

LIFE AND MIND.

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We live, and we think. What is life? What is that we call mind, of which thought is a product?

Science gives us no satisfactory answer to either query. The best it can do is to surmise, to speculate, and imagine; or, in other words, to guess; and some of the guesses seem to me extremely wide of the mark. While I am not learned in any department of science, I look with interest on the efforts of the real students of science to solve the riddle of the universe. But when the scientist reaches a point where he can only surmise, speculate, and imagine, I feel justified in making my own guess.

Modern science has opened for us wonderful vistas in every direction. It reaches out into space and tells us with certainty of suns so far away that light can only bridge the distance in more than a hundred thousand years. What this means can be appreciated, when we remember that light in eight minutes leaps across the ninety-three millions of miles that separate us from the sun. With equal certainty science delves into the depths of the infinitesimally small, until its discoveries stagger even imagination. It has made the earth's strata an open book, in which we read the story of the ages. It has harnessed the powers of earth and air and made them our servants. Wherever science leads us we find an apparently homogeneous universe, homogeneous in the sense that matter in the distant sun, as revealed by the spectroscope, does not differ from matter as we know it on this insignificant atom—our world, all apparently obeying uniform, unchanging, and unvarying laws that rule everywhere and everything, from the mighty sun as it wheels in distant space, to the tiniest animalcule revealed by the microscope. Such laws tell us unmistakably of an intelligence beyond our possible comprehension. While finite mind can only imagine infinity, we find in these things what seems to us infinity in space, infinity in duration, and infinity in that Power which lies back of and apparently originates that controlling law. That law is therefore the product of "Infinite Mind."

But with all its accomplishments, has science as yet succeeded in explaining any fundamental reality? Thus, the universe is composed of what we call matter. Science, explaining matter, long ago told us, with an air of absolute certainty, of ultimate atoms, the most minute particle into which matter could be divided, of molecules, and of many elementary substances. It now tells us that the atom is not the ultimate thing they once thought it, but that back of the atom lies the electron. It tells us that instead of the many elementary substances of which we were once assured, it is possible or it may be probable that there is only one single elementary substance, and that the so-called many elementary substances are simply due to the manner in which the electrons are arranged or grouped. The reasoning impresses us, but it comes to us with the frank admission that no one ever saw an electron.

While time may prove that this theory is correct, I think it safe to say that the problem is not yet solved.

Again, I am bewildered when I am told about a conjectural, universal ether, that is supposed to fill all space, to be everywhere present—a something more dense than any known substance, and yet a something in which we freely move and in which the myriads of suns and planets revolve. Another one of science's guesses.

We ask science about that mysterious power that caused the falling apple to hit Newton's head and sent him conjecturing until he identified it with that power which rules the march of the worlds, and which we call gravitation. But when we ask what gravitation is, science answering only gives it a name and tells us something of the ways in which it acts. It cannot tell us what it is.

Among the many unsolved mysteries, is that of life. And here, again, science fails us. An article in the last edition of the Encyclopedia Britannica, which purports to tell us what life is, begins with the statement that life is

“The popular name for the activity peculiar to protoplasm”, and follows with an inconclusive two pages that get nowhere, and does not even attempt any clearer definition or explanation.

The Encyclopedia Americana frankly says:

“No definition of life has ever proved quite satisfactory.”

It then quotes several definitions, including Herbert Spencer's amended conception of life, which I quote. It is, Spencer says,—

“The definite combination of heterogeneous changes both simultaneous and successive in correspondences with external co-existence and sequences.”

I quote this because of its lucidity and clarity. Quite as much so as a London fog.

None of these attempted definitions throws any light on what life really is. The writer of that article, after quoting several, says:

“The most recent attempts have been in the direction of proving that life is merely a form of energy or motion.”

This, I can begin to understand. True, Sir Oliver Lodge, who is universally recognized as one of the most eminent and learned of living scientists, tells us that life cannot be a form of energy. I quote from one of his latest published utterances. He says:

“Life must be considered *sui generis*. It is not a form of energy, nor can it be expressed in terms of something else. Electricity is in the same predicament. It too cannot be explained in terms of something else. This is true of all fundamental forms of being. * * * To show that the living principle in a seed is not one of the forms of energy, it is sufficient to remember that the seed can give rise to innumerable descendants through countless generations without limit. There is nothing like a constant quantity of something to be shared as there is in all examples of energy.

There is no conservation about it. The seed embodies a stimulating and organizing principle which appears to well from a limitless source."

He adds:

"But although life is not energy any more than it is matter, yet it directs energy and thereby controls arrangements of matter."

Lodge here uses the term "energy" in the limited sense familiar to the physicist and defined by them as the power or capacity to work. Thus limited, he says life is not energy. This will also exclude gravitation and electricity from the list of modes of energy, for he admits that neither of them can be shown to conform to the laws governing the conservation of energy. I am a layman, and do not recognize this limitation as legitimate. To the layman, the word "energy" is one of the synonyms of the word "force." The Standard Dictionary defines the word "energy", among other things, as

"The power by which anything acts effectively."

