THE ORDER OF THE ESSENES 2527 SUNSET DRIVE TAMPA 6, FLORIDA

SPARTMENT OF INSTRUCTION

FACTS -- NOT LEGENDS: -

In this world we must row, and not just drift.

Things infinitesimal have always existed, but man did not have the instruments to perceive or measure them, but that day is passing.

It does seem marvelous that we have now the electron-microscope, which can magnify up to one hundred thousand diameters, and with it scientists have disclosed heads and tails on minute creatures only a quarter of a millionth of an inch long. This means that they are so small that a thousand of them could be put on a point of a pin, and the whole mass would still be invisible to the eye. This is fact, and not fiction.

We can now tune in on the brain. By this tuning in on the brain we know definitely that a visual image is recorded in one area of the brain; a hearing image is recorded in another area, and these areas have been definitely located.

In these instructions we propose to prove that mind is the result of forces playing upon the physical instrument, the brain.

As wonderful as are the instruments which disclose the infinitesimal, man has, in mind, a more wonderful instrument.

We want to impress upon you that the smallest acts and the most ordinary attitudes among the simplest folk have reverberations reaching infinitely far into the future.

To impress on a child's brain one sentence may move -- and it can be proved has moved -- mountains.

Beunau-Varilla dug nearly through the Panama Canal under frightful odds, because when a lad, at the time the Suez Canal had been dug, his mother said, "Phillipe, you can dig a great canal, too."

This is not a legend, but the truth and a historical fact. One sentence set a life ambition for a man and directed the course of his life.

It should be a source of pride and satisfaction to you, who help in this work, to know that we receive countless letters from people who say that as they look back they marvel at the change that has come about in their thinking, in their human relations, and in their material situations, as a result of studying with us.

There is nothing mysterious about it. Right thinking does alter material conditions, - conditions of health, outlook upon life, social relations and business relations and results. It has been so with you, or will be, if you are faithful to the precepts we present to you.

Very sincerely yours,

THE ORDER OF THE ESSENES

Enc. 79

I Hamner Davis

THE Essenes

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INSTRUCTION 79

Insuring to the acceptable and accepted HEALTH, HAPPINESS AND SUCCESS.

FAITH, BEING A MENTAL STATE, IS NATURALLY A PRODUCT OF MIND. IT IS COMPOUNDED OF EXPECTANCY, ASSURANCE, AND CERTAINTY WITHOUT THE ALLOY OF DOUBT.

ST. PAUL SAID: - "FAITH IS THE SUBSTANCE OF THINGS HOPED FOR, THE EVIDENCE OF THINGS NOT SEEN."

THOUGHT IS MIND AT WORK, THE FORMATIVE FORCE WHICH ACTS UPON THE "UNSEEN," WHICH FAITH HAS EVER PROCLAIMED SUBSTANCE. THIS "FAITH SUBSTANCE" SCIENCE NOW KNOWS AS THE BUILDING UNITS OF THE UNIVERSE; —THE ELECTRON.

IT IS THAT SIMPLE - AN ELECTRIC FORCE WORKING UPON UNITS, ELECTRICAL IN NATURE.

SUCH IS CREATION -- TRUE IN THE PAST. TRUE NOW.

CHROMOSOMES AND GENES

The aim of Life Science is the understanding of human behavior in the interest of human happiness and efficiency. Like all true scientists, we must observe, organize and interpret our facts along well ordered lines. We must observe strict logic in our interpretations. We cannot wed ourselves to a hypothesis or theory because of age or general acceptance. Truth is known only when it fits all conditions and circumstances.

In experimentation we must observe the laws - and one of the fundamental laws is - Let one thing vary at a time.

Let us illustrate by bringing to you a classic example of misdirected effort in the psychological field - years of effort and research that proved absolutely nothing.

Two families were selected for study. The descendants of Jonathan Edwards, an eminent divine, and the descendants of Max Juke - an illiterate, drunken and shiftless backwoodsman.

