K E Y T O T H E U N I V E R S E:

T H E P R I M O R D I A L

L I F E E N E R G Y C O N T I N U U M

THE PRINCIPLES AND PRACTICAL APPLICATIONS OF NEW AGE SCIENCE

GERHARD L. WEBER

Dedicated to the children of the future.
These bio-energetically intact human beings
will be in tune with the contents of this
book and they will find solace therein.

P R E F A C E

The most brilliant scientist, who has ever explored the nature of life and the universe, discovered, almost a half century ago, the primordial, mass-free energy that permeates the cosmos. This man, Wilhelm Reich, named the primordial energy, orgone. The word, orgone, is derived from organism or orgasm. The energy was so designated because it was initially discovered in conjunction with Reich's biophysical and sex-economy research. Orgone energy is equated to life energy because its functions are governed by a self-generative, metabolic process. Although this energy governs both the living and nonliving realms, the orgone energy that is embodied within and animates organic matter is referred to specifically as bioenergy.

My work rests upon the solid foundation of Reich's natural-scientific findings. More than a decade of arduous, intensive research on my part allows me to state as he did: "This isn't a 'theory'. The orgone is burning in the air and in the soil." I gladly acknowledge my debt to this great benefactor of mankind. My reference to orgone energy as primary energy does not connote any departure from the road that leads to a functional = energetic perception of nature and the world. On the contrary, I use the designation, primary energy, in order to unite and encompass within that term the identity of orgone = bioenergy = life energy. Primary energy is orgone energy, not a variation thereof.

The properties, principles and dynamics of orgone energy that Reich revealed, investigated and made practical use of in various devices (including a motor powered by orgone) became the basis for the new science, orgonomy. Since orgone energy functions in all of the domains that are open to the human quest for knowledge, orgonomy is, of necessity, a multi-discipline science. Any specialist who wishes to advance into this comprehensive field must broaden his/her horizon and begin to cultivate a thought process called functionalism. Functionalism, in essence, constitutes the capacity to recognize the common functioning principles (CFPs) that are at work in every domain. This ability to perceive the common denominators in such apparently divergent fields as biology, physics, chemistry and meteorology develops hand in hand with insight into the processes that govern the primordial energy. Reich's contemporaries saw such a crossing of the artificially erected scientific boundaries as being a symptom of insanity. This pernicious indictment will come back to haunt the accusers in the future. Already, the trend toward holism and ecology anticipates the major paradigm shift from a mechanistic to a functional view of the world.

The functional approach to nature views all phenomena in the framework of the interaction and interdependence of a physical entity with its environment. The environment which is of principal concern to the functional thinker is the all-pervasive mass-free energy continuum. I have chosen to refer to the explanations of physical phenomena as continuum physics. Continuum physics is inseparable from orgonomy. I follow the pioneer trail that has opened to mankind the realistic prospect of unlimited, easily accessible energy resources and constructive, life-enhancing human potentials. The translation of mechanical phenomena into functional dynamics has become a matter of urgency. Current scientific theories contain too many fundamental errors; errors that are severe obstacles in the way of any creative, rational effort to bring life and the universe into clear focus. The conceptual extensions and elaborations of primary energy presented in this book probably contain minor errors. However, the cornerstones:

a.) existence of a mass-free energy continuum
b.) the fact that all mechanical phenomena are governed by well-defined, underlying primary energy processes

are steadfast and unassailable.

The functional orientation provided by this Conceptual Physics of the Primordial Energy Continuum is invaluable. I consider this work as being a touchstone that will eventually allow future generations to venture into relatively uncharted frontiers with some degree of know-how, experience and confidence.

GERHARD WEBER
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PRIMARY ENERGY

"What is the hardest thing of all? That which seems easiest,
For your eyes to see
That which lies before your eyes." -Goethe

The 'empty space' in which a mythological "Big Bang" supposedly gave explosive birth to the universe does not exist. Nature does indeed abhor a vacuum and therefore there is, in the natural realm, no such thing as a 'vacuum'. Space is a mass-free Primary Energy substratum within and out of which evolve life, matter and all secondary energy manifestations such as light, heat and electromagnetism.

Primary Energy is primordial and cosmic. Primary Energy's existence is 'a priori' to every other entity whether that be an atom or a galaxy. Primary Energy is the irreducible substratum of the universe. Primary Energy displays very definite physical properties. These properties or qualities are well-defined and completely account for the concrete physical field functions throughout space, e.g., gravitational attraction and the transmission of solar radiation. These specific, well-defined properties are demonstrable visuallly, thermically, electroscopically and by means of Geiger-Mueller counters. They are experimentally reproducible and controllable.

Concentration of Primary Energy

The two fundamental interactions between all-pervasive Primary Energy and matter are:

1.) Organic material of every kind attracts Primary Energy (=PE) and absorbs it.
2.) Metallic material, especially iron, attracts PE but then quickly repels it again.

It is upon the solid foundation of these principles that we are enabled to construct an apparatus which will accumulate and confine PE. This apparatus, the PE accumulator, was initially devised and used

experimentally by the foremost researcher of Primary Energy functions, Dr. Wilhelm Reich. It was and remains a basic tool in PE research.

"The accumulator consists of a casing of organic material; celotex, etc. The inner wall is lined with a thin layer of sheet metal. This arrangement makes possible a concentration of atmospheric orgone energy (=PE) much greater than the usual atmospheric concentration." - W. Reich (1

Let us try to obtain a clear scientific perspective of this process of PE accumulation. To begin with, the six-walled, box-like apparatus has its existence, like everything else, in what can be termed a PE continuum. The mass-free, mobile PE , prior to the accumulator's assembly, is evenly distributed or concentrated in the vicinity of the unassembled apparatus. However, as soon as the device becomes operational, i.e., when it is fully constructed and an area of open space has been separated within the accumulator's walls from the general PE continuum, this energy equilibrium changes. Now the organic outer casing begins to strongly attract and absorb atmospheric PE. The absorbed PE is then attracted by the inner metal walls. Although metallic material both attracts and repels PE, significant quantities of mass-free energy do penetrate the thin iron sheets. This energy is radiated into the enclosed space, whereas the repelled PE filters back into the organic outer layer. It is obvious that while mobile PE is blocked by the outer walls; it can move unimpeded into the inner space. Therefore, taking the path of least resistance, PE flows from the outer layers into the enclosed space.

The PE Room

"The 'Orgone Energy Room' can be a common room or hall of about 15 feet square. The inside of the walls should be lined with sheet metal of iron or steel - no copper or aluminium should be used since

1 (Wilhelm Reich: THE CANCER BIOPATHY
New York: Farrar, Straus and Giroux, 1973 pg. 109)

these metals are dangerous to health! Between the inner iron metal lining and the outer walls, a layer of ordinary glassfiber insulation should be placed. This increases the effectiveness of the accumulation.

The OR (=PE) accumulation will operate immediately after the assembly of the metal-lined walls... Several weeks are required for an OR room to "soak" up enough atmospheric OR to reach a fairly constant and high level of activity. The activity varies with the weather, diminishing to near zero in bad, rainy weather, and increasing many fold in dry, sunny weather. The heat, due to OR radiation, can easily be felt by holding the palm some 4 to 10 centimeters away from the inner metal lining.

Observations: The OR room should be made light-tight in order to make possible the observation of OR in the dark. Such visual observation is a strict requirement for every student of physical Orgonomy. (Orgonomy is the science of Orgone = Primary Energy) A well-built OR energy room should, after 15 to 30 minutes accomodation to the eyes, appear bluish gray, and not black. After about one-half hour to one hour the room should appear brighter than in the beginning... To begin with, the movements of the grayish, bluish "vapors" or "fogs" seen are slow, undulating, concentrating slowly here and there, and dispersing again. The longer we sit in the OR energy room, the greater the changes that take place.

We can speed up these changes by having more people in the OR room or by exciting the OR energy with a simple spark-producing electrical coil system. We can then see that the even distribution of the OR energy is replaced by sharp, long lines of bluishly luminating "threads". The concentration increases more and more. Later on, countless tiny violet sparks like pin points should be seen everywhere, especially at the walls

and ceiling. Can the blue-gray and deep-violet light phenomena be enlarged with a magnifying glass? We discover that a good magnifying glass does indeed enlarge the dots and make them more distinct. Every individual light dot seems alternately to expand and contract as though pulsating. The light dots flying past us follow a specific trajectory. Because of the shape its path takes, we have called it a Spinning Wave-Kreiselwelle." - W. Reich [2] (See Figure # 1)

These observations of concentrated, luminescent Primary Energy are accessible to and repeatable by the serious researcher who conscientiously duplicates the laboratory conditions described above. Once we have, by controlled experimentation, arrived at the firm conviction that our subjective impressions reveal concrete, objective physical phenomena; we can begin to formulate some definite conclusions.

- MOVEMENT

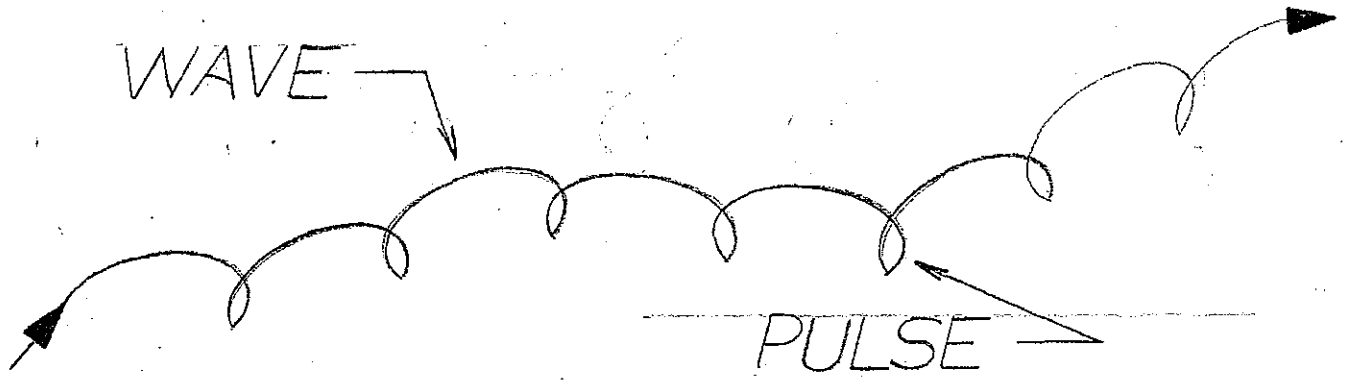
Primary Energy is always in flux. Everywhere, i.e., within matter, in space, within organisms, etc., and always PE constitutes a dynamic continuum in perpetual motion. A "rest state" in reference to this mass-free substratum is a complete misnomer. Movement, therefore, is a Basic Functioning Principle (BFP) of primordial, cosmic PE. This, of course, would seem to be true for any kind of energy, since energy is a function of motion and vice versa. Classical physics speaks of "potential energy" as, for instance, that contained in a water reservoir in a high basin. Nothing of the kind can be found in PE. It never shows any condition that could be referred to as static or immobile, except in its crystallized, structured form of solid matter.

2 (Wilhelm Reich: THE ORANUR EXPERIMENT
Rangeley, Maine: The Wilhelm Reich Foundation, 1951 pg. 193 pg. 335)

FIGURE #1

CONTINUUM PHYSICS

PE SPINNING WAVE



THE MOTION OF PRIMORDIAL, MASS-FREE ENERGY IS IN THE FORM OF THE SPINNING WAVE.

- PULSATION

The movement of Primary Energy is not a steady, continuous, linear flow. On the contrary, PE flow is characterized by a rhythmic, pulsating motion. The spinning wave modality of PE clearly and unequivocally embodies a constant alternation between expansion and contraction. Expansion and contraction are the antithetical part functions which together constitute energetic vibration = pulsation. Pulsation, like movement, is a Basic Functioning Principle (BFP) of primordial, cosmic PE. The rate of pulsation = frequency increases or decreases in response to such factors as: the degree of PE concentration, the presence or absence of external excitation, e.g., EM field action, the organismic = bioenergetic field and solar radiation.

PE SPINNING WAVE CYCLE

"To see the world in a grain of sand." - W. Blake

The spinning wave is the actual "shape" or modality of Primary Energy movement. What is, under the proper laboratory conditions, directly observable in the PE room manifests itself infinitely in both the microcosm and the macrocosm. For example:

Microcosm -

-The spiralling nucleic acids in the DNA molecule
-Spiral shapes and motions of protozoal life
-The Schroedinger standing wave electron

Macrocosm -

-The spiral form of the Van Allen 'radiation' belts
-The rotating, pulsatory PE envelope = field of the Earth
-Hurricanes, tornadoes, waterspouts, etc.
-Spiral galaxies
-The mysterious "against the laws of physics" braided outer rings of Saturn

Quantum mechanics, whose foundation is the revolutionary theory of physics that Max Planck pioneered in 1905, is currently still perplexed and haunted by the insoluble problem of the wave-particle duality. This is not surprising. Indeed, precisely such an impasse is to be expected when a theory has neither been derived from nor is confirmable by the direct observation of tangible physical phenomena.
Granted, Planck's initial theory of quanta was and is firmly based upon his incisive investigation of the energy of heat radiation. Planck's monumental discovery that the structure of the universe is "granular", i.e., the changes in nature are not continuous but, "quantized", ranks with the discoveries of Kepler and Newton. However, the Quantum Theory, which has since accreted around the core of Planck's scientific disclosures, is unprecedented in its alienation from experience.

The proponents of Quantum Mechanics march to the beat of obscure mathematical formulations. They hold high the banner of complete abstraction vis-a-vis the real world. The lyrics to the tune that they chant were, no doubt, penned by their chief mentor, Albert Einstein:

"Physical concepts are free creations of the human mind and not, however it may seem, uniquely determined by the external world. In our endeavor to understand reality we are somewhat like a man trying to understand the mechanism of a closed watch. He will never be able to compare his picture with the real mechanism." (3)

Continuum Physics, whose foundation is the existence of the cosmic Primary Energy, emphasizes the fact that with the proper techniques and tools the 'closed watch' can be opened. Consequently, observation of and experimentation with the individual mechanisms will reveal How and Why the whole works. Just as the discoveries of the telescope and microscope opened up the heavens and the formerly invisible, miniature domains respectively, the discovery and research of PE will open up (and already has to a large extent) the functional = energetic processes that govern and are the basis for both the macrocosm and the microcosm.

Let us look closely at the perceivable physical phenomenon of the PE spinning wave. An accurate analysis of its Form and Content will place the wave-particle paradox into proper perspective.

FORM

The PE spinning wave embodies the simultaneous movements of forward movement and spinning. The forward movement, due to the spinning component of the PE motion, regularly turns back on itself, i.e., there occurs a "looping". Therefore, the spinning wave is seen to move forward in a looping trajectory.

3 (Einstein and Infeld: THE EVOLUTION OF PHYSICS
New York: Simon and Schuster, 1938 pg. 31)

> The forward motion component of the spinning wave can be designated as a longitudinal wave movement. This is characteristic of the pure wave which moves through space in a continuous manner, e.g., sound waves.

The spinning - rotational - component of the PE spinning wave can be designated as a transverse wave movement. This is characteristic of pure spinning which in the spinning wave occurs regularly but discontinuously.

This radial action, i.e., spinning rotation, is the pulsatory function inherent in PE flow. Pulsation consists of a constant alternation between expansion and contraction. When we speak of pulsation in reference to mass-free PE flow, we can say that expansion is functionally identical with ACCELERATION and contraction is functionally identical with DECELERATION. For example, picture a point on the rim of a forward moving wheel. On the forward rotation of this wheel, that is, before the point reaches ground level, there is acceleration. Upon contact there is deceleration after which motion again expands = accelerates until the next contraction = deceleration.

The form of the PE spinning wave movement is composed of the following components:

1. Forward motion
2. Spinning - Rotation
3. Pulsation

This brief consideration of the PE spinning wave form is incomplete and misleading if we fail to point out that this basic modality of PE movement is subject to many and diverse transformations. The PE continuum in which the spinning wave manifests itself is dynamic and is in perpetual flux. The distinct spinning wave form which occurs mirrors the manifold changes in the qualitative and quantitative states of the ubiquitous energy substratum.

When the forward motion occurs in the same plane as the rotation, we observe the typical PE spinning wave movement depicted in Fig. #1 and described above. When the forward motion occurs at various angles to the plane of rotation, transformation into the helix-spiral, whirlpool-vortex configurations takes place. These lawful, functional transformations of the fundamental PE spinning wave form are abundantly evident in the universe. Again, the spiralling nucleic acids in the DNA molecule, waterspouts, hurricanes and spiral galaxies are dramatic examples.

CONTENT

Quantum Mechanics survives or perishes, as a plausible and viable description of reality on the reliability of the renowned wave function. The wave function is a mathematical entity. It is regarded, by the quantum physicist, as being a free creation of thought, i.e., a strictly mental construct whose derivation from observable, physical phenomena is denied. This is logical within and only within a conceptual framework that is oblivious of the actual existence of a mass-free energy substratum. Quantum Mechanics, having accepted without question the premise that the Michelson-Morley findings gave the Ether Theory a verdict of death, dismisses any search for the ultimate "stuff" of the universe as a quixotic illusion. Amid the confusion and clamor of this headlong flight toward more and more obscure theories; even the words of titans fall on deaf ears.

"Is not the heat of a warm room convey'd through the vacuum by the vibrations of a much subtiler medium than air, which after the air was drawn out remained in the vacuum? And is not this medium the same with that medium by which light is relected and refracted and by whose vibrations light communicates heat to bodies? And is not this medium exceedingly more rare and subtile than air, and exceedingly more

elastick and active? And doth it not readily pervade all bodies? And is it not - by its elastick force - expanded through all the heavens?" - I. Newton from "Opticks"

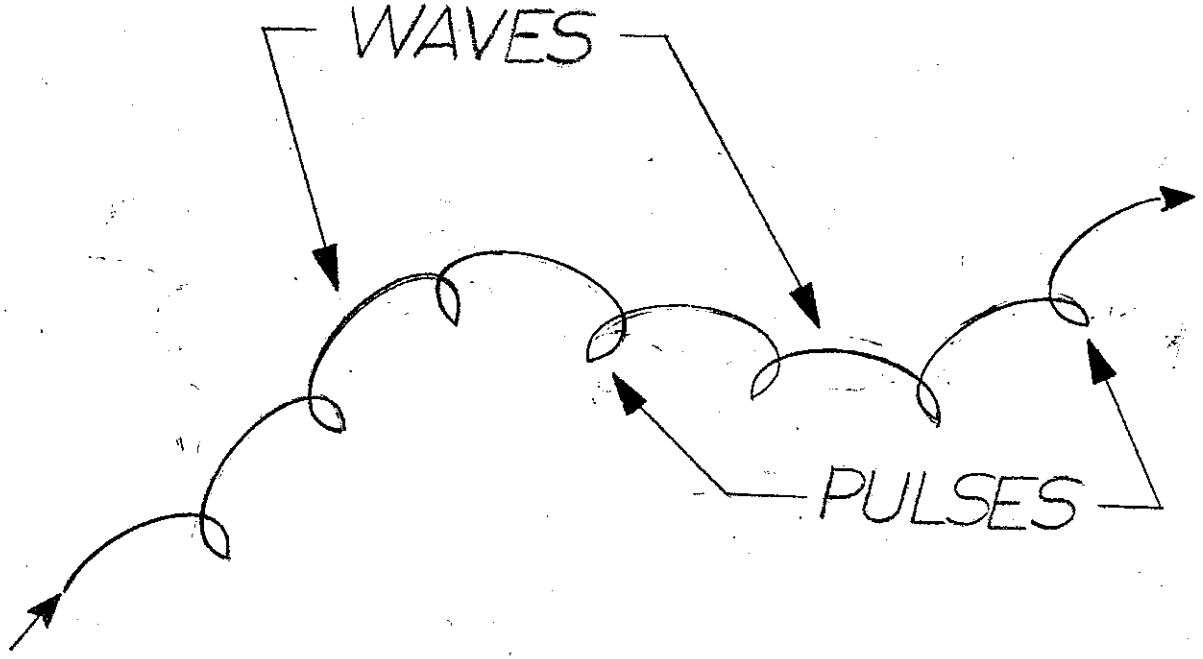
Current interpretations of Quantum Theory require that there be no such thing as an 'ether' - particulate or otherwise. The wave and density functions of Quantum Mechanics are calculated probabilities that occur in 'empty space'. The postulated energy and mass free space in which wave and density functions take place cannot contribute anything to their existence.

Einstein speculated that subatomic interactions and reactions were guided by "ghost waves". Subatomic particles, according to this speculation, seemed to follow paths which had all the characteristics of waves - waves which in actuality do not exist. Common sense and logic dictate, at this point, that we seriously ask ourselves the question: "Is it possible for a physicist to predict an occurence, formulate the mathematics which describe it and yet not know what he is talking about?" Bertrand Russell answers: "Mathematics may be defined as that subject in which we never know what we are talking about, nor whether what we are saying is true."

Continuum Physics, which is based on direct observations rather than on abstract formulations, maintains that the spinning wave modality of Primary Energy brings into clear, sharp focus the central philosophic issue of Quantum Theory, i.e., What exactly is it that Quantum Mechanics describes?

FIGURE #2

CONTINUUM PHYSICS
THE PE SPINNING WAVE:



WAVES AND PULSES = QUANTA ARE THE INTEGRAL PARTS OF THE SPINNING WAVE.

The two distinct components of the PE spinning wave are illustrated in Figure #2. Waves and pulses (=quanta) are integral parts of the functional unity, PE spinning wave. Waves and pulses constitute separate, complementary functions of the one basic process: the forward movement of Primary Energy in and through the PE continuum. These part functions of the whole, as is graphically evident in Fig. #2, can never occur simultaneously. Instead, there is a ceaseless transition of a wave function to a pulse function to a wave function etc. Subatomic (more accurately, PREatomic) phenomena, as a result, do not exhibit either a wave or a particle nature. Preatomic phenomena are inherently transformations of the wave function to the pulse function back to the wave function. This is a functional process the details of which will be discussed shortly.

A wave can be defined as something which is spread over a large region of space. A particle is an entity confined to a very small volume. A wave, as measured from crest to crest is a continuous process, whereas a pulse (=quantum), restricted as it is to a specific point in space, is essentially a discontinuous process. The PE spinning wave, therefore, contains both the continuum functions, i.e., classical wave mechanics, and the discontinuum functions, i.e., Planck's quanta.

Dr. Reich cautioned the researcher: "If we describe the qualities of a natural process without arranging them logically, we attain knowledge of facts but not of the functional connections." Continuum Physics acknowledges and follows this advice. Hence:

DEVELOPMENT

The cosmic, primordial functions of the spinning wave as demonstrated in pendulum oscillation is illustrated in Figure # 3.
The natural process which constitutes and governs the movement of the PE spinning wave is analogous to that which is exemplified in one cycle of pendulum oscillation.

Let us, to begin with, define what precisely is meant by one cycle. For our purpose, one cycle of pendulum oscillation will be defined as: Starting at the bottom of the page - with the pendulum bob at rest - we follow the swing upward to the horizontal position at the left side of the page. Then we follow the swing downward again to the bottom of the page. This two-phase up and down motion, from and back to the rest position of the bob, is considered as being one full cycle.

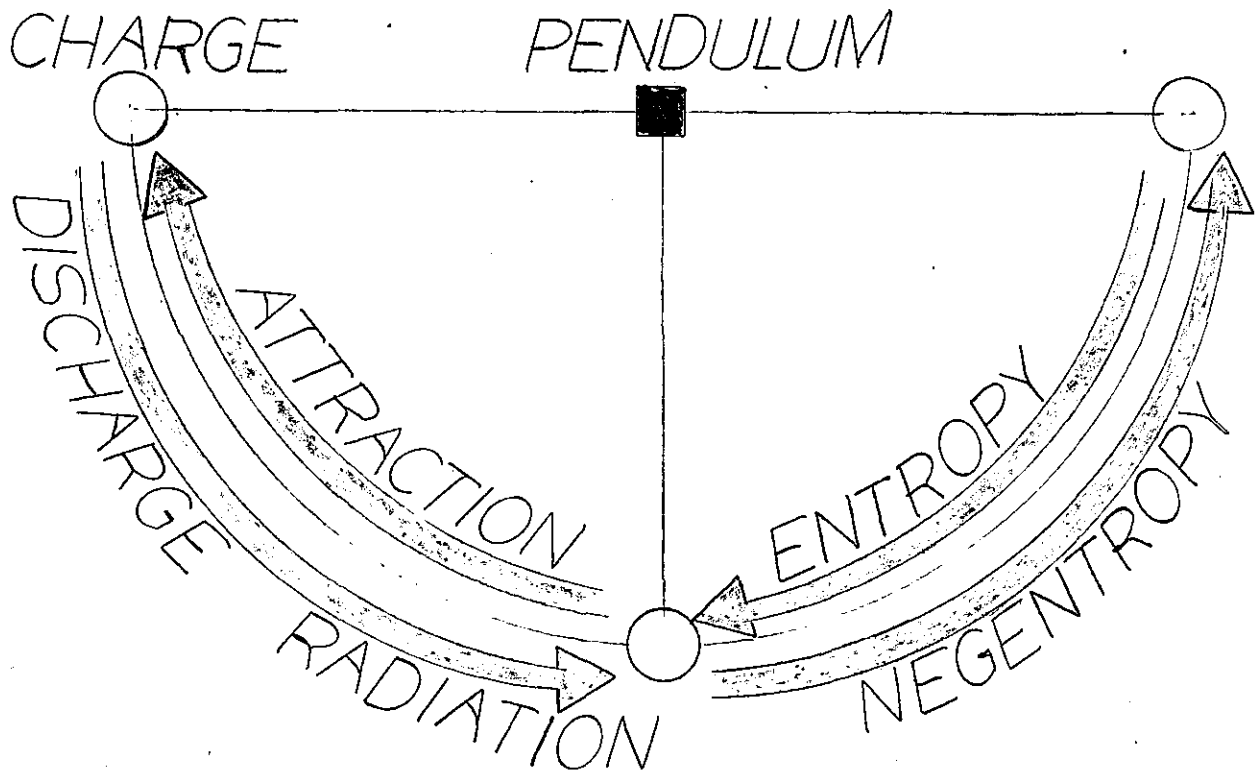
Now the alert student of physics would, no doubt, be quick to point out that pendulum action is ordinarily initiated with the bob in the horizontal or near horizontal position, i.e., at some angle, small or large, from the vertical plane described by the suspended pendulum bob in the rest position. The potential energy possessed by an already raised bob could then, upon release, produce a series of oscillations. In other words, the student wants to assure himself that the cycle, as defined above, is lawful, i.e., it fits into the framework of classical mechanics.

Continuum Physics will, for the time being, meet this requirement. Therefore, instead of beginning the swing with potential energy (= mechanical potential of position) already resident in an elevated bob, we will impart energy to the bob while it is in the rest position. The force which is supplied by a push with the hand or a sudden spurt of compressed air from a bellows achieves the desired effect. The formerly inert bob is thereby impelled = energized to swing upward to what is designated

FIGURE # 3

CONTINUUM PHYSICS

THE COSMIC, PRIMORDIAL FUNCTIONS OF THE PE SPINNING WAVE AS DEMONSTRATED IN PENDULUM OSCILLATION.



as the CHARGE stage in the figure. The bob, in this elevated position, has reached its maximum potential energy. The first phase of the cycle is complete.

Next the energized pendulum bob is released and swings spontaneously downward toward the rest position. The potential energy of the bob is transformed into the kinetic energy of the oscillation. Potential energy diminishes as the bob loses height. We refer to this as the DISCHARGE stage. When the bob reaches the rest position, potential energy = charge is minimum while kinetic energy = discharge is maximum. The second phase of the cycle is complete.

The cycle, then, is composed of two distinct, separate and even antithetical phases. The first phase is the upward swing which culminates in a CHARGE stage. The second phase is the downward swing which terminates in a DISCHARGE stage.

It is important to note that unless we were to erect a physical block to the pendulum bob motion; the bob will swing to the right side of the page and, without added external force, complete another cycle. Indeed, this back and forth oscillation can continue until all of the potential energy has been transformed into kinetic energy and that kinetic energy, in turn -in the process of overcoming friction- has been transformed into heat.

The analogy between the pendulum oscillation and PE spinning wave processes must be prefaced by a reiteration of the fact that movement, per se, is a Basic Functioning Principle (BFP) of Primary Energy. This BFP is an intrinsic function of PE just as PE itself is, 'a priori', the ultimate, irreducible substratum of the universe. Consequently, a REST stage is unknown and inconceivable in any cyclical process descriptive

of how the PE spinning wave functions. The mass-free PE flow in and through the continuum does not require an external impetus to set it into motion. Whereas we had to apply an external force to the pendulum bob and push it into a swing, the PE spinning wave is self-generative; it "pushes" itself, so to speak.

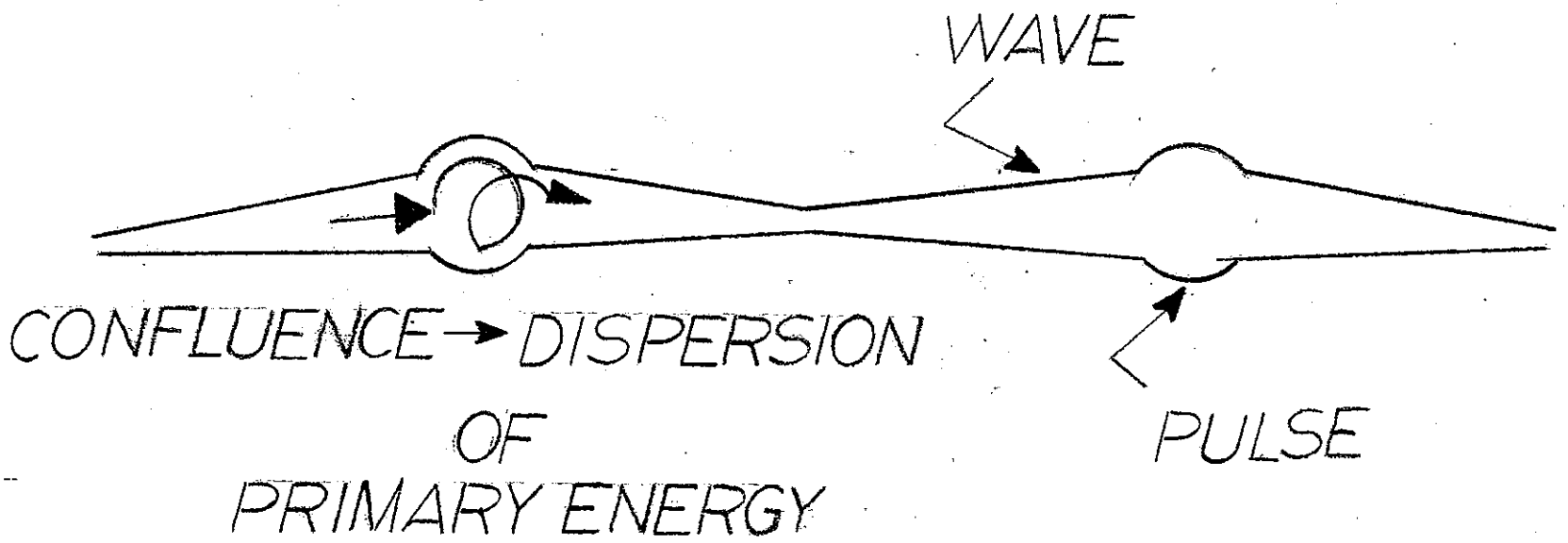
A schematic of the PE spinning wave is depicted in Figure #4. Let us compare its configuration, in the context of our analogy, with the pendulum illustration. Here the "rest stage" of the bob is is represented by the narrow sections at both extremes of the wave functions that encompass the pulse function. These "rest stages" occur horizontally, at-a-distance from one another since the PE spinning wave ceaselessly moves forward through space. The CHARGE stage is labeled pulse in the schematic. The DISCHARGE stage commences at the arrow which points out the directional flow of PE from the loop to wave function.

Recall that the student of traditional physics would have preferred that our cycle start with the bob in the elevated = energized position. He needed the assurance that the process was lawful. Continuum Physics, in the case of pendulum oscillation, acquiesed to this demand. This was accomplished when we introduced an external force in order to activate the inert bob. A swing was thereby imparted to the bob and potential energy was created at the culmination of phase one of the cycle. The question of lawful natural processes arises again in the consideration of the PE spinning wave cycle. Unfortunately, for those not conversant with PE dynamics, reference to and the explanation of the law which governs phase one of the PE spinning wave cycle is not to be found in any standard physics text. This law, originally termed orgonomic potential by its discoverer, Dr. Wilhelm Reich, is the PE potential.

FIGURE #4

CONTINUUM PHYSICS

SCHEMATIC: PE SPINNING WAVE



The PE potential, like movement and pulsation, is a Basic Functioning Principle (BFP). All functions in nature that are governed by the flow of energy from low level, weaker systems to high level, stronger systems are based upon this principle. The PE potential is the basis for and functions contrary to the mechanical potential. (Mechanical potential dictates that the high energy level losses energy to the low level, e.g., heat, electricity.) The PE potential principle is most clearly expressed in the maintenance in most animals of a temperature higher than that of the environment and in the function of gravitational attraction.

This BFP of Primary Energy cannot be overemphasized. Physics books will have to be revised to accommodate this natural law. Just as one remains illiterate without a concise knowledge of the alphabet; so one fails to read nature without understanding that PE functions in accordance with the PE potential principle.

A physical bob that swings through space finds no counterpart in the PE cycle since the PE spinning wave expresses mass-free energy in forward movement. Therefore, in order to offer a valid comparison, the significance of the bob has to be disregarded in favor of the actual energy phases that it represents. The pendulum bob, in this context, can be viewed as being an indicator, by virtue of its position, of the separate stages in the cycle. Essentially, if we dispense with the "rest stage", the bob indicates a charge and a discharge function. Charge and discharge constitute phase one and phase two, respectively, of the complete cycle.

The schematic of the PE spinning wave clearly shows the difference between phase one and phase two of the cycle.
Phase one is represented by an upward inclined plane which culminates in the expansive, sphere-shaped pulse = CHARGE function.
Phase two is represented by a downward inclined plane which expresses the contractive DISCHARGE function.
These processes coincide with the up and down swings in the pendulum cycle.

PHASE ONE

The CHARGE stage in the pendulum cycle is equivalent to an accumulation of potential energy. Similarly, charge, in the PE spinning wave cycle, is equivalent to a maximum accumulation of Primary Energy. We must, at this juncture, pause and distinguish between charge = potential energy and charge = Primary Energy.

Charge = potential energy (Pendulum oscillation cycle)

Here an external force supplies the impetus necessary to raise the pendulum bob to its maximum mechanical potential of position. The subsequent series of oscillations are energized by this gravitational potential difference. In other words, the potential energy in this process is not a definite quantity of energy which has been concentrated to comprise charge, e.g., like an electrical charge.

Charge = Primary Energy

Here the BFP, PE potential, generates the quantity of mass-free energy requisite to create the charge function. In other words, the pulse = quantum in this process is a definite quantity of PE which has been concentrated to comprise charge.