One of its definitions of the word "force" is, that it is

"Any operating or operative *energy*; any active agency or power tending to change the state of matter."

Accepting these definitions as correct, it seems to me that gravitation, electricity, and life, are each and all forms of energy. It seems to me that gravitation, that power that holds the universe in its grasp, and electricity, as it lights our streets and homes and supplants steam in driving mighty engines, are certainly exhibiting forms or modes of energy.

To me, life is a force, one of the modes in which force manifests, for I believe that science is on the way to the demonstration of the unity of the so-called forces, as it has already practically demonstrated the unity of matter. That is, that as all the various so-called elementary substances are resolvable into one primeval form of matter, so all the various so-called forces are only various ways or modes in which one single force manifests itself. Life is the building or constructing and conserving force in nature. Sir Oliver Lodge says "it directs energy and thereby controls arrangements of matter." To me, instead of *directing* matter, it *uses* matter to build organic structures under the direction of that Infinite Intelligence which lies back of the laws which govern the universe. Instead of life directing matter, it is itself directed and the evidence shows that it slavishly follows the directions given it. To say that life directs, is to attribute to it intelligence. I can conceive of nothing in the action of life that indicates the possession by it of independent intelligence. The definition of life in the Encyclopedia Britannica, that "life is the popular name for the activity of protoplasm," seems to me flippant and unworthy of that great publication. True, protoplasm is the physical basis of life, that is, it is the vehicle or instrument by which and through which life's work is done. Protoplasm is not life nor is life protoplasm. Protoplasm, like other substances, may and does die, and dead protoplasm, like any other dead

substance, will decay or dissolve into the various substances which enter into its composition. Life is that which animates all things, from the animalcule or the bacterium to man, and it does its work by the exercise of force. Life drives that wonderful organ, the heart. It selects from the food the substances it needs, puts them in place, and casts off the residue. It drives the sap through the tree or plant, and unfolds the leaf or flower. Until stayed by death it is acting, and its action is force. The life which builds the tree, or paints the flower, does not differ from that which builds the man. Life is not an originator or a planner. It builds the various structures of organic life, but in so doing it simply follows the plans that are given it. The germs with which it begins its work in building a structure, are its trestleboards on which it finds the plans of that which it is to build. No microscope or other instrument devised by man can examine one of those germs and tell what it enfolds. That mysterious Intelligence that lies back of the great law is the architect that draws the plans, and life as it takes up its work with a given germ follows that plan without deviation, except as it may be interfered with by outside influences. An ovum and a spermatozoan encounter each other, they combine, and the stage is set and the actors are present for the drama of life. Life only waits for the proper and necessary conditions in the environment for the play to begin. Science may exert all its powers, but it cannot discover from that tiny germ what the production will be, but given proper conditions life begins its work, and in that little cell it reads the plans and specifications for the structure it is to build. With favoring conditions and no outside interference, it follows those plans without deviation. It may develop and improve but it never originates. Life is a master builder, and a master preserver, for its work does not end with the building of the structure, it continues to preserve it. But where should we look for the architect,—the originator of those plans and specifications? Where, indeed, save in that Infinite Mind which lies back of the great law that rules the universe.

The conduct of mankind is regulated in accordance with the evidence of our senses, and, unless we reject all of the evidence thus furnished us, mind is only another name for the Infinite Intelligence that pervades the universe, and is also the directing power through which man exercises control over material things. True, the materialists tell us that mind has no existence save as a function of the body, or of one of the body's organs, and that thought is a mere secretion of the brain. Cabanis, a distinguished French physician, expressed the idea in this way. He said:

“The brain is determined to thought, as the stomach is to digestion, or the liver to the secretion of bile.”

The German, Voght, expressed the same idea in the following language:

“Thought stands in the same relation to the brain, as the bile to the liver, or the urine to the kidneys.”

Buchner, another German, says:

“Mind, like light, heat, electricity, or magnetism, is a movement of matter.”

The late Ernest Haeckel, the famous German materialistic biologist, in his book “*The Riddle of the Universe*,” says that neither mind nor soul have any origin, because sensation is an inherent property of all substance, and that conscious soul is a mere function of the brain. It is worth something that these gentlemen recognize that mind has an actual existence, even if they do degrade it to a mere function of one of the bodily organs. In animal physiology, a function of an organ of the body is simply its normal mode of action, and therefore necessarily involuntary and automatic. The bodily organs all have their functions. The heart, the lungs, the stomach, the liver, and the kidneys, have each their functions or their normal mode of action; and none of them can voluntarily refuse to act or change the manner of its acting. They act automatically. The action of the mind, therefore, according to these men, is simply the normal automatic action of the brain, as digestion is the normal and automatic action of the stomach. In animal physiology, a secretion is a substance existing in the blood, which is prepared and separated therefrom by glandular activity or by the action of the epithelial cells, as milk is separated from the blood and secreted by the mammary glands. To follow their argument to its legitimate conclusion, we might say that as all the organs of the body are built from the food we eat, and perform their functions by the power thus generated, and as all the bodily organs are produced from that same food, mind and thought really originate in the stomach, and that organ is the abiding place of the soul.

