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Jorge Resines

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THERE IS NO "FREE" ENERGY

Space and 'field' phenomena; Nature and sub-nature by An Anonymous Friend

I only recently was handed my first copy of <u>The Journal of Borderland Research</u> (Vol. XLVI, No. 2), and found what was being discussed there quite intriguing. Having parallel interests, but coming from a slightly different viewpoint, I thought I would offer some comments. Not being familiar with all the preceding work, I have nevertheless made the assumption that the work of certain other thinkers on these problems is not known in your circles, as I found no evidence of their usual terminology and conceptual frame of reference. This was somewhat surprising, since this work is founded on the impulse of Rudolf Steiner, and is an extension of the work of Goethe, both of whom were mentioned in various places in the Journal. Hopefully what follows will be helpful and a further contribution to the ongoing interest in areas falling outside the traditions of mainstream science...

Of all that I read, the most interesting was the idea of the possibility of free energy, which I take to mean the construction of an electrical-magnetic device whose output exceeds its input. I have no problem with the idea that such a device can be, and may already have been, developed. I believe, however, it would be a serious error to conceive that the energy surplus is free, unless one only means to speak in terms of monetary considerations. The "energy" always comes from some "place", and cannot in any sense be considered newly created. This is not to say that in the totality of cosmic happenings there is no newly created matter or energy, but rather that any electrical-mechanical process can only transmute one thing into another thing. Creative processes are of a whole other order, and while they can be observed in Nature, they are presently beyond man's capacity to reproduce, except with regard to creative transformations in his own soul life (spiritual self development).

Leaving that aside, I would like to consider the problem of where might such surplus "energy" come from, assuming that by normal means of measurement we are already in a situation where the output exceeds the input. Inlooking at this question I want to be concerned primarily with the conception of "space", secondarily with the conception of "force" and lastly with the distinction between Nature and sub-nature. I will be relying primarily on four works: Ernst Lehrs, Man or Matter; and George Adams, Space and the Light of Creation, Physical and Ethereal Spaces and Universal Forces in Mechanics.

Before this, however, a few words should probably be said concerning the history of these ideas. The poet Goethe was also a natural scientist of quite unique capabilities. His scientific work languished until Rudolf Steiner re-awakened interest in it, and since Steiner's time there has come into being a Goetheanistic Natural Science, which has yet only a few practitioners. Anyone who wishes to understand this new science should make

the acquaintance of Lehrs' book (above), which is subtitled: Introduction to a Spiritual Understanding of Nature on the Basis of Goethe's Method of Training Observation and Thought. In addition it will be a desirable goal to come to terms with the philosophical/epistemological problems outlined in Steiner's The Theory of Knowledge Implicit in Goethe's World Conception.

The threshold problem, which for obvious reasons many people refuse to recognize, can be stated in the following way. Behind the world of phenomena stands a world of invisible Beings. To come then to a true understanding of the natural world, and of man and man's role in it, it is necessary to come to an awareness and appreciation of Beings. Such knowledge cannot be won in a one-sided fashion. We cannot force Nature to reveal secrets. Rudolf Steiner puts it this way (and in this recapitulates a very old approach): the laboratory must become an altar. True science is moral science, moral both in terms of the method of investigation as well as in application

Now there is no question that mankind has forced from Nature certain "powers" which man applies for his needs and desires. But man does not understand these "powers", or Nature, but rather weaves for himself an illusion. Moreover, this illusion is very seductive, and has the capacity to lead man away from his own true nature, from real self knowledge, and to make of man a slave of the "powers" he worships. We all see this plainly as these "powers" more and more build their "body" in the age of the computer networks. A vast intelligence creates for itself an "electronic" nervous system, and weaves for itself a pseudo-persona, the mask of the friendly servant.

Not all the secrets of electricity have been discovered. Not all the "powers" evoked. The work of Keely, Tesla et.al. shows this clearly. The problem is: will man continue to invent new devices without realizing just with what he is dealing? Or, will he trouble himself to do more, to penetrate with

his thinking Nature's workshop, so that man is the master and not the slave.

In what follows it will only be possible to suggest a certain way of looking at phenomena. The reader who really wants to penetrate with his thinking these mysteries, and therefore be free of the seduction of electrical "powers", will have to make his own way through the material.

What is electricity? Electricity is a special condition of "space". We see this whenever we make a spark leap a gap. Before the leap, in the empty "space" between the leads, there is an increase of electrical potential, that is a "field" condition arises. Simultaneously with the spark, the "field" collapses. When the so-called alternating current is "moving" though a wire we have a cyclically potentiating and collapsing "field" present. The wire, by its spatial presence, constantly collapses the "field". While this is far too brief, it has hints enough so that we can see that it is necessary to understand "space" a bit better.

Of all the illusory conceptions of modern mainstream science, one of the more fundamental concerns the idea of space. Ordinarily we conceive of space as this vast empty container, which at some time in the past (the big bang) becomes filled with substance, which then organizes itself through the most amazing series of fortuitous accidents. Setting that aside, we can consider, as an alternative, the idea that space itself was created.

George Adam's small book, Space and the Light of Creation, investigates this question as a problem in mathematical physics utilizing the conceptions of a special mathematics called either projective or synthetic geometry. The chapter headings are quite intriguing: 1. The Radiation of Space; 2. The Music of Number; 3. The Burden of Weight and the Sacrifice of Warmth. It is not possible to duplicate these ideas here, but a few hints can at least lead the reader in the right direction.

Projective geometry is all geometry; that is euclidian, Reinman, Hilbert, non-euclidian, all other geometries are special cases of

projective geometry. Physical reality is a reflection (and vice versa) of this geometry. Space in the sense of projective geometry is bi-polar, that is, it is three dimensional at its "center" and two dimensional at its "periphery". For example, a sphere with an infinite radius has a surface which is both "flat" and "curved" simultaneously. "Centric", three dimensional, space is the place of physical "forces" and physical events, which "forces" are strongest at the "center". Peripheral or ethereal space is the place of etheric (or life) "forces", which are strongest at the periphery. "In the organic world we often have to do with forms arranged in layers more or less eccentrically about some nucleus or kernel. If we imagine such a process to have been brought about etherically - from the periphery instead of from within - quite new possibilities are opened out for the interpretation of such living forms." (Adams pp. 45, Physical and Ethereal Spaces)

Wherever we have to do with matter, or what we ordinarily consider as mass centered spatially extant bodies, we also have to do with a polar aspect, a counter-spatial (ethereal) component. "In all mechanical systems, be they at rest, be they in motion, elastic forces are involved...with every displacement of elastic balance, however small, shades of warmth arise...[leading to]...revelation of the dynamic interplay of space and counterspace...elastic resistant forces of matter have to do with something...ethereal." (Adams, pp. 2, Universal Forces In Mechanics).

Now space, according to this view, is created by Beings out of Light, Light is here used in the sense that Goethe developed in his Theory of Color, whereby color is a result of the "deeds and sufferings" of Light. At the centric pole of space, the relevant Beings create weight, or what we experience as gravity, and at the ethereal pole is created warmth (recall the surprising discovery that the background radiation of cosmic space is not absolute zero as expected, but in fact reveals the presence of heat phenomena, erroneously interpreted as evidence of the big bang).

The result is that all events which occur on the Earth where Nature unfolds her normal activity, and where man resides, occur within two primary "fields"; a centric or gravity "field" and an ethereal or levity "field". (This and the following material are to be found in Lehrs' Man or Matter.) All matter is gravity bound Light, into which is woven a portion of bound levity. The various traditional chemical elements represent different proportions and balances of the gravity and levity "fields". One investigates these different

ent proportions when one investigates the oxidation (combustion) properties of various kinds of matter. Again, in the properties of the table of elements (the periodic table), one finds the "musical" relation of these various proportions. Certain other relations are to be found in the different magnetic and electric properties of various kinds of matter.

Matter then is a property of Light under special conditions of space (Darkness).

Phenomenal Nature, i.e. matter in all its forms, is divided into four kingdoms. One can account for all the properties (or most all) of the Mineral and the Plant kingdoms through the complex interactions of the two "fields", i.e. gravity and levity -life or etheric-(never forgetting meanwhile that at their root is the activity of Beings). The kingdoms of Man and of the Animal possess, in addition to matter and life, the properties of inwardness (consciousness) which both man and animal possess, and for man alone, the property of self awareness.

This phenomenal Nature, with its matter, life, inwardness and self consciousness has two boundaries, an upper and a lower. At the upper boundary is the threshold across which the relevant Beings act, that is the boundary across which "creative" deeds flow. Beyond the lower border, in the realm of subnature lie the "fallen" deeds, the fallen light and chemical ethers as described by Rudolf Steiner.

When we subject matter to certain transformations we "rouse" from its enchanted sleep this "fallen light", i.e. electricity. This one passive "power" becomes available for our use, but due to its intrinsic nature, tends to lead civilization - to "stamp" civilization with certain qualities. Thus we have a civilization fascinated, in fact enthralled, with its technological innovation, but blind to the consequences. For what we do to matter when we extract from it the electrical "power" latent in it is to age it. We hasten the cosmic aging of the Earth through the electrification of our civilization. (This also is the key to the yet to be understood medical disorders connected to this electrification.)

Thus, when we produce a device which is able to generate greater output than input, we have found a way to transmute matter through the interaction of its vibratory (musical) properties, and its electrical properties (gravity/levity balance). We have to keep in mind that the levity "field" is coextensive with the whole cosmos, so that when we alter that "field" where it is bound up with the gravity "field" in matter, we also alter it simultaneously at the cosmic periphery. The energy produced is not free, but in fact involves the

aging and transmutation of the whole cosmos. We have extracted a "power" which was previously bound up in Nature, and this alters the whole of Nature.

To understand this process of "aging" a bit better, we need to enter into the old doctrine of the elements (which remains true, just misunderstood), i.e. the problems of fire, earth, air and water, and the related qualities of dry, moist, warm and cold. This old doctrine was based on a very goetheanistic observation of Nature, which did not impose theories, but rather tried simply to describe Nature as carefully and accurately as possible.

Included in the doctrine of the elements is the idea of ponderable and imponderable substances. Michael Faraday, who is responsible for the fundamental observation of electrical and magnetic "field" theory, used just this terminology. Ponderable substances are those which have material density and weight. Fire and Air are imponderables, and do not refer to the air we breath or the flame we observe, but rather to certain qualitative characteristics. Consider the following statements from Lehrs:

"The element Fire reveals its attributes of warm and dry in a behavior which combines a tendency to dynamic expansion with a disinclination to enter into lasting combinations with the other elements. Thus the attribute, dry, belongs equally to pure flame and sheer dust, though for opposite reasons. Distinct from both these elements are the middle elements Water and Air; with them the attribute, moist, comes to expression in their tendency both to interpenetrate mutually and to absorb their neighbors - the liquid element absorbing solid matter and the aeriform element taking up heat. What distinguishes them is that water has a 'cold' nature, from which it gains its density while air has a 'warm' nature, to which it owes its tendency to expand." (pp. 200, Man or Matter)

"...a magnetic field imparts to the relevant part of space qualities of density which otherwise prevail only in the interior of solid masses...the appearance of electricity...is caused by the loosening of the coherence of the material substance. A similar loosening of the coherence of the magnetic field takes place when its field-lines are cut by the movement of the conductor across it. Just as heat occurs when we move a solid object through a liquid, electricity occurs when we move a conductor across a magnetic field. In each case we interfere with an existing levity-gravity relationship." (pp. 235, Man or Matter)

"...with every act of setting electromagnetic energies in motion we interfere with the entire levity-gravity balance of our planet by

turning part of the earth's coherent substance into cosmic 'dust'." (pp. 239, Man or

These facts make for an enormous responsibility.

One further refinement can be made. Those who seek after these secrets of Nature have a choice, a moral choice. This moral choice is personal, i.e. there is no absolute idea outside us which compels us, but rather it is a question of whether we ask ourselves just how responsible are we willing to be. It is plain from a study of those personalities who have made discoveries in science (even those who are goetheanists, and therefore largely unknown), that what one finds out that is true and not illusory (and seductive) is dependent upon how one approaches Nature. Lehrs' book is the best guide for this, for Nature is Herself desirous of letting Herself be known to those who approach with the right motives in their hearts. Sometimes it will come to such people to know things, but not to be able to produce them, to introduce them into civilization and to profit financially from them. The satisfaction has to be in the achievement of the right understanding. When investigations are made with an awakened conscience as to what may properly be done with that understanding, then there are no secrets which Nature will withhold.

It has been my hope, in writing these brief paragraphs, to point toward an ongoing work which I believe will be of definite interest to the readers of the Journal. I will end by making my own view as clear as possible.

The production of electricity, which has always been a very mysterious process, is in fact an act which steals from Nature the power by which matter is made coherent. Electrification destroys order, but on a subtle level; that is, the diminution of the levitygravity balance does not immediately cause matter to 'fall apart', rather it 'ages' the matter, weakens it and makes it less resistant to other forces.

We stand, especially in terms of the investigation of Keely and Tesla, upon the threshold of further 'discoveries/inventions' revealing even deeper and more significant ways of deriving energy, for our desires, from electrical, magnetic and vibratory phenomena. To the extent we act in ignorance of the real consequences, we place ourselves in the danger of leading our civilization along a course determined not by our own free moral deeds, but rather by the seductive power of the energy (Being) itself.

It is not any accident of mythology that the 'snake power', the pranja of Eastern Kundalini practices, is sometimes thought to be related to the seemingly mechanical pow-

ers connected to electricity. Nor is it an accident that the 'serpent' is the great tempter of man in the Garden of Eden. Even materialistic science recognizes that the universe is a whole and can only be understood on the basis of principles which encompass its total nature. Which to me means Nature's Being, consciousness, and moral characteristics.

Concerning the availability of books. Man or Matter, by Ernst Lehrs, PhD. may be ordered from the Anthroposophic Press, R.R. 4, Box 94-A1, Hudson, NY 12534.

Two of the works of George Adams are currently out of print. The only one available, also through Anthroposophic Press, is Physical and Ethereal Spaces. The other two are much more difficult anyway, so this problem is not really significant. It will be quite enough to master the more elementary text. Should one wish to go on, then letters should be written to Anthroposophic Press encouraging placing these books back in print. Anthroposophic Press does not presently list Steiner's Theory of Knowledge Implicit in Goethe's World Conception, but correspondence directed to them ought to result in directions as how to obtain a copy.

Sympathetic Vibratory Physics John Ernst Worrell Keely

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pathetic association. Thus demonstrating that we are all One with Nature.

Sympathetic Vibratory Physics is a publication devoted to the investigation, study, and practical application of natural and spiritual laws. The purpose of the organization is to enable everyone to better live in harmony with the creative, constructive forces of nature for the attainment of health, happiness and peace. The organization believes that through the scientific and philosophical insights afforded by Sympathetic Vibratory Physics a more wholistic and harmonious future is attainable for all concerned.