The charge phase of the PE spinning wave cycle is described in Fig. # 4 as the Confluence of Primary Energy. The upward inclined plane indicates the direction of this first phase. The direction is from the lower level to the higher level. This PE flow from low to high is, in effect, the PE potential.

The charge phase of the pendulum oscillation cycle is described in Fig. # 3 as Negentropy. Negentropy = PE potential.

The renowned physicist, A. Eddington, the despondent author of The Running - Down of the Universe asks: "Is there no counter-process (to entropy) by which radiation collects in space, evolves into electrons and protons, and begins star-building all over again?"
Continuum Physics, in the words of W. Reich, answers:

"While some orgone (=PE) units are forming in the orgone ocean by concentration, others terminate their single existence by energy dissipation into the orgone ocean. Thus energy lost by discharge or "deaths" of a number of orgone units would be picked up again to be concentrated in other units. The "running-down of the universe" toward random functions would in this way be counteracted by new births of high energy potential due to reversed concentration - "creation". The orgonomic (=PE) potential would make entropy unnecessary."

This fundamental function of nature - the PE potential - although eminently manifest in the macrocosm, e.g., gravity, has its genesis in the microcosm of the PE spinning wave. We shall limit our discussion of this all-important process, so as not to stray too far afield from our analogy, to gross effects and try to fill in the details later.

GENESIS OF THE PE POTENTIAL

Observation of the mass-free energy continuum in the laboratory, i.e, the PE room, reveals an undulating energy substratum in perpetual motion. The wavy, foglike or cloudy condition of the continuum constitute its "unexcited state". The "unexcited state" is an expression of the PE continuum in dynamic equilibrium. PE potential arises from and within this energy continuum in dynamic equilibrium.

Individual, separate PE spinning waves are engendered within the evenly distributed energy matrix when this matrix is excited. This excitation, unlike the external physical force (the push) that impelled the pendulum bob into a swing, is, in the strictest sense, a field phenomenon, i.e., an activation of energy by energy. Solar radiation, electric tension and organismic field contact increase the pulsation of the PE matrix. The distinct PE spinning waves that are generated within and from this matrix are the excited states of the energy continuum.

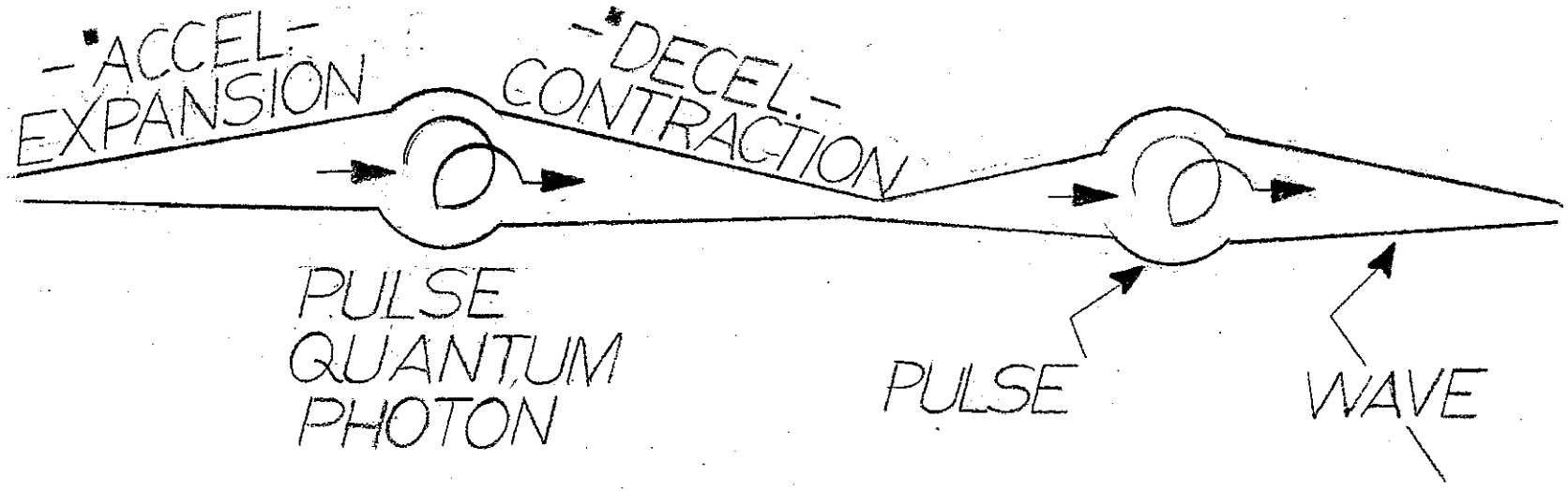
The ceaseless flow of the "unexcited" PE substratum is characterized by a slow, undulatory, wavy movement. Excited, distinct PE spinning waves are characterized by rapid, spiralling movements. The general substratum, like the individual PE spinning waves, is governed by the charge ➤ discharge energy metabolism. The metabolic rate of the PE spinning wave is much greater that that of the substratum. The high energy level PE spinning wave literally develops at the expense of the low level substratum. The PE spinning wave schematic in Figure #5 illustrates this process. Phase one of the cycle is labeled <u>acceleration</u>. Here we do not refer strictly to the accelerated forward movement of the spinning wave as a whole but rather to the progressive increase in motility = intensity of the energy content of this phase. As previously stated, a definite quantity

FIGURE #5

CONTINUUM PHYSICS

SCHEMATIC: SPINNING WAVE

THE PULSATION OF PRIMARY = BIOLOGICAL ENERGY



*ACCELERATION *DECELERATION

of mass-free energy accumulates and reaches a peak of concentration = charge in phase one. If we could magnify this process, we would see a confluence of the energy "units" = PRIONS which eventually constitute charge. The excited prions could be seen to attract 'unexcited' prions from the encompassing energy substratum. Once activated, the acceleration in phase one of the PE spinning wave cycle is self-generating, i.e., intensity gives rise to energy inflow and energy inflow gives rise to increased intensity. The greater the intensity, the larger is the quantity of energy inflow. The quality, i.e., intensity, conditions the quantity and vice versa.

Figure # 5 also shows that the confluence of PE leads to <u>expansion</u>. Expansion, in this case, denotes a filling of the energy reservoir. The peak of this expansion is designated <u>pulse</u> = charge. Phase one of the PE spinning wave cycle demonstrates the genesis of and is governed by the BFP - PE POTENTIAL - i.e., the flow of energy from the low to the high level.

<u>PHASE TWO</u>

The pendulum bob, at the peak of its elevated position, has reached maximum charge = potential energy. The mass-free PE reservoir that has accumulated at the peak, in the PE spinning wave cycle, is maximum charge = quantum of PE. This charge stage constitutes the culmination of phase one in both the pendulum and spinning wave cycles. The conclusion of phase one spontaneously initiates phase two. Expansion is inseparable from and leads to contraction in pulsation. What goes up must come down and, so too, charge is followed by discharge.

The build-up of potential energy in phase one has given rise to the mechanical potential of position in the pendulum cycle. This gravitational potential difference is the basis for the work function, i.e.,

force x distance, which is actualized here in the transition of potential into kinetic energy. Work can be defined as the power to move, or to move something. Hence, phase one has created the basis for the work function.

There is, in the PE spinning wave cycle, the build-up of a definite quantity of mass-free energy. This process, which is governed by the PE potential principle, is the basis for the work function. Actualized in phase two is the transition of PE potential into mechanical potential. The work performed consists of the self-generated forward movement of the spinning wave through the continuum.

Continuum Physics, in order to render an accurate analogy, must distinguish between the generation of the mechanical potential in the two different cycles. Specifically, the creation of mechanical potential is applicable only in the case of the PE spinning wave cycle.
The bob in the pendulum cycle had to be "energized" by an external source. Therefore, mechanical potential, i.e.,.the basis for the work function (expressed as kinetic energy in the pendulum cycle), was imparted to and not generated by the pendulum.
On the other hand, the confluence and subsequent accumulation of PE in the spinning wave cycle, which results in a definite quantum of mass-free energy, constitutes the creation of the high energy potentials that are the basis for the mechanical potential.
The fact that the mechanical potential is derived, evolves from the PE potential is demonstrated in the PE spinning wave cycle.

The PE spinning wave schematic in Fig. #4 designates phase two as the Dispersion of Primary Energy. The configuration depicts a downward flow from the pulse = maximum charge. This constitutes the discharge phase of the cycle. Just as the pendulum bob swings down from its high elevation; so the high energy concentration of the PE quantum = pulse disperses down to a lower level. The PE 'units' that had accumulated to a peak of charge now discharge, i.e., they dissociate.

Figure # 5 shows phase two as being characterized by deceleration and contraction. Here we do not refer to the decelerated forward movement of the PE spinning wave as a whole but rather to the decreased motility = intensity of the energy content in this particular phase. As the previously concentrated, highly motile prions suddenly dissociate, their intensity decreases. A dispersion of mass-free energy in the PE spinning wave cycle entails contraction. Contraction, in this instance, denotes an emptying of the energy reservoir. This discharge phase has been engendered by phase one, i.e., the PE potential phase. Phase two is governed by the mechanical potential, i.e., the flow of energy from the high down to the lower level.

The comparison between the pendulum and PE spinning wave cycles would be incomplete unless we confront the question of entropy. The pendulum, once activated and left to itself, would eventually lose all of its potential energy. This occurs as a result of the transformation of kinetic energy into the random motion of molecules = heat. Hence, Fig. # 3 labels the down swing, which expresses kinetic energy changed into heat, entropy. Strictly speaking, the upward swing also entails entropy. However, for the purposes of our analogy, we have taken this liberty.

Whereas the pendulum cycle inevitably loses all of its energy to a process of entropy, the PE spinning wave cycle does not. Prions that disperse upon discharge immediately converge, re-associate and generate another complete cycle and that another. This perpetual association ➤ dissociation ➤ association = charge ➤ discharge ➤ charge is the basis for the Primary Energy BFP, movement. The PE spinning wave cycle constitutes, in effect, a self-generative process.

THE ENERGY FORMULA

The PE spinning wave schematic in Fig. #5 is entitled, "The Pulsation of Primary = Biological Energy". Pulsation consists of rhythmic alternations between expansion and contraction. The cyclical process that constitutes the forward movement of PE clearly and unequivocally embodies pulsation. Continuum Physics acknowledges that pulsations in nonliving nature, as epitomized in the PE spinning wave, and pulsations in the living organisms are identical. The Primary Energy incarnate in organisms is biological energy. Continuum biophysics has established that a living organism is not merely a complex chemical-physical machine. The organism is essentially a PE = bio-energetic system whose functions are governed by a well-defined, lawful energy metabolism.

When we think of pulsation in respect to the human being, our attention is immediately focused on the heart beat and breathing. The energetic process of charge and discharge is evident in the rhythmic expansion and contraction of the heart and lungs. Although less evident and pronounced, every single cell or organ, whether it be a gland, urinary bladder, intestines, etc., pulsates.

Long before he actually discovered the existence of mass-free atmospheric PE, Dr. Wilhelm Reich discerned that living entities function in obedience to a specific metabolism. The paramount product of his extensive biophysical investigations was a formula that logically and fully integrated the various functions of this bio-energetic metabolism. He found that the bio-energetic process functions in accordance with the following formula:

TENSION → CHARGE → DISCHARGE → RELAXATION
(swelling) (expansion) (contraction) (detumescence)

Respiration provides us with a graphic example. The lungs swell (tension) with each inhalation. They, being filled with air, expand. The lungs, at full capacity, are charged. Exhalation discharges oxygen and CO_2. The organs shrink (contraction). They become detumescent (relaxation) in the final stage of exhalation. This four-beat process is the organic = <u>life formula</u>.

The pivotal functions of the life formula are charge and discharge. The PE spinning wave cycle, likewise, revolves around the alternation of the charge and discharge phases. This direct correlation points to the fact that the living and nonliving realms are regulated and governed by functionally identical energy metabolisms.

The PE spinning wave schematic in Figure # 6 reveals the <u>energy formula</u> as being:

ATTRACTION → CHARGE → DISCHARGE → RADIATION
(confluence) (expansion) (contraction) (dispersion)

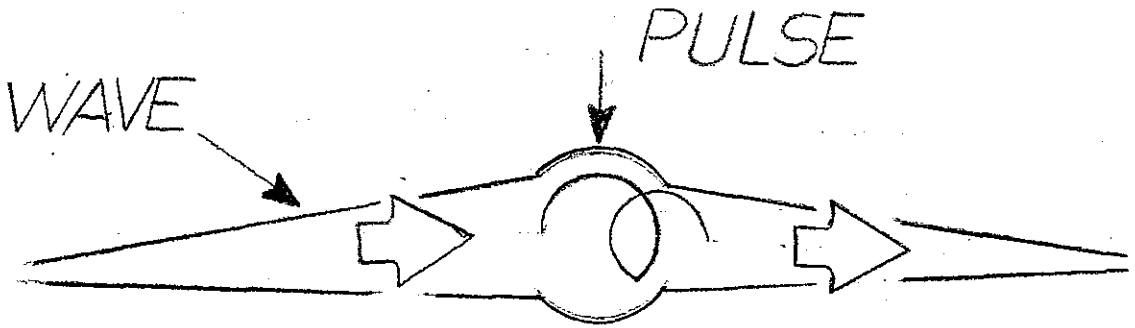
Here the functions that constitute the two-phase PE spinning wave cycle have been logically arranged and integrated into a definite four-beat pattern.

FIGURE #6

CONTINUUM PHYSICS

SCHEMATIC: SPINNING WAVE

THE FUNCTIONAL ENERGY FORMULA -



ATTRACTION ► CHARGE ► DISCHARGE ► RADIATION

ENERGY CONFLUENCE — ENERGY DISPERSION

NEGENTROPY — ENTROPY

PE POTENTIAL — MECHANICAL POTENTIAL

While the PE metabolism of the living and nonliving realms have in common the functions of charge and discharge; the inorganic functions of attraction and radiation supplant the organic functions of tension and relaxation in the energy formula. The functional identity of the PE metabolic process in both the living and nonliving domains is a cornerstone of Continuum Physics.

Continuum Physics' Observations vs. Quantum Mechanics' Formulations

The Quantum Field Theory is a deplorable break with the centuries-old scientific tradition that postulated the existence of a tangible, physical substratum = 'ether'. Quantum Theory blatantly asserts that the electromagnetic fields involve no object whatever. These fields are not perceived to be states of the ether medium but rather as "ultimate, irreducible realities" in themselves. However, unable to scrap the "matrix hypothesis" completely, Quantum Theory has resurrected a new type of ether. Henceforth, particles = quanta are conceived as being the excited states of the featureless ground state of the 'field'.

Continuum Physics has demonstrated that the PE spinning wave is a concrete functional = energetic process. Waves and pulses = quanta are the integral components of this fundamental process.

Quantum physicists have ascertained that the wave function (which to them is a purely mathematical entity) exhibits two very different modes of development.

Mode #1 A smooth, continuous, dynamic development, i.e., wave function

Mode #2 An abrupt, discontinuous collapse of mode #1, i.e., density function

Mode #1 corresponds precisely with the confluence of PE, i.e., the accumulation of mass-free energy prior to maximum concentration in the charge phase of the PE spinning wave cycle.

Mode #2 corresponds precisely with the maximum PE concentration which is the pulse (quantum) = charge function of the PE spinning wave cycle.

The mathematics of these wave and density functions represent only a situation in which one condition leaps to another with no apparent development between the two modes. The actual PE process from which waves and densities evolve is hidden from the physicist whose conceptions of nature are divorced from a direct observation of objective reality.

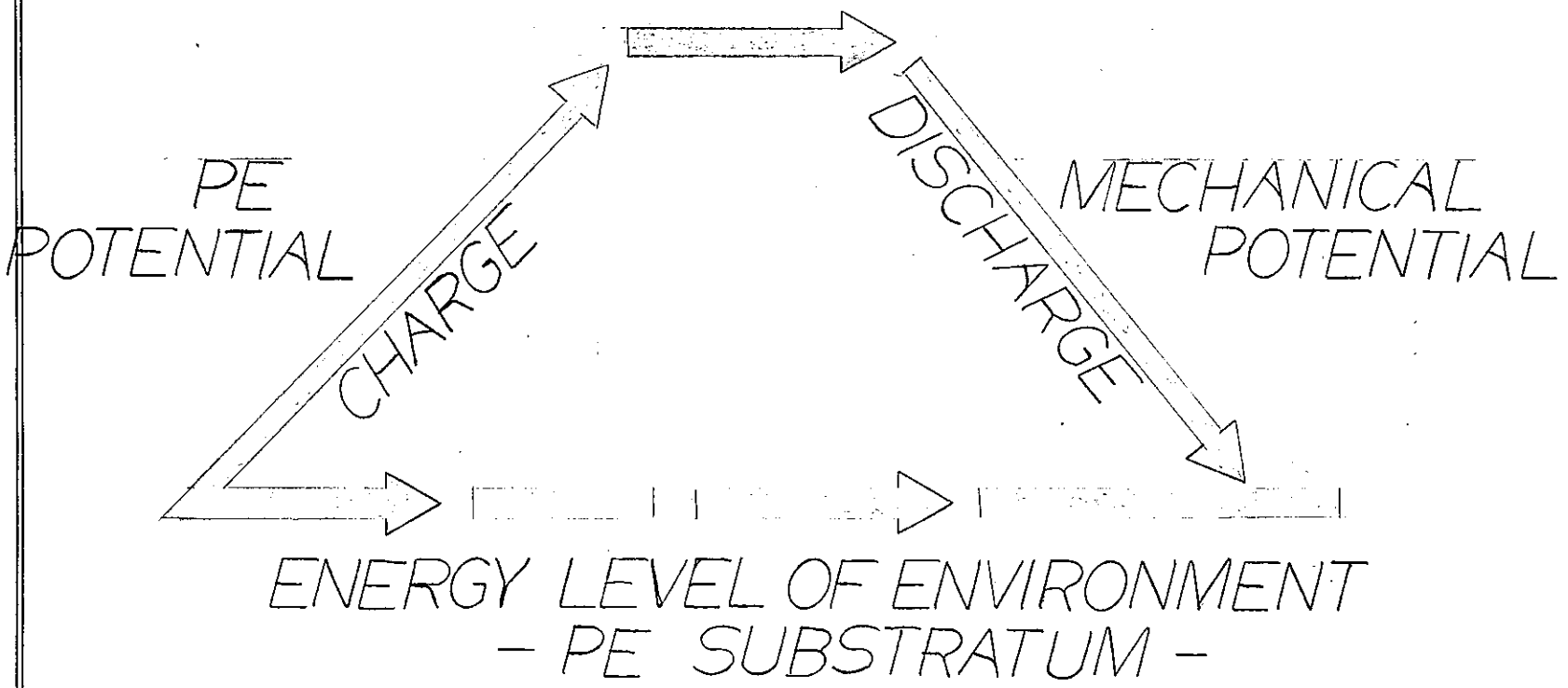
The PE spinning wave is composed of a continuous, uninterrupted series of two-phase cycles. These cycles are governed by a charge→discharge energy metabolism. This energy metabolism is expressed in the four-beat pattern of the energy formula. As the spinning wave moves forward within and through the PE continuum, ceaseless transformations of wave - pulse - wave, etc., are generated.

The process that constitutes the wave function in the PE spinning wave cycle is spread out in space and consumes time. The confluence of mass-free energy, and also the dispersion of mass-free energy, requires a certain period of time. Significantly, since a static, 'rest state' does not apply to PE, the time required for confluence - dispersion is simultaneously accompanied by a forward progression through space.

The quantum = density function which is engendered in the charge phase of the PE spinning wave cycle is confined to a specific point in space. While the series of cycles which comprise the PE spinning wave spread out in space (traverse measurable distances); the pulses = quanta are seen to be discontinuous singularities that emerge at specific points along the trajectory of the spinning wave's forward movement.

FIGURE #7

CONTINUUM PHYSICS
DIAGRAM OF THE ENERGY METABOLISM IN THE PE SPINNING WAVE CYCLE



Pulses = quanta are engendered by, evolve from the wave function. Consequently, waves and "particles" exclude one another, i.e., they can never occur simultaneously.

When one sees the green light emitted by a traffic signal, the observer can be assured that the waves perceived have a uniform wavelength and frequency. This wavelength, in the case of the green light, is consistently in the 5500 angstroms range.

The observation of PE spinning waves discloses the fact that such a uniformity and rigid consistency does not occur here. Each and every wavelength in the PE spinning wave is different. The explanation for this diversity lies in the fact that the PE spinning wave's forward movement is generated within and through the energy substratum. Although the mass-free energy of this substratum is, overall, somewhat evenly distributed in open space, there are always areas of higher and lower PE concentration even under the most ideal circumstances. The The energy metabolism of the PE spinning wave will, as a result, vary in accordance with the particular PE environment into which it moves. The energy metabolism increases under one set of conditions and decreases under another. On the one hand, an increase in the energy metabolism is functionally identical to an increase in the spinning wave's frequency which in turn is equivalent to a shortened wavelength. On the other hand, a decrease in the energy metabolism is functionally identical to a decrease in the spinning wave's frequency which in turn is equivalent to a longer wavelength.

Continuum Physics has, at this point, reached a crucial juncture. An understanding of what follows is important for the natural researcher who seeks genuine insights into PE dynamics.

GIVEN: Two separate PE spinning waves that are activated by the same source of excitation, e.g., solar radiation, under identical circumstances. We distinguish between the two by designating one, KRW-1, and the other, KRW-2.

KRW-1 moves forward into an area of high PE concentration. KRW-2 moves forward into an area of low PE concentration. KRW-1 encounters a high PE potential environment. High PE potential areas are characterized by strong tension. (Tension is a property of the atmospheric PE that is conditioned by the quantity of energy. The greater the quantity of PE, the stronger the tension.) KRW-2 encounters a low PE potential environment. Low PE potential areas are characterized by weak tension.

The attraction ➤ charge process, i.e., phase one of the PE spinning wave cycle, dictates that the high level spinning wave will attract and draw energy from the low level PE substratum. The greater the PE potential difference between spinning wave and its energy substratum, the more efficient is this metabolic process. Hence:

The dynamic interaction between KRW-1 and the high PE potential KRW-1 environment into which it has moved generates a DECREASE in the metabolic rate = frequency of this PE spinning wave cycle.

The dynamic interaction between KRW-2 and the low PE potential environment into which it has moved generates an INCREASE in the metabolic rate = frequency of this PE spinning wave cycle.

CAPACITY LEVEL

Capacity level is the peak = maximum charge = quantity of mass-free energy accumulated-concentrated at the culmination of phase one in the PE spinning wave cycle.

Capacity level constitutes the accumulation of a quantity of energy that is above the level of the general PE substratum. A greater quantity of mass-free energy has to build-up in a high PE concentrate environment than in a low PE concentrate environment. In order to 'peak' above it and make possible a subsequent discharge. Therefore, the capacity levels of a spinning wave's temporary pulse functions are proportional to the PE potential level of the environment in which they are generated. In other words, a large capacity level arises within a high PE potential environment while a small capacity level arises within a low PE potential environment. We can now state that:

a.) A PE spinning wave that functions within the confines of a high PE potential level is characterized by low frequency, long wavelength and large capacity levels.

b.) A PE spinning wave that functions within the confines of a low PE potential level is characterized by high frequency, short wavelength and small capacity levels.

The confluence of mass-free energy that results in the formation of a temporary capacity level (pulse) occurs in the context of a time (frequency) function and a space (wavelength) function. In the PE spinning wave cycle, changes in frequency coincide with proportional changes in wavelength. These functional changes also occur in the case of electromagnetic radiation. However, it is imperative to recognize that, in contradistinction to EM radiation, the velocity of a PE spinning wave cannot automatically be set at the "speed of light" constant (=186,000 mps). On the contrary, we must assume that PE spinning wave velocity fluctuates over a wide range. This conclusion is based upon the fact that the simultaneous changes in the frequency and wavelength of a PE spinning wave correspond to changes in velocity.

FUNCTIONAL EQUATIONS

The core process at the very roots of nature, i.e., the PE spinning wave cycle, is the source of and allows us to formulate the following functional equations:

low frequency $\neq$ long wavelength $\neq$ low velocity $\neq$ large pulse (capacity level)

high frequency $\neq$ short wavelength $\neq$ high velocity $\neq$ small pulse (capacity level)

PRIMARY ENERGY SYSTEM

"All matter possesses a natural rate of vibration. The understanding then of the principle of vibration or frequency is to grasp the secret of energy, i.e., vibrations, in which lies the secret of all things."
- T.H. Moray

The core=source process in nature is revealed in the PE spinning wave cycle. The distinct, 'excited' spinning waves are generated within and emerge from the all-pervasive "unexcited", i.e., in a condition of dynamic equilibrium, PE substratum of the universe. This PE substratum constitutes a mass-free energy continuum in which and from which the discontinuous "energy packets" ceaselessly rise and fall in accordance with the energy metabolism of charge and discharge. This perpetual 'birth' and 'death' of "quantized oscillators" is the tangible, physical basis for Planck's Quantum Theory. However, the so-called "subatomic particles" which correspond to the Quantum mechanic's mathematical formulations are not equatable to the pulse = quantum functions that are embodied in the PE spinning wave cycle. The spinning wave is intrinsically a PRE-atomic, mass-free, pure energy process.

The pulses = quanta, that are generated by the PE spinning wave cycle, consist of definite amounts of mass-free energy which has been accumulated-concentrated in the cycle's charge phase. These pulses are 'peaks' which momentarily rise above the energy level of the encompassing substratum. The forward movement of a spinning wave can be plotted and the direction and distance traversed measured by drawing a line from pulse to pulse. These discrete points connected by our imaginary line in space are not indications of a separate, definable 'particle' that intermittantly appears and disappears.

Close scrutiny would disclose that each and every point = pulse varies, i.e., its capacity level = the quantity of accumulated energy to comprise charge, differs. Therefore, what we observe in reality is a pre-atomic, mass-free process in which the terminology, 'particle' and 'mass' , is inapplicable. These terms apply and are appropriate only after the PE spinning wave cycle undergoes a functional transformation, a transformation that, in effect, creates a bona fide particle.
Continuum Physics comprehends how this transition from a discontinuous, variegated pulse = quantum to a continuous, well-defined (in terms of specific mass) atomic entity evolves. This genesis of an elementary particle is governed by a PE process referred to as SUPERIMPOSITION.

SUPERIMPOSITION

Superimposition is, like movement, pulsation and PE potential, a Basic Functioning Principle (BFP) of cosmic PE. The function of superimposition, in the nonliving realm, is exemplified by the genesis of particles, planets and stars. When two or more PE spinning waves or PE streams merge and fuse, mass-free energy is transformed into mass-containing entities. The twin-armed spiral galaxies as well as the hurricane - although the superimposition of two enormous atmospheric PE streams in the case of the hurricane does not yield mass - are unequivocal demonstrations of this process as it occurs in the macrocosm.

Continuum Physics has, through the direct observation of concentrated PE in the PE room, i.e., under strict, controlled laboratory conditions, investigated this phenomenon in the microcosm. What follows is a cogent interpretation of this process as seen and described by Dr. Reich.

"Years of painstaking observations and functional theory formation have hewn two major pathways into the realm of non-living nature that revealed the function of superimposition to be at work at the very roots of the universe. One pathway leads into the microcosmos, the other into the macrocosmos... The essence of the microcosmic framework is as follows:

In a completely darkened metal-lined orgone energy room we can observe luminating orgone energy units pursuing certain pathways as they move spinning forward through space. These pathways distinctly show the form of a spinning wave. This was reported on several occaisions many years ago without further elaboration. There is now ample evidence to the effect that two such spiraling and excited orgone energy units attract and approach each other until they superimpose.

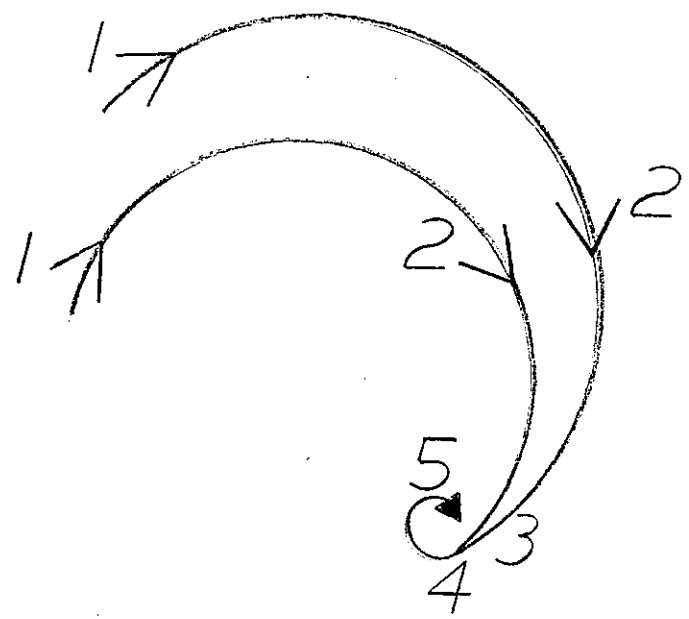
It is an essential characteristic of our base of operation to assume that the primordial orgone energy ocean is entirely mass-free. Accordingly, mass -inert mass at first- emerges from this mass-free energy substratum. It seems further logical to assume that in the process of superimposition of two mass-free spiraling and highly excited orgone energy units, kinetic energy is being lost, the rate of spiraling motion decreases greatly, the path of motion is sharply curved and a change takes place from long-drawn-out spinning forward toward circular motion on the spot. (See Figure # 8)

Exactly at this point in the process, inert mass emerges from the slowed-down motion of two or more superimposed orgone energy units. It is immaterial whether we call this first bit of inert mass "atom" or "electron" or something else. The basic point is the emergence of inert mass from frozen kinetic energy. This assumption is in full agreement with well-known laws of classical physics.

FIGURE #8

CONTINUUM PHYSICS

THE PE PROCESS: SUPERIMPOSITION



1. TWO DIRECTIONS OF PE SPINNING WAVE FLOW
2. ATTRACTION AND MUTUAL APPROACH
3. SUPERIMPOSITION AND CONTACT
4. MERGER
5. SHARP CURVING OF PATH OF FLOW

To continue our train of thought, we must further assume that the material, chemical "particles" that compose the atmosphere have originally emerged (and are still emerging, through superimposition of two or more spinning orgone energy units in the orgone energy envelope of the planet..

Inert mass is being created by superimposition of two or more spinning, spiraling orgone energy (=PE) units through the loss of kinetic energy and sharp bending of the elongated path toward circular motion." (5)

Let us take a close look at Fig. # 8, The PE Process: Superimposition, and see if we can bring it into sharp focus.

1.) Two directions of PE spinning wave flow -

GIVEN: Two separate PE spinning waves, KRW-1 and KRW-2, that move forward, in close proximity to one another, in and through the continuum. The frequency of KRW-1 is slightly higher than the frequency of KRW-2. Consequently, KRW-1 possesses a higher velocity than KRW-2, i.e., spinning wave KRW-1 is the stronger system while spinning wave KRW-2 constitutes the weaker system.

2.) Attraction and mutual approach -

The BFP, PE potential, dictates that a strong system attracts the weaker system. This attraction and subsequent flow of energy from the weak, low to the strong, high level commences and increases the nearer KRW-1 and KRW-2 approach.

3.) Superimposition and contact -

KRW-1 and KRW-2 establish contact, superimpose and fuse.

4.) Merger -

The PE spinning wave cycles of the two formerly distinct waves get locked in step with each other, i.e., they begin to pulsate 'in phase'.

5.) Sharp curving of path of flow -

The spiral, looping trajectory receives a sudden impetous, i.e., a momentum of torque. The path of spinning wave flow curves sharply. The fused PE spinning wave closes in on itself and proceeds to rotate on the spot. The formerly elongated trajectory of PE forward movement through space has changed into a circular, rotating motion.

PE SYSTEM - ELEMENTARY PARTICLE

The PE system consists of:

1. Core, i.e., a nucleus
2. Periphery, i.e., the boundary between the nucleus and its mass-free PE matrix
3. PE Field, i.e., a mass-free PE matrix (See Figure # 9)

The Nucleus

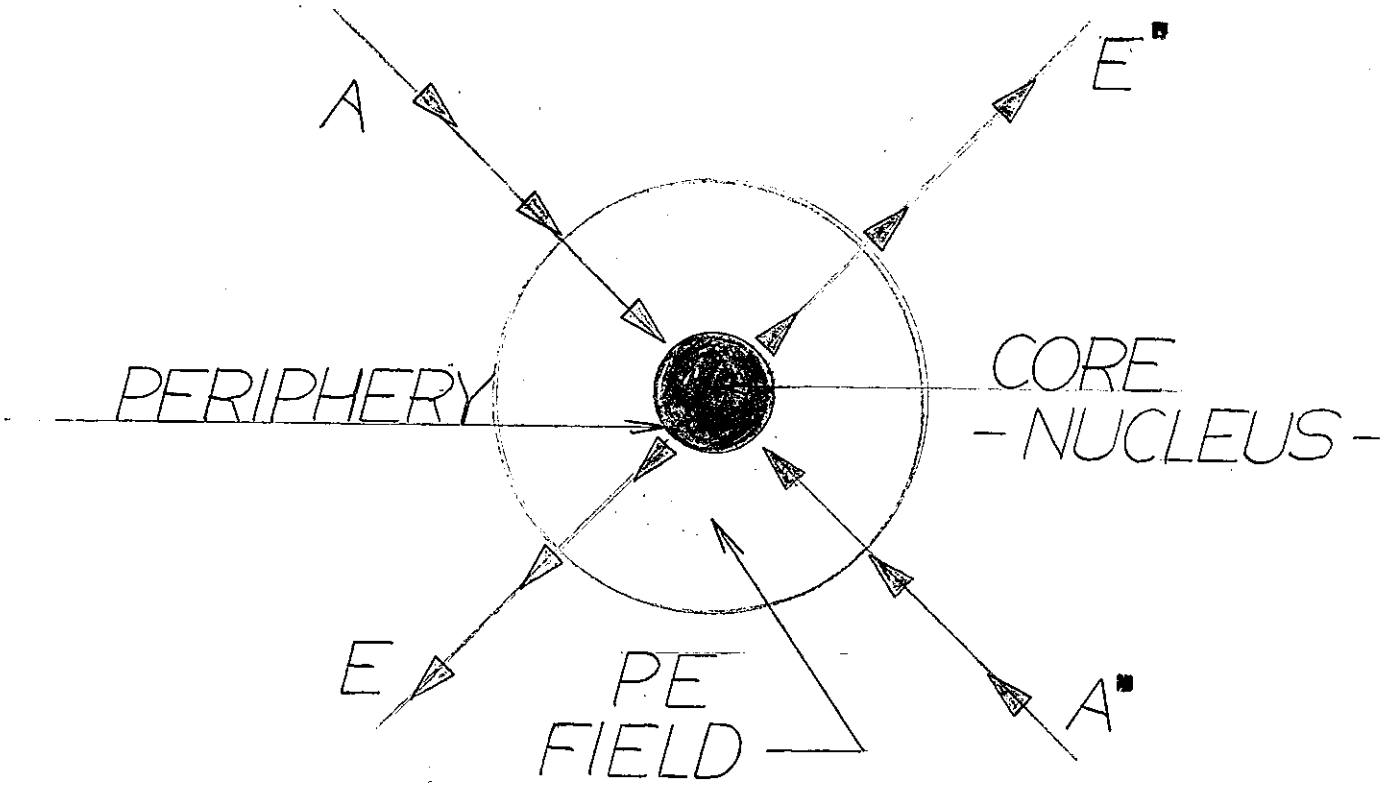
The PE spinning wave cycle revealed how a temporary, discontinuous pulses = quanta are constantly engendered by the forward movement of the spinning wave within and through the energy substratum. The BFP, superimposition, demonstrates the process whereby the discontinuous pulses of two or more separate spinning waves converge, fuse, begin to rotate on the spot and are thereby transformed into a continuous quantum.

