased hope of a poetic imagination, though dreamed, never realized.

All fruitful discovery, all advancement made by man in art, science and industry is held in and kept in the body of his intellectual inheritance, but his personality disappears with his death, as the lightning spark of the opposed electricity disappears with its neutralization.

The clay that forms the mortal flesh of the to-day man will form the flesh of the to-morrow man, and the same mind that organized and directed that clay yesterday will be the same mind that will direct to-morrow.

Man is an advance agent of God on earth. God has created the minerals, the plants and animals, and man the locomotive and sewing machine. This planet is his inheritance, and to him belongs the duty to make it a hell or a paradise. Ignorance, superstition, corruption and sensualism turn it into a hell; wisdom, self-control, kindness and the Fatherhood of God into a paradise.

CHAPTER XVII.

TO BE AND NOT TO BE.

I am, and I am not. Both propositions contain a relative truth. I am, it means that I distinguish consciously between myself and what is not myself, consequently I am something. I am not is another relative truth. It means that I depend on something else for my existence, or in a word, that I am a part of something else from which I depend for my being or existence, as an integral part of it. If it is admitted that the creation from nothing is an Utopia, the above propositions are self-evident.

To accept the truth of the above propositions, it is to accept the sound principle that all substantial things existing to-day have preëxisted, and only a change of form and manifestation is what is going on. I am not conscious by myself, because I would be conscious all the time, even through sleep, but in the latter state there is only the latent energy through which I become conscious when awakened, consequently consciousness is not a state by itself, but it is the operation of some energy or combined energies in a special act. The action of these energies is intermittent. Sleep and vigil being only

Who? Whence? Where?

the effects on the mode in which the energies act. In sleep the conscious mind is slumbering, at the awakening it is found there, where it fell asleep. So we see that we are only an effect of energies that act in and through us, and our conscious existence is subjected to the laws of their manifestations. To be and not to be.

CHAPTER XVIII.

DEDUCTIONS OF THE PRECEDENT CHAPTERS.

As we cannot go farther than the observation and analytical power of our minds let us go, we observe that in this nature of ours, of which we are a part, three energies play together in an undividable manner all the phenomena presented to us, viz. : the inorganic elements, the foundation of life ; the organic substance the result of life operation and the foundation of the psychical energy.

It is absolutely necessary an entity provided with life to endow the inorganic matter with it and make it susceptible of reproducing itself, viz. : the plant, a living entity, absorbs by the roots and leaves the inorganic elements from the soil and air not only to grow, but to serve to the growth of other higher manifestation of life.

Life in the plant turns the inorganic matter into food and the animal builds its flesh with it, as it is impossible for it to take directly the elements of such food from the inorganic kingdom. In this flesh, though made from inorganic matter, life has worked such wonderful change upon it that there is no resemblance at all to its source. No one can find the elements iron, lime, etc., in the animal tis-

Who? Whence? Where?

sues except by decomposition, or depriving them of life. When the vital principle departs from the organic living substance, the chemical laws take charge of it and return it to its original primary elements.

Life is wholly a distinct energy from that of heat, light, magnetism, affinity, cohesion, gravity, etc., and to it the organic living matter owes all the properties of which it is endowed, such as growth from inside and reproduction from its kind.

The ordering energy, or spirit, plays also its activity in matter when this one by its high living structure, the brain, affords room for its manifestation.

The hypostatic union of the spirit with the living cerebral structure is a fact in nature though not perceived by the intellect, notwithstanding that man is a fair sample of it. Now, if it is an undeniable fact that mind can effect a union with the cerebral structure, it is another fact, too, that by a dynamic act the will without any effort can put in motion all the voluntary muscles through the influence of the cerebro-spinal nerves, the will's act being not a physical but a dynamic act.

How a dynamic force acts on material things. What is the link that chains the spirit with the brain structure is something beyond our comprehension, but a fact. These psychico-organic phenomena give us a light how the universal mind acts directly on matter without any effort through the evolutive power that represents in the universe the will of the Creator.

Who? Whence? Where?

As the mirror reflectively shows the image of a body, similarly our nature, with its trio, matter, life and spirit, represents the nature's trio, matter, evolution and mind in a harmonious unity.