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MAGNETIC ENERGY TAUGHT ME NEW BASIC CONCEPTS

or Can't is a Challenge

by LARRY SPRING

There is an old saying that you can't see the forest for the trees.

They used to say a bumble bee is aerodynamically unable to fly. Nobody was every able to convince the bumble bee of that.

I used to say man will never be able to travel through space as there was nothing out there to push against like land, water or air. All the time I was doing just that on a large ball of soil, water and rock hurtling through space in an orbit around our sun which is part of a galaxy of suns and planets. The whole galaxy was traveling at a terrific pace going somewhere. The part I did not realize was that, once you have pushed the molecules of air aside and arrived at a point in space where gravity was very weak or in balance between distant mass like Sun, Earth and Moon, there was nothing to slow you down or stop you. The trick was to apply enough push against Earth and air or just reaction to an action to reach an escape velocity after which you can coast forever. Yes, perpetual motion. I had to revise my basic concepts.

Perpetual motion can exist when there are no molecules of mass to bump into. Its when you try to get more energy out than you put in that the job becomes more difficult. Free space traveling units of magnetic energy are constantly racing in a huge volume from Sun to Earth through that great empty outer space. Space seems empty only because energy does not require a space of its own.

Spherical units of energy travel at 186,000 miles per second. They bounce, they compress when passing through a denser medium, they scatter from an irregular surface and they drive electrons when their magnetic lines of force are cut or distorted. This electron drive results in an electrical current. Radiated magnetic energy has no weight so does not have to obey Newton's laws of mass and motion.

Driving electrons in a conductor or within an atom uses up some of the magnetic unit's energy, as electrons are tiny light mass. It consumes some energy to move them. However the electron movement and resulting electrical current causes a new magnetic field to form around the electron path or conductor. This magnetic field opposes the field that formed it. This direct current magnetic field was discovered by Hans Christian Oersted and expressed in his right hand rule. The opposing field was discovered by Lenz and is known as Lenz's law. Both these phenomena were verified by me, Larry Spring.

The energy thus absorbed reradiates in a global pattern away from the electron path and thins by the square of the distance. This global pattern gives rise to the inverse square of the distance law of light density and all other radiated magnetic energy, like television signal and radar, as well as electrical and gravitational fields. This newly reradiated

energy is again traveling at 186,000 miles per second and drives electrons in the next electron conductor whether it be 93 million miles like Sun to Earth or as short a distance as to the next atom. Electron activity within the atom is known as heat, and the slow movement of radiated energy from atom to atom due to its many steps is known as conduction. This last statement as well, as all other statements in this series of articles that do not fit conventional teaching, are Larry Spring observations and analysis taught to me by the radiated magnetic energy itself, which I believe will stand the test of time.

All radiated magnetic energy is cast off and continues to move at the speed of light which is 186,000 miles per second, 300,000 kilometers per second, 300,000,000 meters per second, 3 x 108 m/sec or a distance equal to more than seven times around the Earth in one second. This I, Larry Spring, verified in 1954 by a very simple method which I stumbled onto by myself.

I was using two dipole antennas and a radion field strength meter. While adding together television signals from the two antennas I recognized I had measured one wavelength peak to peak. All I had to do then was multiply by the frequency per second and come out with 186,000 miles per second. Details of this experiment as well as verification of speed of propagation of the electrical field of a television signal on lead line can be read in my book published in 1986 entitled "My Electromagnetic Spherical Theory and My Experiments to Prove It". This book describes radiated energy as taught to me by the energy itself, and does not necessarily coincide with physics as taught in schools today. It explains hitherto unexplainable physical phenomena and yet does not disturb the end results or the formulas and mathematical equations used in electromagnetic engineering. I have since written two other books as my thoughts and experiments progress. One I call "Electromagnetic Heat" and the other is entitled "Electromagnetic Sea in Which We Live". This last book projects my antenna observations down inside the atom where actions and reactions are similar.

While observing the four gigahertz down link frequency of satellite TV signal on a satellite dish I realized the energy front must be composed of spherical units of magnetic energy much larger than the packages of light energy visualized by Sir Isaac Newton or the photons recognized by Albert Einstein which gave rise to the quantum theory put forth by Max Planck. The clue to a larger third dimensional size was the fact that satellite units of energy spanned across the roughness of flat non-gloss paint while the same roughness scattered or diffused visible light.

If energy units composing the energy front had a third dimensional size, then I was determined to measure it. A

good physicist said "Larry, you can't measure a unit of energy." There is that can't challenge again.

By close observations of meter readings on my satellite receiver backed up by picture quality on a TV set I was able to determine the energy units to be 1/2 wavelength in diameter by passing the satellite signal through various sized screens. This energy unit diameter I have since verified in many other ways. Visible light then with spherical units 1/100,000 inch in diameter as determined by Larry Spring can pass readily through 1/16 inch mesh window screen, while the same screen makes a good bounce surface for satellite signal, which will pass readily through two-inch mesh chicken wire, which makes a good bounce surface for UHF TV channel 27 with a 1/2 wavelength unit of energy 10-3/4 inches in diameter and TV channel 3 at 8 feet in diameter.

The perfect elastic spherical shape can readily be demonstrated with a parabolic solar reflector setting face up on the floor and a styrofoam ball hanging at the focal point. A ping pong ball when dropped into the dish will bounce to the focal point every time. There is no other shape that will do that.

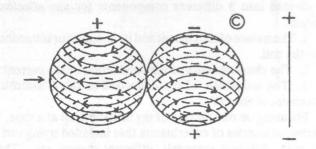
My demonstration solar reflector is painted with flat non-gloss latex paint to scatter the sunlight as before painting it nearly started a fire in my work room from sunlight coming through the window. The rough paint scatters the little spherical photons of light but it does not effect the bounce characteristics of the ping pong ball, 1-1/2 inches in diameter, which is just the size of 1/2 wavelength of the 4 GHz satellite signal.

4 GHz in electronic language means 4 billion cycles per second of alternating electrical current. In one four billionth of a second magnetic energy can travel 3 inches at 186,000 miles per second. Alternating 4 GHz electrical current on a conductor travels 1-1/2 inches in one direction and back 1-1/ 2 inches to make the full there and back trip of 3 inches.

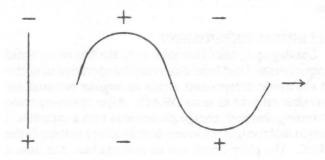
Applying Oersted's right hand rule for a magnetic field around a conductor you can recognize that magnetic fields have 1/2 cycle to grow while the current is traveling in one direction and 1/2 cycle to grow a reverse polarized field on the way back. This alternating current would be casting off magnetic fields with their magnetic lines of force perpendicular to the current carrying conductor.

These fields traveling at 186,000 mps would drive electrons and an electrical current in any conductor lying in a position to cut or distort the magnetic lines of force of these high speed spheres of energy.

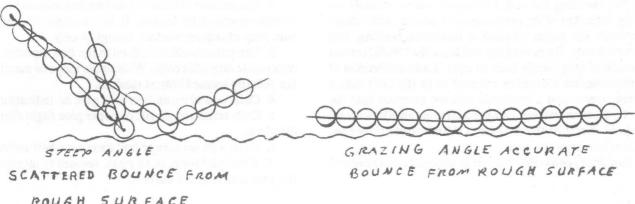
These basic changes open doors through which the explanation of many natural physical phenomena can reach us. Subsequent articles by me, Larry Spring, will reveal the continuing progress I have visualized or demonstrated over the past five years.



LARRY SPRING'S ELECTROMAGNETIC SPHERES Arrows indicate pointing direction of magnetic compass. They do not indicate rotation. + and - indicate direction of driven electrical current in a conductor that cuts the magnetic lines of force.



Oscilloscope pattern of the carrier energy converted to an electrical current.



ROUGH SURFACE

THE COIL/ORAC EFFECT

EXPERIMENTAL OBSERVATIONS

Nicholas A. Reiter

INTRODUCTION

During the months of December 1988 and January 1989, I conducted a series of experiments which yielded results that I believe may add to the existing body of physical orgonomy, or at least may confirm and extrapolate upon certain littler recognized orgonotic phenomena.

The experiments this report will deal with were a direct offshoot from a search for electronic or electro-mechanical OR (orgone) instrumentation. As the reader will see, it was by sheer chance that I stumbled across the effects described in the following sections.

I cannot over-emphasize the importance of other experimenters duplicating my observations. It must be done. Yet, because a large part of the observed phenomena was dependant upon a singular and rather antique piece of instrumentation, it may be difficult to reproduce my procedures and results verbatim. However, I will try to give as much information as possible to the reader so that he/she may be able to improvise equipment and follow through with experimentation.

THE INITIAL EXPERIMENT

Leading up to what I consider to be the first of my series of experiments, I had been observing the operation of different electronic components inside an orgone accumulator (hereafter referred to as an ORAC). After observing some interesting charge/discharge phenomena with a capacitor, I thought that it might prove worthwhile to try a coil inside the ORAC. The piece I used was an antenna base coil from a marine radio set. It consisted of 90 turns of bare silvered 18 ga. copper wire wound air core on plastic strips. The windings were spaced. The coil was about 6 inches long and about 1.5 inches wide. The coil was connected via clip leads to an old (pre-1940s) but perfectly functional galvanometer. I then placed the coil inside my ORAC. (7"x7"x7" ten layer sheet steel/fiber sheet box).

Upon inserting the coil, I observed a slow, steadily increasing deflection of the galvanometer's needle. After about 20 seconds, the meter reached a maximum reading, and remained steady. Removing the coil from the ORAC caused the needle to drop slowly back to zero. Later calibration of the galvanometer (hereafter referred to as the GV) with a millivolt source and a precision resistor revealed that the level of deflection I witnessed was equal to about 30 microamperes (uA). Yet the behavior of the GV indicated a rather unelectrical nature of the current.

I then tried positioning the coil in different configurations

within the ORAC, whereupon I made the following observations:

- The strongest meter deflection occurred when the coil was placed upright along an inner wall or corner of the ORAC.
- 2. Flipping the coil end for end would always cause the polarity of the meter deflection to reverse. This reversal was, however, a slow movement as opposed to a quick reversal which one would expect from an electrical current.

3. The polarity seemed to be due to the position of the coil relative to the ORAC. A later experiment using a slightly shorter coil showed that when the coil is positioned horizontally within the ORAC, the current drops to nearly zero.

4. Positioning the coil immediately outside of the ORAC gave similar, though weaker, indications. As the coil was moved further away from the ORAC, the effect diminished further. The effect was no longer noticeable at distances greater than about 3 inches from the ORAC.

At this point, I felt that what I was seeing would have to be divided into 3 different components for any effective analysis:

- 1. The nature of the current and its coupling or induction into the coil.
 - 2. The characteristics of the conduction of the current.
- The mechanics of the deflection of the D'arsonval movement of the GV.

Focusing on one section of my initial set-up at a time, I conducted a series of experiments that included trying various coils, different materials, different meters, etc. The following three sections of this report are a compilation of all of my observations.

COIL / ORAC COUPLING

A number of different coils were tried in place of the original one.

- 1. Loosely wound helixes of copper wire, with no insulation, and of large diameter, gave best results.
- 2. The number of turns in a coil did not seem to be as large an influence as other factors. In fact, a single wire loop, or a bare strip of copper worked, though poorly.
- 3. The polarity effect noticed in the first experiment was observable only with coils. With single loops or metal strips, the polarity seemed almost random.
 - 4. Coils wound on an iron core gave no indication at all.
- 5. Coils wound on plastic or paper gave slight current indications.
 - 6. Coils with no core or coil form gave best indications.
- 7. Wire insulation, in all cases, seemed to interfere with the production of the current.

Different ORACs were tried.

1. A 2 layer wood/steel box ORAC, a 6 layer plastic/steel wool cylinder ORAC, and a 10 layer aluminum/fibre sheet cylinder ORAC were used in lieu of the original box ORAC. All gave similar results, though the aluminum/fibre sheet ORAC caused some erratic movement of the GV needle.

2. Flipping ORACs on their sides, or placing them upside down did not seem to make any difference. Current polarity seemed to be totally dependent on the coil position relative to the ORAC.

3. When water in a tin cup was brought near the ORAC, the current reading would drop minutely. Dunking one end of a spare clip lead into the water, and draping the other end into the ORAC, would cause the current to drop faster, usually to zero. I consider this to be a key observation.

4. Number 3 was repeated with a ceramic cup. The same results followed. Upon removal of the water and the clip lead, the current would very slowly come back up.

5. Laying hands upon the ORAC would cause the current to increase, though sometimes only slightly.

6. Moving the coil inside the ORAC, in any direction, would cause the current to momentarily jump and then settle out at a slightly higher level.

7. The highest readings attained with any combination were in the vicinity of 60uA.

CONDUCTION OF THE CURRENT

A number of different conductors were tried besides the original clip leads.

- 1. Bare single or multi-strand conductors worked best.
- 2. Soldered connections gave the same results as slip leads. However, old clip leads with the cadmium plating worn off of the clips gave erratic readings.
 - 3. All connections had to be clean and tight.
 - 4. Again, wire insulation seemed to dampen the effect.
- 5. Crossing wires, even when insulated, would sometimes dampen the effect.
- Copper, tinned copper, silver, gold, and lead all conducted the current with equal results.
- 7. Aluminum, steel, and iron wire seemed to block the current entirely.

Standard carbon resistors of different values were put into the

- 1. Resistors put in series would damped the current, though a high ohmage resistor did not seem to cut back the current any more than a low valued one.
- 2. Resistors put in parallel with the coil or GV would not decrease the measured current, but sometimes did reverse the polarity of the current!

THE GALVANOMETER REACTION

Here lies the portion of my experiments which is the most difficult to explain or present. Quite simply put, I was unable to read any of the aforementioned current effects on any instrument except my antique galvanometer! As I mentioned earlier in this report, the GV was, and is, electrically functional. Using a calibrated millivolt source and a 1.105K ohm resistor, I was able to calibrate the GV, which is unmarked, except for a numerical scale. The meter works.

I have not been able to find any other meter, D'arsonval or otherwise which will read the currents I observed with the GV. I have tried over 10 different brands of micro-ampere range D'arsonval style meters with no success. I was also unable to read the currents with either a Fluke or a Simpson digital multi-meter.

After discovering this paradox, my next step was to take the cover off of my GV and examine its construction. Not surprisingly, I found the GV to have a simple, un-shunted, magnet deflected D'arsonval movement almost identical to any of the other meters I tried. Idid find one difference, however. The coil of the GV's meter movement is wound without a frame or support, and apparently is held together by its own shellac coating. On all of the other, modern meters I tried, the movement coils are wound on tiny aluminum frames! I believe that it is this aluminum frame which prevents any modern meter from reading the currents I observed.