The capacity level = maximum charge in the PE spinning wave cycle constituted a transitory 'peak' that arose above the energy level of the general substratum only to fall again in the discharge phase. The capacity level generated by the circular motion of two or more

FIGURE #9

CONTINUUM PHYSICS

SCHEMATIC: THE PE SYSTEM



* ABSORPTION AND EMISSION

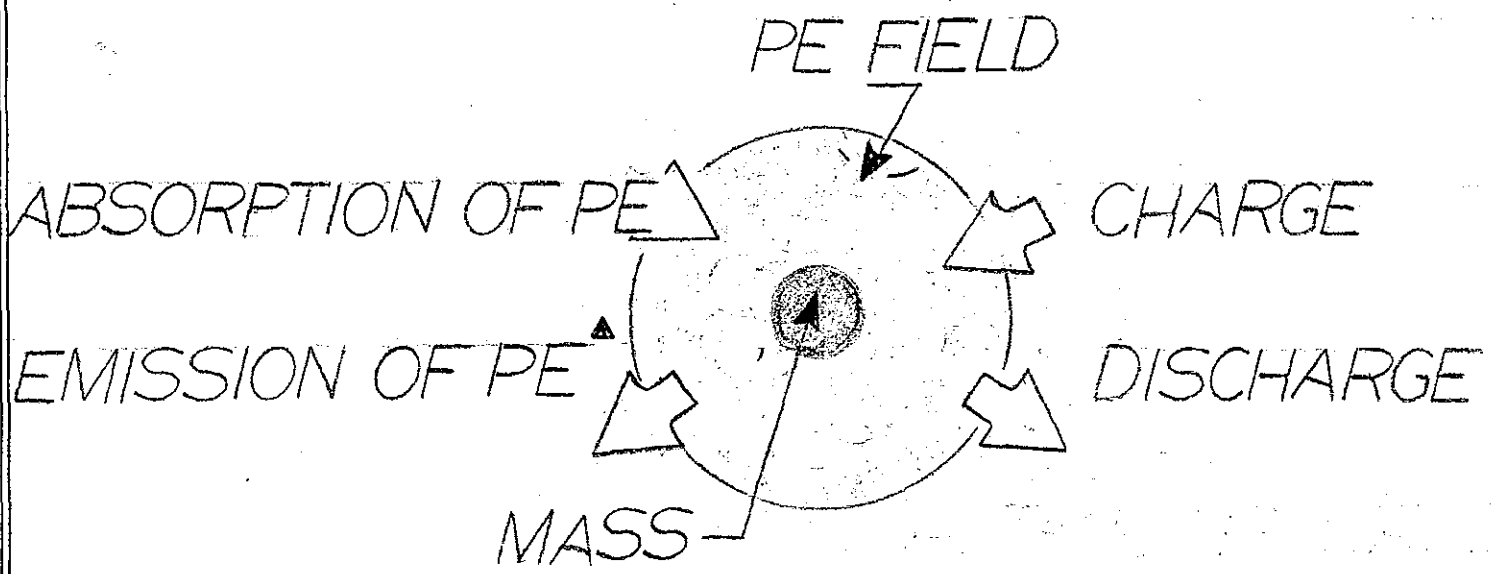
superimposed, fused spinning waves is, in contradistinction, a continuous, steady state entity that permanently maintains itself at a charge level higher than that of the PE substratum. In other words, the 'peak' = quantum has taken on form and structure and no longer is liable to a dispersion of its energy content in the discharge process. The nucleus, therefore, consists of a measureable quantity of highly concentrated PE. This transformation of a discontinuous charge function into a continuous capacity level allows Continuum Physics, for the first time, to use the terms, mass and particle. The forward movement of two or more PE spinning waves has, in the superimposition process, changed into circular motion on the spot. This circular motion now embodies a continuous, well-defined concentration-density of PE. MASS is crystallized, structured PE.

PE Field

Once the core=nucleus of the PE system, elementary particle, has taken shape, a mass-free energy matrix forms a permanent PE field around the periphery of the particle. The BFP, PE potential, governs both the mass-free PE spinning wave cycle and the mass-containing PE system. The nucleus constitutes a high energy level. This strong entity attracts weak PE 'units' , i.e., prions, from the energy substratum. This PE field that now envelops the nucleus, due to the strong attraction exerted by the nucleus, separates from the general PE continuum and rotates with the particle. The PE system = elementary particle has, in effect, generated its own specific, demarcated mass-free energy environment. A field within a field has been created.

FIGURE # 10

CONTINUUM PHYSICS
THE CHARGE ▶ DISCHARGE METABOLISM OF THE ELEMENTARY PARTICLE



A DYNAMIC ENERGY EQUILIBRIUM WITHIN THE ENCOMPASSING, UBIQUITOUS, MASS-FREE PRIMARY ENERGY SUBSTRATUM IS MAINTAINED.

▲ PRIMARY ENERGY

The Continuum Physics' contention that the various elementary particles have been and continue to be generated in the PE substratum can, to some extent, be delineated. (Note: These microcosmic processes are not yet directly observable - at least in their entirety. However, it may be expected that an incisive analysis of the functionally identical processes in the macrocosmos will substantiate our tentative assumptions.) The following examples, which are based upon the solid foundation of proven, verifiable PE functions, provide insight into how diverse elementary particles evolve.

PE Dynamics of Particle Evolution

GIVEN: On the one hand, two or more spinning waves superimpose in region L, i.e., an area characterized by low PE concentration. On the other hand, two or more spinning waves superimpose in region H, i.e., an area characterized by high PE concentration.

The functional equations have secured the firm foundation from which Continuum Physics can equate the PE superimposition processes that occur in a region of Low PE concentration with:

high frequency $\not\Leftrightarrow$ high velocity $\not\Leftrightarrow$ small quantum (w/ fast rotation)

while the PE superimposition processes that occur in a region of high PE concentration with:

low frequency $\not\Leftrightarrow$ low velocity $\not\Leftrightarrow$ large quantum (w/ slow rotation)

Consequently, the parameters of the core = nucleus of the PE system, elementary particle, that is generated in region L are:

- high frequency
- small mass
- fast rotation or spin

The parameters of the core = nucleus of the PE system, elementary particle, that is generated in region H are:

- low frequency
- large mass
- slow rotation or spin

Figure # 10 illustrates the charge►discharge energy metabolism of the elementary particle. To review: The PE spinning wave cycle is strictly governed by the energy metabolism of charge►discharge. This energy metabolism is expressed in the PE spinning wave's forward movement through space. Continuum Physics comprehends the fact that when forward movement changes to rotation on the spot, a functional transformation of energy metabolism must accompany the change of temporary, discontinuous charge phases = mass-free quanta into permanent capacity levels = mass-containing particles.

The rotating quanta that comprise the "structured" nuclei are no longer generated by the confluence of prions in the forward movement through the energy substratum of the PE spinning waves. On the contrary, circular motion on the spot has created, as previously explained, a distinct, separate environment around the nucleus, i.e., a mass-free energy matrix = PE field. The nucleus now attracts (absorbs) and radiates (emits) (which corresponds to the charge and discharge functions respectively) the mass-free prions from and into this field. Instead of being a linear process, i.e., a confluence and dispersion of PE that constitutes forward, longitudinal movement, this is a radial process that occurs within the PE system's demarcated energy matrix. In other words, the nucleus, as a unit, perpetually pulsates, i.e., charges and discharges. The continual expansion and contraction of the PE field is the direct expression of the nuclear energy metabolism.

Ground State = Natural Functional Dynamics

The ground state of the PE system, elementary particle, that has been engendered in region L is characterized by:

1.) High frequency nucleus, i.e., the nucleus has a high rate of pulsation.
2.) Small capacity level, i.e., the quantity of mass-free PE that comprises the 'structured' mass of the nucleus is small.
3.) Rapid spin, i.e., the PE system's rate of rotation is fast.
4.) Narrow, mass-free PE field

The ground state of the PE system, elementary particle, that has been engendered in region H is characterized by:

1.) Low frequency nucleus, i.e., the nucleus has a low rate of pulsation.
2.) Large capacity level. i.e., the quantity of mass-free PE that comprises the 'structured' mass of the nucleus is large.
3.) Slow spin, i.e., the PE system's rate of rotation is slow.
4.) Wide, mass-free PE field

Continuum Physics recognizes that the gaseous atmosphere that surrounds the Earth would neeessarily have had to be generated through the superimposition of PE spinning waves in the planet's mass-free energy matrix = PE field. This observable field revolves, slightly faster than the physical globe, from west to east. Both on the macrocosmic scale of planet and on the microcosmic scale of elementary particle, the density = concentration of a PE system's mass-free energy field diminishes, becomes more diffuse the farther out it extends from the core = nucleus. In other words, PE concentration increases toward the planet's core and decreases toward the upper atmosphere. Indeed, the heavier elements, e.g., oxygen, nitrogen, etc., combined and uncombined are located near the Earth's periphery. The lighter elements, e.g., helium, hydrogen, etc., are located, uncombined, at the extremes of the atmospheric PE fiedd and beyond.

GRAVITATIONAL ATTRACTION

"A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents die and a new generation grows up that is familiar with it." - Max Planck

The first phase = charge phase of the PE spinning wave cycle is governed by the BFP, PE potential principle. To reiterate; The PE potential principle dictates that energy flows from the low to the high level, i.e., the stronger system attracts the weaker system (and draws energy from it). This is a strictly mass-free process in the PE spinning wave cycle which is expressed in the attraction ▶ charge functions of the four-beat formula that defines the energy metabolism. Continuum Physics has herewith firmly established that the PE potential principle is equivalent to and constitutes the basis for gravitational attraction.

The confluence of the mass-free prions that accumulate and are concentrated in the forward movement of PE spinning waves clearly demonstrates the process of gravitational attraction. In addition, the convergence, merger and fusion of two or more spinning waves in the superimposition process that generates mass, whether that be an elementary particle or a planet, embodies gravitational attraction. The task at hand is to determine how mass-free gravitational attraction = PE potential principle, which is an intrinsic, integral function of the PE spinning wave cycle, is transformed into the gravitational attraction that is exhibited by mass-containing PE systems.

Albert Einstein speculated, in his general theory of relativity, that mass caused space to curve. What Isaac Newton termed gravitational attraction, Einstein equates with force-free motion in that curved space. A good analogy that might provide the reader with some insight into this abstruse hypothesis is: Imagine a rubber sheet that is stretched over a frame. If you place a heavy ball bearing in the center of the sheet, the weight of the ball will cause a deep depression. If you then drop a tiny marble upon the curved sheet, the marble will immediately start to move toward the center as if the large ball bearing were attracting it. However, there is in reality no attraction between the ball bearing and the marble; just force-free motion in a curved space. According to relativity, gravity is what distorts the space-time continuum. Where the effects of gravity can be neglected, the space-time continuum is like a sheet of rubber before we stretched it. To Einstein, gravitational force is a mental creation which has no factual basis in reality. The substratum of Einstein's universe, i.e., "empty, curved space", is force-free because the existence of the primordial force = Primary Energy is explicitly denied and ignored.

Newton deduced that the sun, due to its huge mass, exerted gravitational attraction upon all of the planets. However, he completely evaded the question: "What is the nature of this mysterious attractive force?" He insisted: "I make no hypothesis as to how gravitational attraction is transmitted from body to body across the void." He simply postulated "action-at-a-distance". Indeed, Newton ultimately considered the seemingly incomprehensible nature of gravity to be a sort of divine dispensation. God had forbidden to man this crucial insight into this mystery of creation.

Continuum Physics contends that the sun does not attract the planets. This star is merely the largest entity of our closely associated solar system. Instead of being governed by "universal gravitational attraction", the sun and the planets are perceived to be moving in the same plane and to be revolving in the same direction in harmony with the movement and direction of the cosmic PE stream of the galaxy. Let us, in the light of this critical finding, consider the following:

GIVEN: The PE systems, hydrogen and helium, are released, in the form of free, gaseous atoms, from the Earth's surface into the atmosphere.

The conventional definition of gravitational attraction dictates that:

1.) The larger mass attracts the smaller mass.
2.) The greater the difference in size between the masses, the stronger is the attraction.
3.) The closer together the masses are, the stronger is the attraction between them.

The question that comes to mind is: Why do these elementary particles ascend into the outer stratums of the atmosphere? Afterall, it is an observable, verifiable fact that these small masses regularly defie the gravitational pull of the larger mass, Earth. There is, both in the case of hydrogen and helium, a very definite limit to this defiance. Ultimately, these atoms remain 'attracted to the planet' within specific, well-defined atmospheric layers. On the one hand, the helium atom rises to an elevation of 200 miles before it remains suspended within the confines of the heliosphere. On the other hand, the hydrogen atom rises to an elevation of over 500 miles before it remains suspended within the confines of the protonosphere.

Therefore, contrary to accepted notions, these small particles experience the strongest gravitational attraction at long range rather than at close proximity to the large mass.

Continuum Physics interprets this phenomenon as follows:
The PE system, hydrogen atom, is generated, through the process of superimposition, within a low PE potential level.
The PE system, helium atom, is generated, through the process of superimposition, within a moderate PE potential level.
The PE system, Earth, has, like an elementary particle, a PE matrix. This enveloping, mass-free energy field carries the gaseous atmosphere from west to east around the planetary body. We will, for our purposes, subdivide the planetary energy field into an inner and outer atmospheric layer, i.e., an endosphere and an exosphere. The endosphere constitutes a series of graduated (from high to moderate) PE potential levels. The conventional designations for these levels are: troposphere, stratosphere, mesosphere and ionosphere. The exosphere constitutes a series of graduated (from moderate to low) PE potential levels. The conventional designations for these levels are: heliosphere and protonosphere.

The natural frequencies (ground states) of both the helium and hydrogen atoms are much higher than the pulsatory rate of the PE potential level in which they have been released. The hydrogen atom and the helium atom find themselves, in effect, in a condition of disequilibrium. Metabolic, self-active elementary particles, under these circumstances, can be compared to metal springs that are being compressed by some external pressure. The inherent tendency of a forcibly compressed spring is to stretch out to its full length. Similarly, the inherent tendency of PE systems (atoms) is to function at their natural frequency.

Each decrease in the external pressure will allow the constrained spring to expand and bring it closer and closer to equilibrium. Such a decrease in pressure, in the case of the hydrogen and helium atoms, is not equivalent to a diminution of the physical pressure that is imposed upon them by the weight and density of the gaseous atmosphere under which they find themselves. Instead, the pressure imposed upon these PE systems is the constraint of natural frequency that results from their interaction with a high PE concentrate environment.

At this point, I remind the reader that the metabolic rate = frequency of the PE spinning wave cycle, which is functionally identical to the natural frequency of an atom, decreases in a high PE concentrate region and increases in a low PE concentrate region.

These atoms, upon release into the endosphere, will spontaneously generate an increase in spin (since spin ≠ frequency) as they rise from the troposphere, into the stratosphere, into the mesosphere etc., etc. Logically, spin does not automatically translate into a linear, upward trajectory. This change from random, on the spot rotation to directional, upward movement is a lawful, functional process. The upward movement of hydrogen and helium is a direct result of the increase in spin that the interaction between the atoms and each successive less and less concentrated PE environment generates. Here, again, we dispense with the need to provide an external force or energizer, e.g., temperature, in order to stimulate motion in a PE system. The rise of hydrogen and helium atoms is a self-generative, self-regulatory process that takes place within the framework of the graduated (high to low) PE substratum. An ever-increasing spin of the atoms occurs simultaneously with accelerated directional, upward movement.

The helium atom, until it encounters the exosphere, has moved through successive atmospheric layers that have been conducive to an accelerated spin. However, once the exosphere (specifically, the heliosphere) is reached, the helium atom has arrived within the moderate PE potential level that functions at a frequency identical to its own natural frequency. The helium atom finds itself within the PE environment that allows it to function as a PE system in dynamic equilibrium. (The compressed metal spring has stretched to its full length.) The atom resonates in harmony with the mass-free environment. Since an increase in spin is no longer generated in this condition of equilibrium; directional, upward movement changes into random, on the spot motion. Helium, in effect, remains attracted within the confines of this resonant PE potential level.

The hydrogen atom, due to its higher natural frequency, has found the endosphere and even the heliosphere to be conducive to the generation of upward movement. It is only at the outer edge of the Earth's atmospheric PE envelope that hydrogen finally encounters the low PE potential level that allows it to function as a PE system in dynamic equilibrium. The establishment of a resonance bond between the atom and the protonosphere keeps the hydrogen suspended within and attracted to this particular PE potential level.

Summation:

The masses, hydrogen and helium, are not attracted to another mass, i.e., to the planetary globe. The PE systems (atoms) are attracted to a mass-free energy field = PE potential level. The frequency of the PE potential level functions in harmony with natural frequency (as expressed in an atom's pulsatory energy matrix) and attracts the hydrogen and helium atoms.

Strictly speaking, pulsation attracts pulsation, i.e., a field interacts with another field. In other words, we can now equate gravitational attraction (mass-free or mass-containing) with pulsation. Herewith we establish the functional equation:

GRAVITATIONAL ATTRACTION $\Leftrightarrow$ PULSATION

FUNCTIONAL DYNAMICS OF THE ATOM

"Atoms are known to be harmonic oscillators, the nuclei being the oscillators themselves. The electrons and their orbits being seen as the reverberations and echos of the periodic, harmonic motions of the nucleus." - A. Glazewski

FUNCTION AND STRUCTURE

The constituents of the integrated whole, i.e., the PE system atom are:

a.) Nucleus
b.) Periphery, i.e., the boundary between the nucleus and its mass-free PE matrix
c.) PE field, i.e., the mass-free PE matrix

Let us compare the Continuum Physics model of the atom with the prevalent views of atomic structure and function.

Prevalent View:

The fundamental building block of the nucleus is the nucleon. When this particle is in its electrically neutral state, it is a neutron. When it is in its electrically charged state, it is a proton. Nearly all of the mass is concentrated within the nucleus in the form of these positively charged particles.

Continuum Physics:

The nucleus is composed of a definite quantity of accumulated-concentrated mass-free energy.

Prevalent View:

Orbiting around the nucleus, as planets orbit the sun, are electrons which have almost no mass as compared with the nucleus.

Continuum Physics:

A mass-free PE field revolves around the nucleus.
This energy matrix is extremely diffuse in comparison to the condensed

nucleus. "Electrons" are the energy levels that are here illustrated (See Figure # 11) as constituting concentric, graduated - in terms of an increase in PE potential toward the nucleus - energy layers.

Prevalent View:

The positive charge of the protons attract the surrounding electrons to make an atom. Each electron has one negative charge. The number of electrons is always the same as the number of protons. The negative and positive charges cancel each other and the atom, as a whole, has no charge.

Continuum Physics:

The mass-free PE field, an integral component of the atom, is attracted to the nucleus in accordance with the PE potential principle. To repeat: PE potential dictates that energy flows from a low, weak level to a high, strong level. Consequently, the rarefied, weak PE field gravitates to the condensed, strong nucleus.

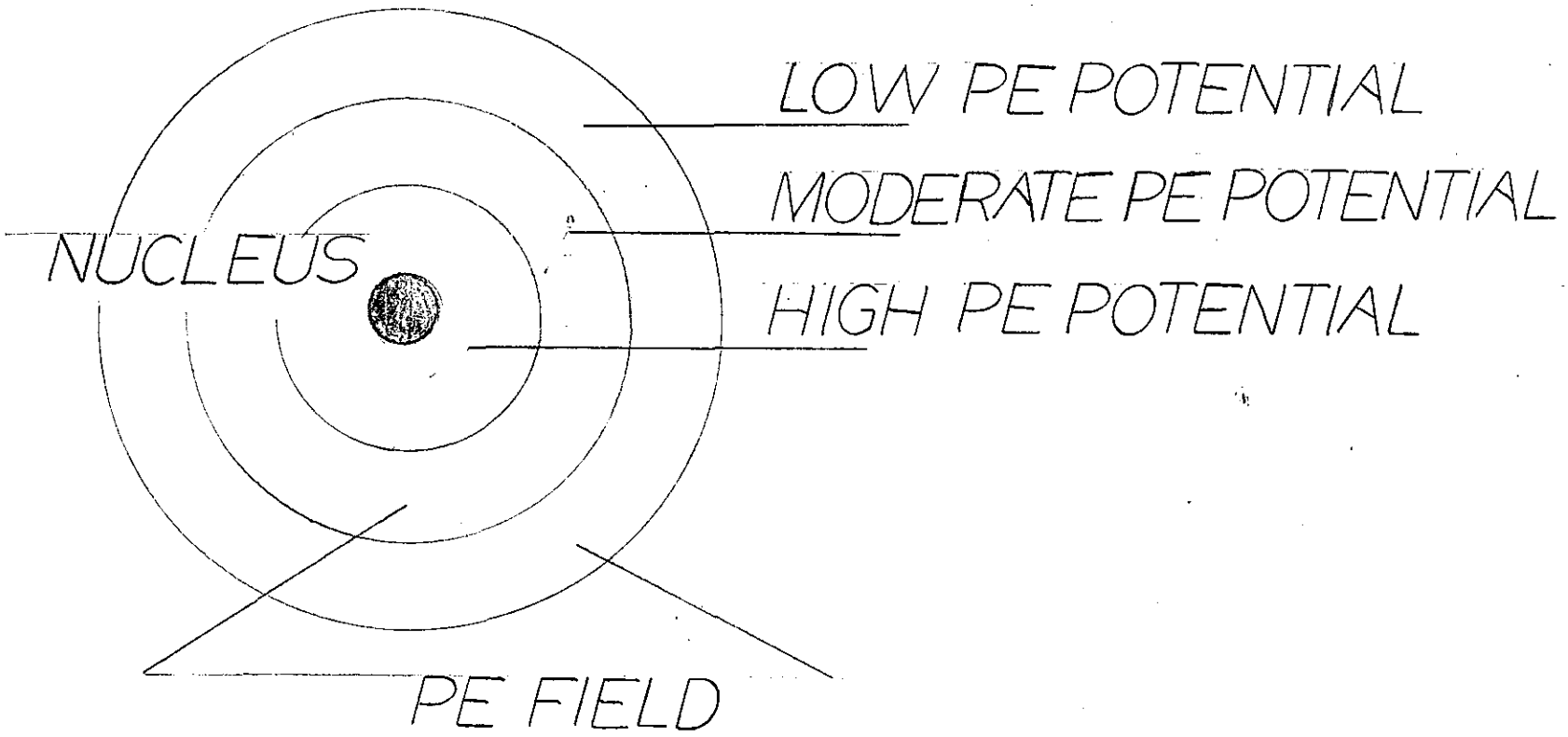
Positively charged and negatively charged particles brings us to the critical question of polarity.

Prevalent View:

There exists a universal force like gravitation which varies inversely as the square of the distance, but which is billions of times stronger. This force, if it were only attractive like gravity is, would dictate that the universe would be pulled together into a tight sphere. This force, if it were instead one of repulsion, would dictate a universe that can be likened to an ever-expanding gaseous cloud. However, the fact happens to be that the universe consists of both attractive and repulsive particles, i.e., positives and negatives. Positives repel positives but attract negatives. Negatives repel negatives but attract positives. Like kinds repel and unlike kinds attract. This force is called the 'electrical force'.

FIGURE # 11

CONTINUUM PHYSICS
ENERGY LEVELS OF THE PE SYSTEM-ATOM



The positives and negatives refer, respectively, to the protons and electrons of which all matter is made. Atoms, molecules and the matter they comprise are mixtures of positive protons and negative electrons which are attracting and repelling with this huge force.

Continuum Physics:

We have found that the universal law of gravitation has been misinterpreted. Hence, Continuum Physics has established, unequivocally, that every object in the universe does not attract every other object. Instead, gravitational attraction is actually a localized function that becomes effective only whenever the PE fields of separate, differentiated nonmaterial (PE spinning waves) or material entities are in contact and interact.

Contemporary physics acknowledges the existence of four (4) distinct variegated 'forces' that are deemed to hold sway over the entire spectrum of observable physical phenomena. These 'forces' are:

1. Gravity
2. Electromagnetism
3. Strong 'force'
4. Weak 'force'

This urgent need to conjure up these specialized, unconnected, unrelated 'forces' betrays a blindness to the functional=energetic basis of the universe. Continuum Physics' insights make it evident that all these diverse 'forces' are actually transformations of the unitary, primordial, mass-free energy. The 'forces' are engendered by lawful PE processes.

The polarity concept of positive and negative charges (represented in the form of the polarized entities, i.e., protons and electrons) is found to be invalid in the context of the Continuum Physics' model of the atom.

Since the nucleus is, in essence, accumulated-concentrated mass-free energy; particulate protons are a misnomer. The need, therefore, to postulate a special 'strong force' that binds these protons together (since particles of like polarity repel one another) does not arise. The maintenance of an atom's nuclear integrity is governed by the PE potential principle. Both the density and frequency of the encompassing PE field increases toward the strong, attractive nucleic core. Particulate, positively charged protons do not exert attraction upon specific numbers of negatively charged electrons in order to keep them in orbit around the nucleus. The counterparts to the electrons in the functional model of the atom are the graduated energy levels of the unitary PE field.

The illustration (see Fig. # 11) designates and distinguishes between three energy levels that range from low to high PE potentials. These PE potential levels grow stronger toward the nucleus.
The low energy level is equivalent to a diffuse concentration of PE and low frequency. The high energy level is equivalent to a dense concentration of PE and high frequency. These PE potential levels are, in terms of their structural arrangement, analogous to the orbital shells of the Bohr atomic model.
As such, the lighter elements embody less orbital shells (= energy levels) than do the heavier elements.
In other words, the spectrum of energy level densities and frequencies that characterizes a light element is much narrower than the spectrum that characterizes a heavier element.

Prevalent View:

The 'electrical force' like gravitational 'force' decreases inversely as the square of the distance between charges. However, whereas gravity only attracts; 'electrical forces' may either attract or repel. Coulomb's Law of Force states that: the 'force' between two electric charges is directly proportional to the product of their charges and inversely proportional to the distance between them (Inverse Square Law). The 'force' is repulsive when the charges have the same sign; attractive when they have different signs.

Continuum Physics:

The negative and positive polarities assigned to the distinct, particulate charges, i.e., electrons and protons, respectively, are inapplicable in Continuum Physics.

The neutral atom, according to prevalent views, is one in which the number of protons is the same as the number of electrons. This exact balance of charges (positive and negative) gives the atom stability.

The Continuum Physics model's 'neutrality' is perceived as being a dynamic equilibrium, within the general PE substratum, which is actively maintained by an alternating, rhythmic energy metabolism, i.e., the atom continually absorbs and emits mass-free energy.

CI [illegible]: A pair of atoms, e.g., hydrogen, which are 'neutral'.

Prevalent View:

a.) Neither attraction nor repulsion between atoms, e.g., two hydrogen atoms, occurs when they are significant distances apart.
b.) Once in close proximity to each other, repulsion between the atoms is observed.
c.) Repulsion is governed by the Coulomb Law which dictates that like charges repel one another.

Continuum Physics:

Points a and b are verifiable observations. However, point c, i.e., the hypothetical explanation for the phenomena, is amenable to a

functional = energetic interpretation. We have firmly established that gravitational attraction is a localized function that becomes effective only if and whenever the PE fields of separate, differentiated material entities are in contact and interact. Similarly, we now assert that the repulsion between these atoms in close proximity to each other is due to the effect of PE field radiation. The centrifugal emission (discharge-radiation process) of mass-free energy from the nucleus within and beyond the circumscribed PE fields of both elementary particles, repels. Since the flux density of this radiation, like all known radiation, diminishes the farther from the source that it spreads; repulsion is great at close range and becomes progressively less at a distance.

Chemical Bond

GIVEN: A mixture of confined, uncombined gases, i.e., atomic oxygen (O_2) and atomic hydrogen (H_2). Heat is applied to this mixture. The gases ignite and water molecules are formed.

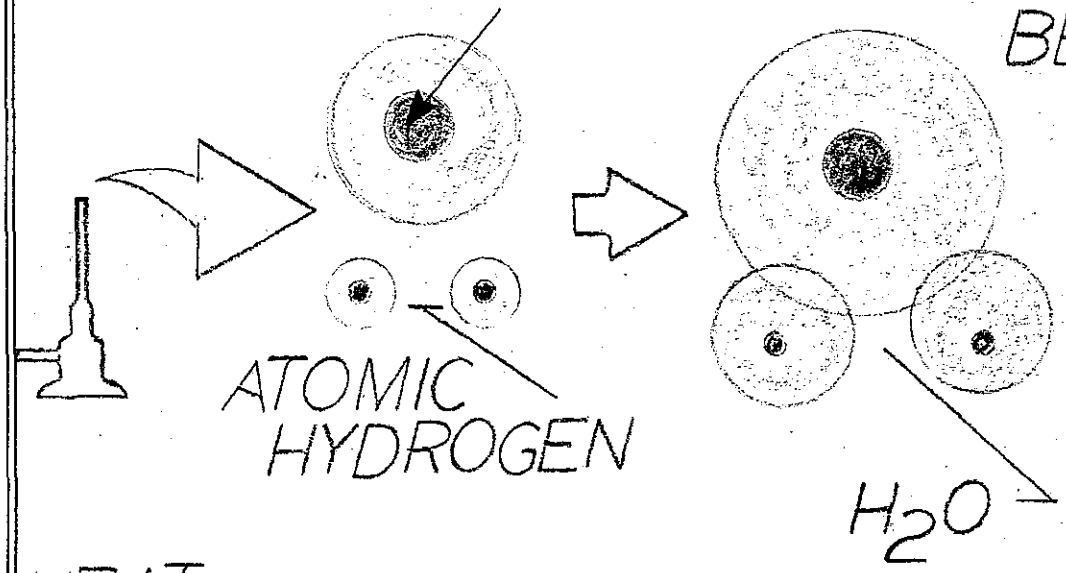
Prevalent View:

When the rise in temperature has caused the kinetic energy of the gases to increase sufficiently, substantial quantities of oxygen and hydrogen atoms come into close proximity to each other. Upon collision, a pair of hydrogen atoms combine with a single oxygen atom to form a water molecule.

The atoms in the molecule of water (H_2O), in this covalent bonding, are held together by virtue of the electrons that they share. The oxygen atom forms a two-electron shared pool with a hydrogen atom. However, the oxygen atom, having the stronger hold on valence electrons, will hold them more firmly in its outermost shell. The electrons will occupy the electron shell of the hydrogen atom to a correspondingly lesser degree. Since the oxygen atom has more than an equal share of the pooled electrons, it also has more than an equal share of the negative charge of those

FIGURE # 12

CONTINUUM PHYSICS
THE FORMATION OF A WATER MOLECULE



THE ATTRACTION BETWEEN THE
▼PE FIELDS ESTABLISHES THE CHEMICAL BOND.

HEAT ACTIVATION

▼PRIMARY ENERGY

electrons. There is, therefore, a fractional negative charge on the oxygen atom. The hydrogen atom has a small (and just balancing) positive charge. In effect, the atomic combination is held together in accordance with the Coulomb dictum: opposite charges attract.

Continuum Physics:

The excitation of the PE systems = atoms is essentially the activation of a field (atomic PE matrix) by a field (radiation). An absorption of "heat energy" by the individual atoms which in turn 'causes' an increase in their "kinetic energy" does not occur. Instead, the heightened energy metabolism that is generated within the atoms by the excitation is directly expressed in an increase of their pulsation and motion. Hence, atoms come into close proximity to one another. Collisions among physical particles does not result in 'chemical' bonding but rather the field to field contact between atoms (a necessay precondition for the functional superimposition process) is established.

The balanced, dynamic charge ➤ discharge energy metabolism of the atom is changed upon heat activation. There occurs a preponderance of nuclear charge. Consequently the atom is in a state of disequilibrium. As already determined, the constant re-radiation of energy from the nucleus of an atom that functions in a state of dynamic equilibrium ('neutrality') exerts a repulsive force (one PE system vis-a-vis another). However, when the balance shifts, upon excitation, to absorption; attraction predominates over repulsion. Once contact between the separate circumscribed PE fields of two or more atoms is established, an atomic superimposition process is initiated. (See Figure #12)

The phases of this atomic superimposition process consist of:

- Attraction - merger
- Charge
- Discharge
- Equilibrium

(Note: Even prior to an actual contact between PE fields, attraction is exerted by the stronger PE system (=oxygen) on the weaker system (=hydrogen). We can envision this as the hydrogen being swept into the stream of mass-free prions that gravitate from the general PE substratum toward the excited oxygen atom.)

Merger and Charge

The superimposition of atoms to form the 'chemical bond' of molecules (water, H_2O) is governed by the energy formula. Therefore, upon the establishment of contact between the PE fields of a single oxygen atom and two hydrogen atoms (or a hydrogen molecule, H_2), the subsequent attraction of the hydrogen proceeds in accordance to the PE potential process. This phase of atomic superimposition is a process of charge. The hydrogen atoms are 'pushed' into the rotating PE matrix of the oxygen atom. The weaker system is impelled, from the oxygen's outermost orbital shells = energy levels, inward. This journey inward through successive, graduated energy levels is simultaneous with an ever-increasing overall charge of the evolving PE system, H_2O. When the hydrogen atoms reach an energy level whose frequency coincides with their own, inward migration ceases. A resonance bond between hydrogen and oxygen is formed. The hydrogen revolves and remains 'attracted' within the resonant system. The establishment of such resonance among the components of the engendered entity, water, signifies the culmination of the charge process.

Discharge and Equilibrium

The peak of charge, generated by the mutual excitation and combination of the formerly separate atoms which eventually comprise the water,

is much higher than the capacity level $\neq$ natural frequency of water. In other words, the sum total of the capacity levels of the hydrogen and oxygen components (plus the mass-free energy inflow generated by the excitation process) is much higher than that possessed by a water molecule that functions in dynamic equilibrium. Since the H_2O molecule, like any other PE system, always tends toward its 'ground' state; a discharge of the excess energy must occur before balance can be achieved. The heat and light associated with the transformation of hydrogen and oxygen into water is the discharge ➤ radiation phase. The production of heat and light indicates the discharge of the excess quantity of mass-free PE that has been generated in the formative attraction ➤ charge phase.