Man has a life that carries his organic functions without any annoyance to the conscious mind; similarly in nature evolution carries on the designs of the universal mind without any annoyance to the latter, and as there is no knowledge in the conscious mind of the performance of functions of the organic life, except when they are disabled, similarly there is not unrest in the universal mind with the evolutive power on performing his designs.

As the spirit of man is not lowered by having a brain as an instrumentality to his manifestations, so the universal mind for having the evolutive power as a means of its exteriorization.

The tangible facts speaking to our mind and senses are that physical, vital and psychical energy always work together and never separate, as they blend harmoniously with each other, and when the word "I" is uttered the totality of the being goes with it, none of the energies being excluded; similar in nature matter, evolution and mind go together making the totality of all existing things.

We have said that the simple chemical elements through the influence of life undergo a remarkable change in building up the vegetable and animal tissues, which elements behave differently, or possesses new properties when submitted to a living organization, turning into clay at life's extinction; that the body of each man is a constituent part of

Who? Whence? Where?

the earth in which he lives, breathes, takes his food and returns it; that having taken temporarily from the clay his body, which he thinks is a distinct one from the surrounding environment, nevertheless that it is one with it and exchanges continuously with it its elements, its independence, though apparently absolute, is only relative, and all men earthly brothers; similarly with the spirit derived from the universal mind, from which it differs in attributes by its hypostatic union with the brain, and as the flesh possesses other properties than those of the inorganic elements that constitute it, in the same manner the incarnate mind by its hypostatic union with the brain discloses qualities that are not inherent to the disembodied mind.

It is said that God has created man in His own image, which is a truth, if we take into consideration the trio from which man is formed, viz.: matter, life and spirit, and the trio in the universe, matter, evolution and mind; matter represents the stone, evolution the chisel and mind the planning.

Now, as in the case of man it is observed that life's controlling principle never is tired in its silent and constant work in the conservation and reproduction of the living organism, letting loose the mind to expand in other spheres as those of art, science and industry; similarly in the case of the universe, evolution like the vital energy carries on the designs of the infinite mind, creating and moving everything without fatigue or distraction to the general supervision of the Divine mind.

CHAPTER XIX.

RESUME.

In this system of nature we have the following points to observe:

1. Matter and force with its affinities, attractions, repulsions, combinations and decompositions subjected to fixed laws.

2. Life energy shaping into definite living forms some of the inorganic elements and endowing them with vegetative and animal properties.

3. Mind energy transformed in psychical power in the cerebral structure of man.

Lastly, the contention of this booklet is that the creation is based in something preëxisting, or, in other words, "something cannot be created from nothing," as the law of the substance is universal, the conservation of matter and energy inseparably connected, and ceaseless development of the substance follows the same "eternal iron laws," we find God in natural law itself. "The will of God is at work in every falling drop of rain and every glowing crystal, in the scent of the rose and the spirit of man."—*Haeckel*.

CHAPTER XX.

SOME POINTS OF CONTROVERSY.

1. The creation of matter from nothing is a matter of faith and not of reason and science.

2. Gross materialism is opposed to the law of adaptation to an end in view and contrary to facts. From blind forces cannot originate psychic force, in which case the effect would be of another kind than its cause.

3. The philosophical system that admits of single infinite potential substance from which matter, life and mind are derived is untenable, because the substance would be at the same time the designer and designed, which is absurd, viz.: an engineer designing a locomotive and at the same time turning himself into it, would be a fair sample of that system. To think that energies so distinct in their characteristic start from an indivisible point is something incomprehensible to us.

4. The dualistic theory in which there are only two energies, "Mind and Matter," playing totally the phenomena of nature, or atoms provided with intelligence, tends to prove too much, and becomes the tacit admission that all is mind, and matter a

Who? Whence? Where?

mind's thought. A glass in itself is not a thought, but the product of a thought.

5. A reasonable system that agrees with the facts we observe is the one admitting that the three great energies acting in nature are distinct in their characteristic, but playing together the phenomena presented to us.

We can only see the effects of the energies, but the energy itself is inaccessible to our senses.

A seed apparently does not differ from a stone, but place the seed under the influence of soil, air, humidity, light and heat and the bud springs from it, which under such agents, never springs from the stone, as life is not in the latter.

The matter idea is acquired by direct relation of the external senses with the bodies. The life idea is acquired by the mind through the perceptions of the impressions conveyed to the brain by the living beings, and that of the ordering energy by the conceit of the adaptation of the existing things to an end in view: Three and one.

THE END.