SUMMARY OF OBSERVATIONS

From these experimental observations, I have drawn the following conclusions:

1. When a helix or loop of copper is placed in or near an ORAC, a current of seemingly un-electrical characteristics is generated or induced within said helix or loop.

2. Upon reaching a given level for a given coil arrangement, the current seems to be a steady state flow with only minor, very slow fluctuations.

The current is conducted by soft, diamagnetic metals, and is resisted or blocked by para or ferro-magnetic metals.

4. Organic material, in the form of insulation or carbon resistors, appears to hinder, absorb, or damped the current.

5. The un-electrical current is able to develop a reaction force with a magnetic field, and cause a deflection of certain un-shielded D'arsonval meter movements.

6. The level of current induced or generated within the helix or loop varies with the responses of the enclosing ORAC to classical external organotic stimuli.

CONCLUSION

It is obvious that the experimenter will have to use some ingenuity in duplicating my observations. The old galvanometer I used has no nameplate or manufacturer's data on it. There are probably a number of similar units "out there", though. One could possibly find a responsive GV at an electronics surplus store, or an antique shop. Another option would be to build a coil/magnet arrangement based on a D'arsonval meter movement. A design that I believe might work is shown in figure A. I have not yet tried it though.

I believe that these observations may give some insight into two areas of orgonomy which have apparently been somewhat neglected:

1. The development of accurate OR instrumentation.

2. The re-development of the OR driven motor.

It is my hope that those who read this report will be able to duplicate my observations and carry out further investigations in this area of orgonomy.

UPDATE ON THE COIL / ORAC EFFECT -- 4/24/90

- 1. The device shown in fig. A on the COIL / ORAC EFFECT was tried out in February 1989 and did indeed work, although the deflection was quite small. Several other variations of this device were tired, however none of them have indications of current which were any better than the original.
- 2. Around March of 1989, the Coil / ORAC effect began to diminish, and eventually "went dead". Different ORACs were tried, along with variations in wiring. Nothing seemed to make a difference.

However, around November of 1989, I tried out the coil and galvanometer arrangement with a newly constructed 20

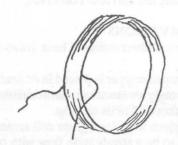
fold steel and fiber sheet box ORAC. The Effect was once again present, and back to levels of current readings corresponding to those observed originally. The Effect is currently active, and further experimental work with it is continuing as time permits.

3. The main thrust of my experimental work is currently in the area of amplifying the Coil / ORAC Effect to higher, more useful levels. Sadly, I have had no real success so far. More reports will eventually be generated regarding these experiments.

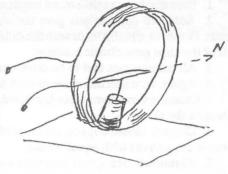
4. There is no doubt, at least to this experimenter, that the Coil / ORAC Effect is the Orgone Motor Effect of Wilhelm Reich. However, without a means of amplification, which would functionally correspond to Reich's "Y" factor, the effect remains a subtle, marginally measurable entity.

* Currently no further experimentation is being carried on. This information is being released for other experimenters to work with.

Figure A



- Wind approx. 50 turns of #30 magnet wire around a cardboard tube wrapped with wax paper.
- 2. Coat coil with white glue and let dry.
- When dry, slip out cardboard tube, then peel away wax paper leaving a rigid air core coil.
- 4. Glue coil upright to a wooden base. A cork with a needle through it is glued inside coil. A magnetized steel pointer is fashioned and then balanced on top of the needle point.
- 5. The pointer, acting as a compass will align itself N and S. Position the base of the unit so that the windings of the coil are parallel to the pointer. The leads of the coil are then connected to the experimental coil/ORAC assembly. Any current reaching the "meter" coil should result in a deviation or deflection from N-S alignment.



For more information on orgone energy and orgone accumulators contact:

James DeMeo Natural Energy Works P.O. Box 864 El Cerrito, CA 94530

Natural Energy publishes <u>The Orgone Accumulator Handbook</u> by James DeMeo, an excellent experimental guide to the subject. Many related titles.

The Wilhelm Reich Museum PO Box 687 Rangley, ME 04970

Source of Dr. Reich's works on the discovery of orgone energy. They sell plans for a basic accumulator, as well as reprints of many of Reich's experimental papers and journals.

VIKTOR SCHAUBERGER' BIOLOGICAL SUBMARINE

by Albert Zock

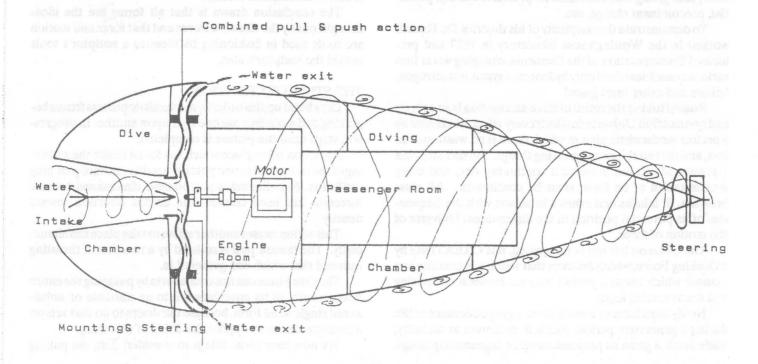
The biological submarine once had the attention of the German War Lords, but Viktor Schauberger made it look as though it were not very useful, as in his opinion, bio-technology is for supporting progress and not for destruction. This submarine idea was taken from the observation of fish, especially of trout, which can stand motionless in a flowing stream, just by taking water in and out. This process has two functions, first it creates a vacuum in front of the mouth into which the fish gets sucked, and at the same time provides food, as the water contains all that the fish needs. While the food goes into the digestive system, the water is forced through the fan-like structure of the gills, which not only absorb the oxygen needed, but also push the water backwards. This specially compressed water does not mingle right away with the rest, it glides along the conical body like a wedge and shoves it forward. In addition, on the scales it forms little whirls which enhance the push further.

However, Viktor Schauberger was not the sole observer of this phenomenon. Before him others not only formed the same idea but even constructed prototypes with some results. One inventor, A. Borner, came to the conclusion that the speedy motion of a fish is relative to the size of its gills. He constructed a boat with a precise opening in its bow, where a turbine sucked in water like a fish, and pushed it out through slit-like exit ports in such a way that it glided along the hull like a sheet, not only separating it from the friction of the

outside water, but also giving it an additional push forward. Further, he applied such skin depressions like sharks have on his ship's hull, presuming that they cause small swirls, and so increased the forward motion. Borner even incorporated the slippery skin layer that fishes have by applying oil to the hull to reduce friction. He hoped all this would bring a 60-80% reduction in fuel. Indeed, experiments with his boat FORELLE, meaning 'trout', achieved twice the speed, while still using the same amount of fuel.

Apparently, Borner did not know the spiral-vortex, which is an invention of Viktor Schauberger. If properly applied, it will not only increase speed, but also reduce fuel consumption to a minimum!

This drawing by Dipl. Ing. Water Schauberger, Viktor's son, shows such a submarine. His bio-technical submarine has a movable bow, which gives the boat the flexibility fish have. The conical and rifled water-intake permits a variable step-up, creating a strong torque on the water, which, after entering the implosion turbine, will be intensified to such a pitch, that now its recoil (resonance) is driving it instead of the motor, as bio-technical applications always have a pull and push action. Such a turbine consist of tapered-down pipes with inside rifling which are bent into spirals. Such FREE ENERGY is not a question of time, rather the will to use it, as it already exists, giving us a chance to move on water, under it and in the air using only a fraction of the energy we use today!



UNDERSTANDING THE CONTINUOUS UNIVERSE PREPARING FOR TRANSMUTATION

Rhetta Jacobson Baumgartner

The workable Cosmogany of Dr. Walter Russell presents us with the "continuous atom". Recalling his important contributions to Science, among which are the completion of the hydrogen octave (he explained that there are twenty-one other elements which precede it and that hydrogen itself is not a single element but a whole complex octave); and his discovery of the existence of the two atomic elements which he gave to the scientific world in his revised Periodic Tables of the Elements in 1926, we will give serious attention to Russell's explanation of Transmutation of the Elements.

To consider these explanations one must discard his concept of matter as being substance. This Universe is substanceless. It consists of motion only, polarized light in

motion expressed as waves!

Moving waves simulated substance. Fast moving short waves simulate solids, while slow moving, long waves simulate the gases of space which surround solids. Here is an example of how motion can appear as a solid: If something as rarified as a cobweb could spin fast enough it would simulate a solid steel disc—and it could cut your finger off just like a solid disc. It would not be the "substance" of the cobweb which cuts, it would be the motion which cuts.

Russell's Cosmogany of light, matter and energy tells us that there are not separate substances or elements of matter, but that these seemingly different "substances" are merely different states of motion or wave vibrations. The different states and characteristics of the various elements appear because of the position that substance finds itself in along the wave, thus giving that substance its pressure, density, potential, predominant charge, etc.

To demonstrate the simplicity of his theories Dr. Russell worked in the Westinghouse laboratory in 1927 and performed Transmutation of the Elements, changing water into various quantities of not only hydrogen, oxygen, but nitrogen,

helium and other inert gases!

Russell told us the result of force and motion is an orderly and symmetrical Universe in which every effect is balanced by a perfect mechanistic plan in which there is no waste and no loss, and that all things are growing things. Further still, this Universe of motion must be a continuing one, and every manifestation of its force must be continuous. All mass breathes. It inhales and exhales in unison with the frequencies of its potential position in the dimensional Universe of the motion of force.

The Universe has not been <u>created</u>, it is CREATING by a thinking Force, which destroys that which it is creating in a manner which keeps a perfect balance between composing and decomposing form.

Newly born form or mass is given a preponderance of life during a generative period, which is maximum at maturity, while death is given its preponderance in degenerating things.

Death does not mean discontinuance, for no idea discontinues. Death means disappearance; just an interval between that and reappearance. This is a repetitive universe of continuing things. There is always a gap in every cycle of motion, when expanding things get beyond our physical range of perception; but they come back again within it always.

"The Universal One", by Walter Russell, shows a twoway plan of the One Force where the only thing created is form, and the only form created is the sphere. The sphere is the ultimate result of all action. Within the sphere all other forms are included. It also traced the fact that form is an illusion of motion which changed continually in that orderliness which we call growth and evolution.

Growing things appear from invisibility, grow to a maximum of perfection in maturity, and disappear into invisibility. Russell goes through the entire process step by step and discloses the forces and illusions of Nature and Science along

the way.

Every effect of motion appears in every high potential and disappears in every low potential in this Universe. Invisibility does not mean discontinuance. It means only that temporary disappearance which follows every appearance and which is, in turn, followed by reappearance.

If we question our thinking process, we will find that ideas generate in the same manner, grow to a maximum and then degenerate because of fatigue into disappearance. If we fit the mechanics of life and death to this process, it will be

found to correspond exactly.

The conclusion drawn is that all forms are the ideas thought out by the Creative Force and that force and motion are tools used in fashioning its ideas as a sculptor's tools mould the sculptor's idea.

THE STEPS OF CREATION

Let's build up this orderly, mechanistic process from a beginning and superimpose one idea upon another in progressive steps until the picture is completed.

An action takes place which has for its desire the gathering of the outer void to one point by a pulling inward pumping oscillation. Non-dimension now becomes dimensional, because direction has been created, the inward direction toward density.

This action causes another effect to take place simultaneously. The inward pull is resisted by a reaction of thrusting outward that which was gathered in.

The One Force can not create form by pumping the entire homogeneity of its equilibrium into an unstable or unbalanced single solid form, because the desire to do that sets up a resistant desire to oppose the doing of that thing.

We now have three things to consider; first, the pulling

inward, charging force which approaches itself only because it focuses on a point; second, the thrusting outward discharging force which departs from not only the other force, but from itself, because it spread itself out into a larger area; and third, a quality of resistance which belongs equally to both forces.

Now we come to the third step. After finding that 100% of the One Force is divided into 50% each of an action and reaction force, the action force, which we will call the electrogenerative force, in the fact that its 50% pulls half of the energy of the whole tenuous volumes occupying thousands of millions of cubic miles into small, dense volumes so infinitesimal in comparison with the whole that each one might be compared to a single speck of dust in the center of an armory.

This is just what the generative force desires to do and a thorough comprehension of this most important step in the scheme of creation is absolutely necessary in order to understand the advantage that the generative force, centripetal motion and Implosion, has over the degenerative, in the struggle for supremacy.

Consider it for a moment. One half of a total quantum of energy accumulated at the exact center of a volume so vast that its particles are hundred of millions of times closer together than the particles of the other half.

What is the result? "Solids" of high potential and high inductivity become insulated from each other throughout the Universe by low potential fields of low conductivity. Out of "space" the generative force has pulled whirling vortices into gravitation centers, to accumulate energy into high pressure centers which we call solids.

Back again into space--the degenerative force pushes this accumulated energy by that process which we know as radiation.

What an inconceivably great advantage the generative force has over its equally strong opponent can be best realized by comparing the energy locked up in a ton of coal with an equal amount of energy in fully expanded water vapor miles above the earth. It is the advantage of <u>concentration</u> over decentration.

It is as though one half of New York City's population were spread out over the continent, each one ten miles from his nearest neighbor, and put into business competition with the other millions who are all concentrated in a space more conducive to working together.

We are now ready to consider the next step, a vastly important step which we will designate as "relative Preponderance". The idea of preponderance of opposite effects present in every mass has been stoutly denied. In mass electric practice a mass is considered either positively or negatively "charged". Such a possibility as both charges being present in every mass is not considered in modern Science.

We should not only see how absolutely necessary it is to a <u>continuing</u> Universe but how evident it is in Nature which plainly tells us that the Universe is not running down to zero, but is winding up as fast as it is running down. Radio-activity and genero-activity are each exactly fifty percent of the whole. Remember the fact of relative volume and realize that the two equal forces are divided, one into a very large volume of the same amount of energy spread out into what we call low potential, the other equal half packed closely into a small volume of high potential.

THE UNIVERSAL PISTON

Now, we will add one more two-way idea to the plan which we will call expansion pressure (which is the negative direction toward low potential), and contraction suction (which is the positive direction toward high potential). Let's connect the maximum low and maximum high positions of these two opposite "pressures" with pistons to get the driving force of the Universal Machine.

The Machine itself is made up of two sets of pairs of wheels, all geared together, each pair cross-geared so that each set is turning in opposite directions, and graded in sizes from large slowly turning ones, to small ones which turn 186,000 times per second. These sets are so arranged that the smallest is next to the biggest in each set at one end of the piston; while at the other end, which is the middle of the cycle, both sets of wheels are exactly the same size.