According to these learned gentlemen, therefore, the mind is a mere function of one of the organs of our body, as digestion is a function of another. Our much vaunted thinking and reasoning is only a secretion that oozes from our brain, as the tears ooze from our lachrymal glands while we weep over the dismal hopelessness and purposelessness of human existence as thus pictured by these scientists; and their erudite productions are no more than material exudations from their material brains.

The works of these materialistic writers, showing as they do that they are the result of much study, are alone sufficient to refute their conclusion. This is particularly true of the work of Haeckel. His work is not the production of a mere automaton. When we read the record he made of his lifetime studies in the field of biology, we know that it is not a record of the mere involuntary working of a bodily function. Every page evidences purpose and design; an individual and personal purpose and design that could not possibly find its origin in a mere bodily function. The existence of this purpose and this design is as obvious in that work as is the existence of purpose and design in the work of the Infinite Intelligence that is over all. The immediate and impelling power by which the various bodily functions perform their several offices, is life,—that force which builds the body. But life only follows the plan it finds in the germ with which its work begins. It

never changes that plan, or makes the mistake of developing the human germ into some other type of animal. Every function of the body is potentially present in the germinal dot from which the body grows. The various secretions of the different bodily organs are also automatically produced and their normal character is potentially determined when life begins its work with that germinal dot. The liver cannot secrete tears, nor can the lachrymal glands secrete bile. Whatever there is of purpose or of design that determines the character of these secretions, must be sought in the work of that Infinite Intelligence which lies back of the germinal dot. If thought is nothing but a secretion of the brain, we can no more originate and direct that secretion than we can originate and direct the secretions of other organs; there can be no such thing as an intention of thought, and our so-called reasoning is a mere involuntary discharge of an involuntary secretion, as free from inherent intention, or from voluntary and independent purpose, as is the urine or the bile. They tell us that the beginning of all organic life was in a germ or germs that in some way appeared in primordial slime. They also tell us that these germs have developed throughout countless ages into myriad forms of life, and that among these forms they find the physical man of today. They may be right as to this, for physical man is still "of the earth earthy", and can hardly deny kinship with the slime. Keeping their eyes on that slime of the distant past, and on the life force that stirred its depths when that germ appeared, they seek only in the dust of the ages and in that life force for the origin of all the qualities they find in the man of today. They might as well attribute the secret of Canova's genius to the marble of Carrara, or the inspiration of Michael Angelo or Raphael to the pigments they used. They remind one of Bunyan's "Man with the Muckrake". If they will but lift their eyes from the dust and study the harmonious rule of that power which governs the universe, they will find the source of the crowning glory of humanity.

"The Heavens declare the glory of God, and the firmament showeth his handiwork. Day unto day uttereth speech, and night unto night showeth knowledge. There is no speech nor language where their voice is not heard."

As the mysterious thing we call "magnetism" may enter into the apparently inert needle of steel and give to it a new quality or power, and as magnetism's mysterious relative, electricity, when it is sent coursing through a wire, imparts to the filament in the bulb the power to emit light, so man, at some point in the course of his development, has had imparted to him a power beyond anything that can originate in that form of force we know as life. Life acts automatically, but this new power enables man to originate action,—to think, to reason, to decide, and to do. Common sense is a most excellent possession, and common sense would dictate that in searching for the origin of mind we should look where we know mind to be. One would not search for tropical flowers at the north pole, nor for icebergs at the equator.

In conclusion, my guess, as above indicated, is that life is the constructing and conserving force in nature, and that mind in man, in-

stead of being a mere exudation from a material brain, is that Infinite Mind itself shining through the clouds of matter, and gradually developing the brain as an instrument for its future use; that the limitations of our mental processes are due to imperfections in the instrument it uses, an instrument not yet fully developed. Imperfect as its manifestations are, I see in it that which thinks, which reasons, which plans, and which directs; that which inspires and lifts; that which creates the beautiful and majestic things the artist and the poet embalm in color and in words; that which makes great men, great leaders of men, great statesmen; that which makes men great in anything; that which reaches out into space, further than the most distant suns of which science tells us,—further, still further, until we feel there is no boundary in space; that which looks back through the record of the ages gone,—backward and still backward, until time disappears, and we feel there is neither beginning nor ending, only an eternal now; that by which we grasp the immensity, the majesty, the beauty, and the symmetry, of all, and which forces upon us the conviction, not that there is *a* God, but that God is.