Practically all students of psychology are familiar with this investigation, and volumes have been written upon it. "Genetics" by H. E. Walter - a Macmillan Company publication - gives us the results.

Nearly fourteen hundred descendants of Jonathan Edwards were traced. Their standing, accomplishments and contributions to society were tabulated.

Five hundred and forty of the known descendants of Max Juke were traced and their lives and contributions to society were likewise carefully studied.

All of this long and laborious research disclosed that of the Edwards male descendants two hundred ninety-five were college graduates, thirteen of whom became college presidents. In the line of descent were sixty physicians, one hundred clergymen, seventy-five army or navy officers, sixty authors, thirty judges, three United States Senators, and no criminals.

The findings with respect to the Juke descendants disclose three hundred and ten paupers, one hundred and thirty were convicted criminals and of this thirty-seven were murderers. Out of the whole male line twenty had learned an honest trade, but ten of this twenty learned their trade in prison.

In many publications advocating controlled breeding or birth control and devoted to what is termed eugenics, these figures are used and it is pointed out that the known members of the Juke tribe had cost the State of New York more than one and a quarter million dollars.

Countless are the birth control enthusiasts who are sure in their own minds that these facts make a perfect case for "heredity being all important," or the potent force of heredity.

In the first place you will readily recognize that the facts as given were not taken in a way to satisfy the first rule of experimentation "one variable at a time." Environment was not even considered.

If all the Edwards progeny at birth had been transplanted in the Juke environment, where drunkeness, poverty, crime, and prostitution were rife, and the Juke newborn had been transplanted in the Edwards environment of wealth, culture, refinement and educational and social opportunities - who can say what the record would have been?

Here is where the advocates of eugenics clash with the advocates of euthenics, or those advocating environmental control.

That question cannot be answered absolutely and positively without an understanding of what mind is, and how it functions, and an understanding of what it is that is transmitted in the line of descent in the human family.

Let us give you this assurance - that you will with an understanding of Life Science be able to answer it for yourself. That answer will be satisfying and gratifying, because you will understand the part each plays.

Likewise you will understand the humor in the very modern definition of heredity, which runs something like this - "Something a father believes in until his son starts acting like a damn fool," and you will be equally appreciative of this modern comment which has to do with environment: "Some people believe in environment; others believe in heredity - especially those who got all their money that way."

We are not unmindful of the fact that we have laid it down that mind is a result or product of forces playing upon the physical instrument the brain. Be not alarmed. We do not belong to what is known as the "mechanistic school" which holds man to be a machine - that mind is wholly a by-product of the occurrences in the physical world - and unable in its turn to influence the outside world. Man is a living and self conscious being; within him are many instruments and what we may term machines far superior to any man made machines. By mind, man has made many machines which help us to a better understanding of ourselves and our working parts.

Before proceeding to the study of the forces that play upon the brain to produce mind, we must pause to consider what part, if any, of mind we have at birth — this brings up the consideration of heredity. Note that we say "what part of mind, if any." We know that we are born with a physical brain.

We shall find that sense experiences form the basis of our mental life. Note - basis. The various senses -- touch, sight, hearing, smell, taste, temperature and others, operate through sensory nerves communicating with the central brain. The brain consists of the large cerebrum, occupying the upper front part of the skull cavity, whose outer surface or cortex is the seat of sensation and volition or willing; and the cerebellum, the lesser brain, lying at the back of the head. There are more than six billion nerve cells in the brain. One authority points out that that is more nerve cells five times over than there are people on earth.

We are born with a brain we know. Are we born with a mind?

Is there any advocate of the potency of heredity who claims or will claim that the newborn babe if it were just permitted to vegetate, if that were possible, would eventually show up with a mind - reasoning, visioning, willing, and functioning as we know minds do function?

In other words, let us put it this way. Do we inherit from our ancestors thoughts, ideas, or minds!