To understand why the little wheels are next to the big wheels in each case, it is necessary to understand that the One Force discovered that it could not send each entire half of its energy in opposite directions around the cycle, so each had to lose a little to the other in a series of progressive preponderances and take them around the cycle with them in pairs of effects instead of as single effects.

Here we will briefly interpolate another idea, the idea of time, and the balance of time in its two directions. Positive time, which is generative, in proceeding in the inductive direction, must accelerate in order that small volume may sweep over areas equal to areas swept over by large volume. In the opposite direction, negative time, which is de-generative, must decelerate to keep a balance of all dimensions.

That is why all opposites must be in pairs and why all but the two sets of pairs half way round the cycle have different sized wheels. Consider the time element in rotation and revolution, for example. They are one set of pairs.

Mercury must revolve very fast to sweep out areas equal to Jupiter's, in proportion to their relative potentials, and Jupiter must travel very slowly in order to keep from getting ahead. On the other hand, Jupiter must rotate extremely fast to balance Mercury's slow rotation.

We are ready for the next step, which should be anticipated. The electro-gravitative force does not keep on attracting new energy into its vortex forever; for the energy in its respective volume of influence would be used up. To restore the supply, the radiated energy, which was exhaled from the generated solid into the vast field surrounding it, bends around gradually to an equilibrium position where both opposing forces are even enough to neutralize each other. At this low potential position the radiated energy stops expanding, and contracts as it bends in a slow gradual spiral curve

within the intake of the generating vortex.

Now, we are at the fifth step of this progression with a realization that a repetitive cycle of a series of two opposing dimensions has been perfected as a mechanistic means of bringing form of varying densities into the Universe.

We now have positive spiral suction curves, which we call "centripetal force", and negative spiral pressure curves which we call "centrifugal force". All energy must travel along those two curves no matter whether that energy is an invisible flux or a visible solid.

Because of the spiral concept in a curved Universe one must conceive of spiral gears and many eccentricities added

to the Universal Machine. This concept is necessary in order to understand the orderly progression of an effect which is known as crystallization. To put it briefly Nature is aiming at the true sphere in all her gyroscopic turnings. She finishes her sphere only in one part of the Universal Machine, which is half way around the cycle where the wheels are the same size. In the wave, this position is at trough and crest.

At this position an element called carbon crystallizes in true cube. It is the only element which does crystallize in absolutely symmetrical true cube,

because it is the pivotal point of nine efforts of Nature to get her two halves equally divided to equal opposites.

THE OCTAVE WAVES OF THE ELEMENTS

The waves on Russell's Periodic Chart are what are known as the octaves of the elements. The octaves are spiral waves along which the elements are strung like discs on a string.

As a matter of fact, the elements are the wheels of the Universal Machine and the reason for the variance in form, eccentricities, gearing and crystallization is because they all are parts of a sphere within which all separate parts fit together.

In carbon the nucleus of the atom is a true sphere, but in no other atom is there a true sphere. All other atoms only approximate the sphere and then only in passing the amplitude positions of their waves, where both sets of wheels of the machine are the same size.

The nine octaves constitute a complete cycle of all effects of motion, of which the first half overlaps the last half of the last octave. This makes carbon the pivotal point of the cycle.

Radio-active emanations of the elements at the end of the cycle have the speed of light in their return to space. Genero-active corpuscles have exactly the same speed as they begin their journey from the unseen universe into the visible range.

Of the waves, only part are within the visible or perceptible range.

The rest are beyond perception as elements, but their existence is clearly indicated in the spectra of all other elements.

SPECTRUM LINES: A UNIVERSAL LANGUAGE

Russell pointed out the fact that spectrum lines were letters and words of a Universal Language of light which plainly recorded all effects of motion, and asked Science to read each spectrum as cumulative history and not as an individual record of each element.

He stated that light was Nature's means of communication between the spiral controls of communication between the spatial controls of her invisible universe and the poles of her universe of form.

The language of light is as legible and as orderly as our written and spoken language. Its pressure symbols have as definite a meaning as our alphabetical symbols, or as the dots and dashes of our telegraphic code. They all have their relations in the spectrum cycle of varying pressures.

Much of this language has been available to Science for

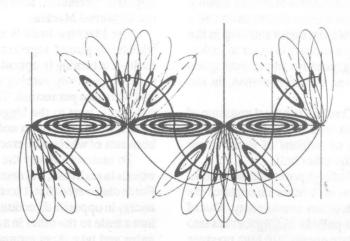
many years, through spectroscopic pressure lines, but Science has translated each set of pressure lines as belonging to one unit or one element. Science has not realized that each element contains within it all of the other elements, just as this planet, which is an "electron" of an element, contains all of the other elements within it, being just preponderantly one element.

Russell also stated that all of the elements of the entire cycle are within each other and that by making allowance for the changing pressures of each succeeding octave, the history of the past could be clearly deciphered. This idea of the existence of "patterns" of all evolving things recorded in wave dimensions and locked up in the inert gases until the time of their regeneration was ridiculed by the Scientific world, which was not then ready to consider a continuing universe of motion, even though Russell pointed out very clearly the history of the evolution of iron from its beginning in the unseen universe up to its present position in its cycle in its spectrum lines.

TRANSMUTATION APPROACHING

When Science is fully willing to accept the continuity of all effects of motions the roads within the unseen universe will be as clearly posted as the Lincoln Highway.

Russell also pointed out the fact that hydrogen, carbon,



silicon and the other overtone elements born on the amplitude positions of their waves, were not single elements, but were complex ones. Each one of these contains seven full tones within it. In the case of carbon and silicon many split "tones" of new metals of great value to industry can be secured by understanding Nature's simple principles.

Carbon metal, for example, will have a tensile strength of over three hundred thousand pounds. Silicon steel will become an ideal structural steel of more than double the present tensile strength, and very much cheaper because of the unlimited supply of sand as compared to iron ore.

By understanding Nature's method of acquiring density, industry can at least double the density of any metal. Nature

knows how to compact her atoms so that a cubic inch weighs a ton. Man has all the electric power at his disposal that Nature has but he has not yet observed how Nature contracts her atoms. He has not even believed that Nature is genero-active; so he has been content with expanding her atoms, then letting them freeze as they will instead of as he wills.

When he is willing to accept the idea of the Universe as a complexity of solenoid coils of varying dimensions which exert their influence two ways simultaneously, and that every radio-active effect of expansion is simultaneously accompanied by a genero-active effect of contraction, he will then command Nature to give him greater density in the materials furnished him by her, for his use, instead of passively taking them as created and unalterable finalities.

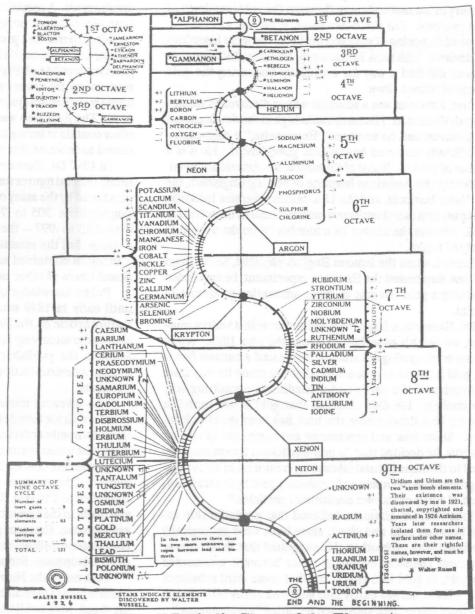
We are close to the day when industry will have this knowledge of now unbelievable densities and the advantage of transmutation of one substance into another.

Both of these effects of motion are attainable only through knowledge of the wave and of the laws of polarization. Before that day comes, however, science must comprehend the great simplicity of Nature's plan and eliminate the inconsistent and unworkable complexities of their many theories which have no precedents in Nature.

Nature's entire simple plan is written in each and every individual wave! To know the mechanics of the wave is to know the entire secret of Nature!

For further information on transmutation applied to the production of Hydrogen, subscribe to "CAUSES" Newsletter, 1990 Issues from Energy Unlimited; P.O. Box 493; Magdalena, N.M. 87825.

The books of Dr. Walter Russell are available from "The University of Science and Philosophy"; P.O. Box 520; Waynesboro, VA 22980.



The Russell Periodic Chart of the Elements

AMERICA'S AMAZING ALCHEMIST

by Vincent H. Gaddis

Did Dr. Stephen H. Emmens find the key to the dreams of the medieval alchemists, or was he a clever imposter? The question remains unanswered. But there is no doubt that he did produce gold from some source which he sold to the United States Mint. Moreover, another scientist, by following his instructions, attained partial success. Dr. Emmens, however, like the fabulous sorcerers of legend, carried to the grave his fundamental secrets.

If Dr. Emmens was truly a modern Rosicrucian, the rediscovery of his methods may threaten the gold standards of world markets. On the other hand, if he was a fraud, his scheme of disposing of gold was probably the most ingenious ever devised. The facts in the story, however, indicate that Emmens did find a way for artificially increasing the gold content of coined silver.

First, Emmens was a scientist whose discoveries cannot be lightly dismissed. His name ranks high in the development of explosives; and he invented "Emmensite," a high-explosive officially accepted by the U.S. government. He was a member of the U.S. Board of Ordnance, the American Chemical Society, the American Institute of Mining Engineers, the U.S. Naval Institute, and the U.S. Military Service Institute. His reputation as a chemist was international in the scientific world. He was the author of a number of books on a wide variety of topics.

Second, when the famous English physicist, Sir William Crookes, duplicated the Emmens experiment, he succeeded in gaining a gold content in silver amounting to almost 27 percent.

Dr. Emmens, a large, well-built man with a walrus mustache, started his experiments about the year 1895. While making some geological studies, he noticed a curious fact—that gold is found in greenstone that has made its way from the interior of the earth under conditions permitting very slow cooling. He also observed that gold is not found in ordinary lava flows where the heat has been quickly dissipated. Since lava and greenstone are composed of similar elements, he decided that "a non-auriferous limestone, subjected to the same natural laboratory treatment as an auriferous greenstone, is capable of producing gold by the transmutation of some of its own constituent particles."

Likewise, Dr. Emmens believed that a relationship existed between gold and silver, since both were geologically associated with each other. He suggested that in the course of natural chemical evolution silver becomes transmuted into gold, or gold into silver, "or that some third substance exists which changes partly into gold and partly into silver." This third immediate substance he called "argentaurum."

Experiments were started in his New York laboratory. Several years later Dr. Emmens claimed to have produced

argentaurum by a method which he kept secret, although he revealed the general principles involved in the process. He used as his material Mexican silver dollars, certified by the U.S. Mint as containing less than one part in ten thousand of gold.

First, there was a mechanical treatment. The silver was subjected to continuous hammering at very low temperatures in a special cylinder. He called the apparatus a "force-engine," and it seems to have a combination riveter and hydraulic press. Aspecial arrangement rapidly carried away the heat generated by the hammering.

Next, there was a process of fluxing and granulation. This action, Dr. Emmens wrote, rendered the "molecular aggregates susceptible of displacement and rearrangement." The mechanical treatment was again applied to the silver, followed by a chemical process in which modified nitric acid was used. The final step was refining. It was necessary that the silver contain at least a trace of gold, and the Emmens process served to increase this gold content.

In 1897 Dr. Emmens started selling his gold to the U.S. Mint. Official figures for the amounts of "argentaurum gold" purchased by the assay office in 1897 reveal a fineness of gold ranging from .305 to .751. A year later the content varied from .313 to .997 — the latter being almost pure gold. It is obvious that the results of the process were not consistent. The ingots contained an alloy of silver and gold, with occasional traces of other metals.

Public knowledge of this modern alchemy did not come until early in 1899 when the New York <u>Herald</u> printed a feature article on the Emmens discovery. A storm of discussion and controversy immediately followed. James Gordon Bennett, the publisher, issued a challenge to Emmens to present a demonstration of his process before a committee of scientists.

The inventor immediately accepted. However, the famous publisher found it impossible to form a committee. He invited a number of scientific experts, including Nikola Tesla, to witness a demonstration, but they all refused. Again, it was found that the cost of the demonstration would be no small matter. The expense of equipping a new laboratory was estimated at \$10,000. On the other hand, if the experiment was made in the inventor's own laboratory, the cost would be even greater. Emmens pointed out that the fraud-suspecting committee would demand that one floor be torn up and all his other equipment dismantled.

As a result the New York <u>Herald</u> withdrew its challenge, claiming that the conditions for a demonstration could not be arranged. Meanwhile, Emmens quietly continued his work of apparently manufacturing gold and selling it to the Mint. During one nine-months period his sales of gold to the

government amounted to \$8,000.

Rumors of Dr. Emmens alchemy had circulated throughout the scientific world before it reached the public. In May, 1897, Sir William Crookes wrote to Emmens from England inquiring about his experiments, and their correspondence continued for about a year. Almost from the beginning, however, the personalities of the two men came into conflict, and their relationship ended in bitterness and controversy.

Sir William was a scientist -- placing the acquisition of knowledge above all other considerations. But Dr. Emmens was first an inventor, and he demanded that his work bring a financial return. In one letter he wrote: "The gold-producing work in our Argentaurum laboratory is a case of pure Mammon-seeking. It is not being carried on for the sake of science or in a proselytizing spirit. No disciples are desired, and no believers are asked for."

Sir William questioned the theory of argentaurum as an immediate substance between silver and gold. In reply, Dr. Emmens outlined his general method, but he never revealed all the details of his process.

He told the English scientist to take a Mexican dollar, and "dispose it in an apparatus which will prevent expansion or flow. Then subject it to heavy, rapid, and continuous beatings under conditions of cold such as to prevent even a temporary rise of temperature when the blows are struck. Test the material from hour to hour, and at length you will find more than the trace (less than one part in ten thousand) of gold which the dollar originally contained."

In duplicating the experiment, Sir William used a steel mortar with a close-fitting piston. The piston had a weight of twenty-eight pounds, and was raised and dropped a foot sixty times a minute by means of a cam on a rotating shaft. The mortar was enclosed in a coil of pipes containing liquid carbonic acid, and immersed in solid ice. The hammering process covered a period of forty hours. As a result the gold content of the silver was raised from .062 to .075 -- a difference of 20.9 per cent. It should be pointed out that no chemical processing followed the mechanical treatment.

Dr. Emmens considered this experiment a valuable independent testimony on the truth of his theory. Without asking Crookes' permissions, he published an account of the results, and the English physicist never forgave him for taking this liberty. Sir William complained bitterly that Emmens had betrayed a confidence, and had placed an importance on the experiment that it did not deserve.

Later Crookes made a second experiment that resulted in total failure. In this attempt, however, the physicist used chemically-pure silver. Emmens had previously stated that the silver must contain at least a trace of gold in its composition for the "force-engine" to produce more gold. But Sir William had either forgotten this statement or regarded it as unimportant.