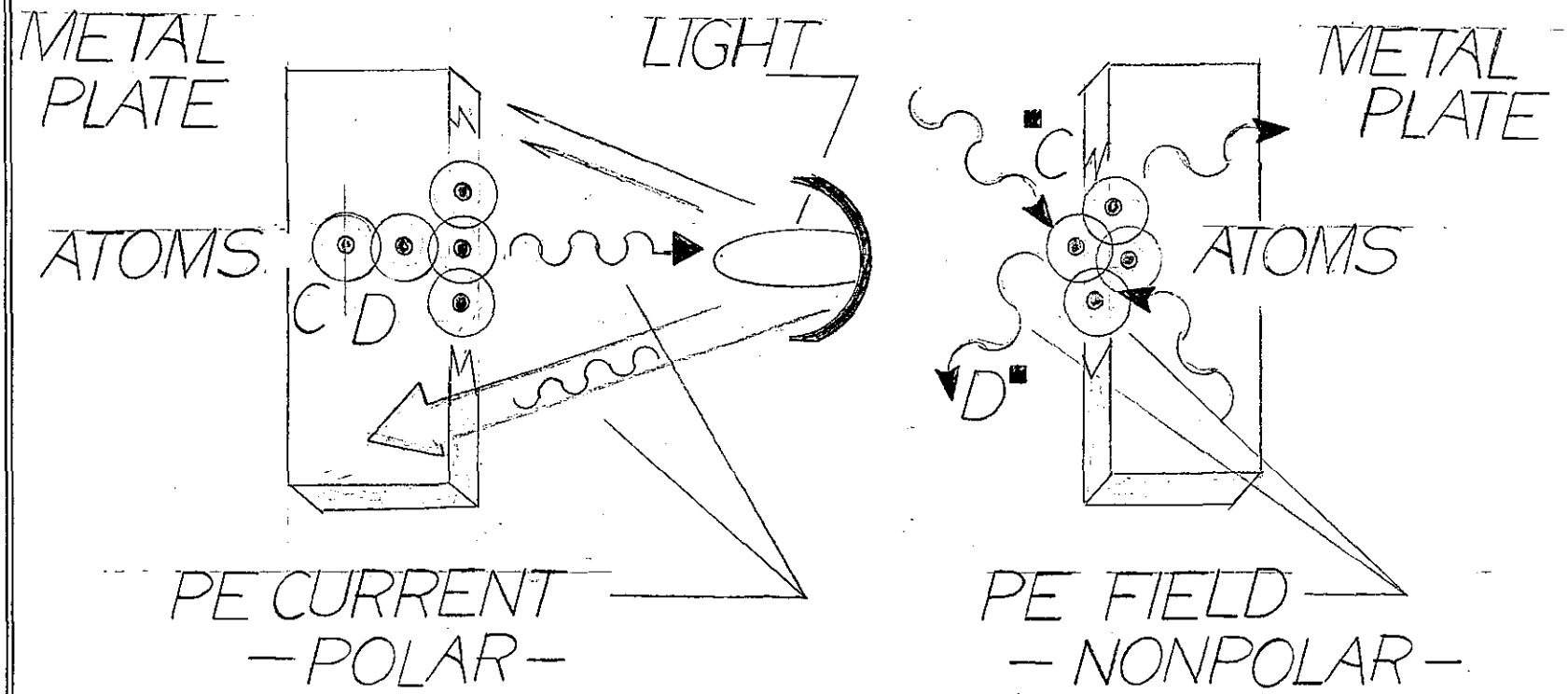
The dynamic equilibrium of the integrated H_2O molecule is defined in terms of the functional equation:

capacity level $\neq$ natural frequency $\neq$ spin (radial velocity)

The water molecule's capacity level is higher than that of either the oxygen atom or hydrogen atoms. However, water's natural frequency and radial velocity are lower than that possessed by the free, uncombined gaseous components.

CONTINUUM PHYSICS

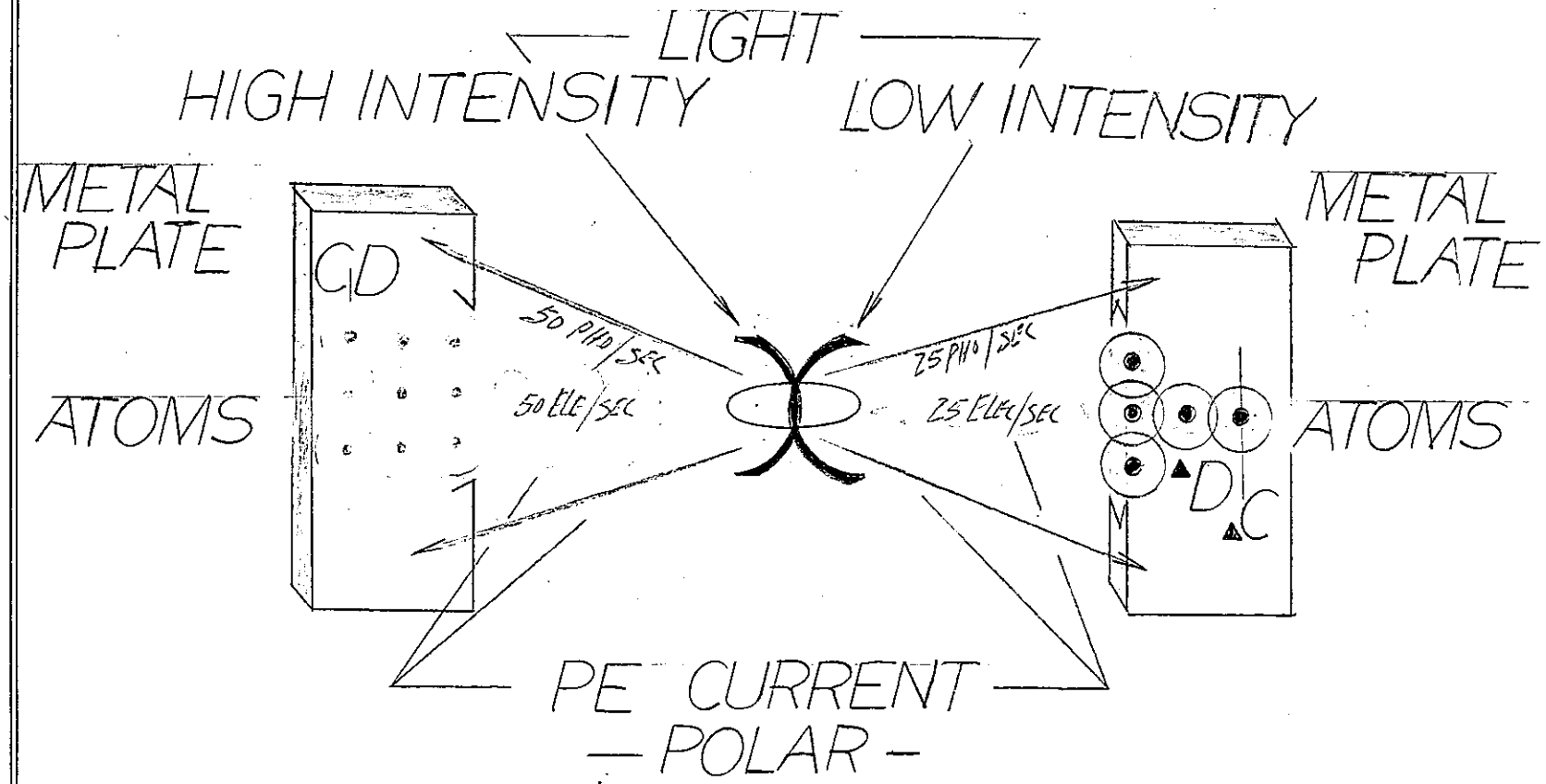
PE FIELD FUNCTIONS GOVERN THE PHOTO-ELECTRIC EFFECT



■ CHARGE ⟶ DISCHARGE

CONTINUUM PHYSICS

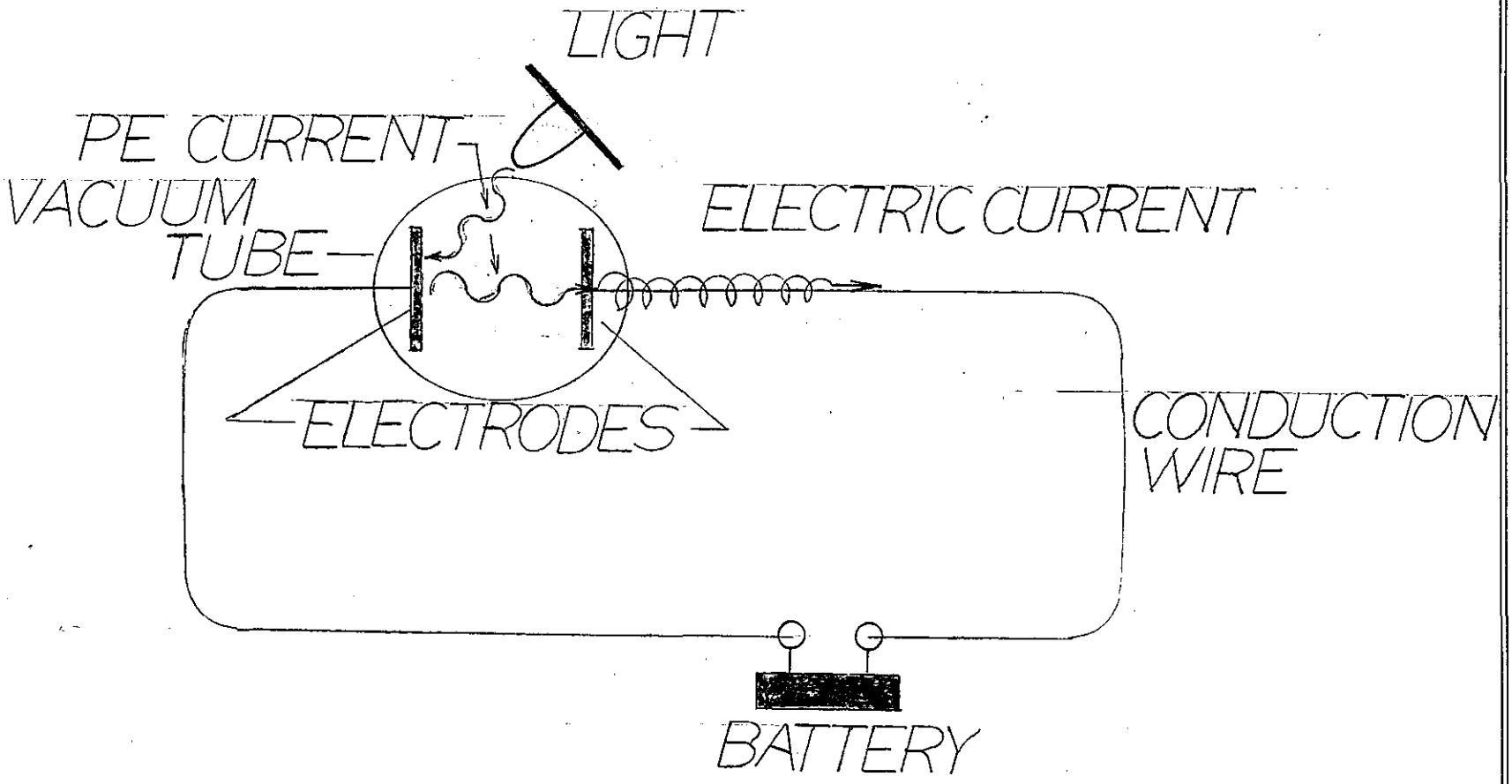
PE FIELD FUNCTIONS GOVERN THE PHOTO-ELECTRIC EFFECT



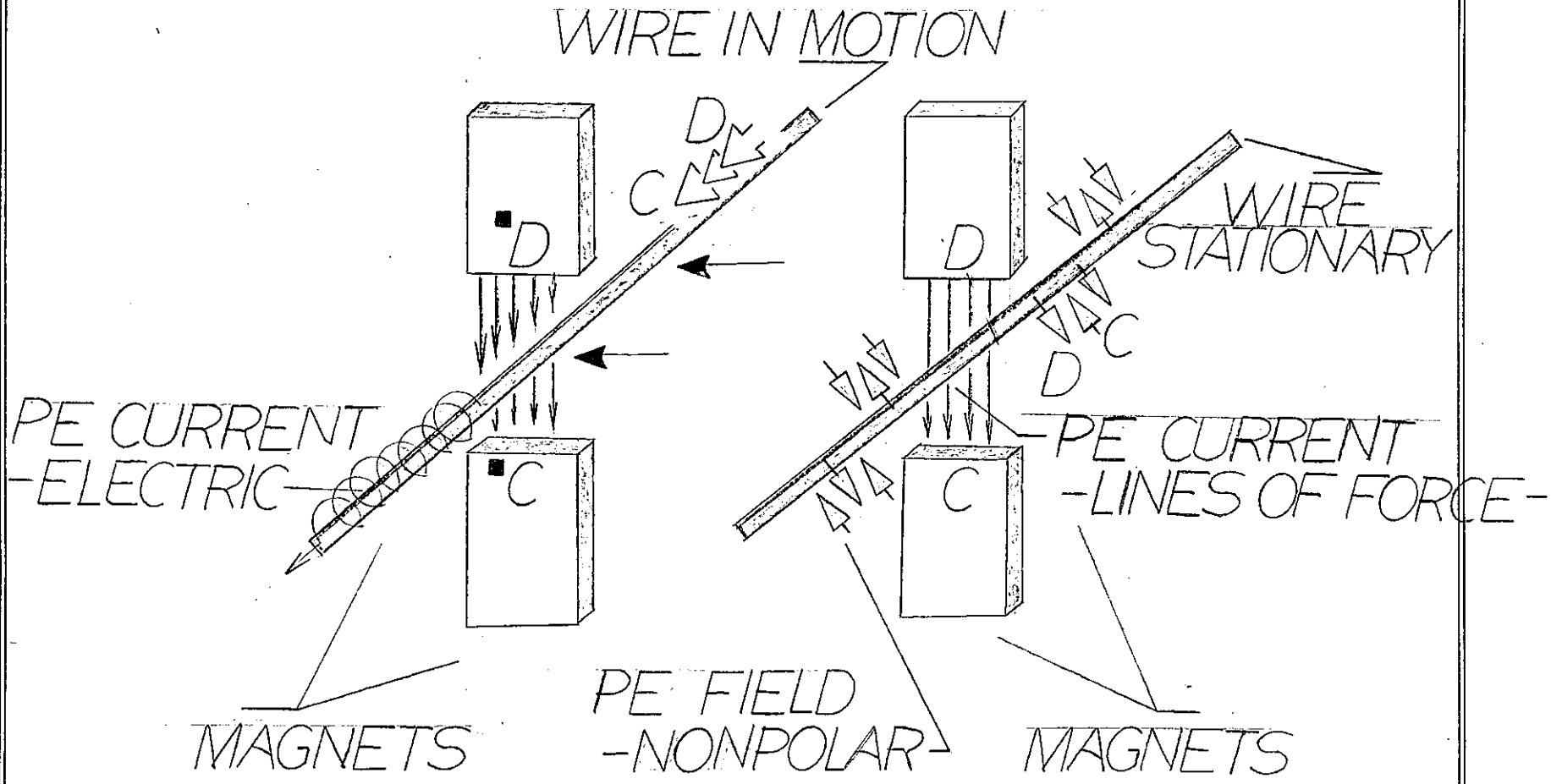
▲CHARGE → DISCHARGE

CONTINUUM PHYSICS

PE FIELD FUNCTIONS GOVERN THE PHOTO-ELECTRIC EFFECT

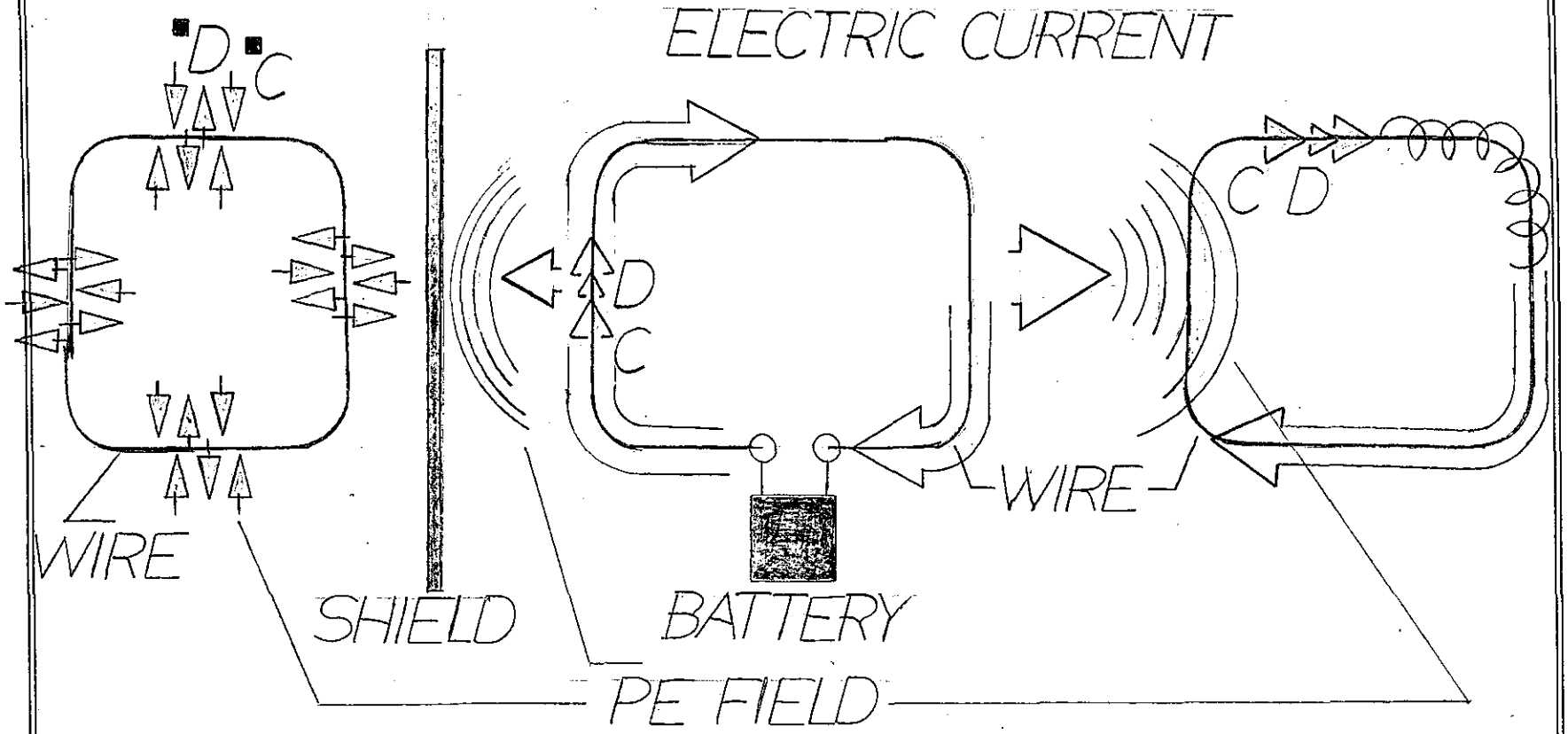


CONTINUUM PHYSICS
THE PE FIELD DYNAMICS OF ELECTROMAGNETISM



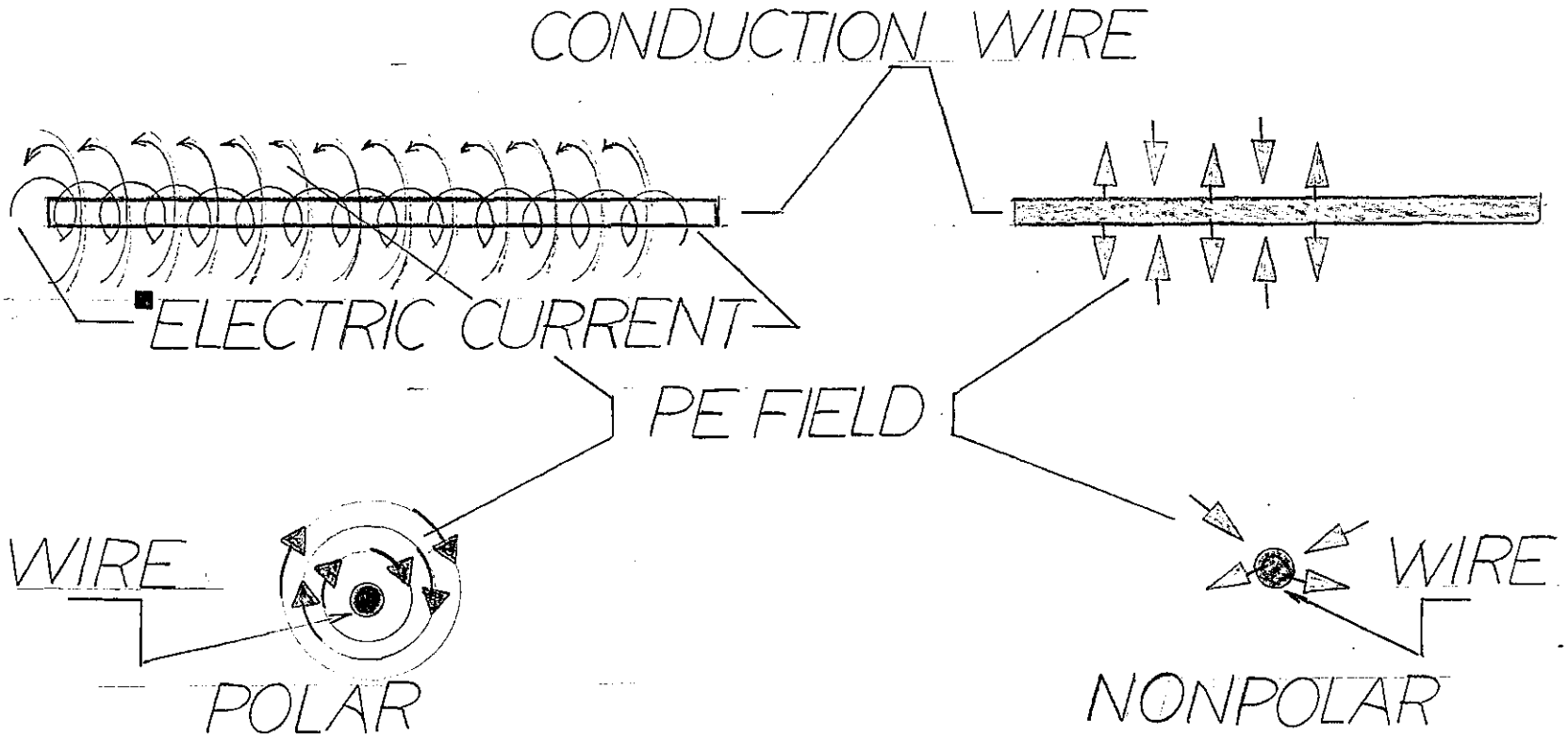
■ CHARGE → DISCHARGE

CONTINUUM PHYSICS
THE PE FIELD DYNAMICS OF ELECTROMAGNETISM



CHARGE → DISCHARGE

CONTINUUM PHYSICS
THE PE FIELD DYNAMICS OF ELECTROMAGNETISM



■ELECTRIC = TRANSFORMED PE CURRENT

Prevalent View:

When heated, the particulate, negatively charged electrons expand into wider orbits. The oscillations of the electrons become excited and cause the atom to absorb and re-radiate more energy.

Continuum Physics:

When an atom is excited by radiation, its energy metabolism increases. Metabolism is expressed in the continual charge ➤ discharge process. Therefore, an increase in the PE system's metabolic rate constitutes a greater absorption and emission of energy.

Prevalent View:

All of the electrons in a given orbital shell are identified with a specific energy level. Shells farthest out from the nuclear center of an atom correspond to the higher energy levels.

Continuum Physics:

The mass-free energy content in a given orbital shell = energy level within the integral, graduated (in terms of a decrease in the PE potential level from the nucleic periphery outward) PE field embodies a specific frequency and degree of energy concentration. Energy levels farthest out from the nucleus correspond to lower energy levels.

Prevalent View:

If we excite, for example, a hydrogen atom we cause its electron to jump to one of the outer shells. However, as soon as it can, i.e., when the excitation ceases, the electron returns to its groung state. Whenever the electron jumps from the outer shell back to the inner shell (= ground state) it radiates excess energy. The energy that the electron emits is exactly the amount of energy that it absorbed when it jumped outward in the first place. This excess energy is radiated in the form of photons.

Continuum Physics:

Upon the excitation of a PE system, for example, a hydrogen atom, the energy metabolism increases. The atom becomes charged. The nucleus (not particulate, polar charges = electrons) expands.

The hydrogen atom, like any other PE system, seeks to function in dynamic equilibrium. Consequently, as soon as the excitation ceases, hydrogen returns to its ground state = natural frequency. Equilibrium is achieved by a sudden radiation of energy from the nucleus. This constitutes the discharge of excess energy. The amount of energy radiated is equivalent to the difference between the capacity level ≠ natural frequency of 'unexcited' hydrogen and the peak of charge accumulated by the excited hydrogen atom.

THE TRANSFORMATION OF PE INTO ELECTRICITY

" We must turn physics around. Instead of starting with parts and showing how they work together - the Cartesian order - we start with the whole. " - D. Bohm

The voltaic or simple cell consists of a pair of metallic plates, i.e., a zinc electrode and a copper electrode, which are immersed in an acid solution, e.g., sulfuric acid (H_2SO_4). When in operation, the electrode terminals are connected by a conducting wire.

Figure # 13 entitled, "The Decomposition of the Chemical Bond," shows that within or without the framework of a voltaic cell; the zinc atom attracts an oxygen atom. In fact, any heavy metal, i.e., a metal whose atomic weight is greater than that of oxygen, readily combines with oxygen.

Zinc constitutes the stronger PE system and oxygen (whether in the form of O_2 or combined with hydrogen as water) is the weaker PE system. Therefore, once these two PE systems are in close enough proximity for their PE fields to make contact, the PE potential principle dictates that the lower, weaker energy system gravitates to the higher, stronger energy system.

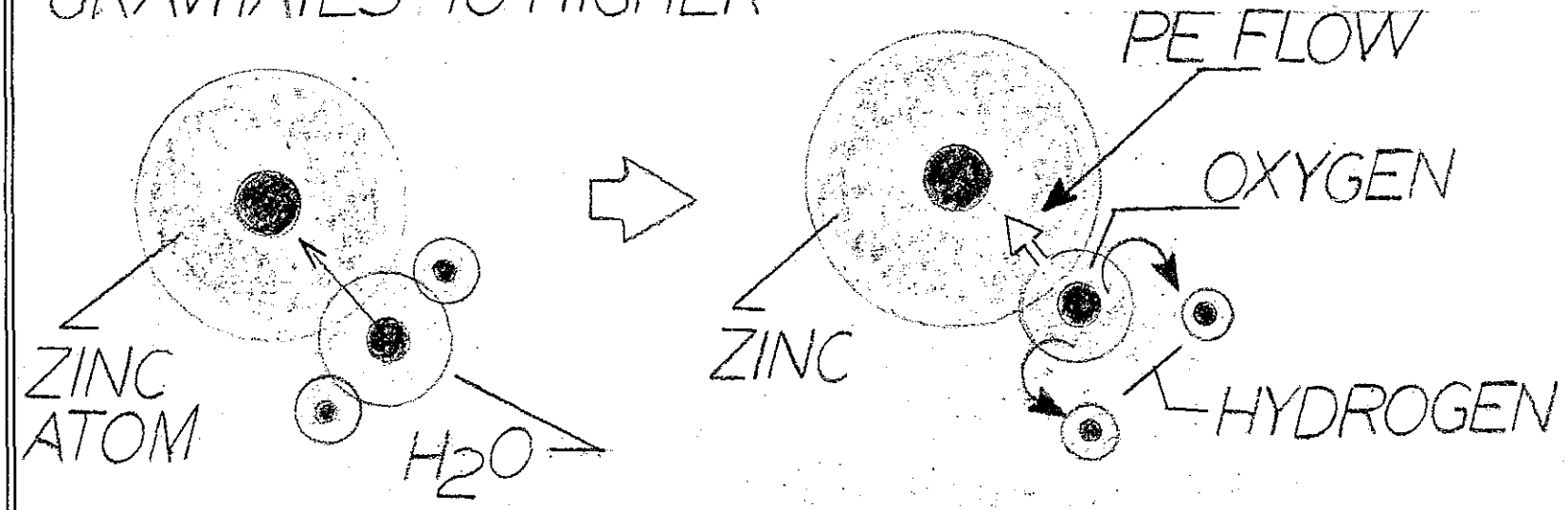
The attraction exerted by the zinc atom on the H_2O molecule, specifically on oxygen, literally draws energy from the mass-free PE matrix of the water. The entire PE field of the H_2O system is thereby weakened. Consequently, the frequency and energy concentration (= PE field potential) of the orbital shell = energy level in which the hydrogen atoms revolve, sharply decreases. The resonant, in phase bond within that PE potential environment that was previously established between oxygen and hydrogen in the formation of the water molecule is now disrupted.

FIGURE # 13

CONTINUUM PHYSICS

THE DECOMPOSITION OF THE CHEMICAL BOND

PE POTENTIAL:
LOWER ENERGY SYSTEM
GRAVITATES TO HIGHER



THE WEAKENED PE FIELD OF THE OXYGEN ATOM ALLOWS THE HYDROGEN SATELLITE ATOMS TO BREAK THE BONDS.

In other words, the lowered PE potential environment of the energy level allows the energy metabolism of the hydrogen atoms to increase . As a direct result, the satellite hydrogen atoms develop the angular momentum that allows them to break the 'chemical bonds' and escape the PE system altogether.

The composition of the two electrodes is crucial to the function of a voltaic cell. It is a prerequisite that these electrodes must be made of dissimilar metals. The Continuum Physics interpretation of this requirement is: The atomic weight of copper is 63.5. The atomic weight of zinc is 65.3. Zinc is a stronger, higher energy system than copper. Therefore, the chemical reactions between the electrolyte (acid solution) and the zinc plate take place more frequently and more readily than between the electrolyte and the copper plate. A build-up of mass-free energy, (that released in the chemical reactions between electrodes and acid) even prior to circuit closure via the connection of the terminals with a wire, occurs on both the copper and zinc plates. The PE potential is high in the case of the zinc plate and low in the case of the copper plate.

Voltaic Cell Functions

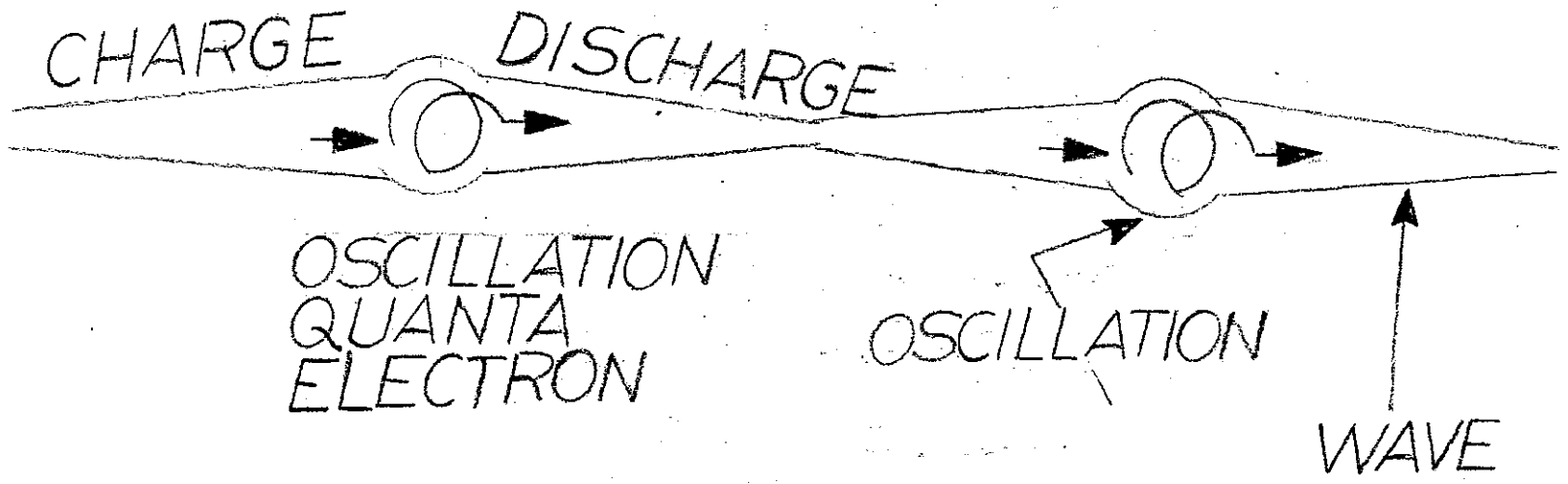
Prevalent View:

There is a certain tendency for the zinc atoms in the zinc electrode to lose electrons and form zinc ions. These electrons accumulate on the zinc plate as "free electrons". This does not proceed very far, for, the electrons that accumulate, all possessing like charges (negative) develop a mutual repulsion, setting up, in effect, a kind of "electron pressure."

CONTINUUM PHYSICS

SCHEMATIC: SPINNING WAVE

THE OSCILLATION OF TRANSFORMED PRIMARY = ELECTRIC ENERGY



The same thing is happening in the copper electrode, for the copper atom, too, has a tendency to lose electrons. Nevertheless, the "electron pressure" is greater in the zinc plate, for zinc atoms have a greater tendency to lose electrons than copper atoms do, and more electrons therefore accumulate on the zinc plate.

Continuum Physics:

Chemical bonding, i.e., the atomic superimposition process, entails the release of energy. Thus, the interaction between oxygen and hydrogen atoms to form water molecules is accompanied, or better stated, generates a sudden emission of mass-free PE (perceived as heat and light). Similarly, the combination of zinc with the acid electrolyte of the voltaic cell entails a process that releases energy.

The excess energy that is generated by the superimposition process discharges while the zinc atom escapes from the weakened PE matrix of the metal plate and drops into the solution. The emitted, excess energy (in the form of mass-free PE spinning waves, not particulate "free electrons") flows along the zinc electrode's periphery and constitutes the metal plate's charge. A static state being unknown in PE processes, the attraction ➤ charge functions spontaneously give rise to electrode discharge ➤ radiation functions. As a result, a steady stream of mass-free energy flows over the metal plate and beyond into open space. A comparable process occurs at the site of the copper electrode. However, the PE potential (=nonpolar charge) of the zinc electrode is, as already explained, higher than the PE potential of the copper electrode.

Prevalent View:

When the zinc electrode is connected to the copper electrode by means of a metal conduction wire, the "free electrons" can and will now slip through and among the atoms composing the metal wire.

The "electron pressure" in both metal plates acts as a driving force that will send these small particles through the wire. Since the "electron pressure" is greater or higher in the zinc electrode, the electrons move away from the zinc electrode with greater energy and overwhelm the weaker flood of electrons moving out of the copper electrode. The net movement of electrons then, is from a region of higher electron pressure to one of lower electron pressure.