We know that man has evolved from a lower to a higher plane. There is and can be no denial of the fact that all living organisms are made up of protoplasm, and that the physical basis of life is the same for all organisms and they all show the same chemical foundation, the same general type of cell structure, and the same general phenomena of metabolism, growth, reproduction and adaptation. The plant kingdom and the animal kingdom can be classified into natural groups which show an ascending order of complexity.

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By heredity the characteristics of the parents are transmitted to the offspring. Perhaps great error has crept into the conception of what is transmitted by the general use of the words "traits" and "characteristics."

If we will concede for a moment that it means something physical - a make-up which has to do with capacities, capabilities, and possibilities, we will get somewhere.

The brain of man has evolved to higher and higher planes, just as man as a whole has evolved. That improvement has come about by the use he has made of it; by the necessities of the occasions he has met and mastered. It was just the "overcoming principle" of the Universe at work, which we touch upon in an earlier lesson.

Man by the use of his senses - and by applying his thinking along certain lines has opened and broadened and deepened the channels leading to that section of the brain receptive to those sense perceptions. More correctly speaking, he has developed the connections to the brain and those portions of the brain - or the mechanism of the brain where that character of forces center, just as man develops the muscles he exercises physically. These developments bring about physical changes - These characteristics man does transmit to his off-spring. Man by his application to the arts and trades and by his studies and skills develops characteristics which are transmitted to his offspring. Thus man changes the physical. That is evolution - and man is evolving today as in the past.

For a moment let us observe man's origin; what we might term his germinal origin. Pay particular attention that we say the "origin OF MAN" - meaning the physical man - and particularly note we did not say "life." Life is a stream. It has no beginning. It is the history of the upward climb. Conception is not the beginning of life. Birth is not the beginning of life. The origin is in living cells, life is there present.

The fact that Life had no beginning lays a substantial foundation for faith that it has no end.

Let us view conception. Within the <u>living</u> germ cells which unite at the moment of conception to produce an individual are found a number of tiny rodlike structures which are known as chromosomes. These steer the development of <u>structure</u> as the fertilized ovum unfolds into an individual organism. Within the chromosomes are what is known as "genes." Each gene is essential to the development of a particular trait of <u>structure</u>. A trait of structure is the determining factor in the <u>capacity</u> or <u>ability</u> to behave or function—as we know behavior and functioning.

From the mother come one-half of the genes; from the father the other half. We again repeat - the moment at which the sperm and egg unite to form an individual does not mark the beginning of life. It is a uniting of living germ cells - and each has gone through a process and period of ripening. Back of that can be found no particular moment of life's beginning. This bears out two things --- that evolution is a fact - a truth of life in accord with universal laws, and secondly - that life is without beginning, and the conclusion that it is without ending is well founded.

We would have you here note that the human fetus (unborn child) is an individual which responds to stimulation long before it is born. We know that it is secluded in the fluid of the mother's uterus (womb) and hence has no contact with the outside world - and hence its nerve and muscular response to stimuli is a matter of heredity. The most elemental cells - what we might call

the primary cells - respond to stimuli. From this we must draw the conclusion it is physical in nature and universal. The conclusion that it is mind at work is precluded. Mind is the result of three classes of forces as outlined - and until birth one class cannot be operative.

Every multi-cellular organism starts with the fusion of an egg-cell and a sperm-cell. This grows by cell division and becomes what is known as an embryo.

Let us turn to the plant kingdom and observe nature at work. We will select four o'clocks. Red four o'clocks go to seed and the seed from them always produces red four o'clocks. The same is true of white four o'clocks.

We now take the pollen from one and apply it to the pistils of the other. The seed which result from this "crossed" plant we plant. The result is a pink four o'clock. We then take the seed from the pink four o'clock and plant them. What do we have? Pink four O'clocks? No. The seed of pink four o'clock - known as a hybrid - produces three kinds of plants - some white, some red, and some pink, - and it is worthy of note that there is generally a definite ratio -- one red - one white and two pink.