In March, 1898, Emmens wrote the following paragraph in a letter to Crookes: "You have made two experiments. In one you employed metal from a normal Mexican dollar and obtained an increase of nearly 21 per cent in the contained

gold. In the other you employed abnormal Mexican dollars, and obtained no gold. It seems to me that your duty is to dispassionately announce both experiments."

But the English scientist apparently had no desire to have his name linked with modern alchemy. Moreover, Sir William made a second unfortunate mistake. He asked Emmens to send him "a small piece of the gold you have made." Emmens sent him a sample of the product he was selling to the U.S. Mint, which, naturally did not contain "argentaurum," a substance which Emmens considered a temporary one in his process.

However, Crookes called the sample "a specimen of argentaurum," and published a detailed analysis of its composition in a British scientific periodical. He pointed out that it contained only well-known elements, and that the spectrograph revealed "no lines belonging to any other known element, and no unknown lines were detected."

By this time the correspondence between the two men had been strained to the breaking point. Sir William had spent a lot of money on his experiments, and the refusal of Emmens to go into exact details regarding his process was an added source of irritation. He, likewise, felt that Emmens had violated his confidence by publishing parts of his private letters.

The inventor, on the other hand, was annoyed by the Englishman's suspicions, and his refusal to continue or publicly report his experiments. In May, 1898, he wrote his final letter to Crookes: "Really, don't you think it poor sport to ride the horse of grievance? You and I are growing old, and we may surely turn our time to better account than in exchanging complaint and repartee over such a trifling matter as to whether an experiment with a bit of metal should or should not be treated as a weighty secret?"

The English scientist never replied.

A year later Emmens published a book entitled <u>Argentaurana</u>, or <u>Some Contributions to the History of Science</u>. It contained a general outline of his methods, together with his correspondence on the subject with Sir William Crookes. Shortly later he exhibited his process at the Greater Britain Exhibition.

Did Dr. Emmens actually created artificial gold which he sold to the U.S. Mint? In one assay report of "argentaurum gold" made by the government, it was stated that the ingots contained impurities of a kind "constantly present in old jewelry." In referring to this report some sixty years ago, the British writer Lieut.-Commander Rupert T. Gould, R.N., stated that this "was as neat a way of calling Emmens a "fence" as could be imagined." On the other hand, the same impurities -- traces of copper, platinum, lead, zinc and iron -- are to be found in coined Mexican dollars.

Dr. Stephen H. Emmens died shortly after the turn of the century, and his secret died with him. No evidence of fraud has ever been found to discredit America's only alchemist. And the whereabouts of his mysterious but very real argentaurum gold, once stored beneath Fort Knox in coins and in bars, today remains unknown.



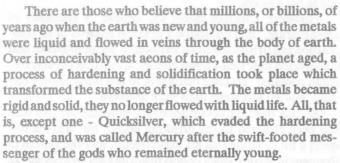
QUICKSILVER

MERCURY'S LIQUID METAL

Alison Davidson

"The world of nature consists of many forms which are reflected in a single mirror - nay, rather, it is a single form reflected in many mirrors."

Muhyi 'd-Din ibn 'Arabi



Mercury is one of the strangest substances on earth, and holds a special place among the ranks of the metals. Although twice as dense as iron, 14 times heavier than water, and with one of the highest atomic weights, it remains a liquid

Like the noble metal silver, it gleams when it flows in a metallic stream; it is the water of the metallic world, moistening and dissolving metals the way water dissolves salts. On account of these properties it gained its chemical name hydragyrum (Hg) from the Graeco-Latin words for water and silver.

I remember being fascinated by this metal back at high school. We used to 'borrow' it from thermometers in the laboratory and play with it for entertainment during boring science classes (that was before learning of its toxic properties!) If you've ever handled mercury you will remember its mysterious fluid weight and great power of cohesion. If the liquid mass is dropped it instantly shatters into countless droplets, each forming a perfect sphere. But just as rapidly these drops join and are absorbed back into the whole again, leaving no trace on the surface where it was dropped. Quick-silver is an apt name to describe the mobility of this Mercurius Vivus of the ancients.

A NATIVE METAL OF EUROPE

Mercury could be called a European metal as the richest deposits are found in Spain, Italy, Yugoslavia and Russia - although smaller deposits have been heavily worked in the states of Nevada, California and Texas. Native Americans once used the ore as a pigment, and it also formed the basis of vermillion dye.

The mines in Almaden, Spain, go back to ancient times and once supplied the world's demand for this metal. With the discovery of Mercury's ability to dissolve gold and silver, the ancients learned how to leach these precious metals from the ore, the Moors being attributed with discovering mercury amalgams. From Almaden the Romans sent great quantities of mercury ore (cinnabar) to Rome to extract the metal; from Almaden the Spaniards transported hundreds of tons of mercury a year in their sailing ships to the great silver mines of South America. When the richest silver deposits were exhausted they used the mercury to exploit the poorer ores, and no doubt the miners, many of whom must have became ill with mercury poisoning. For a long time mercury was transported in sheepskin bags.

In nature mercury is found in its familiar liquid metallic state, as tiny globules and larger droplets secreted within the matrix rock, or it often occurs in these deposits in its single ore form of cinnabar, or Mercury sulphide, which the ancients ground with vinegar to extract the metal.

This beautiful deep red ore, sometimes known as 'quick-silver blende' transforms mercury's heaviness and density into surprisingly light semi-precious crystals. The presence of sulphur reveals a hidden brilliance of colour in mercury that leaves little trace of its metallic nature. This relationship between sulphur and mercury was regarded as one of nature's special processes by early metal workers and alchemists.

CHEMICAL MERCURY - THE "METALLIC WATER"

As 'metallic water' mercury dissolves the soft metals, first by moistening them, then absorbing them to form amalgams. Gold, silver, tin, lead, copper, zinc, cadmium and alkaline metals all succumb to the power of mercury.

However iron, and the iron related family of metals such as nickel and cobalt resist this dissolving power (so does aluminum), and mercury can be stored in iron as well as glass containers. In many respects iron and mercury are completely opposite metals, especially when mercury's extreme mobility is contrasted with iron's intense consolidating power.

Mercury's mobility is evident throughout all its changing forms. Like water it is easily transformed from liquid into gas, or into a frozen solid state. It can lose its form in solution or acquire a new crystalline form, or changing its state, it becomes a new substance filled with colour. Because of this tremendous capacity for transformation, mercury symbolized more clearly than any other substance the one *materia prima* of the alchemists - the primal cosmic substance which is capable of taking on all possible forms and states.

Mercury is the most volatile of the metals, boiling and vaporizing into gas at only 359° C, and freezing at only -39° C,

after which it solidifies to form a silvery-white, very malleable and ductile mass, soft and easily cut.

While a poor conductor of electricity and heat in its liquid state - "It is only externally lively, not having yet achieved the inner mobility of conductivity" - when frozen into a solid, mercury becomes a good conductor and takes its place in the table of metals between gold and copper.

Although a poor conductor, liquid mercury is extremely sensitive to heat, contracting and expanding exactly with the rise and fall of the outside temperature, giving us its most familiar use in thermometers. It is also used in barometers,

vacuum pumps and electric switches.

As a liquid metal mercury has a special affinity with the forces involved in chemical reactions, those forces which "appear and work primarily in the liquid realm." It is an important catalyst, beginning and speeding up certain chemical combinations and is described as "uniting and harmonizing the chemical polarities."

On every level it is Mercury's nature to associate, to bring together other metals and chemicals, eager to form alloys and amalgams. We are all familiar with amalgam dental fillings (containing over 50% mercury!) used in allopathic dentistry since the 1800's. Only now is the dangerous toxicity of these mercury amalgams coming into public awareness. Hopefully we will soon follow the lead of the more enlightened Swedish authorities who will ban the use of all mercury in amalgam fillings by 1991.³

This power to combine diverse substances has also led to the use of Mercury in explosives, where it holds a tense balance between highly explosive elements. An example is mercury combined with nitric acid and alcohol to form mercuric fulminate, a highly unstable explosive and an essential element in detonating dynamite. The brilliant explosives expert Jack Parsons, a member of our early space program and also a well known occultist, was killed by an explosion of mercury fulminate. (Curiously, Mercury is said to rule over both travel and magical operations).

Just as easily as mercury combines with other elements, so is it freed from these combinations. It dissolves and amalgamates, catalyses and separates with equal ease. It is the "solve et coagula", the basis and key symbol of the alchemical work.

The chemical activity of mercury is not limited to its liquid state, even the light of a mercury arc lamp has a strong chemical effect, radiating its metallic properties in vaporlight form. Wilhelm Pelikan mentions that ergosterol when irradiated with this light, can be transformed into a substance resembling Vitamin D. Whereas the ore of mercury is a deep warm red, mercury vapor gives off a cold, intense green-blue light giving the flesh a corpse-like pallor. This light, high in violet and ultra-violet rays, is reminiscent of the light in high mountains and is used in artificial 'alpine sun' lamps.

Returning for a moment to the contrasting properties of iron and mercury, we find that while iron oxidizes easily and rusts in contact with air, mercury remains unaffected. But a relationship between mercury and oxygen is formed when the

metal is heated almost to boiling point, where it sucks in the oxygen to form a yellowish-red oxide. On further heating mercury expels this oxygen and is said to breathe "like a small metallic lung." It was this curious breathing action which led to the discovery of oxygen. The oxides form two series of salts, the univalent mercurous salts (Hg_2O) and the bivalent mercuric oxide (HgO).

MERCURIAL FORCES IN THE BODY

"The essential nature of Mercury is to unite."

We can live only because our bodies are able to take in external substances and change or transquite them into nourishment. It is the mercury force which makes this amalgamation of the external and internal possible, and this is most obvious in the breathing and digestive processes.

All living breathing beings share the same outer atmosphere, the same air space, which is brought into each individual through the lungs where oxygen is absorbed into the blood to become a part of the living organism. Rudolf Hauschka writes: "Even the build of the lungs is mercurial. They are like little trees made of tiny hollow drops. Innumerable spherical spaces thus form a common breathing surface."

This union of the outer with the inner to nourish and regenerate the body is also evident in the digestive system where food is taken in from the outside to be dissolved by the digestive secretions and absorbed through the intestinal walls into the streams of lymph and blood.

Following this process deeper into the metabolic system we find the forces of mercury ruling even over the cellular life, keeping a state of order and balance between the organism as whole and its individual cells. When this equilibrium is disturbed the cellular order breaks down and individual cells assume an anarchistic life of their own, proliferating out of control and in extreme cases destroying the system itself.

Here the value of mercury as a medicinal remedy excels, working to stop the independent action of cells which have detached themselves, rounding up the separatist 'guerrilla units' and reabsorbing them into the body as a whole.

MERCURY AS 'A REMEDY FOR ALL ILLS'

At the turn of the century the British Pharmacopeia contained some 25 mercurial preparations including pills and powerfully antiseptic ointments, and up until recently you could still buy mercurial antiseptics over the counter. This antibacterial quality of mercury is today exploited, for example, in anti-fungus baths for seeds, a practice responsible for major outbreaks of mercury poisoning in Iraq, where hundreds have died from eating seed grain treated with methyl mercury fungicide.

Mercury was once even administered pure and the old medicinals describe as much as a pound of pure mercury given in cases of intestinal obstruction, hoping to relieve the problem by its sheer weight!

But mercury was most valuable as a remedy against syphilis, that scourge of the 13th century up until recent

history, (and including the connection of syphilis with AIDS as previously reported in this Journal). The only problem was that mercury, being so highly toxic, cured the disease but tended to poison the patient!

Even the smallest traces of mercury can cause dangerous effects. In the Middle Ages mirrors were commonly made by

coating glass with a mercury-tin amalgam, and objects were gilded with a combination of mercury and gold. In these industries, and in the mercury mines, poisoning was an occupational hazard with the metal being absorbed so easily through the skin or lungs of the workers.

Like arsenic and digitalis, mercury is a cumulative drug and once it has been absorbed by organic tissue it is held fast there and only with great difficulty escapes to be excreted from the system. It causes damage to the brain and nervous system, overstimulates the glandular system which produces hormones, and suppresses the entire immune system.

But despite being such an insidious poison, the use of mercury in homeopathic form is a highly effective and invaluable remedy for many problems. It is one of the prime remedies for syphilis and AIDS, for the whole progression of symptoms,

in combination with other remedies including certain snake venoms (another connection with the serpents of the caduceus). It is sympathetic to the lymphatic and central nervous system and works towards restoring the marrow of the spinal bone.

THE ALCHEMICAL 'MERCURY OF THE WISE'

The Tantrik alchemists described mercury as "the most fundamental, and indeed the quintessence, of all substances." They were well aware of its medicinal properties and believed it to possess life-prolonging properties. It was so highly valued as a restorative and stimulant, that mercury was the main ingredient in most Tantrik medicinal preparations.

Marco Polo, on his travels through India, commented: "Those people make use of a very strange beverage, for they make a potion of sulphur and quicksilver mixed together and this they drink twice a month. They say this gives them long life, and it is a potion they are used to take from their early childhood."

Even today we are told that some Tantrikas take mercury in place of food to preserve the vital elixir of life, believing

that "only when the body is perfectly attuned and strengthened can it experience and sustain the full intensity of the cosmic state."

Among the ancient Tantrik treatises are descriptions of their sophisticated chemical laboratories, and details of the medicinal and alchemical mixtures they prepared. But these

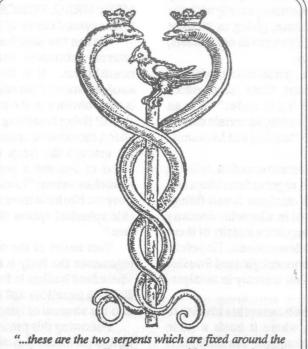
preparations were more than just a mechanical mixture of material substances following some ancient alchemical recipe. Alongside the combination of chemicals was a body of closely guarded secret processes that transmuted the raw mercury into the lifegiving elixir. An understanding of the processes of spiritual transformation went hand in hand with the knowledge of chemical transmutation. The two could not be separated.

In the Tantrik alchemical writings mercury is referred to as rasa, which is not merely the metallic substance but the subtle essence of substance itself. Rasasara, or the 'sea of mercury' refers to the cosmic sea from which the primeval form of all things emerged.

This Tantrik concept of "an original stuff, or ultimate substance, out of which the whole universe has been formed" is identical with the *materia prima* of western alchemy mentioned

earlier, with mercury as its symbol "...seen as the fine psychic stuff, or vital breath, which unites the individual body-soul organism with the cosmic sea of life." 5

Rather than just dismissing these old alchemical beliefs, some modern researchers have continued to incorporate this knowledge into their observations and understanding of nature. Pelikan, for example, relates the three basic alchemical principles of Mercury, Sulphur and Salt to three processes in the mineral kingdom. He describes Salt as being "the ponderable matter, subject to the earth forces", and Sulphur "as the substance saturated with the imponderables, the forces raying in from the world circumference." Mercury, however, he describes as "a substance open to the rhythmic interplay of forces from both sources, one radiating out from the earth and the other radiating in from the cosmos."²



"...these are the two serpents which are fixed around the caduceaus, or Staff of Mercury, and by means of which Mercury wields his great power and transforms as he wills."