Continuum Physics:

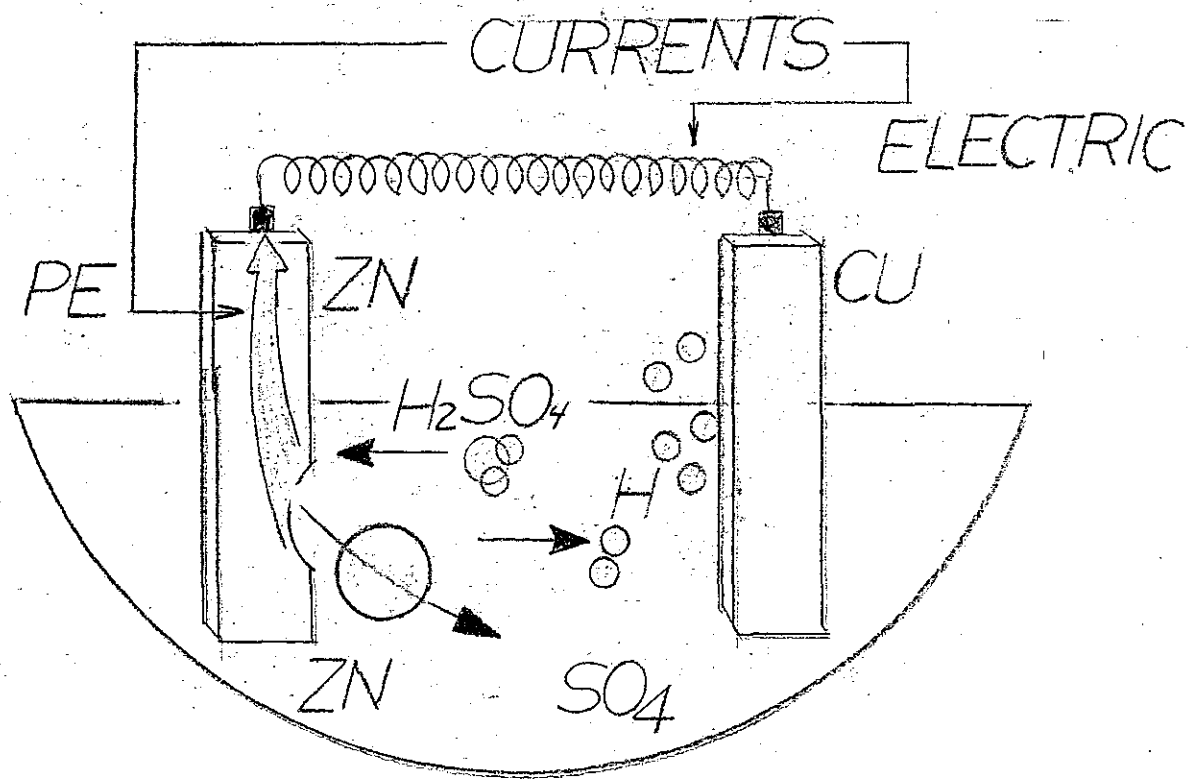
Michael Faraday, the pioneer researcher of electromagnetic phenomena, observed: "The increase of intensity or power of the current produced by a simple voltaic circuit with the increase of the force of chemical action at the exciting place, is sufficiently evident."

Continuum Physics must point out an important and critical distinction. Faraday's observation refers to the intensity and power of the "electric" current produced by the voltaic cell arrangement. We contend that the "electric" current is a functional transformation of the PE current. Therefore, whereas the PE current is already extant in an open circuit; the "electric" current is produced only after the voltaic circuit is closed. We differentiate, as a consequence, between the PE current (generated by chemical bond dissolution) and the "electric" current (produced in the closed voltaic circuit). (See Figure # 14)

The fact is that the 'chemical reactions' take place more frequently and more readily at the zinc electrode than at the copper electrode.

FIGURE # 14

CONTINUUM PHYSICS
THE TRANSFORMATION OF PRIMARY ENERGY INTO ELECTRIC CURRENT IN THE VOLTAIC CELL



This dictates that the PE current will be stronger at the zinc electrode than at the copper electrode. Therefore, the directional flow of the "electric" current, i.e., from the zinc to the copper electrode, is determined by the strength of the two PE currents relative to one another.

The open circuit PE current consists of a diffuse PE field which continually streams, radiates from the physical margin of the electrodes beyond into open space. However, once terminals together with a conduction wire are affixed to the respective metal plates; the random energy emanation changes into directional energy flow. This change is analogous to what happens to the flow of water. For example: What happens when a broad, calm, slowly moving stream of water is diverted from its usual course and must funnel through a ravine? What happens is that suddenly a lazy, meandering stream turns into a narrow, forceful, rapidly surging river.

The terminal lead and conduction wire can be compared to the ravine. Like the ravine, they serve to channel the PE current. Once in place, the terminal lead constitutes a point for energy convergence, while the wire is the energy transmitter. The change of diffuse energy radiation from the electrode to an intensified PE current at the terminal is an effect of concentration. The convergence of mass-free PE spinning waves at the terminal establishes a point of high PE potential. This high PE potential (at the terminal), which is higher than any other point on the electrode, governs (PE potential principle) and assures that a confluence of PE currents will occur at and only at the terminal.

Prevalent View:

An electric current is simply 'electric charges' in motion. The 'electric charges' are in the form of negatively charged, particulate electrons.

Continuum Physics:

Figure # 15 , "Primary Energy Flow" and Figure # 16 , "Electric Energy Current" clearly and unequivocally distinguish between the flow of PE and an electric current. The electric current constitutes a functional transformation of the mass-free PE spinning wave. The parameters of this functional transformation are:

1.) Constant, invariable charge → discharge functioning mode instead of variable, rhythmic alternations in a metabolic expansion → contraction cycle.

On the one hand, the diffuse PE flow of the open voltaic circuit, that emanates beyond the electrode into open space, embodies PE spinning waves whose energy metabolism fluctuates. In other words, the cycle frequency increases or decreases in accordance with the particular, changeable energy substratum in which the PE spinning wave happens to be functioning.

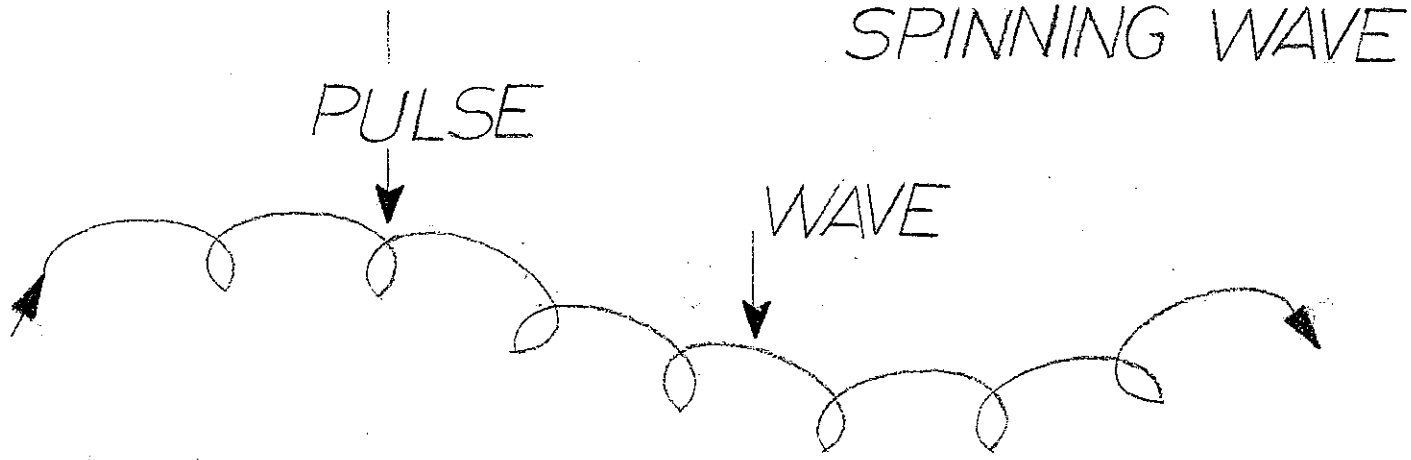
On the other hand, the concentrated electric current of the closed voltaic circuit, which moves forward along the transmission wire, embodies spinning waves whose functional mode is uniform and inflexible. In other words, the electric current's cycle frequency remains constant. Frequency does not alternate because the electric current is restricted to the fixed PE substratum which surrounds the metal wire.

2.) Rapid instead of slow, wavy motion.

The convergence of the diffuse PE flow at the electrode terminal constitutes a change in both energy concentration and velocity. This confluence process at the terminal generates a high velocity PE current which, in turn, accelerates to the even higher velocity of the electric current as it is transmitted along the conduction wire.

FIGURE # 15

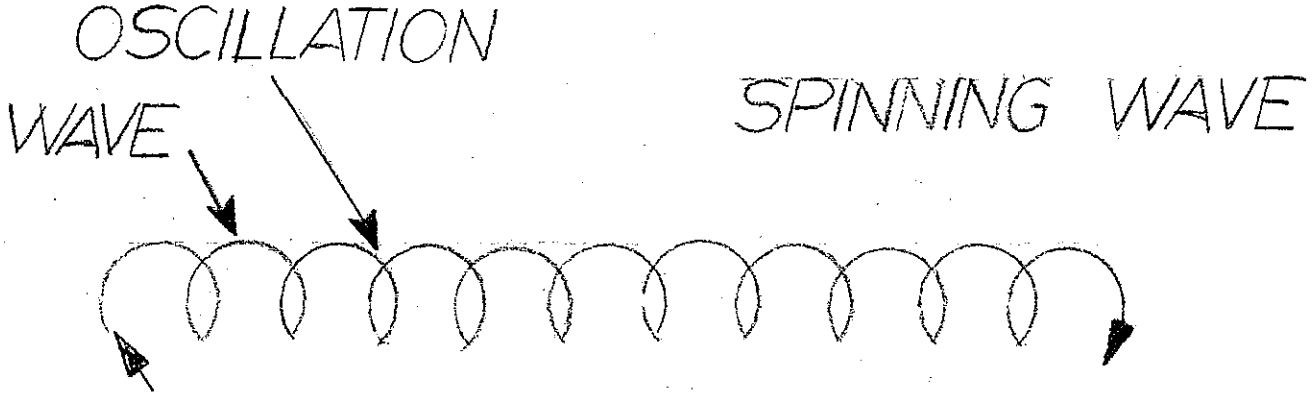
CONTINUUM PHYSICS
PRIMARY ENERGY FLOW



- RHYTHMIC EXPANSION + CONTRACTION
- SLOW, WAVY MOTION
- DISCONTINUOUS, NONLINEAR PULSES
- HARMONIOUS WITH BIO-VIBRATIONS

FIGURE # 16

CONTINUUM PHYSICS
ELECTRIC ENERGY CURRENT



- CONSTANT CHARGE ➤ DISCHARGE
- RAPID MOTION
- CONTINUOUS, LINEAR OSCILLATIONS
- DISHARMONIOUS WITH BIO-VIBRATIONS

3.) Continuous, linear oscillations instead of discontinuous, nonlinear pulses.

The pulses engendered by the PE spinning wave cycle are, by definition, temporary, discontinuous, mass-free energy quanta. Therefore, strictly speaking, the electric current oscillations (=charges) are here designated as being 'continuous' relative to and in comparison only to the more widely interspersed, discontinuous PE current pulses.

Also, since we assume that the electric current flows (spiral-like) around the conduction wire, the reference to linear oscillations should be clarified. PE spinning wave forward movement follows a nonlinear, spiraling trajectory. In comparison, the forward, directional motion of an electric current can be described as being linear.
(Note: Continuum Physics experimentation has disclosed that even in the absence of a physical guide, e.g., the conduction wire, an increase in the frequency ≠ velocity of a PE spinning wave coincides with a change from a spiraling trajectory to a more and more linear forward movement.)

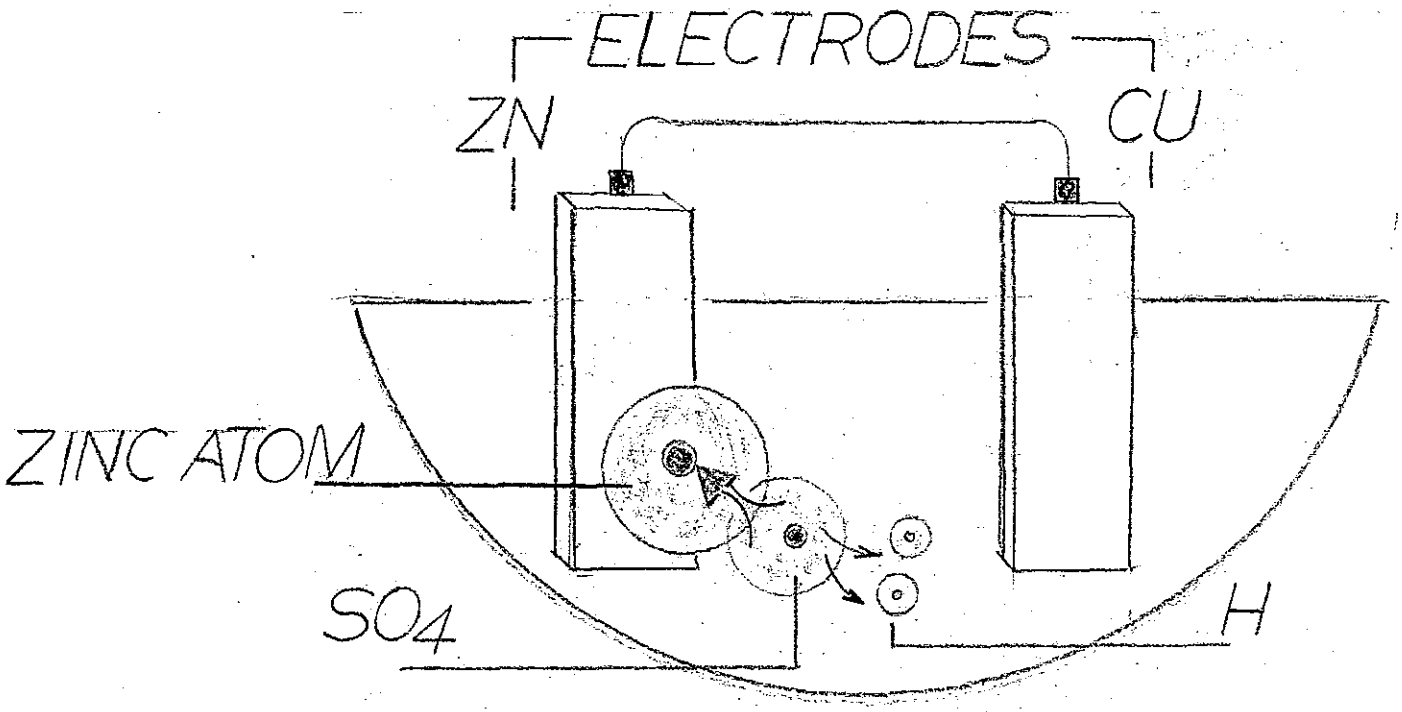
4.) Electric current is disharmonious with bio-vibrations = biological PE.

The fundamental antagonism is due to the difference in the intensity between organismic, bio-energetic streamings and electric currents. The oscillations (=charges) of an electric current can be contrasted to the pulses of biological PE currents in terms of frequency ≠ velocity and intensity. Hence:

- The frequency ≠ velocity is high in the case of (DC) electric current and low in the case of biological PE currents.
- The intensity, i.e., the degree of energy concentration, is high for the electric oscillation and low for the bio-energetic pulse.

CONTINUUM PHYSICS

THE TRANSFORMATION OF PRIMARY ENERGY INTO ELECTRIC CURRENT IN THE VOLTAIC CELL



THE CHEMICAL REACTIONS OF THE CELL ARE GOVERNED BY PE FUNCTIONS.

Voltaic Cell Energy Metabolism

Figure # 17 demonstrates that the energy circuit of a voltaic cell is governed by the two phase (charge → discharge) energy metabolism. This energy metabolism functions in accordance to the four-beat formula:

attraction → charge → discharge → radiation

The functional dynamics of the voltaic cell are comparable to the similar dynamics which are operative in pendulum oscillation, PE spinning wave cycle, etc. Consequently, the gravitational potential energy of the pendulum oscillation process is analogous to the electric potential energy of the voltaic cell process.

The rest stage (= position of equilibrium) of the pendulum bob corresponds to the inactivated zinc and copper plates (electrodes) prior to their immersion into the acid solution (electrolyte).

On the one hand, gravitational potential energy is imparted to a pendulum when the bob is somehow impelled to swing to an elevated position. A physical push or a spurt of compressed air from a bellows will energize an inert bob. On the other hand, electric potential energy is generated in a voltaic cell once the metallic plates are immersed in the electrolyte. The energy released by 'chemical reactions' charges the respective electrodes.

The condition that exists in an open circuit can be viewed in relation to the pendulum process:

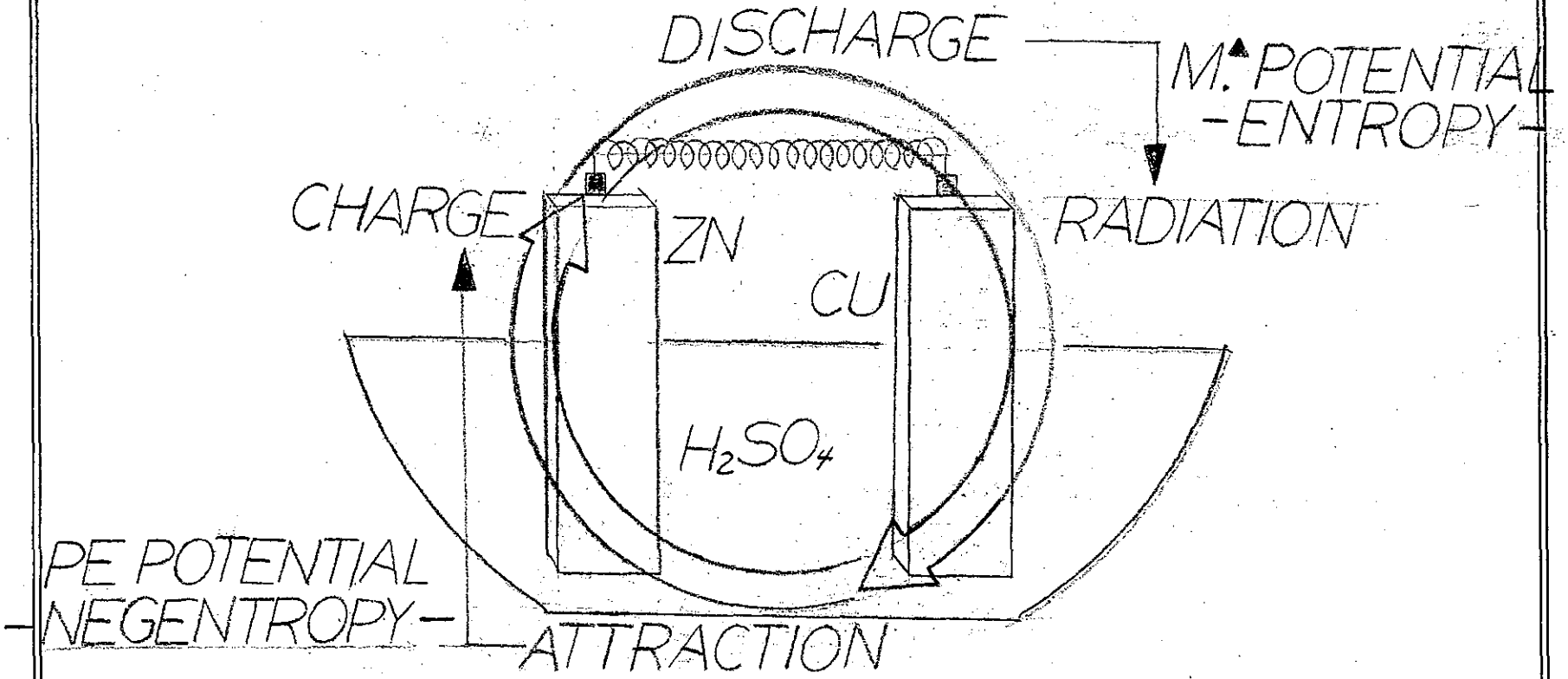
GIVEN: A pendulum bob is impelled to remain suspended at a constant elevation. This is accomplished by means of a steady, even-pressure stream of air from a bellows with an infinite supply of air.

This situation dictates that the bob will attain and maintain a constan

FIGURE # 17

CONTINUUM PHYSICS

THE TWO PHASES OF THE ENERGY CIRCUIT IN THE VOLTAIC CELL



▲ MECHANICAL

level of gravitational potential energy. The excess air (more than is required to keep the bob elevated -charged) will discharge and radiate beyond the physical bob into open space. Similarly, the electrodes of the voltaic cell, continually energized by the 'chemical reactions' that take place at their respective sites, attain and maintain specific PE potentials (= electric potential energy in the voltaic cell arrangement). Their excess charge - in the form of steady, diffuse PE currents - discharges and radiates beyond the metal plates into open space.

Therefore, the charge phase of the voltaic cell's energy metabolism has generated so-called electric potential energy. Here it is important to again emphasize that this energy charge, i.e., an actual accumulated quantity of mass-free PE, has been generated in accordance to the PE potential principle. Hence, high, strong energy systems = metallic electrodes have attracted and withdrawn energy from the low, weak energy systems = molecules of the acid solution. This acquisition of gravitational and electric potential energy in the respective processes constitutes the first (=charge) phase.

Continuum Physics contends that the so-called electric potential of the electrodes is in essence a high PE potential field. The discharges from this field (in the form of diffuse PE currents) are transformed, upon circuit closure, into the electric current that flows along the conduction wire. The magnetism associated with the flow of electricity is viewed as an effect of the localized concentration (an intense PE field) of mass-free energy ~~around the current.~~

The second (=discharge) phase in pendulum oscillation, already fully detailed, comprises basically the transformation of potential energy into kinetic energy and that ultimately into random molecular motion = heat.

The discharge ➤ radiation functions of the voltaic cell energy metabolism are initiated as soon as a conduction wire connects electrode to electrode. The energy circuit is closed and voltage is transmitted.

Prevalent View:

An electric charge will have no spontaneous tendency to move from one point in an electric potential field to another point at the same same potential energy level. If an electric potential difference exists, however, the electric charge will have a spontaneous tendency to move from the point of higher energy to that of the lower.

Continuum Physics:

To reiterate: The 'chemical' reactions occur more frequently and more readily at the zinc electrode than at the copper electrode. This dictates that the PE currents will be stronger at the zinc electrode than at the copper electrode. Therefore the directional flow of the electric current, i.e., from the zinc to the copper electrode, is wholly determined by the respective strength of the two PE currents.

This discharge ➤ radiation phase of a voltaic cycle is governed by the mechanical potential, i.e., energy flow from the high to the low level. Mechanical potential is, by definition, a process characterized by entropy. This entropy is in evidence only in conjunction with these discharge ➤ radiation functions of the energy metabolism.

The functional dynamics of the voltaic energy circuit reveal, unequivocally, that the mechanical potential (=entropic process) is not the fundamental modus operandi that rules physical phenomena. Instead, the mechanical potential is shown to be the derivative of the PE potential (=negentropic process).

" STATIC ELECTRICITY "

"Science is built up with facts, as a house is with stones. But a collection of facts is no more science than a heap of stones is a house."
- Henri Poincare

The indigenous "electrostatic" field associated with each and every atom, living cell, material object, biological organism, etc., is neither electric or static. The energy matrix that encompasses both living and non-living entities is, in actuality, a mass-free PE field.

Figure # 18 depicts a pair of pith balls in close proximity to one another and suspended, free to move, by a string from a pendulum. The PE field which surrounds them functions in accordance to the charge → discharge energy metabolism. This dynamic (never static) balance of mass-free absorption from and mass-free emission back into the general PE substratum assures the maintenance of PE field equilibrium.

Prevalent View:

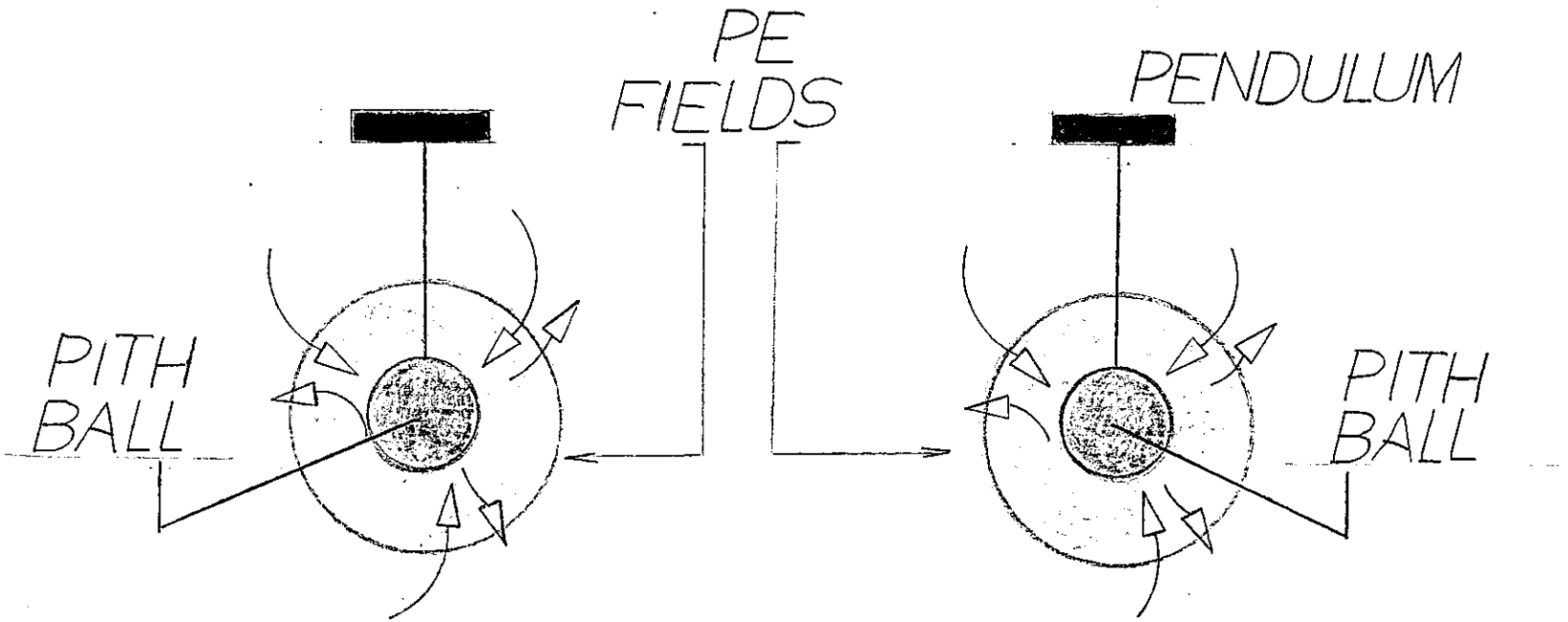
The uncharged objects = pith balls neither attract nor repel one another because they are electrically neutral. They are indeed filled with polar electric charges (negative and positive) but the two types are in balance, i.e., the number of electrons and protons are equal.

Continuum Physics:

The PE systems = pith balls neither attract nor repel one another because before either attraction or repulsion can occur between these two objects, contact between their respective PE fields must be established. We always have to keep in mind that attraction and repulsion are PE field functions, The pith balls are 'neutral' due to the balanced charge → discharge functioning of their local, non-polar PE fields.

FIGURE # 18

CONTINUUM PHYSICS
PE FIELDS IN DYNAMIC EQUILIBRIUM



PRIMARY ENERGY FROM THE MASS-FREE ENERGY CONTINUUM IS CONSTANTLY ABSORBED + EMITTED.

Charging by Friction and Induction

Prevalent View:

Although the innermost electrons in an atom are bound very tightly to the oppositely charged nucleus, the outermost electrons of many atoms are bound very loosely and can easily be dislodged. The force with which the outer electrons are held in the atom varies for different substances. The electrons, e.g., are held more firmly in rubber than in glass. Hence, when we rub a glass rod with silk, electrons transfer from the glass rod to the silk. The glass rod therefore has a deficiency of electrons. The silk, in turn, has an excess of electrons. The silk, since it has an excess of electrons is said to be negatively-charged. The glass rod, since it has a deficiency of electrons is said to be positively-charged.

Likewise, when we rub one of the pith balls with silk, the ball acquires a positive charge. The electrically neutral ball, once close enough to but not in direct contact with the charged pith ball, is attracted.

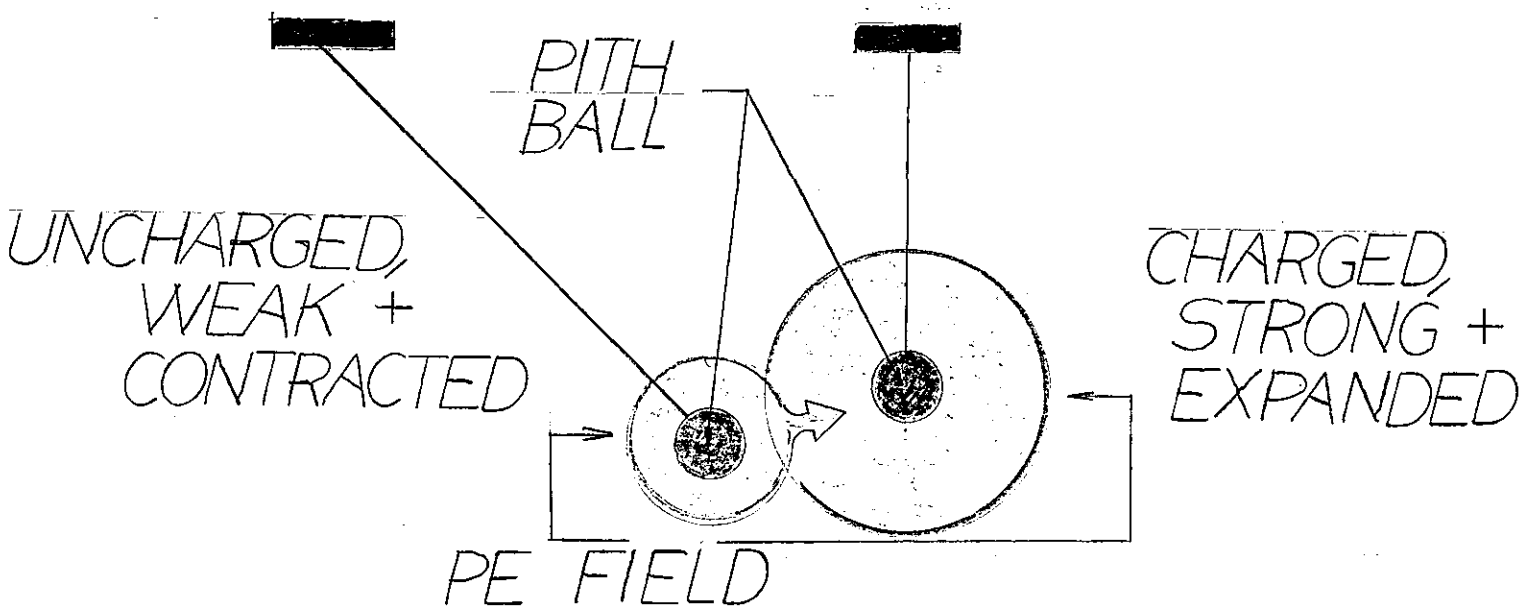
What happens is that as the neutral ball is brought near the charged ball, the electric charges in the molecules making up the neutral ball are redistributed. This ball remains electrically uncharged, ie., no electrons are added or removed. However, the surface layer nearest the positive-charged pith ball now contains the negative side of the molecules on that surface, while the far surface contains the positive sides of molecules. Since unlike charges attract, this ball now gravitates to the charged ball.

The reorientation of atomic and molecular charges is called charge polarization. This inducement of charge polarization has occured without therebeing any contact between the two pith balls. The surface of the neutral ball has been charged by induction and therefore attraction-at-a distance ensues.

FIGURE # 19

CONTINUUM PHYSICS

"ELECTROSTATIC" CHARGE = A HIGH PE FIELD POTENTIAL



THE LOW PE SYSTEM GRAVITATES TO THE HIGH PE SYSTEM.

Continuum Physics:

When we rub a pith ball with a silk cloth, friction is generated. Friction produces heat. Heat is an excitation process. The atoms and molecules which comprise the pith ball become agitated, i.e., they are activated into a heightened vibration. As such, their charge→discharge energy metabolism increases. The excited pith ball absorbs and emits much greater quantities of mass-free energy from the PE substratum than does the unexcited, 'neutral' ball. Since an increase in energy metabolism (=heightened oscillation) coincides with an increase in field strength; the PE field potential of the excited pith ball is now much higher than that of the unexcited pith ball.

Therefore the pith ball neither losses negative, particulate charges (=electrons) nor does the silk cloth gain negative, particulate charges (=electrons). Instead, the interaction of silk and ball generates a high, strong non-polar PE field potential in the PE system = pith ball. Hence, Figure # 19 illustrates the fact that "electrostatic" charge is equivalent to a high PE field potential. (Note: Of course, accurately speaking, neither ball is 'uncharged' since the indigenous PE field, per se, constitutes charge. The unexcited, 'neutral' pith ball is merely less charged, i.e., has a lower PE field potential relative to the excited pith ball.)

Once contact-at-a-distance between the non-polar, mass-free PE fields of the two pith balls is established, the unexcited ball gravitates toward the excited ball. This attraction, governed by the PE potential principle, is a functional = energetic process which is mediated by the PE continuum.

Charge polarization is a wholly inappropriate designation in any reference to the non-polar PE fields which surround the pith balls. Opposite polarity charge (negative or positive) is not induced, through 'empty space' on the surface of the unexcited ball nearest the excited pith ball.

The process of attraction can be contrasted with what takes place in the case of the two unexcited, 'neutral' pith balls. Here the energy metabolism of both PE systems functions at an equal level. Correspondingly, the PE field potentials of each are identical. As such, there exists no PE potential difference between them and therefore the amount of energy absorbed and emitted by each pith ball from the PE substratum is the same. There is, within this stable, steady-state situation, neither a spontaneous tendency or force which prompts one pith ball to approach the other.

However, as soon as one of the pith balls is rubbed with a silk cloth, i.e,, becomes activated, this state of balance is disrupted. The heightened energy metabolism and increased PE field potential of the excited pith ball creates an imbalance in the environment. In other words, a PE potential difference suddenly exists between the pith balls. The mass-free energy attracted by the excited pith ball is now much greater than that of the unexcited pith ball. The unexcited ball, when in close enough proximity to the excited ball, is literally drawn into the energy stream set in motion by the excited pith ball and is propelled toward it. Once the excited pith ball re-radiates its excess charge and begins to function in equilibrium with the environment again, the attraction for the unexcited pith ball ceases. The pith balls are seen to separate and swing free.

Prevalent View:

Rub a glass rod with silk. Bring the glass rod close to a pair of suspended pith balls. Note that each of the balls id initially attracted by the charged rod. However, these balls are repelled after they make contact with the rod. Moreover, the now charged pith balls repel each other.

Rub a rubber rod with flannel. Bring the rubber rod close to a pair of suspended pith balls. Note that each of the balls is initially attracted by the charged rod. However, these balls are repelled after they make contact

with the rod. Moreover, the now charged pith balls repel each other.