Here is another remarkable feature -- The red four o'clocks from this hybrid will breed true - produce red flowers. This is so with the white ones - but the pinks will keep right on producing reds - whites, and pinks.

In the Story of Science by David Dietz, here is how this is accounted for:

"The explanation of this behavior lies in the mechanism of heredity. Modern research has revealed that the chromosomes, the little threads of protein in the nuclei of the egg cell and germ cell which unite to bring the new individual into existence, are the carrier of heredity. Localized in the chromosomes are the factors which cause the various characteristics of the organism. These factors are called the genes."

"The egg-cells or sperm-cells of the red flowered plants, or the germ-cells, to use the common name for both, contain a gene or factor which makes for red flowers. When two germ cells unite, each of which carries this gene, the result is a plant with red flowers. The same thing is true of the white flowered plant."

"When a germ-cell from a red plant unites with one from a white flower the result is that the zygote which then forms, contains one gene for red flowers and one gene for white flowers - and the result is a plant with pink flowers.

Furthermore, some of the germ cells which the hybrid plant produces will contain the gene for red flowers and some the gene for white flowers, hence the fact that the third generation of plants consists of red-flowered, pink-flowered and white flowered plants."

Equipped with a knowledge of the "laws of heredity" plant and animal breeders are now able to breed superior types. The poultryman mates for egg laying capacity or meaty types. The dairyman crosses for milk producing characteristics, the cattleman for beef types, etc.

We are not primarily interested in biology, but we are vitally interested in knowing that the complex and infinite behavior patterns of which man is capable are due to the organization of his nervous system - of which we may call his brain a part - and that these are physical instruments, and that the use of these results in development, and that the development is transmitted from generation to generation - and then evolution becomes not only understandable but apparent.

We are shortly to take up the play of forces upon the physical brain, show the instruments - and reach an understanding of mind. Through the use of mind man has developed the physical instrument - the brain - until today the brain of an adult man weighs approximately fifty-five ounces, that of a woman about five and a half ounces less.

The largest part of the human brain is the fore-brain, weighing about forty-four ounces. It consists mainly of two large convoluted masses known as the cerebral hemispheres. The mid-brain is only a sort of isthmus between the fore-brain and the hind-brain in man.

The hind-brain consists of three main parts; the cerebellum, the pons Varolii, and the medulla oblongata. The medulla gradually merges into the spinal cord and is continuous with it.

The study of the brain has revealed as we have pointed out that various functions are localized in specific portions of the brain. - In an orderly manner we shall proceed to show you that consciousness is the result of an electro-magnetic pattern in the brain and that changes in consciousness result from changes in this pattern as varying nerve impulses, which in themselves are electrical in nature, flow into the brain.

Considering again the question - "Well! Which is it - heredity or environment?" we have progressed to the point where we can say with conviction that the difference between people is determined by the quality of their inherited structure for one thing, and we shall learn that a determining factor is also the amount and kind of opportunity each has - or environmental conditions.

You will note throughout these instructions we often refer back to early instructions.

If you have reviewed and learned a major part of the early instructions you will without having your attention called to it perceive that the golden threads in each are being woven into perfect pattern, and you will acquire the conviction that you are "The master of your fate, the captain of your soul," and almost imperceptibly you will find yourself living more abundantly. You will radiate it.

To hold the ground you gain - and to insure continued growth - you must utilize what you have - and help others to attune to the understanding that this is a world of law, and help them to become law abiding citizens of the Universe.

This is the law of balanced compensation.

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THOUGHT GEM

We really have the key to Life - Life is a state of consciousness. To be healthy you must have a health consciousness. To be prosperous you must have a prosperity consciousness. To be successful in any field of endeavor you must have the consciousness that corresponds. - We have free will to develop a given kind of consciousness, and then we can do and be anything in accordance with that --- but we have no free will to do anything without the consciousness that belongs to that accomplishment.

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