Nicolas Flamel

THE CADUCEUS OF HERMES

Mercury is the agent of all possibilities, and its great desire to unite, dissolve and transform makes it the 'first agent' of the alchemical operation. Its moist receptive nature was likened to the original female power which like water, or the passive *materia*, takes on all forms without being altered itself. "In it the germ of spiritual gold lies hidden, as does gold in ordinary quicksilver." 5

Its opposing force is the volatile solar Sulphur, with its hot, dry nature. Together they represent the active and passive poles of nature, the double spiral, or the twin serpents or dragons coiled opposite about the wand of Mercury. At their height these two opposing generative forces unite in the alchemical marriage of the Sun and Moon, King and Queen, man and woman, and from their perfect union is born the alchemical gold.

They are the Yin-Yang of Taoism, also identical to the *Ida* and *Pingala*, the subtle lunar and solar currents of Kundalini, described by occultist Kenneth Grant as the "electrosexual serpents entwined about the Wand of the Magician, as in the Caduceus of Hermes."

Certain researches into the mysteries of electricity are focused around what is called a caduceus coil. This coil generally consists of a single wire wound around a central pole in such a way as to resemble the Caduceus of Hermes. Supposedly, when the coil is energized anomalous energy and gravity effects are experienced in the field of the coil. It varies a bit from a true Caduceus in that it consists of a single wire instead of two. Perhaps further experimentation could focus on using two wires of dissimilar metals, such as copper and iron in electrical circuits, or gold and silver in radionic circuits. Actually any two coils wound in opposition could be considered a caduceus coil. Using dissimilar metals, as George Van Tassel proposed to use in his rejuvenation building, the Integratron, would provide a polarity quite in tune with the energies of mercury.

MERCURY OF THE MIND

Being so liquid, continually changing its form, the deeper meaning of mercury is not easy to define. It is described as 'the all dissolving water and nourishment for the spiritual embryo' and a 'living, omnipresent and innate spirit.' It is 'the substance which flows in all psychic and mental forms' and has the only planetary sign which combines both the Sun and Moon above the cross of the four elements.

This dual nature is reflected in mercury's alchemical symbol of an androgynous figure, expressing both female and male powers. It is at the same time the 'semen of Shiva,' and 'the maternal blood' or 'the mother of gold', and there are obscure allusions to the menstrual blood of Tantrik priestesses being potent to solidify mercury.

Wherever there are mercurial forces operating there is the circulation of energies, the connection of opposite poles, contact, intercourse and interaction. In the Qabala the power-zone of Mercury is the sphere of the mind, of mental magic where the mind gives form to its creations. It is called the 'Absolute or Perfect Intelligence' and initiation into this sphere gives the ability to see behind appearances, and to realise the subtle invisible forces behind all forms.

Wherever there are boundaries to be crossed Mercury is found - it is the true ruler of the borderlands. Hermes, the

Greek form of Mercury was also known as the 'Lord of the Crossroads' who conducted the souls of the dead into the underworld. The jackal-headed Anubis performed the same function in ancient Egypt and pots of mercury have been found in Egyptian tombs as offerings to this friend and guide of the dead.

In Astrology, Mercury represents the 'active intelligence,' ruling all occupations dealing with communication, education, travel, and writing. The restless intellect of Gemini roams the fields of the mind gathering and disseminating information. The earth sign Virgo, also ruled by this swift moving planet, puts these ideas into form to be of service to humanity.

Trade, commerce and agencies of all kinds are under the patronage of Mercury - once the entire world trade in mercury was controlled by one family of the Fuggers. In more recent times it was monopolized by the powerfully wealthy Rothschild family. But in its true dual style mercury also patronizes swindlers, thieves and corrupt government officials. We live in a tremendously mercurial age where information is transmitted at mind-dazzling speed via computers and satellites and all their accompanying technology. Never before has such an elaborate system of communications been so open to abuse by 'intelligence' gatherers.

While Mercury makes us want to know, to question and probe beyond the world of appearances, when this force predominates it becomes the coldly rational mind, closing out the higher impulses of inspiration and intuition. This negative side manipulates both information and the forces of nature without compunction, and combined with Mercury's great compulsion to amalgamate works to build giant corporations and vast multinational businesses in which the individual character is dissolved and lost.

Consider the ultimate abuse of the mercurial forces... shades of George Orwell's "1984", a chillingly prophetic example of the shadow side of Mercury, where the world is dominated by a handful of powerful, invisible dictators with complete control over the communications and intelligence networks, who have perfected the art of manipulating the mass mind of the people, now mere slaves to the political machine, their creativity and will crushed by bureaucracy.

But the essence of Mercury remains forever fluid. Far better it is to contemplate the cheerful Messenger of the Gods who, wand in hand, probes beyond all arbitrary boundaries to discover the Gold of the spirit within.

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OMENS, SIGNS AND THE ENERGIES OF TIME

Eugenia Macer-Story

Most "omens" seem to warn or portend of a future which (in the present) remains veiled in uncertainty. Usually the percipient "knows" that some unusually-patterned occurrence is an omen of "something", but is unsure how exactly to interpret this symbolic occurrence.

There are two basic kinds of omens: the evocative freeform occurrence (black cat crosses street) and the "sign" or

encounter with an odd item which has been previously recognized as part of some symbolic language. (Sales slip reads \$4.42; twigs underfoot form pentagram; your boss has started to wear a caduceus tie clip, etc.)

We understand omens and signs in retrospect — if we ever understand them at all — since these physical happenings are part of a pattern of meaning which included the future. Understanding that a quirky event is probably "an omen" does not necessarily give any information about what that event will ultimately "mean" in future context.

A bird flying against the window is a true omen of death only if someone linked to that window does die. Otherwise, such an occurrence -- if apprehended as usual -- is a "false omen". False omens do occur. Why do they occur?

Are there alternate futures, some of which contain a "match" for the omen, but which then fail to occur? Suppose a person "heeds" the omen or sign and avoids the negative occurrence seemingly portended by the omen? If the negative future is successfully avoided, was the omen a false indicator or a true warning?

I allude in these descriptions not to telepathic or psychic visions, but to <u>physical events</u> which prefigure a larger, future configuration of future physical events.

In the February 1990 issue of the MUFON UFO JOUR-NAL, Anatoly Listratov, chairperson of the anomalous phenomena section of the Astronomical and Geodesic Society, USSR, is quoted as stating that: "At the sites of the (ufo) landings...the operating frequency of a crystal-controlled oscillator changes. Simply speaking, electronic timepieces run at rates that are too fast or too slow."

This implies that unknown energies related to time function are somehow linked to the broad spectrum of "anomalies" reported by the percipients as "ufo sightings."

In systems of contemporary philosophy related to time

perception, a thermodynamic model of the universe is utilized to "explain" progress from past to future. The passage of material time is marked within these systems by conditions of relative thermodynamic entropy. Obviously, this model is based on heat energy.

In his book Asymmetries In Time, Paul Horwich points out that this thermodynamic model of time is inadequate

when discussing the phenomenon of electrical current.

The temporal reverse of an electrical process also involves the magnetic field which is perpendicular to that process. Thus, in order to obtain a true time inverse of electrical process within a magnet not only would the internal current loops have to be reversed — but the magnet itself would have to be turned upside down.

Any hypothetical tinkering with time within the electromagnetic environment must take into account the <u>spatial</u> orientation of the energy fields which are involved. It is not a

which are involved. It is not a simple matter of heat generating random molecular collisions.

A device for channeling and controlling electricity with regard to time and/or time with regard to electricity might consist of revolving magnets in some spacial array which caused the magnetic field <u>and</u> the electrical current to actually reverse as a unitary system within the larger electromagnetic environment which is created by the movement of the earth.

Thus, time effects may be basically <u>spatial</u> in ways we have yet to fully comprehend technically. This may be one of the reasons that anomalous "omens" and "signs" are literally physical objects which seem to portend "meaning" about some future physical occurrence.

As Hans Reichenbach points out in his book The Direction of Time, the principle that light is the fastest causal influence creates the situation wherein events are relatively simultaneous rather than being exactly simultaneous. There is always a slight time interval between the time when a light signal (photon) is generated and the time it can possibly be received and/or redirected.

This time gap is represented by a <u>spacial</u> interval -- in much the same way that a spacial interval can be expressed by the phrase "a ten minute walk." However, in the time-relativity diagram, <u>nothing is transacted</u> during the time gap

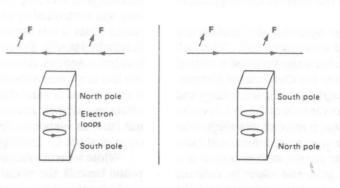


Figure 1

. A light signal leaving point P at time t_1 arrives at point P' at time t_2 , where it is reflected; it returns to point P at time t_3 . The events of the interval from t_1 to t_3 at point P are excluded from causal interaction with the event occurring at point P' at time t_2 .

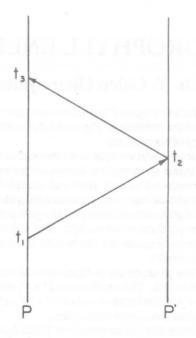


Figure 2

and the extent of the time gap is said to be "relatively simultaneous" to the reflection of the light signal. Can we safely assume that <u>nothing is there</u> during this un-illuminated interval, and then suddenly once again <u>is there</u> when the reflected light signal is somehow physically acknowledged by the environment?

This would mean that the physical continuum literally blinks on and off in thrall to the frequency of photon reception. Obviously, this would involve considerable wear and tear to the furniture of the universe and does not actually happen. What does happen?

As poet T. S. Eliot once remarked in his metaphysical way: "Between the idea and the reality / the motion and the act / the potency and the existence falls the shadow." It is obvious from the previous discussion that between the signal and the reflection and/or reception may also fall the "omen" -- in the form of a sudden, unexpected physical apport into the material (spatial) continuum.

I think that Eliot sensed this basic quality of the "omen" since his poems are full of references to classic omens, signs and transubstantiation of images into information and information into images. This sense of the "time delay" between mental action and realization can also be understood in terms of the neural synapse, the literal connections in the nervous system and brain.

Between the electrochemical "firing" of a neuron and the reception of this directive across the synapse there is a literal spacial gap, and due to this gap a slight "time lag." If the energies of esp/pk are indeed "time energies" of some sort, one key to understanding how these energies affect cognition and/or body function may lie in this literal "time delay" within the neural system.

Possibly, an entire program for future action can be physically conveyed by "fast time energies" within the fraction of a second before the linear continuity of electromagnetic signaling is imprinted in the receptor cell. If this is true, the electromagnetic nexus becomes a "carrier" for fast time energy in the same sense as a magnet is a potential carrier for electrical effects, if exposed to electrical current or manipulated spatially.



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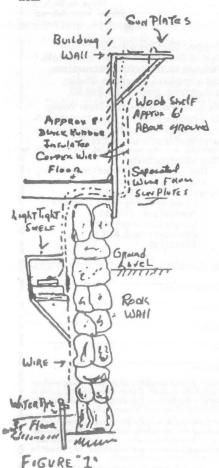
CONDUCTING CHLOROPHYLL ENERGY OVER WIRES

About 1930, I decided to try an experiment of conducting Chlorophyll Energy over wires. I had been conducting Eloptic Energy over long distance via wire.

A wood platform was installed on the south side of the house about six feet above the ground in order to get the desired potential of energy which increases with distance above the ground.

Having some wooden cigar boxes available, I cut boxes apart and cut pieces and made eight boxes that were 2" x 2" x 4" although any size boxes will work.

Aluminum foil was placed on the bottom of seven boxes inside so as to be in contact with the soil. Similar pieces of foil were placed on the under side of the lid of each box. Wires were connected to each piece of foil, the wires from the lids were extended to the sun plates, the wires from the bottom foils were connected to the water pipe and thus grounded. See Figure #2 for details of the box construction.



by Dr. T. Galen Hieronymus

Refer to Figure #1 which shows a "side" view of the installation. Figure #3 shows the system of connections.

Seven plates were placed on the platform so as to pick up energy from the sun and a wire was connected to each plate and extended down into the basement, each box having the top foil plate connected via wire to a plate out on the platform in the sunlight. The eighth box had no connection to the outside, it being the "control".

The plates on the platform were all different in size. The smallest was $2^n \times 4^n$, the next $4^n \times 8^n$, the largest was about $8^n \times 10^n$ and one plate was copper screen wire.

Some dirt was screened and 1/2 inch of dirt placed in each box. Oat seeds were selected, all of uniform size and planted in two rows of 5 seeds spaced in each row, the 1/2" of dirt was placed on top in the box. The same amount of water was added to each box as needed from day to day.

All of the seeds sprouted about the same time. Then we noticed that there was no chlorophyll in the 10 plants in the control box. All of the boxes connected to outside plates had plants with much chlorophyll.

We were quite surprised to note that the plants in boxes with large outside plates seemed to look as if they had been subjected to heat. Apparently the large outside plates were bringing in an excess of energy compare with the effect of the small size outside plates.

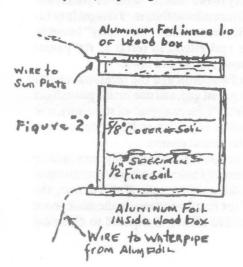
Very soon, the plants grew too tall for the

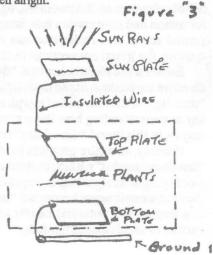
small amount of "head room" in the boxes so each box was equipped with a spacer to raise the top of each lid up about 3/4".

The boxes were placed on a shelf in the end of the basement where there was little light, with no windows at that end. Also, the shelf was kept dark by a board placed in front and another on top to exclude all light. The plants were dark all of the time except when they were examined by a flashlight.

A friend tried to duplicate the experiment, but did not follow all instructions. Their basement was only about 3 feet from basement floor to ground level outside. Instead of placing the outside plates above ground 6 feet, they laid on the ground, thus they did not have the potential difference between outside collector and inside boxes and the experiment was a failure. Also, there was a window near that let much light into where the boxes were placed.

Anyone who expects to duplicate an experiment should be sure they know all the factors and that they follow the instructions exactly without any substitution or change. And as to changes, if you are trying to get a special result and are trying out several methods or ideas, one of the cardinal points to doing good work is to make just one change at a time. Then you know just what the results are. If you make two changes and the result is a failure, you do not know but that one of the changes and the results is a failure, you do not know but that one of the changes may have been alright.