Charge one of the balls by touching it with the charged glass rod and charge the other by bringing it into contact with the charged rubber rod. Note the radically changed behavior in this case. While each of the pith balls is initially attracted to its respective rod, an repelled from it after contact; the two balls now attract each other and cling together after having been charged.

This experiment demonstrates, unequivocally, that the electricity on the glass rod differs from the electricity on the rubber rod. Ben Franklin, quite arbitrarily and as it turned out, correctly, called the charge acquired by the glass rod when rubbed with silk -positive electricity- while he assigned a -negative electricity- to a rubber rod which has been rubbed by flannel.

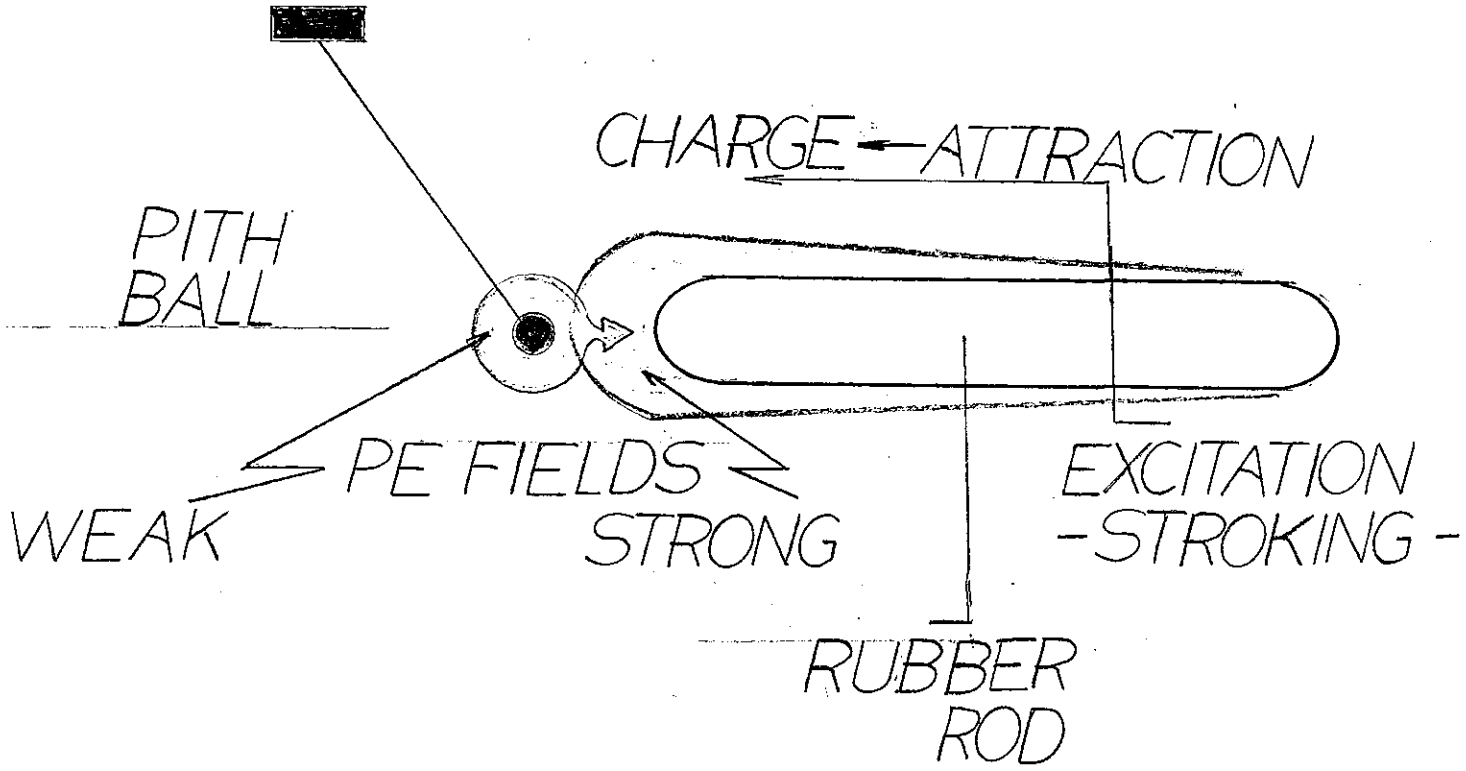
It is further evident from the experiment that the pith balls repel each other when they are charged alike either (+ or -) and attract each other when they are charged oppositely (+ or -). The experiments thus confirm a fundamental fact of electricity, i.e., like charges of electricity repel each other, and unlike charges attract each other.

The pith balls were repelled from either the positive glass rod or the negative rubber rod after having been brought into physical contact with it. In the case of the glass rod, the contact with the pith ball resulted in drawing off some of the "free electrons" on its surface. This, in effect, neutralized a portion of the positive (=electron deficiency) on the rod. As a result, the pith ball also became deficient in electrons and hence, positively-charged. With both rod and ball charged alike, they naturally repelled each other.

FIGURE # 20

CONTINUUM PHYSICS

LOW PE SYSTEM GRAVITATES TO HIGH PE SYSTEM = "ELECTROSTATIC" ATTRACTION



In the case of the negatively-charged rubber rod, a portion of the electron surplus on the rod was transferred to the pith balls, which therefore also became negatively-charged and then they were repelled by the like- charged rod.

In contrast, during the last portion of the experiment, one of the pith balls was charged positively by contact with the glass rod, while the other ball was charged negatively by contact with the rubber rod. Having acquired opposite charges, the two pith balls attracted each other.

Continuum Physics:

The charge, generated when either a glass or rubber rod is rubbed, is non-polar. This non-polar charge, instead of constituting a deficiency or surplus of particulate "free electrons" constitutes a heightened PE field potential. This excited, expanded, non-polar mass-free PE matrix establishes contact (field to field) with the pith balls. The resultant attraction-at- a-distance of a pair of pith balls both to the glass and rubber rod is governed by the PE potential principle, i.e., low, weak PE system gravitates to high, strong PE system.

Figure # 20 illustrates the fact that "electrostatic" attraction is induced at-a-distance between the unexcited, weak PE system = pith ball and the excited strong PE system = rubber (or glass) rod. This phenomenon is again mediated by the general PE substratum and occurs because there exists a PE potential difference between two, distinct non-polar PE fields. During this part of the experiment, i.e., prior to the direct physical contact between ball and rod; the attraction → charge functions of the energy metabolism are operative in the rubber (or glass) rod.

FIGURE # 21

CONTINUUM PHYSICS

THE DISCHARGE OF PE = "ELECTROSTATIC" REPULSION

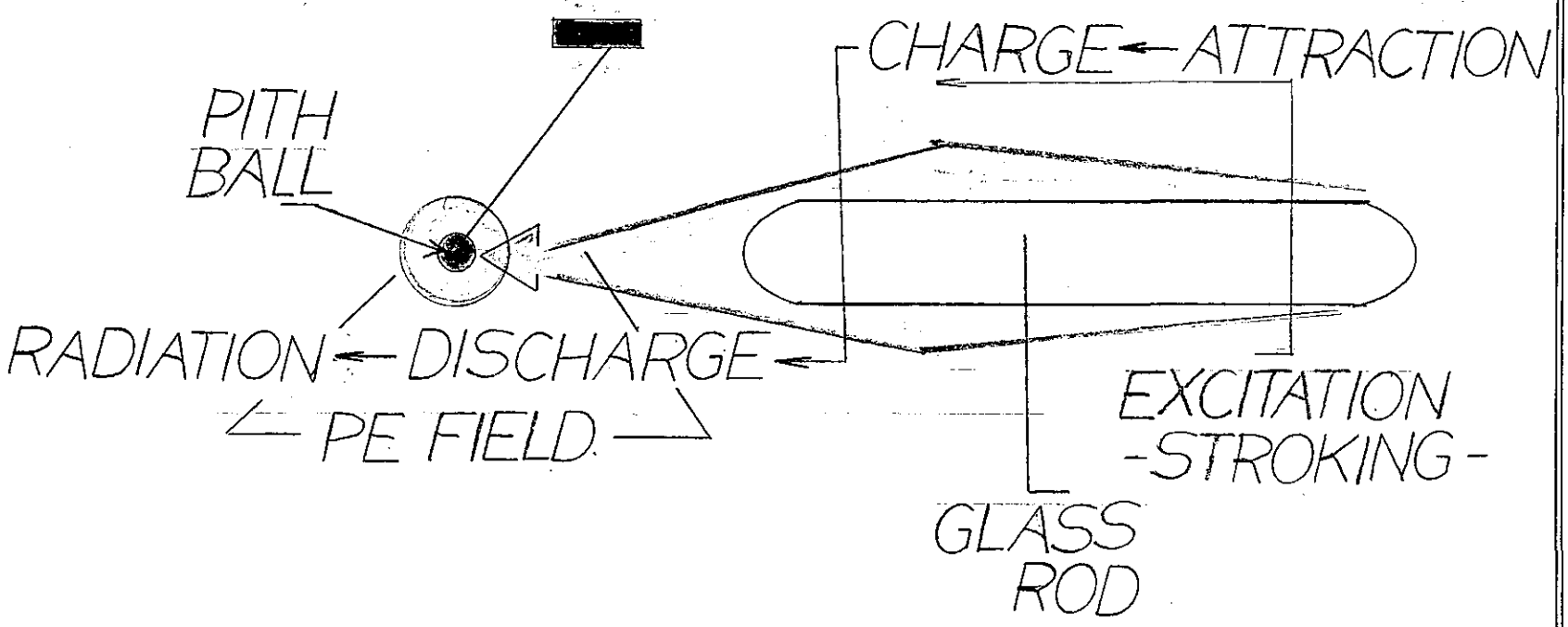


Figure # 21 illustrates the fact that "electrostatic" repulsion constitutes the emission of mass-free PE. Repulsion commences once the pith ball (s touch the glass (or rubber) rod, i.e., the discharge → radiation functions of the energy metabolism become operative. The excess, accumulated non-polar charge is suddenly, upon contact, radiated. The energy (=PE currents) emitted by the rod both repels and charges the pith ball (s). This pair of pith balls, suspended close together, which have, as just described, been charged in equal proportions by the same rod (glass or rubber) now also repel one another in the following manner:

Once fully charged and removed from the original source of excitation, i.e., the PE radiation of the rod, each pith ball begins to emit its excess energy until it again functions in dynamic equilibrium with the 'unexcited' PE substratum. Since the discharge → radiation functions of both pith balls energy metabolism are predominant, the PE currents radiated by these PE systems oppose each other. As a direct result, repulsion between the two pith balls is observed.

The attraction that occurs between pith balls, one of which has been charged by a glass rod and the other by a rubber rod is explainable in terms of the existence of a PE field potential difference.

Continuum Physics has found that the degree of or capacity for PE absorption and emission varies greatly for the different material substances. For instance, organic matter absorbs and holds PE readily whereas metals strongly attract and re-radiate PE. The hard, dense, crystalline composition of a glass rod is comparable to the structure and consistency of metals. Consequently, the energy metabolisms of metal and glass are similar.

It can be anticipated that the PE discharges from a metal (or glass) are consistently stronger than the PE discharges from the organic material (or rubber). Therefore, the PE field potential of the pith ball excited - charged by a glass rod will be consistently higher than the PE field potential of the pith ball excited - charged by a rubber rod. Attraction is, therefore, induced due to the existence of a PE field potential difference between the PE fields of the two pith balls. The weaker, rubber-charged pith ball gravitates, in accordance to the PE potential principle, to the stronger, glass-charged pith ball.

MAGNETISM

"Discovery consists of seeing what everybody has seen and thinking what nobody has thought." -Albert von Szent-Gyoergyi

Prevalent View:

A magnetic field is produced by the motion of electric charge. The magnetism associated with and simultaneous to the flow of an electric current makes this fact self-evident.

Question: If a magnetic field is produced by the motion of electric charges, where is the electrical motion in a solid, stationary magnet?

Answer: Although the magnet as a whole may be stationary, the atoms that constitute the magnet are in constant motion. More important than the motion of the atoms is the motion of the electrons within the atoms. The electrons move in an orbital motion about the atomic nuclei. This movement of electrons produces a magnetic field.

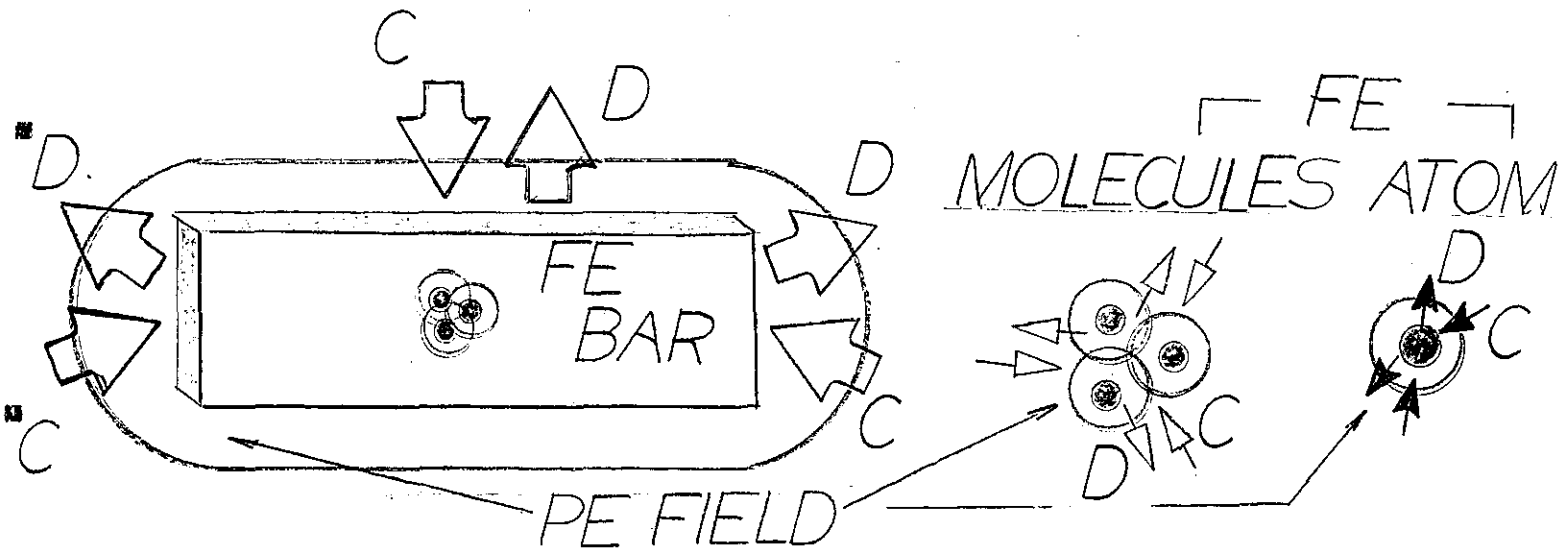
Every electron is a tiny electromagnet. A pair of electrons spinning in the same direction makes up a stronger electromagnet. A pair of electrons spinning in opposite directions, however, are not magnetic. The magnetic fields of each cancel one another. In most atoms the various fields cancel each other because the electrons spin in opposite directions. This is why most substances are not magnetic.

Continuum Physics:

Figures #22 and #23 illustrate the differences between magnetic and unmagnetized iron (Fe). The attributes of each can be distinguished as follows:

FIGURE # 22

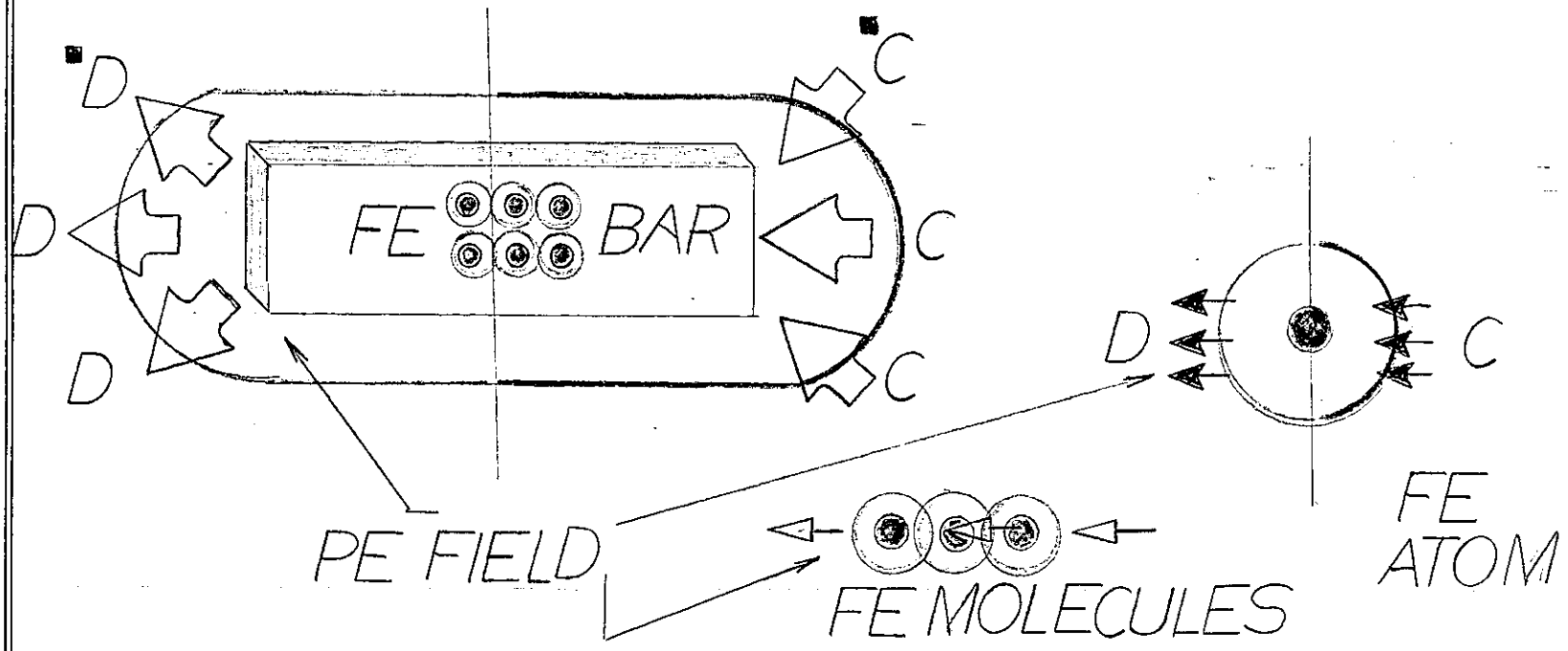
CONTINUUM PHYSICS
THE NONPOLAR PE FIELD OF UNMAGNETIZED IRON.



*C = CHARGE → D = DISCHARGE OF MASS-FREE PE.

FIGURE # 23

CONTINUUM PHYSICS
THE POLAR PE FIELD IN MAGNETIZED IRON



■ C = CHARGE → D = DISCHARGE

1.) The intrinsic, mass-free PE field (whether that of an individual Fe atom, an aggregate = Fe molecules or the iron bar as a unit) is non-polar in the case of unmagnetized iron.

The intrinsic, mass-free PE field (whether that of an individual Fe atom, an aggregate = Fe molecules or the iron bar as a unit) is polar in the case of magnetized iron.

2.) The energy metabolism, i.e., the maintenance of a dynamic equilibrium through the rhythmic, alternating charge ➔discharge functions, consists of a radial, nondirectional absorption and emission of energy (from and back into the mass-free PE substratum) in the case of unmagnetized iron.

The energy metabolism, i.e., the maintenance of a dynamic equilibrium through the rhythmic, alternating charge ➔discharge functions, consists of a linear, directional flow of mass-free PE currents in the case of magnetized iron. As such, the internal PE currents of the iron are emitted at one (pole) end, circumscribe the magnet externally and are absorbed at the other (pole) end.

3.) The atoms of the unmagnetized iron bar are randomly oriented one to another, i.e., the atoms are relatively mobile and not rigidly aligned.

The atoms of the magnetized iron bar are strictly oriented one to another, i.e., the atoms are relatively immobile and are positioned in rigid alignments.

Polarity, according to the electronic theory, is defined in terms of negative charge or positive charge. PE, inherently non-polar and mass-free, does not exhibit polarity as a consequence of either a surplus or deficiency of particulate charges (=electrons). Instead, the charge polarization that the electronic theory postulates is recognized as actually being a field polariztion. The polar PE field of magnetized iron constitutes a functional = energetic transformation.

This PE field transformation, i.e., the change from radial, nondirectional absorption and emission functions in unmagnetized iron to the linear, directional charge ➔discharge functions in magnetized iron, is simultaneously accompanied by a structural transformation of the iron.

This change involves the entire atomic structure of the magnet. Let us compare the linear, directional flow of PE currents within the magnet to the so-called van der Waals forces in order to gain insight into this process.

Prevalent View:

Van der Waals forces are weak interatomic bonds. They result when electrons, which orbit the atomic nucleus, bunch up on one side and create a temporary preponderance on that side of a negative electric charge. This charge is matched by an equal positive charge on the other side. A molecule with this distortion is then "polarized" i.e., it has positive and negative charges at opposite ends. Oppositely charged sides of neighboring molecules are attracted to each other.

Continuum Physics:

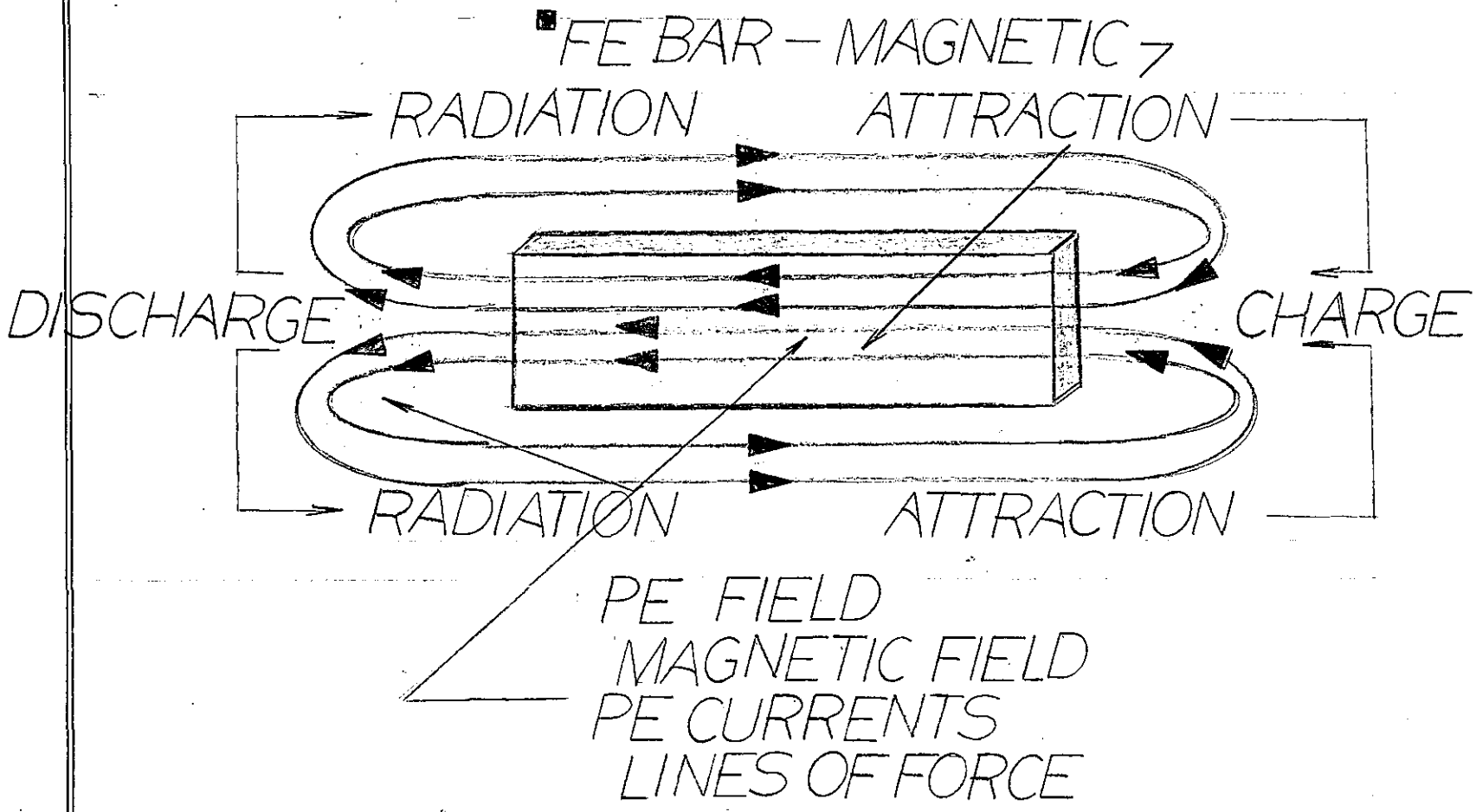
The attraction → charge functions of the PE energy metabolism dominate one side of the atomic nucleus while the discharge → radiation functions dominate the other side. The directional flow of PE currents (which initially induce and then are maintained by this transformation) literally forces the molecules into rigid, linear alignments. Atoms governed by such an energy metabolism are then "polarized" (field polarization not charge polarization) i.e., the mass-free PE field functions of charge → discharge are operative at opposite (pole) ends. The molecular bonds are maintained by the complementary PE field interconnections of the atoms.

Figure # 24 illustrates the flow of PE current through the interior and around the exterior of a magnet.

FIGURE # 24

CONTINUUM PHYSICS

THE FLOW OF PE CURRENT THROUGH THE INTERIOR AND AROUND THE EXTERIOR OF A MAGNET.



■ FE = IRON

Prevalent View:

The region surrounding a magnet, i.e., a field of force, the effects of which can be detected and which extends into space, is known as a magnetic field of force.

In every magnet there exist definite "magnetic lines of force". Each line begins at one pole and ends at the other, and no two lines cross. Faraday believed them to have real existence! Faraday's view of the 'material existence' of "lines of force" did not survive long. By mid-nineteenth century, the ether concept had grown strong in connection with light propagation, and magnetic lines came to be viewed as distortions of the ether. However, with the refutation and disappearance of the ether concept in the 20th century; it became a matter of the "geometry of space itself". Currently it is assumed that each magnetic pole affects the "geometry of space", and this altered geometry (compared with what the geometry would be in the absence of the magnet) is called a magnetic field.

Continuum Physics:

The Continuum physicist, who is all too aware of the headlong flight into abstractions which followed the abandonment of the ether concept, firmly re-establishes the fact that the magnetic field has a real existence. Faraday's assertion that the 'lines of force' are real physical phenomena concurs with our view that: magnetic field = polar PE field and 'lines of force' = PE currents. 'Lines of force' are distinct "closed circuit" PE currents which flow uninterrupted through the interior and around the exterior of a magnet. The magnetic field, like the 'gravitational' and 'electrostatic' fields constitutes a mass-free PE matrix. This magnetic field influences the density, intensity, movement, etc. of its immediate PE environment. The 'magnetic field of force' is not a distortion of the

"geometry of space" but rather constitutes a concrete, in motion, polarized PE field.

Magnetic Attraction

Prevalent View:

If the north pole of one magnet is brought near the south pole of a second magnet, the two poles will exhibit a mutual attraction. If they are allowed to touch, the magnets will remain in contact. It will take force to separate them. We therefore formulate a simple rule analogous to that for electric charges (negative and positive): unlike poles attract.

Continuum Physics:

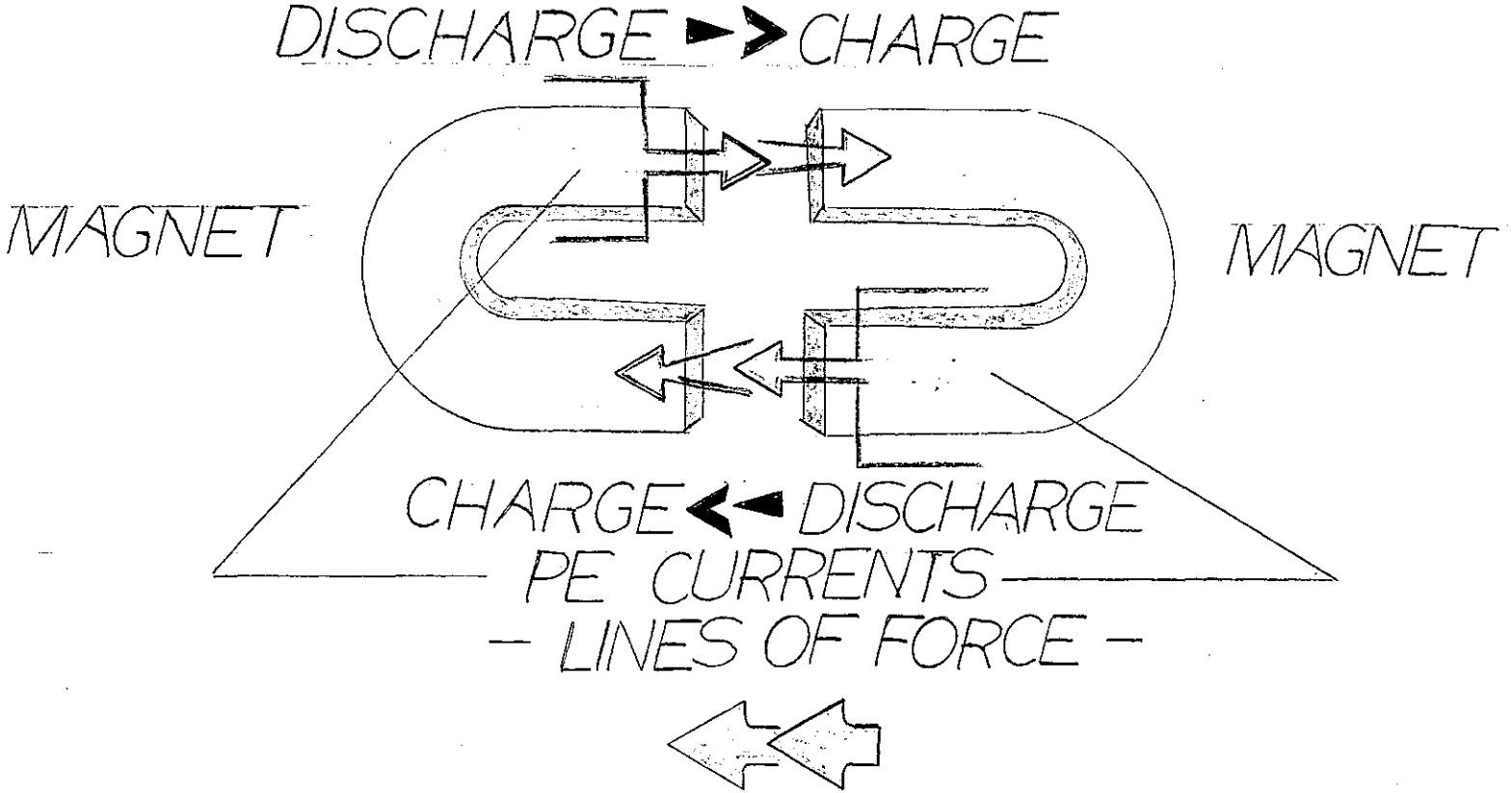
Figure # 25 demonstrates the fact that PE field functions are the basis for magnetic attraction. The pronouncement: unlike poles attract is derived from the observation of magnetic attraction. An accurate description of a physical phenomenon, though, in no way constitutes a scientific explanation of that phenomenon.

Continuum Physics reveals magnetic attraction as being the direct result of the superimposition of PE currents = 'lines of force'. When the discharge (outflow) end of one magnet is aligned with the charge (inflow) end of another magnet, the directional flow of their respective currents is the same. These mass-free PE currents in forward motion converge and amalgamate. This functional process of superimposition, i.e., convergence, merger and reinforcement (identical to that exhibited in the attraction between two or more PE spinning waves in open space) occurs as soon as the PE fields of the two magnets establish contact.

FIGURE # 25

CONTINUUM PHYSICS

PE FIELD FUNCTIONS ARE THE BASIS FOR MAGNETIC ATTRACTION



Magnetic Repulsion

Prevalent View:

If the north pole of one magnet is brought near the north pole of a second magnet, there will be a mutual repulsion. The same is true if the south pole of one magnet is brought near the south pole of the second. We therefore formulate a simple rule analogous to that for electric charges (negative and positive) : like poles repel.

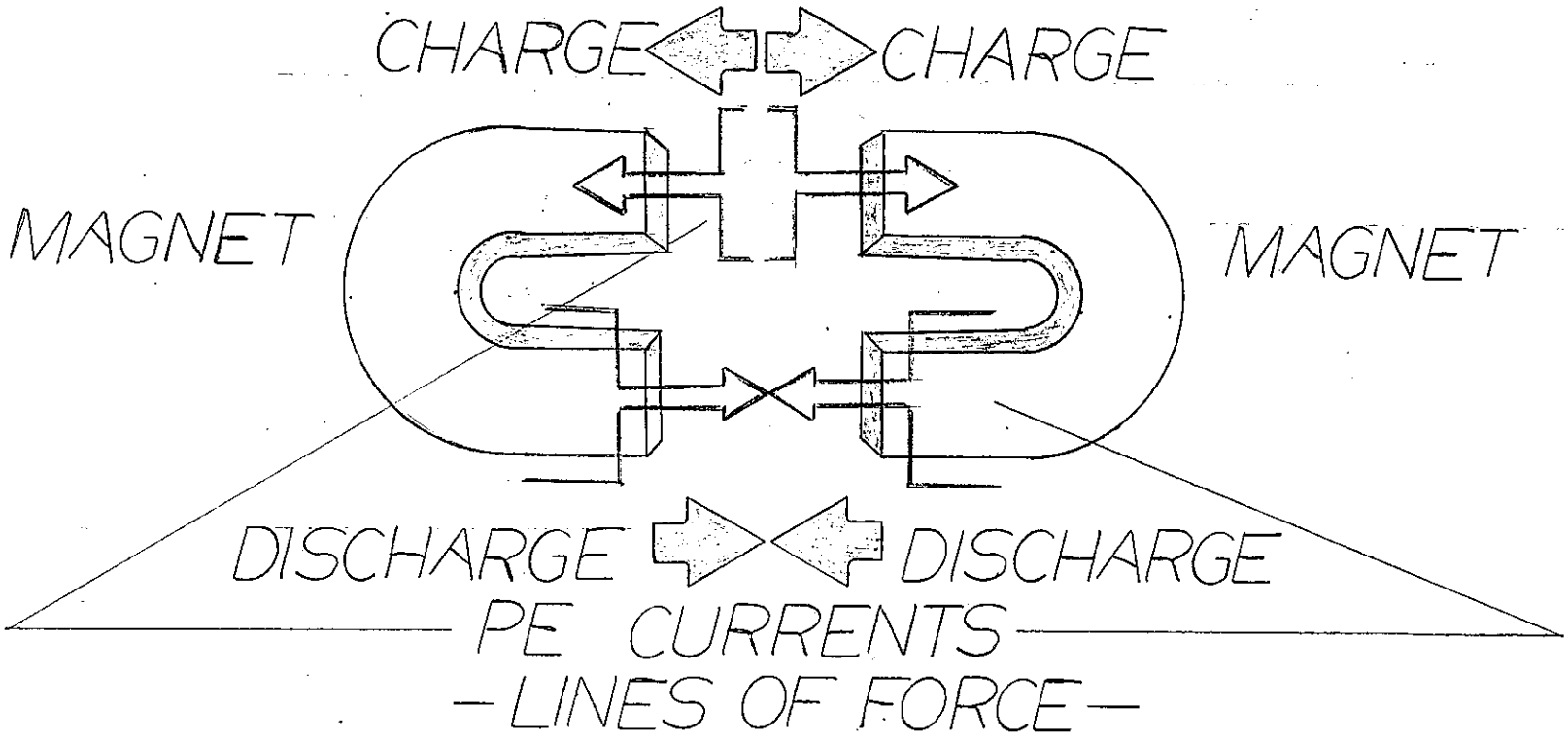
Continuum Physics:

Figure # 26 demonstrates the fact that PE functions are the basis for magnetic repulsion. The pronouncement: like poles repel is derived from the observation of magnetic repulsion. To repeat: an accurate description of a physical phenomenon, though, in no way constitutes a scientific explanation of that phenomenon.