For more information on Eloptic Energy read the book: The Story of Eloptic Energy – The Autobiography of an Advanced Scientist by the late T. Galen Hieronymus, available from: Advanced Sciences R&D, P.O. Box 109, Lakemont, Georgia 30552. (404) 782-2092

B.S.R.F. BULLETIN BOARD

The B.S.R.F. Bulletin Board is a section for Letters, Reviews, Events, Contacts & other useful information for Borderland Members to aid in their researches. We encourage BSRF Members to submit letters, contributions & information to B.S.R.F. Bulletin Board, PO Box 429, Garberville CA 95440.

LETTERS

RIFE AGAIN

The recent double issue is excellent, per usual. On p.52: Ann Wigmore Foundation - Ann Wigmore in her 80's (?) has been forced out of her life's work Foundation in Boston and moved to Florida. I just moved from Carlsbad and when I come across the one page article I'll send it to you. Truly an injustice to a woman who has dedicated her life to others.

Do you know who makes the best Rife instrument? Chris Roberts San Diego, California

Appreciate the update on Ann Wigmore, though sorry to hear the news. I don't know anyone who builds a real Rife instrument. Many variations and questionable stories are available -- a field "rife" with partial research and second (and third) hand stories being presented as definitive history. I've seen so much promotional material and multi-level sales pitches for such things that I wonder if the true story will ever be generally known. See my column View From the Borderlands in the Nov-Dec 1989 JBR for my general overview of this subject.

Klark Kent has submitted one of his "Rife" units for evaluation. A full report is being done, but I would like to say that Klark's is the first unit I've seen that actually comes close to what Rife was doing -- that is, it has a rare gas bulb being driven at high-frequency as an optional attachment.

BOOKS NEEDED

Lexington, KY

I really need to find a copy of Burr's book Fields of Life. Health Research did a book search and hasn't come up with it. Various other people and organizations do not have it in their library. Do you have a copy in the BSRF library? Would you be willing to sell it, rent it (with a deposit) or simply xerox it? Name your price. I did find that Human Energy Press in Foster City, CA has reprinted Burr's "Blueprint for Immortality" and have ordered a copy of it. Thank you very much.

BSRF doesn't have a copy of <u>Fields of Life</u> in our library. If any of our reader's has a copy and could forward it (or a good photocopy) we will make it available as a research file (depending on copyright standing).

While we're on the subject of looking for books I'd like to get a copy of <u>The Loom of Creation</u> for the BSRF library which we'd gladly pay for if anyone has an available copy.

NATHAN STUBBLEFIELD

I am interested in building Tesla coils and replicating old patent constructions. I am currently researching the patents of Nathan Stubblefield regarding a novel battery concept and wireless telephony circa 1892 (Marconi was only 18 at the time!).

Regarding old construction techniques, I have need of cloth insulated non-enameled copper or iron wire. The old DSC (Double Silk Covered) or DCC (Double Cotton Covered) magnet wire may work if a non-enameled version is available. Any information on sources for this wire would be of great assistance in replicating the Stubblefield Battery (Patent #600,457 of 1898).

The Stubblefield Battery utilized a bifilar coil of iron and cloth insulated copper with ground moisture serving as the electrolyte in the cloth insulation. This battery may have been a component in Nathan Stubblefield's demonstrations to the press of "telephones connected to a pair of rods driven into the earth" which allegedly permitted communication of .5 miles. Stubblefield said that he was merely using the electrical field which permeated the earth, the water, and the atmosphere. Allegedly, in May of 1902, Stubblefield demonstrated communication to the steamship, Bortholdi, from the Virginia shore of the Potomac, by sticking "iron rods" into the ground which were connected to a telephone (Washington Evening Star, May 21,1902). The parallels to Tesla's "longitudinal" waves are obvious.

The Stubblefield battery was intended to be utilized (in one configuration) as a battery-electromagnet. The use of an external coil would then allow the battery circuit to inductively couple to the external coil circuit. I am speculating that the reverse application of high frequency external fields may induce electrolyte effects in the coil/battery which may be observable in the battery circuit. Curiously, Stubblefield designed his battery such that the coil windings would have the option of being connected so as to cancel the magnetic fields while still providing a "galvanic action".

Rick Wood Dallas, TX 75208

Last issue had a request for info on Nathan Stubblefield and since then this letter and some other materials have come in. Jorge Resines gave me a copy of an article from Electronics Illustrated, July 1961 about Stubblefield, giving historical information, and stating: "What equipment did Stubblefield use? Probably no one will ever know exactly because the inventor never divulged his secrets. The New York Sun in

1930 described the gear of the then dead inventor in this manner: 'His transmitting apparatus was placed in a box four feet high and six inches in width. A coil of heavy wire was at one end and led to the ground. He [Stubblefield] made the startling statement that the earth's electrical waves furnished the power by which an ordinary telephone transmitter was operated. About a quarter of a mile away another box was fastened to a stump. There were wires leading to the ground and a pair of telephone receivers on top.

Examination showed that the wires terminated in each case at steel rods topped with a ball of iron which was nickel-

plated.

'Stubblefield claimed that the earth and all about it is charged with electrical power, part of which he was harnessing—and that in time spoken messages could be sent without wires thousands of miles.'

'He admitted that he had developed radio-frequency current through a battery of his own arrangement, an earth battery, following which he devised a system of modulation and an adjustment for tuning. The detector was a receiving coil, tapped for adjusting inductance.'"

The article also states that Stubblefield received one radiotelephone patent, No. 887,357 on May 12, 1908.

RADIONICS RESEARCHES

I have been working with radionics since 1985 and have since acquired a De La Warr instrument

and a Copen instrument and have made several "home brew" instruments based on the 15 dial de la Warr instrument. The basic idea for the "home brew" instruments was obtained from one of your Borderland Journal articles.

I am wanting to use my "home brew" instrument to potentize distilled water with the various gem rates using the Copen rates. I also have the rates for the homeopathic remedies. My problem, if any, is this: Because of my vested interest in the outcome of my endeavors to construct such an instrument, I sometimes question my dowsing when testing the gem elixirs I have prepared so far. In other words, I am not sure that "wishful thinking" has not influenced my pendulum evaluations of the prepared remedies. The method I have used to convert my homemade instruments to the preparation of gem elixirs is

diagramed on a separate sheet attached herewith. I would appreciate your comments after you have reviewed the drawing. I do not have difficulty with my pendulum work until I experience doubt, then it becomes almost impossible to get out of the left brain. For this reason, I am seeking independent confirmation as to whether there are any reasons why the method I am using will not work.

Additionally, after looking at the diagram of my instrument, could you show me a way to set a rate for varying the potency of a homeopathic remedy? Would a dial be added to vary the potency of a homeopathic remedy or would it suffice to use the last dial for this, moving the '44' rate back a dial? If I need to add a dial for potency variation, would I use a rheostat or a variable capacitor? Is the rheostat/capacitor method viable in using the instru-

ment for potentization?
Do I need to add any type of AC or DC current to the circuit? Is it necessary to employ the use of an electo-magnetic coil, or will the magnet do the job?

I would most certainly appreciate any help you can give me in this direction. Additionally, should you have any Borderland articles that would assist me in this direction let me know and I will order same from you.

Will be looking forward to hearing from you at your earliest convenience.

Dale Shultz San Bernardino, CA

Copen rates from bottom right: example 44 - rate for ruby. de la Warr rates are set from top left: ex. 80.78 - carcinoma virus.

Glad to hear of your progressive research. I can appreciate your questions on dowsing for the results of radionic potentization. Not being an "expert" I can only give my opinions. I think that using dowsing in this circumstance is perfectly valid. I've noticed with my own dowsing that the quality of results are definitely tied into my state of mind, so much so that I rarely use a pendulum anymore, relying instead on my feelings of which, my experience suggests, the pendulum produces a physical reading thereof.

One suggestion for independent testing of the potentized substances would be to follow the methods used by Lilly Kolsiko in her researches, both agricultural and on the metals. For example she would use various homeopathic potencies (dynamic dilutions) of various substances on equivalent amounts of sprouting seeds. Distinct variations in growth rate and quality were evident. Potentization curves were developed out of this work showing that there is a definite

rhythm in the qualitative effect of a potentized substance on various experimental media during different quantitative potencies. (Remember that all homeopathics beyond the 23rd decimal potency are considered by modern 'science' to no longer contain any of the original substance).

Dr. Kolisko also used a method of crystallization of various metallic salts to record subtle changes in substances. I would suspect that the effect of a radionically potentized substance could be recorded if the experiment were set up

properly.

See The Agriculture of Tomorrow by Lilly Kolisko, available from the Biodynamic Association, PO Box 550, Kimberton PA 19442. Also see Donald Beans' article in the last Journal on the difference between homeopathics prepared in the traditional method, through succussion (rhythmic dilutions), and radionicly potentized homeopathics for further insights into the energetic state of your preparations.

I'm running your sketch and letter in the hopes that one of our readers can supply information on how to vary the potency in a radionic instrument such as yours. I would suggest keeping all electricity out of the circuit, unless you are looking to neutralize the 'fundamental ray' as is done on some radionic instruments, mostly from England, which wouldn't apply anyway to the potentization of remedies. I am curious as to other's views on the use of magnets in a radionic instrument. I could see it both helping and hindering.

An unfinished but progressing project on the shelves here is a re-issue of Riley Crabb's Radionics -- New Age Science, which will include a few additions to clarify how to build and operate a radionic instrument, as well as comments on the instrument's relationship to the subtle energy fields it interacts with.

EEMAN REPORT

I have just bought a copy of L.E. Eeman Report by Tom Brown from "Tools for Exploration." It includes a description of Eeman's Technique of Relaxation but unfortunately Steps 3 & 4 are omitted. Is it possible to get a copy of these two steps? They are not detailed in Eeman's Cooperative Healing. Have you discovered a source for these missing parts, or can you suggest anything I can do to track them down?

Denis Joynt Queensland, Australia

The final section (of ten) in the L.E. Eeman Report is a photocopy of a small book Relax Your Way to Health by H.D. Cotton, N.D. It was a last minute edition to a completed book. As the notice in that section reads, our source copy was missing several pages, but the I felt that the information on the remaining pages was valuable enough to print. We have been waiting for a copy of Cotton's book but it has never arrived. Should any of our readers have, or know where to obtain a copy the information would show up in this Journal and in future editions of the Eeman Report.

WATER SHORTAGE?

They are trying to convince us that we have a water shortage again. California has one border which is nothing but water. I am recalling a magazine article I read a few years back, and sending the letter below to some of the local politicians. I wonder what the response will be.

Have you ever heard of Henri Coanda? He was a Frenchman who lived in the first half of this century (and may still be alive for all I know). He had a scientific type of mind, and was interested in the "venturi effect" - the flow of air over a curved surface. I believe that he has several patents in the area of the venturi effect.

Among his accomplishments was an airplane. He built it of plywood when everyone else was using canvas stretched over a framework. He also at that time invented a jet engine that he incorporated into his plane. For his first test flight he decided to fly it himself, although he had never flown a plane, and did not know how to be a pilot. And he did OK for that era. He got it off the ground, and was flying along minding his own business when the plane hit a brick wall. He survived.

Still with the Venturi effect in mind, he turned his attention to making/getting pure water out of sea water. He made the mistake of constructing his machine in France. He observed that many lakes and dams lose a lot more water to evaporation in some times of the year than flows into them.

I guess it is worse in hot weather. Dr. George, the meteorologist of a local TV station, recently said that for every (I believe) 20 degrees of temperature rise, the air can absorb twice the amount of water as at the lower temperature. Humidity.

Mr. Coanda, before the days of plastic sheeting, constructed a hollow tube perhaps 5 to 6 feet in diameter upright, and floated it about 6 to 8 inches above the surface of the water. He got a few mirrors, some to catch the sunlight and direct it into the cylinder, and others to bounce the sunlight around in the cylinder to heat up the air. Then he made some sort of bend at the top of the closed off cylinder, using his feeling for the venturi effect, and caused the temperature to drop a little. I think he made the curved section smaller, and maybe put it in the shade. He was operating under the theory that hot air rises. Politicians should understand this. It wasn't really a high tech operation. It didn't need a lot of electricity to compress or expand, or move the air. All he needed was contained to confine the humid air, and some sort of tube to convey it to the area that cooled the air and extracted

He was amazed at the resulting distilled water flowing out of it. He soon found that salt was precipitating out of the water and settling to the bottom faster than he could get rid of it.

That just about got him arrested.

France at that time (and still may for all I know), had a

governmental monopoly on the production and sale of SALT, and took a **very** dim view of anyone else manufacturing salt, even though they swore that they were trying to make pure water.

The politicians, and bureaucrats smashed his machine, and convinced him of the long prison sentence that awaited him if he tried to rebuild and experiment along that line further.

Now, I have heard that Southern California has a water shortage, but a visit to the Santa Monica Pier would seem to dispute that. There seems to be a lot of water out there. We also have more than our share of sunshine, and people now sell plastic sheeting that have one surface coated to reflect light back and forth inside when made into a tube.

Unless Los Angeles city, county, or the State decided to prohibit the sale of salt, along with cocaine, there should be no bar to someone experimenting to see how much fresh water this will produce. There are numerous places along the Long Beach and Los Angeles harbor that these things could be constructed, to be allowed to function passively, with the output added to the water supply. It would be very inexpensive, although that might be it's major drawback, since there would not be much money involved to be siphoned off by the politicians.

If you happen to be producing liquor, perhaps all this could be called a "Still", so the concept is not unknown. It is not nearly as expensive as constructing an aqueduct to bring water from the Mississippi River, or the Columbia and Snake River, and politicians seem to prefer things that employ thousands of engineers, and billions of pounds of cement.

I think this water shortage is just another thing dreamed up by the DWP, so they can cut down water usage, which makes it mandatory to raise rates to cover their fixed expenses. That happened in the last "water shortage", mandatory rationing, and all that. I do not recall hearing anything about lowering the rates again after the last "water shortage" was over. I think the DWP just has manufactured this whole thing to get themselves a raise.

All this about Mr. Coanda was in an article in <u>True</u> or <u>Argosy</u> magazine about 25 to 35 years ago, long enough for the many who read the article to forget it. I think it is about time to use the low tech approach.

Many afternoons near the coast, we see the low clouds move in from the ocean. That is merely the humidity in the air where the air temperature has cooled to the point that it can not hold that quantity of moisture that is had during the day, and some of it precipitates out to form water droplets. The dew on your grass, or windshield that you see in the morning is another instance of this.

A demonstration of this in your parking lot, from one portable swimming pool to another, should be an apt subject for a video tape, and should take a half a dozen poles, and some plastic sheeting just to set up a simple trial.