Continuum Physics reveals magnetic repulsion as being the direct result of the opposition of PE currents = 'lines of force'. When the charge (inflow) end of one magnet is aligned with the charge (inflow) end of another magnet or when the discharge (outflow) ends are so positioned, the directional flow of their respective PE currents are opposed. These mass-free PE currents in forward motion collide and repel one another. This functional process of opposition, i.e., collision, divergence and repulsion (identical to that exhibited in the mutual repulsion between two suspended, equally charged pith balls) occurs as soon as the PE fields of the two magnets establish contact.

FIGURE # 26

CONTINUUM PHYSICS
PE FIELD FUNCTIONS ARE THE BASIS FOR MAGNETIC REPULSION



Induced Magnetism

Prevalent View:

Every piece of iron is not automatically a magnet. This is because the domains in the iron are not aligned. That is: in unmagnetized materials the same number of electrons spin clockwise as spin counterclockwise. Since these electron spins cancel out (balance), the material is not magnetic. However in, e.g., iron, more electrons spin in one direction than in the other. These unbalanced electron spins create magnetic domains. Unfortunately, these domains in ummagnetized iron are oriented in random directions, and, hence, the internal fields of the domains ordinarily cancel out. But when the iron is subjected to the magnetic field of a magnet nearby, the domains are induced into alignment much as 'electrostatic' charges in a piece of paper align themselves in the presence of a charged rod. When we remove the iron from the influence of the permanent magnet; the domains of the iron revert to a random arrangement.

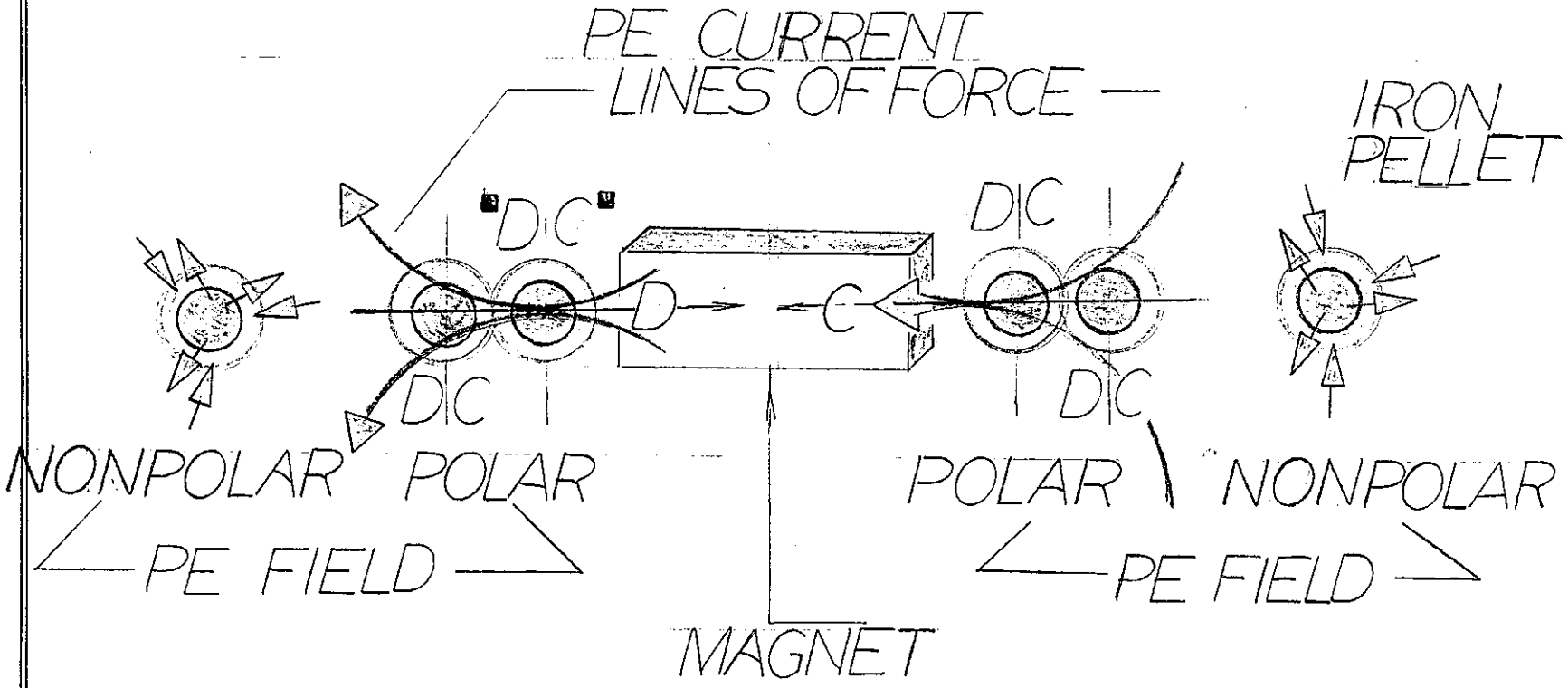
Continuum Physics:

Figure # 27 illustrates the PE field dynamics of induced magnetism. It depicts a permanent magnet which has been placed between six ordinary iron pellets.

It is observed in experiments that two of the pellets, at either ends of the magnet, begin to roll, make physical contact, display mutual attraction one to another and are drawn toward the magnet. One pellet, i.e., a pellet at either end of the magnet, remains immobile and fixed on the spot.

FIGURE # 27

CONTINUUM PHYSICS
INDUCED MAGNETISM



*C = CHARGE → DISCHARGE

The difference in the behavior of the pellets is explainable in terms of PE field dynamics. On the one hand, the mobile pellets happen to be situtated within the magnetic field (= effective range of the magnet's PE currents). On the other hand, the stationary pellet is located beyond the influence of the polarized PE field.

The external environment, i.e., the encompassing PE currents of the magnet, has established contact with the PE fields of the mobile pellets. This field interaction transforms the radial, non-polar PE field which is characteristic of unmagnetized pellets into a directional = polarized PE field which is characteristic of magnetized pellets. The PE potential difference that exists between the magnet and the pellets dictates that the weaker PE systems gravitate to the stronger PE system.

Continuum Physics recognizes the fact that atomic structure is altered in unison with this functional transformation (= PE field polarization). The creation of 'magnetic domains' due to unbalanced electron spins is viewed as being an erroneous interpretation. To repeat: we contend that structural, atomic realignment is a direct result of the induced polarization of the pellet's PE field. When we remove the pellets from the inductive influence of the permanent magnet's PE field; the PE fields of the pellets revert back to non-polar functioning. The rigid alignments of the pellet's atoms, in turn, change back into more random orientations.

MECHANICAL CLOUD-BUSTER APPARATUS

"Man himself is responsible for desert making and desert breaking. Man has the tools of knowledge and the tools of technology at his disposal today to combat desert development, and even to turn existent deserts back into green, rich pastures for man and animal alike... Man himself prevents now and has prevented over the ages the combat of deserts." - W. Reich

Functional and Structural Dynamics

Early in his investigation of atmospheric orgone = primary energy, Dr. Wilhelm Reich noticed that whenever long, hollow steel pipes were pointed at the surface of a lake, the movement of the waves was affected. This haphazard observation, while not immediately analyzed, was never forgotten. Since, at the time, the functions of the primordial energy had not yet been thoroughly formulated; the proper connections could not then be made. Indeed, it took twelve years of controlled experiments and keen observations to turn an apparently insignificant phenomenon into the basis for a technological apparatus which could modify the weather.

The structural components of a mechanical cloud-buster apparatus (CLB) consist of:

1.) Hollow metallic pipes which are arrayed in parallel rows and are mounted on a support, e.g., a tripod, which serves to keep the pipe (s) at some height above the ground.
The pipes are moveable, i.e., the CLB operator is able to direct the pipes, at will, from any position on the horizon up to the zenith, for example, like the maneuverability of an anti-aircraft gun.

2.) The pipe (s) terminates in a length of Bx cable which 'grounds' each individual tube.

3.) Water - The Bx cable (s) leads into, that is, establishes physical contact with a source of water, e.g., a well, lake, river, etc.

A hollow metallic pipe constitutes, per se, a PE accumulator. This is so because the enclosed space inside the metal tube has a higher

concentration of PE than the open atmosphere outside it. In fact, any device which generates and consistently maintains a higher PE level, i.e., higher than that prevalent in the general energy continuum, can be defined as being, in effect, a PE accumulator. This statement promptly calls our attention to the fact that all PE systems (whether it be atoms, protozoa, human beings, planets, stars, galaxies, etc.) are PE accumulators. This accumulation-concentration of mass-free PE occurs, in both the non-living and living realms, in accordance to the PE potential principle. Thus, a capacity level higher than that of the environment is attained through the attraction ➡ charge process of the energy metabolism.

The mass-free energy processes operative in the pipe component of a CLB apparatus can be demonstrated as follows:

Let us position the CLB pipe, which is supported above ground level atop a tripod, parallel to the ground. We then insert a solid, metallic core, e.g., an iron bar, into the pipe. A hollow tube has, therefore, been converted into a long, solid metal rod.

Continuum Physics investigations of the interactions between PE and matter have disclosed that: Metallic material readily attracts PE and then quickly radiates it again. This solid metal rod is, consequently, enveloped by a rapidly pulsating PE field. The rod, like any other PE system, is strictly governed by a charge ➡ discharge energy metabolism that allows it to function in dynamic equilibrium within the PE substratum. What we must point out here is the fact that the PE field of the rod is non-polar. PE field polarization, i.e., a directional flow as in the case of magnetism, does not exist in this case. Instead, prions are constantly attracted and radiated over the entire surface of the solid metal rod.

These PE field functions change radically once we withdraw the solid core from the CLB tube. When this solid core is removed, a hollow metal pipe is created. We will plug, for our purposes, the ends of the pipe with metallic caps. This structural change now facilitates a functional = energetic transformation. Hence, although metallic material both attracts and radiates mass-free PE, significant quantities of energy do penetrate the hollow CLB tube. Those prions that filter into the open space within the metal pipe encounter the fact that whereas their motion outward is impeded by the metal casing, their mobility remains intact in the enclosed space. Therefore, taking, so to speak, the path of least resistance, the energy tends to remain confined within the hollow pipe.

The accumulation-concentration of mass-free energy within the CLB pipe gives rise to a high PE potential. When a PE potential difference between the CLB pipe and the PE substratum has been achieved, the PE potential principle takes effect, i.e., energy flows from the low level (=PE substratum) to the high level (=hollow CLB pipe interior). As a result, the previously non-polar PE field of the CLB pipe is transformed. Field polarization occurs because the attraction → charge functions of the energy metabolism are now dominant. Hence, the dynamic equilibrium which had been maintained by alternating charge → discharge functions changes into steady, directional PE currents that flow into the hollow pipe.

Every PE system, whether it be an atom, organism or star, eventually reaches a peak of charge (= capacity level). This culmination of the energy confluence phase spontaneously induces the discharge phase. Therefore, once the non-living PE system = CLB pipe has reached its capacity level, equilibrium is (as in the case of the solid metal rod) again maintained by alternating charge → discharge functions. In other words,

the PE field polarization, generated by an imbalance in the attraction / radiation processes, reverts back to non-polar PE field functioning.

Now let us drill a hole in the metal cap at one end of the CLB pipe and insert a Bx cable. (Note: a Bx cable is a hollow, flexible, metallic conduit tube) This Bx cable is of sufficient length to allow us to connect the CLB pipe with a source of water.

The CLB pipe, at this point, can be compared to the electrode in a voltaic cell. The water reservoir functions, in effect, as an electrolyte. On the one hand, since there exists a PE potential difference between an electrode and the electrolyte; mass-free energy flows (according to the PE potential principle) from low to high level. Thus, the strong electrode attracts and draws PE from the weak electrolyte.
On the other hand, since there likewise exists a PE potential difference between the CLB pipe and the water reservoir; mass-free energy flows (according to the PE potential principle) from low to high level. Thus, the strong CLB pipe attracts and draws PE from the weak water reservoir.

The electrode in a voltaic cell becomes charged due to the 'chemical reactions', i.e., 'chemical bondings' and bond decompositions, that it induces when it interacts with the acid solution. The mass-free energy that is released by these transformations gravitates onto the electrode in the form of diffuse PE currents.

Continuum Physics assumes, tentative to further investigations, that the CLB pipe does not become charged due primarily (if at all) to the 'chemical reactions' that it induces in the water reservoir. We view this energy transfer as being the result of the interaction between the PE fields of the two separate PE systems, i.e., CLB pipe & water.

Energy gravitates directly from the unbonded, mass-free PE matrix of the water to the CLB pipe. The Bx cable functions, analogous to the terminal lead or conduction wire of an electrode, as a channel in which energy converges. Mass-free PE streams into the CLB pipe in the form of concentrated currents.

The attraction ➤ charge process in the mechanical CLB apparatus is strictly governed by the PE potential principle. To summarize:

a.) Gravitational attraction is equivalent to the PE potential principle.

b.) Gravity is a localized function.

c.) Gravity is, in essence, a function of the interaction between mass-free PE fields.

d.) Gravitational attraction spontaneously occurs (provided field to field contact has been established) whenever a PE field potential difference exists between two distinct PE systems.

e.) Gravity $\neq$ Pulsation

As long as the CLB pipe remains a self-contained unit, i.e., sealed at both ends with metal caps, it functions as an efficient PE accumulator. However, the moment we secure the Bx cable (which leads to the water reservoir) and simultaneously remove the metal cap from the opposite end of the CLB pipe, a radical change takes place. Once again, a structural alteration is accompanied by a functional = energetic transformation.

The CLB pipe, prior to this structural modification, can be compared to an electrode in 'open circuit'. The energy accumulated by either an electrode or the CLB pipe is neither harnessed nor directed, i.e., a random, diffuse, nondirectional discharge of excess energy produces no practical effects.

The CLB pipe, after structural modification, can be compared to an electrode in 'closed circuit'. The energy continually accumulated is now harnessed and directed, i.e., a linear, concentrated, directional discharge of excess energy produces practical effects.

Structural change has induced a PE field polarization. As such, the non-polar PE field of the hollow metal pipe (that had functioned as a PE accumulator) has now been transformed into the polar PE field of a modified pipe which functions as a component of the intact CLB apparatus.

To repeat: Non-polar is defined as an absence of uni-directional energy flow, i.e., a PE field that functions in dynamic balance between energy absorption and emission. PE field polarization is defined as the prevalence of directional energy flow, i.e., a predominance of either PE absorption or emission.

The absorption (= attraction → charge) phase and the emission (= discharge → radiation) phase of the energy metabolism occur at opposite ends of the CLB pipe. PE absorption predominates at the end in contact (via the Bx cable) with the water reservoir. PE emission predominates at the opposite or open end. This field polarization is similar to what prevails in a magnet. We could say, therefore, that functionally a CLB apparatus is identical to an "open circuited" magnet. This is not mere idle speculation since the actual operation of a CLB apparatus confirms

this contention. The fact is that after the prolonged use of the CLB apparatus, the pipe or pipes are regularly observed to exhibit magnetic polarity.

The mass-free energy drawn from the acid solution, in a voltaic cell arrangement, accumulates on the electrode in the form of diffuse PE currents. These PE currents, upon circuit closure, converge and become concentrated. PE currents are transformed into an electric current.

The mass-free energy drawn from the water reservoir, in the CLB arrangement, flows from the water's PE matrix into the CLB pipe in the form of concentrated PE currents. When a CLB device is operational, the charged CLB pipe functions as the generator of a strong PE beam. However, a transformation of the incoming PE currents does not occur. Instead, these PE currents excite an increase in the energy metabolism of the CLB pipe. This process, in turn, generates a steady emission (discharge) of energy from the open pipe end. (Note: This process is wholly comparable to what happens when an atom is excited. The PE system, atom, is activated to function at a higher energy level. The excess energy is discharged in the form of radiation.)

The CLB pipe is somewhat like a laser. A laser and a CLB device both generate powerful energy beams. These coherent energy beams are radiated (shot) into the atmosphere and far beyond into space. The critical difference between them is:

Laser - A laser emits visible, electromagnetic radiation

CLB - A CLB device emits invisible PE radiation

While it is quite apparent how and why a complex laser achieves its immense power, i.e., through the input of intense, high energy which amplifies and stimulates its EM beam emission; the even greater potency and range of the PE beam emitted by a CLB apparatus is mystifying and seems magical to those who are not conversant with PE dynamics. Continuum Physics attributes the potency and range of the PE beam, that is projected into the atmosphere and outward into space from a CLB device, to the metabolic nature of PE radiation.

The core = source process in nature, i.e., the PE spinning wave cycle, has revealed the fact that: The energy metabolism of a PE spinning wave (a PE beam = spinning waves) increases as it moves from a high PE potential region into a low PE potential region.

The PE field that envelops the Earth is, like the gaseous atmosphere which it holds, not uniformly dense. Therefore, just as the air thins out at higher altitudes; the PE field becomes less dense; i.e., PE concentration = potential is high close to the planet's crust and becomes lower farther out. Hence, the PE beam generated by the CLB device moves (provided, of course, that the CLB pipe is pointed skyward) from a high PE potential region to progressively lower PE potential regions. Consequently and lawfully, the energy metabolism (=frequency) of the PE beam also progressively increases. Since an increase in frequency is functionally identical to acceleration, the PE beam gains velocity.

I_t must be assumed, in the context of our theory, that mass-free PE beams traverse infinite distances and are not restricted to the 186,000 m.p.s. (i.e., the speed of light constant) velocity limit. PE beams (= PE spinning waves) are metabolic and self-generating. Hence, the equation:
PE = Life Energy is valid.

Electromagnetic waves, in contradistinction to PE spinning waves, must be forced, pushed, so to speak, through the mass-free PE substratum. This is the case because the functional changes, that occur when PE is transformed into electromagnetism (EM), engender a secondary, non-metabolic radiation. EM is antagonistic to the PE substratum and constitutes, in effect, a disturbance in the mass-free energy continuum. Indeed, areas of high PE field potential are known to resist, interfere with or completely obstruct the transmission of EM waves.

Continuum Physics, before examining the interactions between the CLB's PE beam and the atmospheric PE field, informs the conscientious reader that our description of of CLB functioning contradicts the original concept. Whereas Dr. Wilhelm Reich's classical concept claimed that the CLB attracts (draws) atmospheric PE to itself, the Continuum Physics concept claims that the CLB apparatus radiates (shoots) coherent PE beams into the atmosphere.

Reich's comprehension of the functional = energetic polarity of the CLB apparatus, which he himself had conceived, assembled and sucessfully used, is quite understandable. When Reich began his CLB experimentation almost thirty years ago, an incisive, integrated knowledge of the Primary = Life Energy continuum was just beginning to evolve. During Reich's pioneer explorations into these uncharted realms, neither the energy formula, which clarifies the functional process of mass-free energy field polarization, nor the self-generating, metabolic process of PE radiation had yet been fully deduced. However, the objective observations upon which Reich had based his concept, e.g., holes drilled into the overcast or a cloud by the CLB pipe(s), were and are accurate. Their possible misinterpretation, due to an incomplete theoretical framework, as regards polarity, in no way diminishes or undermines the authenticity of the concrete, proven PE = OR energy functions which had made it possible to engineer and

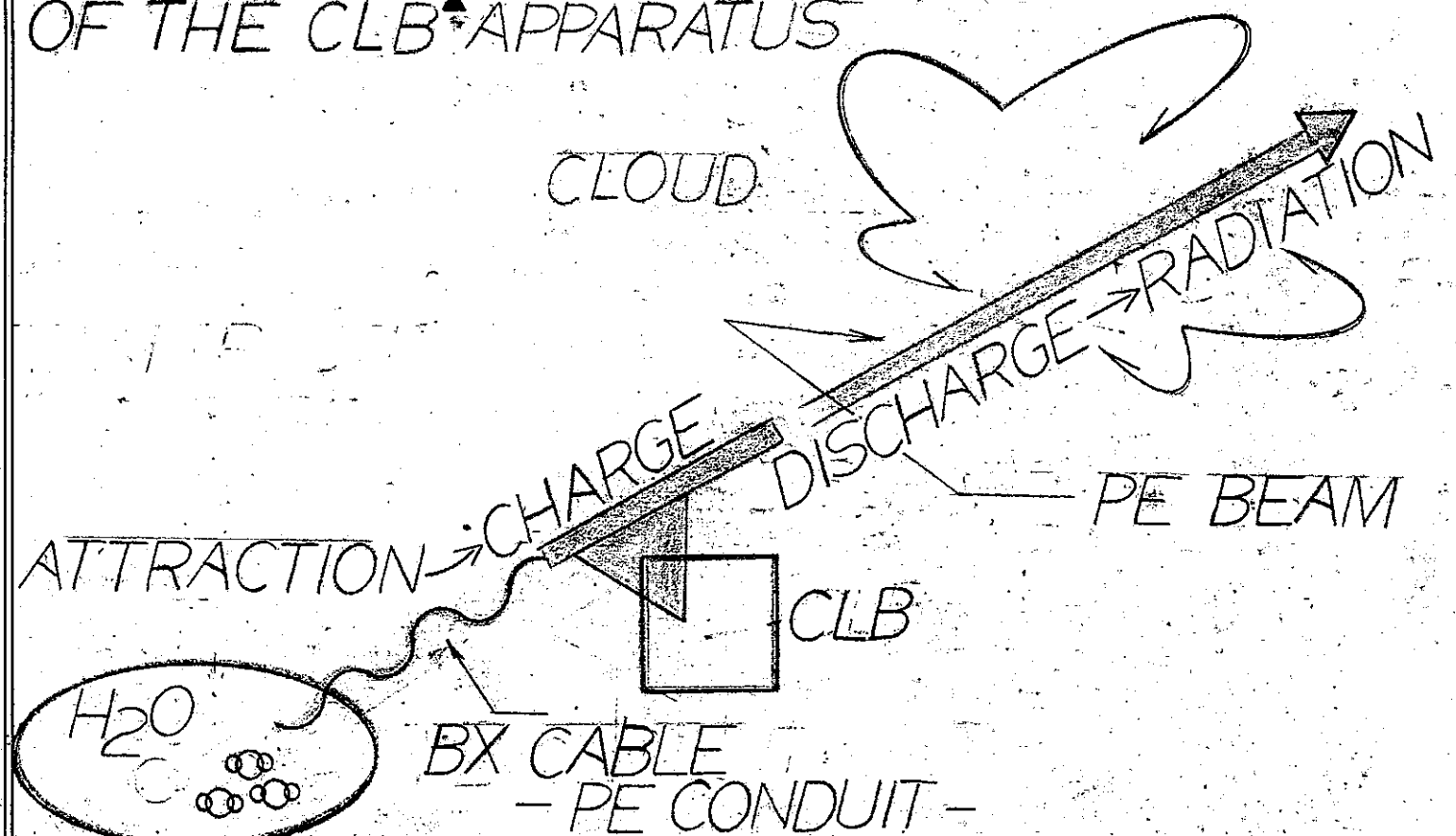
operate the CLB apparatus. These principles, disclosed and thoroughly researched by Dr. Reich, constitute natural-scientific insights of the highest order.

Continuum Physics assumes that the CLB pipes, rather than the water into which they are 'grounded', constitute the core = highest PE potential component of the CLB apparatus. Consequently, a directional PE current streams from the water's energy field to the pipes. Mass-free PE beams are subsequently radiated into the atmosphere. However if, under certain conditions, the water reservoir constitutes the highest PE potential component; then PE currents would converge from the atmosphere to CLB pipes to the water. A CLB whose 'ground' component is a strong, surging river could induce just such a reversal of the device's polarity. This would be a lawful transformation of CLB functions. In other words, since the PE current flow generated by a CLB is a dynamic, functional process (a process governed by the PE potential principle, i.e., energy flow from the high to the low level) the CLB device can function in both directions. Dr. Reich's innovative medical use of the OR energy accumulator as both an energy irradiator, in the "shooter device" and an energy withdrawer, in the "DOR-buster device", confirms this capacity for functional change in the operational mode of the same device. Continuum Physics understands and acknowledges these lawful transformations. Continuum Physics has chosen to emphasize the CLB's radiative, 'shooter' mode of operation because the energy formula and the metabolic process of PE radiation offer new insights into the CLB's observable power to effect action-at-a-distance.

FIGURE # 28

CONTINUUM PHYSICS

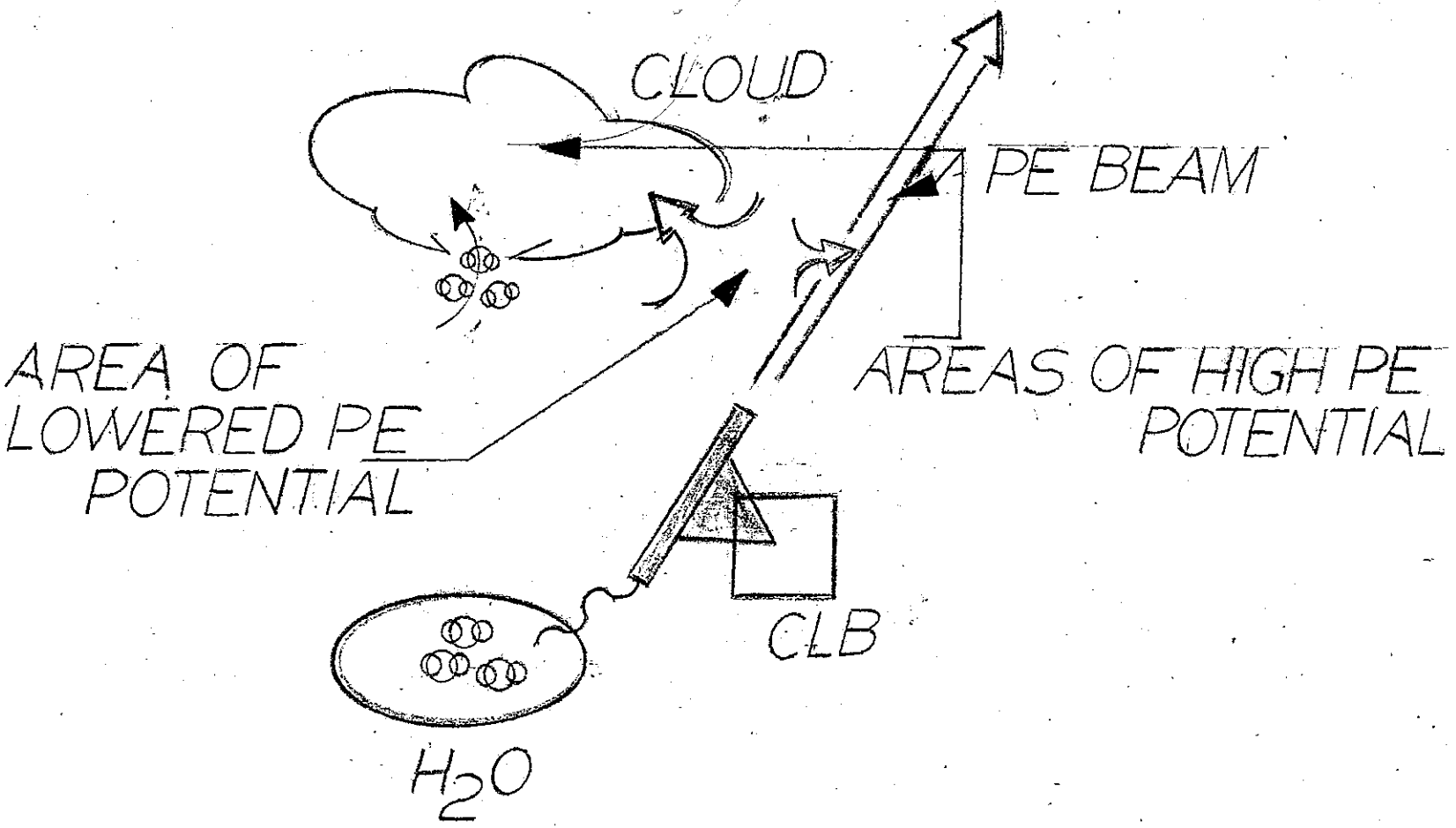
THE DESTRUCTION OF CLOUDS WITH THE USE OF THE CLB ▲ APPARATUS



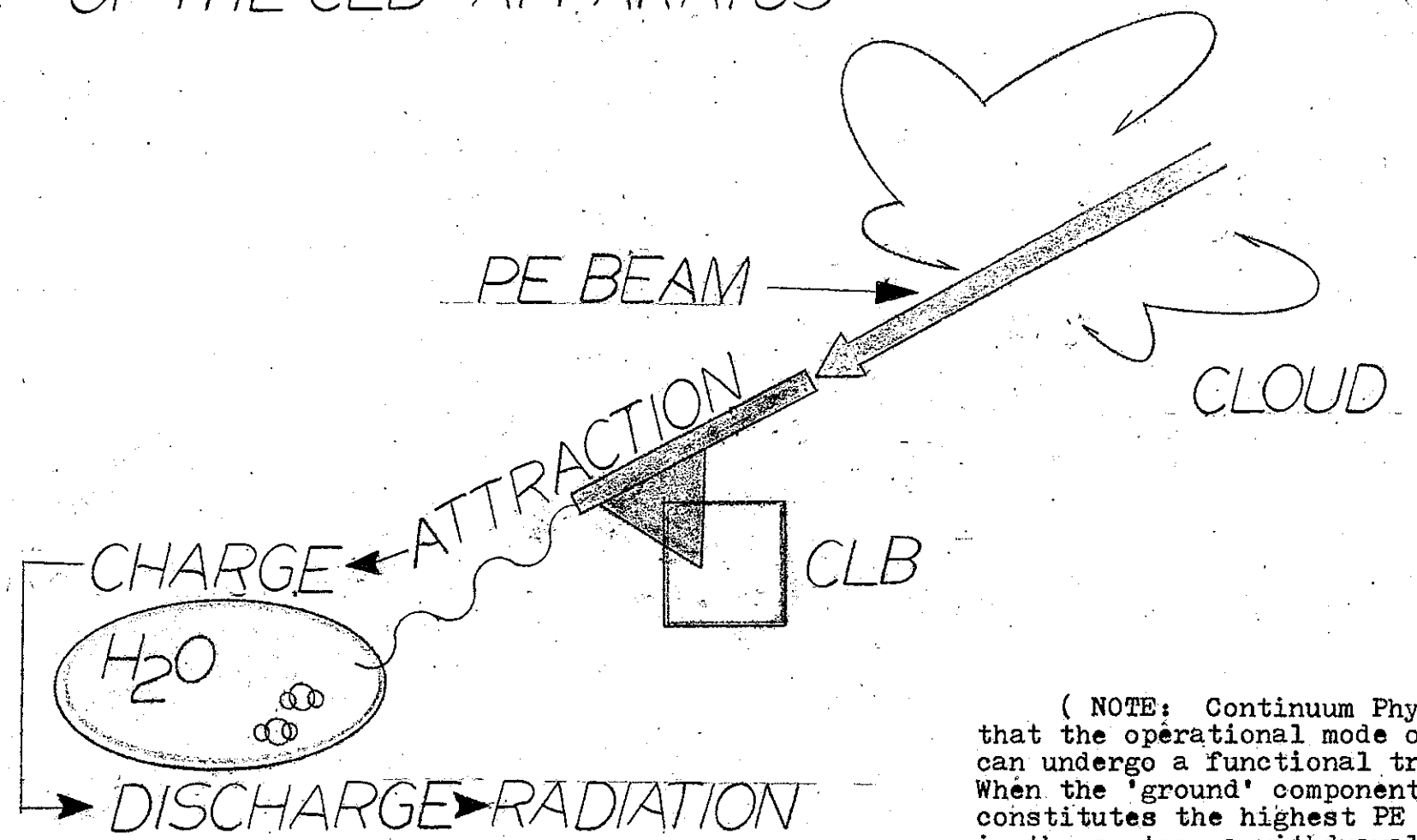
▲ CLOUDBUSTER

FIGURE #29

CONTINUUM PHYSICS
THE CREATION OF CLOUDS THROUGH THE MANIPULATION OF PE POTENTIAL



CONTINUUM PHYSICS
THE DESTRUCTION OF CLOUDS WITH THE USE OF THE CLB▲ APPARATUS



(NOTE: Continuum Physics assumes that the operational mode of a CLB apparatus can undergo a functional transformation. When the 'ground' component of the apparatus constitutes the highest PE potential level in the system, a withdrawal of energy from atmosphere to water will ocur.)

▲CLOUDBUSTER

Figure # 28 entitled, 'The Destruction of Clouds with the use of the CLB Apparatus' illustrates the capacity of an operative CLB device to dissipate clouds. The question that immediately comes to mind is: If a PE beam can dissolve clouds, what in actuality is a cloud?

Prevalent View:

The meteorologist defines the cloud as being: a mass of water particles sufficiently numerous to see in the liquid or frozen state which is formed by the chilling of water vapor below the dew point, i.e., the point in the cooling process at which condensation just begins.

Continuum Physics:

Continuum Physics defines the cloud as being: a combination of concentrated Primary Energy and water vapor.

Cloud Formation

Prevalent View:

Cloud formation is perceived as being a mechanical process (strictly dictated by thermodynamics) the specifics of which are:

1.) Evaporation -
Solar radiation produces the heat that evaporates water into the atmosphere. This water is in the gaseous = water vapor state.

2.) Convection -
Warm, water vapor-laden air expands, becomes light and rises.

3.) Condensation -
As the warm air rises, in the form of convection cuurents, its temperature decreases. The relative humidity of the air increases until saturation (with water vapor) occurs and condensation (= cloud-building) begins.

Mechanistic meteorology, for a long time, found it difficult to solve the problem of how miniscule water vapor molecules could come together and form large cloud drops. Their laboratory experiments disclosed that when there is no foreign substance, i.e., a particulate nucleus, the water molecules do not readily coalesce. When they do combine; it is only as a result of accidental collisions. Consequently, a search was begum for condensation nuclei (the supposed building blocks of clouds). This quest for condensation nuclei recruited the most sophisticated scientific hardware, including aircraft and electron microscopes. Ingenious investigative techniques proved to the satisfaction of the meteorologist that the air in which clouds originate contains thousands of particles, e.g., dust, per cubic centimeter. Hence, the mechanistic scenario for the formation of a cloud once there are an abundance of condensation nuclei in the air is:

Large cloud drops take shape as a result of collisions that occur between droplets which are driven aloft by the powerful convection currents that initiate cloud formation. These drops, when forced upwards, collide with and absorb smaller drops until near the top of the cloud they are so massive that the upward air flow can no longer lift them. They then fall back down through the cloud, collide with more drops in the process and so grow even larger. These large, heavy drops eventually fall from the cloud as rain.

Continuum Physics:

Continuum Physics recognizes that cloud formation is a functional process the specifics of which are:

1.) Attraction -
An area or pocket of concentrated PE forms in the otherwise evenly distributed energy substratum = atmospheric PE field. This high PE potential area has arisen, e.g., due to a more intense solar excitation of this pocket within the 'unexcited' PE substratum. The generation of a PE potential difference now brings the PE potential principle into effect, i.e., mass-free energy is attracted (drawn) from the surrounding low, weak PE substratum to the high, strong PE pocket.

The water molecules, which are usually very diffusely and randomly distributed in the air and which function as separate PE systems in dynamic equilibrium with no tendency to combine, are suddenly drawn into the directional energy currents which have been engendered by the high PE potential pocket. In other words, the water vapor is swept into the pocket by PE currents. Therefore, a confluence of mass-free energy is accompanied by a confluence of water vapor.

2.) Charge -
The steady accumulation of water vapor within the intensely pulsating (alternately expanding and contracting) PE matrix compacts separate H_2O molecules into dense aggregations. As such, every contraction of the pulsatory PE matrix literally squeezes, fuses neighboring water molecules into large rain drops. This functional process occurs with or without the presence of 'condensation nuclei'. In addition, there is no need for the mechanics of forceful air currents and clumsy, random collisions in order to transform small drops into large drops.

The cloud grows and expands. It will continue to grow as long as the influx of PE persists and there is sufficient water vapor in the vicinity. The capacity level, i.e., the volume, density and cohesion of the cloud is strictly governed by its PE content. The strong convection currents associated with thunderstorms are generated by the PE process, i.e., convection currents do not 'cause' cloud formation.

Continuum Physics, unable to reconcile the suspension of tons and tons of water high above the Earth's surface with the conventional convection current hypothesis, interprets this phenomenon in terms of gravity. Cloud formation, since it is generated by the PE potential principle, constitutes a gravitational process.

To reiterate: PE potential principle = gravitational attraction law is a PE field function, i.e., an interaction between two or more mass-free PE fields. Gravity is functionally identical to pulsation. Therefore, we contend that the pulsatory PE matrix of a cloud resonates in harmony with the energy level (= frequency) of (most commonly) the tropospheric layer of the planet's PE field. This resonant system keeps the cloud's PE matrix attracted within the confines of the energy level. The PE matrix is able, in turn, to attract, bind and hold suspended huge quantities of water.

Cloud - busting

The designation, 'cloud-buster' (CLB), for the mechanical weather modification apparatus is derived from the clearly observable effects that are produced when the CLB pipes are aimed into the overcast or at a particular cloud. The CLB device ostensibly "busts" up clouds. For instance, if a CLB consists of three pipes arrayed in a triangular configuration; three distinct holes will be 'drilled' into a target cloud. These holes will appear in the cloud in the exact triangular pattern as the operative CLB pipe arrangement.

When the CLB's PE beam (an extremely concentrated, high PE potential, mass-free energy current) establishes contact, i.e., is shot into a cloud, it attracts and withdraws energy from the cloud's PE field. The resultant holes testify to the fact that the energy matrix which formerly bound and held the cloud drops has been weakened. Gradually, as the PE beam continues to withdraw energy (and we can assume, to a certain extent, water vapor) the entire cloud looses cohesion and dissipates.

The functional=energetic dynamics which allow us to destroy clouds are based upon the technological use of the PE potential principle in the CLB device. The PE potential difference between the PE beam and a cloud governs cloud-busting. Hence, since the CLB PE beam constitutes the higher, stronger energy level, atmospheric PE is attracted and withdrawn from the lower, weaker energy level = cloud.

Pioneer continuum physicist, Dr. Wilhelm Reich summarizes: "One dissipates clouds of water vapor by withdrawing, according to the orgonomic (=PE) potential, atmospheric, cosmic orgone energy from the center of the cloud. This weakens the cohesive power of the cloud: There will be <u>less</u> energy to carry the water vapors, and the clouds necessarily must dissipate. The orgonomic potential between cloud and its environment is lowered."
(CORE - Cosmic Orgone Engineering, Vol. VI, Nos. 1-4, July, 1954 - pg. 37)

<u>Cloud - building</u>

Figure # 29 entitled, "The Creation of Clouds through the Manipulation of PE potential, illustrates cloud-building.

To review: A clear, unclouded sky indicates a general uniformity of the atmospheric PE field potential. Complete overcast, in effect, indicates the existence of a generally high PE potential in the atmospheric PE field. Separated, distinct clouds in an otherwise clear sky are visible manifestations of PE potential differences in the atmospheric PE field. Therefore, the individual cloud constitutes a PE potential higher than that of the substratum, i.e., a PE potential difference exists between a cloud's PE field and the surrounding energy continuum.

Continuum Physics demonstrates, that with the use of the CLB device, this PE potential difference is eliminated. When the CLB's PE beam withdraws energy from the cloud, the concentrated PE matrix, which binds and holds great quantities of water vapor together, becomes diffuse. The PE potential of the cloud is decreased and once more functions in equilibrium with the energy metabolism of the substratum. The cloud looses cohesion and the water vapor disperses and is randomly distributed again. The creation as well as the destruction of clouds with the use of the CLB device is accomplished by the technological manipulation of atmospheric PE potentials.

GIVEN: A CLB apparatus is operative, for cloud-building purposes, under a clear, cloud-free sky.

The task, obviously, is for the CLB apparatus to induce those conditions in the atmospheric PE field which are conducive to cloud formation. Clouds, to repeat, are visible manifestations of the existence of PE potential differences in the atmospheric PE field. Therefore, since a clear, cloud-free sky indicates an overall uniformity of PE potential; the CLB must be used in such a manner that will generate PE potential differences. Hence, the CLB operator aims the CLB pipe (s) at specific, demarcated areas in the sky. The PE beam, which attracts and withdraws mass-free energy in its path, lowers the PE potential in these targeted areas. Since the PE potential of the "unbusted" areas remains intact, PE potential differences have now developed in the atmospheric PE field. The intact, high PE potential areas adjacent to the "busted" low PE potential areas increase, in accordance to the PE potential principle, their PE potential (= pulsation & energy concentration) at the expense of the "busted" areas. Eventually, if there is sufficient water vapor content in the air, clouds will form within the intact, "unbusted" areas.

To summarize: The CLB device has induced cloud formation by disrupting the even distribution of energy in the atmospheric PE field, i.e., the CLB device has generated PE potential differences.

GIVEN: A CLB apparatus is operative, for cloud enlargement (growth) purposes, under a sky dotted with distinct, separated clouds.

The task, again, is for the CLB apparatus to induce those conditions in the atmospheric PE field that are conducive to cloud formation. Hence, the CLB operator aims the CLB pipe (s) at a cloud-free area in close proximity to an existent cloud. The PE beam, which attracts and withdraws energy in its path, lowers the PE potential of this targeted area contiguous to the existent cloud. The intact, high PE potential cloud adjacent to the "busted", i.e., now low PE potential area, increases (in accordance to the PE potential principle) its PE potential at the expense of the "busted" target area. The existent cloud will, provided that there is sufficient water vapor content in the air, expand and grow.

To summarize: The CLB device has induced the enlargement of an existent cloud by lowering the PE potential of the atmospheric PE substratum adjacent to the cloud.

Conclusion

The foregoing descriptions of cloud creation and cloud destruction are examples of small scale changes in the atmospheric PE field that can readily be effected with the use of a mechanical CLB device. While these examples have demonstrated to and given the reader a detailed analysis of the dynamic PE processes involved in cloud-building, busting; they fail, due to their restricted, localized nature, to even hint at the awesome capacity for large scale weather modification inherent in a functioning

CLB device. Indeed, a single CLB device or several CLB's in tandem, when operated with the proper co-ordinated techniques, can effect widespread (even continental) changes in weather. This widespread, large-scale weather modification capability is based on:

a.) The tremendous range and potency of the self-inductive = metabolic CLB PE beam.

b.) The extreme sensitivity to stimulation of the uninterrupted, all-pervasive, elastic atmospheric PE field which makes it highly responsive to the PE beam. The effects, i.e., changes in PE field potentials, can extend for millions of square miles.

Therefore, since billions of tons of atmospheric water vapor are susceptible to the technological manipulation of their concentration, distribution and movement; the science and art of rainmaking has come into human ken. The alleviation of temporary droughts and the reclamation of "permanent" deserts for cultivation purposes are here and now realistic prospects for an enlightened humanity. In addition, the course and severity of hurricanes, the atmospheric conditions conducive to tornado formation and fog are all controllable.

WARNING: The CLB device, because of its vast scope and power, should not be constructed or used without proper precautionary measures (in respect to materials used, protective clothing, operator behavior, etc.) or by an irresponsible person. Those groups or individuals who currently operate CLB's are well-trained and conversant with PE dynamics. There are dangers, both to the CLB operator and to people and environment in general in the inappropriate and irresponsible use of the CLB device. I, personally, am in favor of regulations which would prohibit to anyone, who is not in touch with PE processes or under the guidance of a trained individual, access to a CLB device.

Finally, a responsible operator of a CLB device should always be mindful of Dr. Reich's perceptive advice:

> "In cloud engineering you do <u>not</u> "create rain" - you do <u>not</u> "destroy clouds" - briefly, your are not playing God. What you do is solely helping nature on its natural course."

(CORE, Cosmic Orgone Engineering, Vol. VI, Nos. 1-4, July, 1954, pg. 105)

THE HUMAN POTENTIAL FOR OCULAR CLOUD-BUILDING AND CLOUD-BUSTING

" How could our eyes see the sun,
unless they are sunlike themselves? " - Goethe

When Continuum Physics leaves the inorganic realm of non-living matter in order to investigate the organic realm of living matter, it enters the complex domain of biophysics. Biophysics is chiefly concerned with the examination of the intricate connections between soma-psyche = body-mind, emotion-intellect relationships. We, being conscious of the fact that both non-living matter and living organisms are engendered by functionally identical Primary = Life Energy processes within the universal womb = PE substratum, recognize that biophysics is an integral part of Continuum Physics. This enlightened, hard-won perspective of the fundamental unity of nature has enabled us to achieve an indepth comprehension of biophysical functions. We have reconciled and are able to explain the apparent dualities of body-psyche, emotion-intellect. These seemingly antithetical attributes of the human organism can now be understood as being integrated, interdependent functions.

A full explanation or even a detailed review of the incisive research (accomplished by Dr. Reich) that has confirmed our dynamic conceptions of biophysical functioning is beyond the scope and purpose of this book. It would another volume to do the subject justice. However, I can refer the interested reader to my book, DAWN OF THE COSMIC AGE, in which biophysics and ocular cloud-building, busting are extensively treated. We will, in this particular exposition of ocular cloud-building, busting, remain within the framework and emphasize the parameters of the Continuum Physics revelations made in this manuscript.

Ocular Cloud- building

"Sight is energy leaving the person." - Leonardo Da Vinci

Figure # 30 entitled, "The Stimulation of Cloud Formation with Bioenergetic Current" depicts a human being whose visual ray has established energetic contact with the PE matrix of a cloud. Let us, before we explore the functional dynamics of the human potential for ocular cloud-building, define the components which comprise an organic, living PE system. The living organism is only structurally and secondarily the physical-chemical "mechanism" which orthodox 'science' claims it to be. Primarily and essentially, the living organism is a PE system which is composed of:

1.) Core - i.e., the high energy nucleus of a single cell or the high energy autonomic nervous apparatus of a human being.

2.) Periphery - i.e., the cell membrane or the skin of a human being.

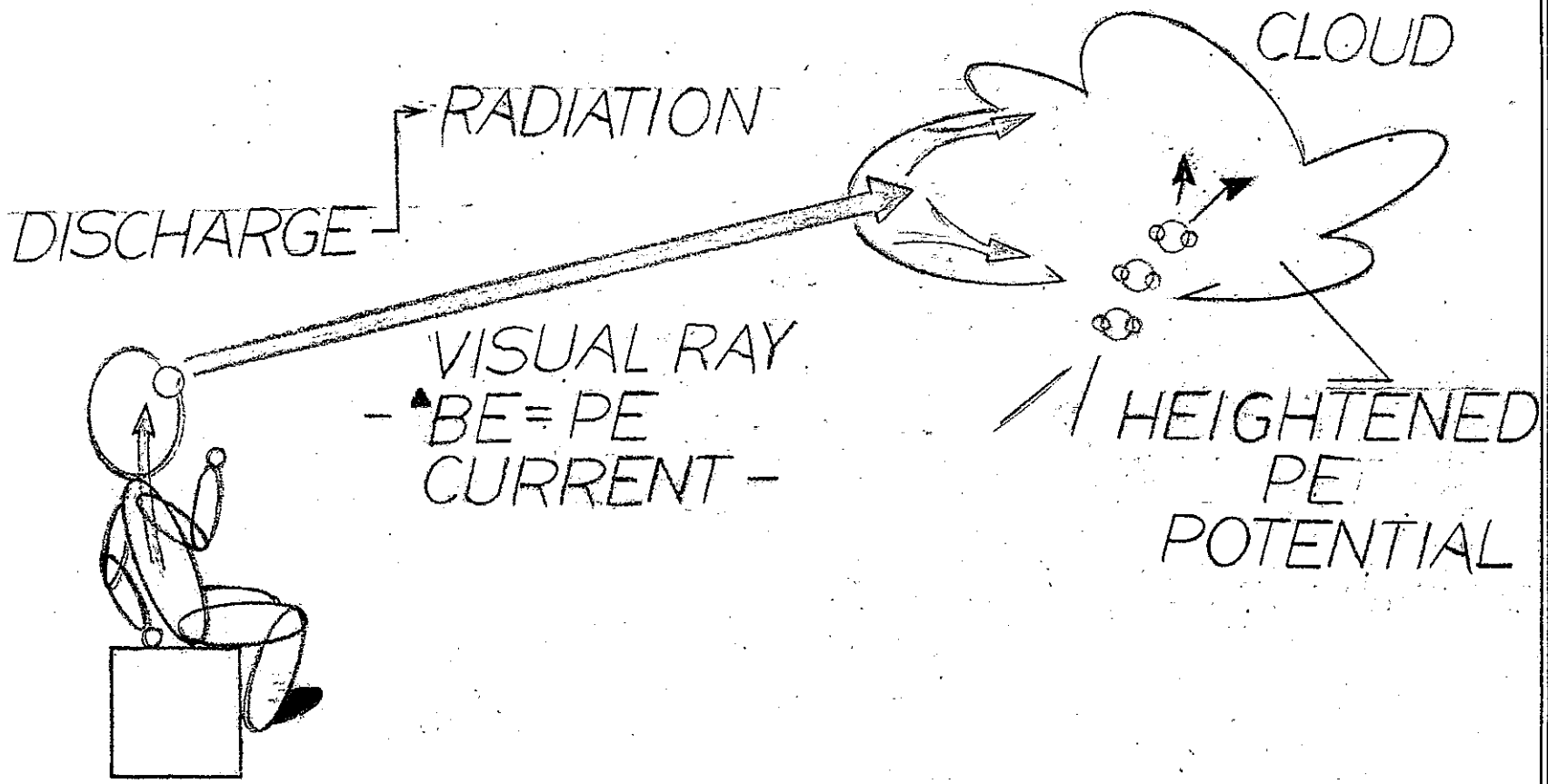
3.) PE Field - i.e., the mass-free energy matrix of a cell or the mass-free bioenergetic field beyond the skin surface; a PE field which encompasses the entire human being.

Here we see that the chief components of the living PE system (whether it be an amoeba, a cell or the human organism) are functionally identical to those of a non-living entity (whether it be an atom, planet or star). Also, a living organism continually absorbs and emits mass-free PE, i.e., it functions in accordance to the charge → discharge energy metabolism. This process is clearly evident in the rhythmic pulsation of the human PE field.

While distinguished biologists like Burr and Ravitz among others claim that the existence of an energy field around living cells and human beings is well-documented and that this energy is electromagnetic in nature; Continuum Physics has, on the contrary, firmly established that the energy field is not electromagnetic. Dr. Reich explains:

FIGURE # 30

CONTINUUM PHYSICS
THE STIMULATION OF CLOUD FORMATION WITH BIOENERGETIC CURRENT



▲BIO-ENERGETIC

"In orgone physics, however, we contend that this field of energy surrounding the organism has nothing to do with electromagnetism and is in reality an orgone energy field, i.e., a field of specific biological energy. It functions at-a-distance without the need for material contact between the body surfaces of the organisms. My own experiments with the oscillograph and the recently constructed orgone energy field meter have shown not only that such an energy field exists but also that its area of radiation varies considerably from individual to individual, from as little as a few centimeters to as much as four meters. It also varies with any given organism, i.e., it expands and contracts. These functions of the energy field are dependent upon the emotional state of the organism." (Wilhelm Reich, THE CANCER BIOPATHY
New York: Farrar, Straus and Giroux, 1973, pg. 314)

It is important to note that the movement (= PE currents) and the pulsation of bioenergy arises within a human being. Emotions = bioenergetic impulses can be consciously generated by human volition. Since, in the case of nonliving entities, movements and variations in the rate of pulsation are dependent upon an external source of excitation; conscious, inner motivation constitutes a crucial distinction between living and nonliving PE systems. This human ability to, by an active, conscious effort, generate and direct the bioenergetic field has been objectively demonstrated and verified in Kirlian photographs of a 'faith healer'. One such photograph showed:

"that the general overall brightness of Krivorotov's hands decreased and in one small area of his hands a narrow focused channel of intense brilliance developed. It was almost as if the energy pouring from his hands could focus like a laser beam."

(Ostrander and Schroeder: Psychic Discoveries behind the Iron Curtain
Prentice-Hall, Inc., Copyright 1970 pg.219)

The author of this manuscript discovered for himself this projection and capacity to act-at-a-distance of the human PE field. Briefly:

"Reich had discovered that under the proper conditions, a pulsating orgone energy field around a metal sphere could be demonstrated. He took a 6 cm. diameter iron sphere and placed it on a solid base. Then a smaller sphere, about 1 cm. in diameter, which he made of metallic and organic material (iron filings & soil) molded together with water and enclosed by a thin glass globule, was suspended pendulum-wise 0.5 cm. from the equator of the larger metal sphere. He observed that: In dry, sunny weather the pendulum sphere oscillates toward the center of the larger sphere, spontaneously. The swings of the pendulum will become greater if the observer's own organism has a strong and far-reaching orgone energy field.

I repeated Reich's experiment and obtained the same results. In addition, I applied an observation which I had gained from the use of the orgone energy accumulator to the experiment. I remind the reader that one of the effects of concentrated orgone radiation is a temporary improvement of visual acuity. I found that when, after a prolonged session in the (man-sized) orgone energy accumulator, I concentrated my eyes on the metal sphere that the swings of the freely suspended pendulum sphere became greater. The orgone energy (=PE) field of the organism has the same effect but this increase in the atmospheric orgone energy pulsation around the metal sphere was excited at distances far beyond the range of my body's energy field. I had to conclude that a <u>visual ray</u> which functions energetically at-a-distance was the source of excitation."

(Gerhard Weber : THE DAWN OF THE COSMIC AGE
Clark, N.J. : copyrighted, 1980, pgs. 124 - 125)

Succeeding experiments and observations have revealed that the excitation of the atmospheric PE, i.e., the energy matrix of an existent cloud, is possible with the visual ray. The author and many others who are aware of this human potential have subjectively experienced and objectively verified this natural phenomenon. It can be readily observed that, under favorable atmospheric conditions, brief, directed visual ray contact with the PE matrix = field of a small existent cloud or fractocumulus will stimulate the targeted cloud into heightened pulsation. As a result, the cloud will rapidly double or triple in size.

Continuum Physics, having established that the human eye radiates energy, recognizes the visual ray as being a modified PE field. As such, the visual ray of the human organism can be compared to the PE beam of a CLB device. Specifically:

1.) Since atmospheric PE is functionally identical to biological PE, the metabolic = life energy emitted by both the CLB device and the eyes is the same, i.e., directional = polarized PE currents.

2.) The PE beam and visual ray are engendered by the attraction → charge functions of the energy metabolism.

3.) The discharge → radiation functions of the visual ray like that of the PE beam effect changes = PE potential differences in the atmospheric PE field.

There are, of course, well-defined differences (structural & functional) between the visual ray and the PE beam. Specifically:

1.) The coherence, concentration and velocity of the PE current (s) radiated in the form of a visual ray by human eyes is markedly less than that of the laser-like PE beam. For instance: holes cannot be 'drilled' by the visual ray into an overcast sky or into a target cloud.

2.) The visual ray is not activated by an influx of concentrated PE from an external energy source, e.g., the water reservoir component of an operative CLB device. Instead, the increased, focused emission of energy through the eyes is consciously generated within the organism and directed by the mind.

3.) Whereas the CLB's PE beam enlarges existent clouds by lowering the PE potential of areas immediately adjacent to the cloud; the human visual ray stimulates cloud growth by increasing the PE field potential of the existent cloud itself. Also, the visual ray, unlike the more potent PE beam, cannot (at least not readily) create clouds in a clear sky by generating areas of PE potential difference. Furthermore, when a CLB's PE beam is aimed at a target cloud, that cloud is "busted" , i.e., it dissipates. When, on the other hand, the human visual ray establishes energetic contact with the PE matrix of a cloud, that cloud is stimulated to grow.

Ocular Cloud-busting

> "There are some people who no matter what miracles took place around them would still go on complacently picking their noses." - Gogol

The last statement made in the previous section on ocular cloud-building, i.e., "When the human visual ray establishes energetic contact with the PE matrix of a cloud, that cloud is stimulated to grow." , must be qualified. This qualification is absolutely necessary in the light of the following natural phenomenon:

(Note: We remind the reader that the classical concept of CLB functioning claimed that the CLB device attracted (drew in) energy from the PE matrix of clouds. The author's own experimentation, initially carried out some years ago, i.e., prior to the dynamic, modified Continuum Physics formulation of mechanical CLB polarity, was based on this classical assumption. This fact should be kept in mind as one reads the following description.)

"I took another brief swim. The afternoon was waning as I sat on the beach. I shivered when the cool air that heralded the approach of evening blew against my wet body. I felt good, refreshed and relaxed. My skin tingled as the sun dried me. The typical fair weather cloud clusters hovered over the ocean. Smaller clumps (fractocumulus) drifted above me. Some of the larger cumulus literally boiled with energy and bulbous puffs of water vapor continuously sprouted from their margins.

I watched this parade of clouds until I could no longer resist the temptation to put my assumptions to the test... I fixed my eyes on a small cloud. The seconds ticked by like minutes. I presumed that, like the CLB apparatus, I could dissipate this cloudlet. Instead it drifted on and away undiminished. Then I recalled my first attempt to see the luminescent OR energy (=PE) points in the sky. I had failed because energetic contact had been blocked by tension. Sure enough, my muscles

were tensed and the tingle had left my skin. I sat for a while with my eyes closed. When I looked up again a cumulus cloud was overhead. I gazed directly at the center of it and followed its slow movement. The effect that my steady gaze had on the cloud was unequivocal. The opaque, white cloud's motion ceased and gradually, in a matter of seconds, it became more transparent and less dense. Its sharp contours melted away and mottled shreds of cloud floated where a whole, compact cumulus had been a minute before. There could be no doubt: I had dissipated the cloud with my visual ray. The water vapor droplets were clearly seen to disperse and the cloud lost cohesion as I drew the atmospheric PE from the cloud's energy matrix. The cloud, objectively, was seen to dissipate and disappear from the clear blue sky in a time span of less than three (3) minutes. Subjectively, I felt the streaming of PE energy in my organism and my visual acuity improved temporarily. "

(Gerhard Weber : THE DAWN OF THE COSMIC AGE
Clark, N.J. : Copyrighted, 1980, pgs. 154 - 155)

The natural phenomenon, i.e., the human potential for ocular cloud-busting, just described makes clear that clouds can be dissipated as well as stimulated to grow with the visual ray. Therefore the qualification:

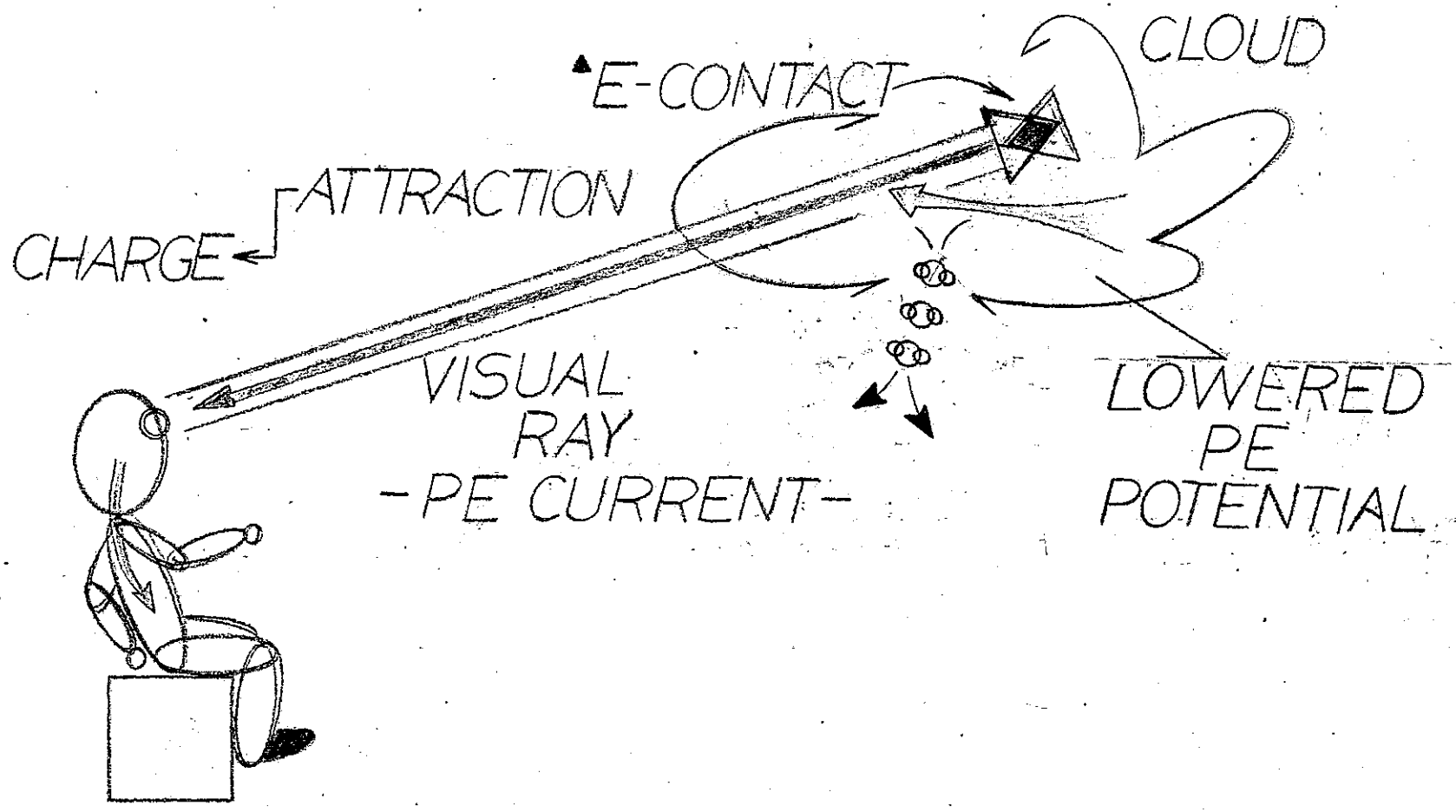
The conscious intention of the human being determines whether, once energetic contact between visual ray and the PE matrix of a cloud is established, that cloud will grow or dissipate.

is required in order to render an accurate picture of the dynamic interactions between the organic and inorganic realms. The connecting link between the living and non-living, since biological and atmospheric mass-free PE are functionally identical, is Primary = Life Energy.
(See Figure # 31)

Even though ocular cloud-busting, like the CLB device, dissipates clouds; the visual ray function is the exact reverse of the PE beam

FIGURE # 31

CONTINUUM PHYSICS
OCULAR CLOUD-BUSTING



▲ ENERGETIC

function, i.e., whereas the CLB's PE beam radiates energy, the human visual ray attracts energy.

Ironically, the classical concept of cloud-busting is correct and applicable to human ocular cloud-busting. The organism (via the visual ray) actually does attract (draws in) life energy from clouds. This coincidence prompts one to speculate again about Reich's 'erroneous polarity formulation' in reference to the mechanical CLB device.
The questions that arise are:
Was Dr. Reich'aware of the human potential for ocular cloud-busting?
Did he perceive and formulate CLB polarity in the light of his authentic subjective experience?

The author of this work, which is rooted in this profound scientist's monumental discoveries, considers an affirmative answer to the above questions as being very probable. This would provide a logical explanation for and bring into sharp focus the reason for the 'polarity error'. The fact that he never disclosed this human potential is quite understandable. Afterall, Reich was already called an imposter because of his "controversial theories". Eventually this benefactor of mankind was prosecuted and imprisoned for illegally distributing "sham" apparatuses, i.e., orgone energy accumulators.

The human visual ray can either attract energy from of radiate energy to the PE matrix of a cloud. The CLB's PE beam can only radiate energy into the atmospheric PE field. The restricted function of a CLB device is due to its reliance (like that of all non-living PE systems) on an external source of excitation. Hence, when the CLB tube is in contact (via a Bx cable) with its energy source = water reservoir, this energy

input dictates, in accordance to the charge → discharge metabolism, that energy output will occur in the form of a PE beam which is radiated through the CLB tube's open end.

A cloud, of course, constitutes, like the water reservoir, a source of mass-free energy. However, since the attraction → charge process = PE potential = gravitational attraction between two separate PE systems takes effect only if and when energetic contact is established, the CLB device has no access to this energy source. Conceivably, if a rigid Bx cable were high enough to reach the PE matrix of a cloud; energy could indeed be withdrawn from it by a CLB dvice so constructed. Such an input of energy, i.e., from cloud to CLB device would depend upon the following two critcal factors:

1.) Establishment of energetic contact between the PE fields of the CLB device and the cloud. Note that the hollow Bx cable, although in physical contact with the energy source, i.e., the PE matrix of water or a cloud, functions as an energy field link or conduit between two separate PE systems.

2.) The pulsatory rate = frequency of the CLB device, i.e., the CLB tube = PE accumulator, must be higher than the pulsation of the cloud's PE matrix.

The PE potential principle = gravitational principle dictates that the high level, stronger system attracts and withdraws energy from the low level, weaker system. In other words, the PE potential difference must be in favor of the CLB device.

The human ability to either attract energy from or radiate energy to the PE matrix of a cloud is based on:

1.) The range of the human PE field, i.e., the modified, long range PE field = visual ray. Continuum Physics assumes, since sight is a function of energetic contact, that this range extends to the limits of our field of vision.

2.) Excitation is independent of the need for external stimuli. Bioenergetic pulsation (an increase or decrease of) is internally generated.

3.) Visual ray functioning, i.e., energy attraction = PE current inflow or energy radiation = PE current outflow, is determined by conscious, inner volition.

Here it must be pointed out that conscious intention which is not anchored in organismic bioenergetic vitality will fail to achieve results. Mindful purpose and bioenergetic vigor condition one another. Together they constitute an integrated process. The absence of either disrupts the unitary, harmonious functioning required for this human potential.

The input of energy, i.e., from cloud to the human organism, depends, as in the case of the mechanical CLB device, upon the two following factors:

1.) The establishment of energetic contact between the PE fields of the human organism and the cloud.

2.) The PE field frequency = bioenergetic pulsation of the human being, i.e., that of the organism as a whole which is mirrored and projected by the visual ray in particular, must be higher than the pulsation of the cloud's PE matrix. In other words, the PE potential difference has to be in favor of the human organism.

Bioenergetic pulsation not only makes possible the attraction (withdrawal) of Primary = Life Energy from a cloud; bioenergetic pulsation also determines:

a.) The effective range of ocular cloud-busting.
An increase in bioenergetic pulsation enables one to draw energy from virtually any cloud within the field of vision; whether that cloud is directly overhead or many miles away.

b.) The speed at which a target cloud will dissipate.
Any increase in the bioenergetic pulsation of the human organism/PE field will result in a simultaneous acceleration of the cloud dissolution process.

While increases in bioenergetic pulsation can be internally generated, the 18th century physician, Dr. Franz Anton Mesmer, observed that external stimulation also enhances a human being's bioenergetic pulsation. Dr. Mesmer found, in his research of "universal fluid", (=PE), that: "The universal fluid is communicated, propagated and augmented by sound."

The author's subjective experiences and objective (controlled and verified) experiments confirm Dr. Mesmer's Life Energy insights.

"I placed an 'Eagles' cassette into my recorder and relaxed to the sound of the music. My response to the music was intense. Pulsatory sensations flooded my whole body. The musical vibrations seemed to resonate in each and every cell. I thought, "will this intense state of bioenergetic pulsation affect the speed and efficiency of an ocular cloud-bust?" The remarkable cloud-bust effects which were accomplished after an elapsed time of only 30 to 45 seconds are positive answers to this question.

Truly, one hears with the whole organism. Every fiber and cell resonates when one genuinely experiences music. Listening to music is not a passive experience. It is rather an active emotional = energy motion participation. It is, again, energetic contact. You vibrate like an instrument in the orchestra. You are, in effect, a resonant instrument. Musical sounds are capable of evoking strong bioenergetic currents in every person that responds to music. Music has become invaluable to me in ocular cloud-busting. Whenever the inner impulses begin to wane, music can stimulate activity again."
(DAWN OF THE COSMIC AGE pp. 83-84)

Rhythmic, harmonious sounds obviously heighten bioenergetic pulsation, i.e., music actively experienced generates coherent, high frequency vibrations in the human PE field. This increase in bioenergetic pulsation (=bio-gravitation) creates a higher PE potential difference between organism and cloud. Consequently, since the organism's strengthened energy metabolism is equivalent to a more efficient attraction ➤ charge process, the PE current = the visual ray's velocity and it's cloud-busting capacity simultaneously increase.

Ocular cloud-busting is not a mechanical process that depends on the proper application of a prescribed technique. Ocular cloud-busting or cloud-building are functional processes that depend wholly on a harmonious interaction between the living PE functions in the human being and in nature. In other words, energetic contact has to be established. This human potential is not a special talent or gift. It is a latent ability in all of us that takes time, effort and an awareness of the primordial, cosmic Life Energy continuum to develop.

" The music that God made during the Creation, He taught Nature to play, indeed she repeats what He played to her. "
- Johannes Kepler