These could be constructed along our bays and in out of the way places in the marinas, and in the harbor areas, with the output added to the local water supply. Any shape is acceptable, as long as it accepts air at the bottom, and is air tight to the end of the tube. Any amount of water produced would help cure the "shortage". Dennis Kier Carson, CA

Too bad our politicians can't see as clearly as you, Dennis. I've heard of Dr. Henry Coanda and his work but have never read anything by him. He is called the "Father of Fluid Dynamics" and is pictured with a young Patrick Flanagan in Elixir of the Ageless authored by Patrick and his wife Gael.

According to Patrick, "The Coanda Effect is the phenomenon of fluid flow that enables airplanes to fly. Simply stated, when a fluid flows over a surface it tends to cling to that surface."

Dr. Coanda was quite interested in the age-slowing secrets of Hunza water and he passed on his lifelong search to Patrick who developed special colloidal concentrates, which when added to water, have profound effects on the functioning of living systems. For more on that story read the book, available from: Vortex Industries, 1109 S. Plaza Way #399, Flagstaff, Arizona 86001, \$10.95 postpaid.

I had never heard of his desalination device but would certainly like to hear more from anyone who has info, including plans.

MWO EXPERIMENTS

I have been very fascinated with your Journal. Thank you for the new world you have opened up to me. For the last few months I have begun to work on an MWO.

I have completed the antennae but did not do as well with the Tesla-coil. I decided to buy the ready made coil from "Edmonds". I connected the secondary to the center of my antennae and did get some action in the form of a purple glow around the third and fourth smaller rings. I can only assume that I need more power to this unit although I was "Quite" pleased at the limited reaction on my first attempt. I would like to reach out to a fellow member who might be able to help me with some advice at this point.

Any advice you would send my way would be greatly appreciated. I thought perhaps you would publish my S.O.S. for help so here is my address:

Paul D. Damiani

Box 93, S.I., New York 10306

Naturally, the quality of output of any electrical device is dependent on not only the quality of materials, but also the geometry of structure and arrangement. The better the coil, the better the antenna, the more refined the fields will be that are put out around the device. As I have pointed out in the article mentioned above in my remarks about the "Rife" devices, the types of "Lakhovsky" MWO's being built today vary

quite a bit from what Lakhovsky was actually building and using himself.

Lakhovsky used very refined electrical designs and probably log-periodic antennas with both poles of a Tesla coil feeding the outside ring in such a manner that there was a logarithmic, electro-magnetic structure oscillating in space which apparently had quite beneficial effects on living organisms. See The Lakhovsky Multiwave Oscillator Handbook from BSRF for more information on log periodic antennas and their quite interesting, frequency-independent effects, as well as circuit suggestions for pursuing Lakhovsky's real work and showing one and two antenna circuits.

The modern variations, based on Bob Beck's schematic of 1963, feed one pole into an antenna (and the other into a second antenna), creating a dielectric field, which when it collapses, due to the rings on the antennae, creates unnecessary sparking and random radio-frequency noise with questionable effects. It is an organic system alterant, but is quite different electrically from Lakhovsksy's original equipment.

RECEIVED

This is a list of materials received for review.

*DISTANT VISION -- Romance & Discovery on an Invisible Frontier by Elma G. Farnsworth. Just in as we go to press is the long awaited book about the late Philo Taylor Farnsworth II by his wife. From PemberlyKent Publishers, 2121 Garfield Ave, Salt Lake City, UT 84108, (801) 583-9921. ISBN 0-9623276-0-3, hardbound. P.T. Farnsworth II was one of the great inventive minds of this century, having invented electronic television, one of the most widely used inventions of our modern times. But there is much more to his story than that -- he also developed workable nuclear fusion in the early 1960's. Looking forward to reading this one. Contains extensive bibliography as well as a complete listing of Farnsworth's many diverse and important patents.

* NEW HORIZONS - Explorations in Science by P.D. Ouspensky, With an Introduction by Colin Wilson. ISBN 0-936385-21-9, Globe Press Books, 3003 Old Yorktown Rd., Yorktown NY 10598. \$14.95, paperback. Called "a work of genius" by The Saturday Review, this book appears to be more of an intellectual stimulus to people endeared with the relativistic viewpoint, rather than a flagship of the "New Science" as the promotional materials suggest. This book is composed of four lectures: A New Model of the Universe; The Fourth Dimension; Experimental Mysticism; On the Study of Dreams and On Hypnotism. Ouspensky, a student of Gurdjieff, was an erudite thinker who kept quite in tune with the development of mainstream scientific thought (circa 1905-1929) during the writing of these essays. He covers somewhat the reasoning behind the development of the ether theories and goes along with the Michelson-Morely 'solution' that the ether does not exist. Hence, he wades into the hypothetical space-time continuum and the theory of quanta as a backbone of his scientific philosophy.

I don't know if Ouspensky was aware of Rudolf Steiner's scientific works of the same period of the writing and updating of these essays, but the experimental evidence, as well as the philosophical framework, put forth by Steiner goes far beyond what Ouspensky is going after. (Steiner's only mention in the book concerns a brief reference to his reading of akashic records.) The publishers should also have checked into what the "New Science" is actually up to these days. Many people are now aware of Dayton Miller's ether drift experiments (published 1938) wherein he measured the ether and showed the error of the Michelson-Morely experiments, not to mention Dr. Wilhelm Reich's orgone research, both of which put a serious experimental crimp in the theoretical indulgences of "curved spacetime" and the like. The work of Rudolf Hauschka and Lilly Kolisko (as an outgrowth of Rudolf Steiner's conception of the etheric forces) prove definite geocentric and heliocentric energy fields which connect planets, plants and metals, and certain regions of the zodiac to certain measurable qualitative and elemental impulses. None of this would ever be evident from Ouspensky's "New Model", nay, he presents pretty much the same sterile world projected by modern science -- his difference is that rather than approaching the reality of the life forces as was done in spiritual science, he channels his thoughts into 4th, 5th and 6th dimensions, all merely intellectual theories (which doesn't invalidate them -- it merely relegates them to regions outside of experimental science).

On the subject of infinity Ouspensky has some very interesting insights concerning the perspective of phenomenon within various real limits. Curiously absent is the conceptuality that could tie it all together -- projective (or synthetic) geometry. Reading through his writings on infinity (and types of infinity) I couldn't help but get the impression that this was a way to intellectualize infinity without really getting down to the main point of how to deal with it on all levels, physically, mentally and spiritually. Projective geometry is important simply because infinity can be dealt with as a scientific reality, and not as an abstraction or an illusion. Rather than all this talk of 4, 5 and 6 dimensions scientists should become aware of the subtleties of this dimension, the living creative forces that of which particulate matter is just a footprint. Ouspensky does move in this direction when he states that the "sun, the moon, the stars, which we see, are cross-sections of spirals which we do not see."

Experimental Mysticism and Dreams and Hypnotism are records of scientific exploration into different states of consciousness (drug induced under "strict scientific experiment" -- which must make it OK), and into dreams, both in sleep and in waking. Definitely some primary borderland materials there worth checking out.

There are a lot of valuable insights in this book, and you will probably enjoy the stimulation of its complex thoughts, but it is pretty much dated and out of touch with where the real "New Science" appears to be heading.

* LIVING WATER - Viktor Schauberger and the Secrets of Natural Energy by Olof Alexandersson, published by Gateway Books, The Hollies, Wellow, Bath, U.K. BA28QJ. \$11.95 US retail price, ISBN 0-946551-57-X. At long last this excellent book is available again. We got our copy through our paperback distributor so it can probably be ordered through any bookstore. An excellent overview of the life and work of 'Water Wizard' Viktor Schauberger. This edition has new appendices which mention Keely, Kervan and Tesla! Appendix I: Contemporary Applications of Vortex Research, and Appendix II: Physics and the Vortex. If you haven't read this book yet it's time to get a copy and check it out. We have received numerous requests for this book over the last 5 years. My only criticism is that this edition has the same listing of references as the original. As anyone knows who wrote the addresses from the original edition they may as well have saved the postage for something useful.

CONTACTS

This is the section where researchers may contact those of like mind or seek out sources of information. We also list various mailers received. Please be kind and considerate and send a buck or two when writing for information.

- * OMEGA COMMUNICATIONS presents: THE UFO EXPERIENCE A Weekend with Researchers and Contactees, Oct 13-14, 1990, Ramada Inn (Exit 12, I-91), North Haven, Connecticut. Paul Devereux, Ann Druffel, Stanton Friedman, James Harder, Antonio Huneeus, Harry Lebelson, Fred Max, Astronaut Brian O'Leary, Gene Phillips, Ed and Frances Walters, Travis Walton. Contact: Omega Communications, PO Box 2051, Cheshire, CT 06410.
- *BIO-DYNAMIC ASSOCIATION, P.O. Box 550. Kimberton, PA 19442, phone (215) 935-7797. Annual BD conference, Oct 5-7, 1990, Kimberton, PA. Theme: WATER AND CALCIUM -- Their Nature, Forces and Management.
- * Television & Community Services, Lawrence Technological University, 21000 W. Ten Mile Rd., Southfield, MI 48075-1058. "The Effects of Artificial Light & Other Environmental Factors on Human Health & Behavior", Dr. John Nash Ott 2 videos (2 hrs. each) \$50 per video or \$80 set, includes postage/handling. Quality information.
- * Natural Energy Works, PO Box 864, El Cerrito, Ca 94530, 415/526-5978. Latest mailer advertises The "Admiral Fitz Roy Stormglass-Barometer". Used for weather forecasting, based on observing the varying crystal formations in the chemical fluid within the device. "...these vials....when it was fairly demonstrated that if fixed, undisturbed, in free air, not exposed to radiation, fire, or sun, but in the ordinary light of a well ventilated room, or preferably in the outer air, the chemical mixture in a so-called storm glass varies in character with the direction of the wind not its force... though it may so vary from another cause, electrical tension. As the atmos-

- pheric current veers toward, comes from, or is only approaching from the polar direction, this chemical mixture i closely, even microscopically watched is found to grow like fir, or fern leaves or like hoar frost or even large but delicate crystallisations...." (from the Weather Book by Fitz Roy) Sounds like a primary piece of weather equipment for those interested in the subtle meteorological energies. \$149 includes surface shipping within USA. Add \$5 for Airmail.
- * Health Consciousness, PO Box 550, Oviedo, FL 32765-0550, 407/365-6681. An interesting holistic magazine edited by Roy Kupsinel, M.D. An open-minded approach to a wide variety of health related subjects. Lots of contacts and good information. Introductory issue offered for \$1.
- * World Research Foundation, 15300 Ventura Blvd. #405, Sherman Oaks, CA 91403, 818/907-5483. International Health Congress "New Directions for Medicine...Focusing on Solutions", Oct 5-7, 1990, Woodland Hills (LA), CA. Presenting breakthrough therapies and technologies from around the world. WRF is doing a good job of finding out about advanced medical techniques from many cultures, ancient and modern, around the globe.
- * Future Technology Intelligence Report, 537 Jones St. #1606, San Francisco, CA 94102. Getting better every issue. Mention you are a Borderland Members and receive a 40% discount off the regular \$250 for 12/issue rate. Editor Antony Sutton has a many contacts and keeps a lot of info flowing.
- *Oxygen Research Institute, 20 Sunnyside Ave #A164, Mill Valley, CA 94941, 415/868-9050. Catalog of products for brain oxygenation, peak performance, skin and body rejuvenation, colon detoxification, water and air purification. Contains basic oxygenation products to air purifiers and state-of-theart ozone generators. Send \$1 for current catalog.
- * Mystic Fire Video, Box 1092, Cooper Station, NYC, NY 10276, 212/677-5040. Quality video catalog covering subjects of philosophy, mythology, literature, art, religion, theater. Once a fairly expensive operation Mystic Fire has just lowered the basic cost for all their videos to around \$30, and they have a very interesting line. Also produce a line of audio tapes sure to provide many hours of advanced thought.
- * Scott Witt, Preventative Health Care Services, 1830 Commercial Way, Santa Cruz, CA 95065, 408/475-0776. Distributor of Genesis 1000, a New Zealand manufactured stabilized oxygen concentrate, to be used as a quality alternative to hydrogen peroxide for getting oxygen into the body. 70 ML (1400 drops), \$17.95, includes shipping.
- * Sacred Stars Newsletter, Bodo Capeller, 10036 Keswick, Sun Valley, CA 91352, 818/841-1158. Published bi-monthly, \$15/year, this newsletter has been quite interesting lately, reporting on Bodo's field work in the vast California desert regions searching for ley lines and other earth energy grid phenomena using dowsing and related methods. Some good fieldwork by an active researcher.

FIRST INTERNATIONAL BORDERLAND SCIENCES CONGRESS -- June 14-17, 1990, Santa Barbara, California. The congress was a huge success in terms of presenting quality information to researchers. The general comments from attendees were along the lines of, "quality information", "clean energy -- no goofy materials", "top rate". While a detailed report is being prepared we wanted to make available the proceedings on audio and video. Trevor James Constable's stunning keynote presentation included proprietary information and will not be publicly distributed. Due to last minute realities of life several speakers could not make it and we were fortunate to have a quality pool of standby speakers on hand. Dr. Tewari and Jim Murray were two who had to cancel at the last minute and their papers will be published in upcoming Journals.

Many thanks to the volunteers who helped pull this one off, especially Donald Hosier of the Rudolf Steiner Research Foundation who handled the audio taping, Alex and Kendra who ran the bookstore, and Marty Ross who kept a close eye on the registration desk. In general we learned quite a bit from this congress, not only in terms of presented materials, but also in terms of how to properly run a conference. Most things went right, some things went wrong. Should the 2nd Borderland Sciences Congress materialize next year (a likely possibility considering the response from this one) it will be a greatly improved setup.

A good review is to be found in the latest issue of raum & zeit, Box 1508, Mt. Vernon, WA 98273

SPEAKER LIST:

Buryl Payne, Demonstration of Instrument that Detects a New Bio-Physical Force

Donald Beans, Radionics - Morphic Resonance & Spectro-Vibratory Imaging

Ed McCabe, Oxygen Therapies

Joan McKenna, The AIDS & Syphilis Connection

Jorge Resines, Invisible Radiations & The Many Grids Theory

Michael Lindemann, UFOS: Toward A New Copernican Revolution

Christopher Hills, The Magical Frequency Band

Murray Bast, Revolution in Farming and Husbandry

Phil Thomas, Edgar Cayce & the Radial-Active Appliance

Terry & Leslie Patten, BioCircuits - Amazing Tools for Energy Health

Alison Davidson, Working of the Stars in Earthly Substance

Karl Maret, Introduction to Spiritual Scientific Medicine & Healing Arts of Tomorrow

Tom Brown, Element and Ether

Vince Wiberg, Electromagnetic & Geopathic Pollution: How to Detect and Counter It

Bruce DePalma, Experiments on Rotation Leading to Development of the N-Machine (three audio tapes, one 2-hour video)

Larry Spring, My Electromagnetic Spherical Theory and My Experiments to Prove It

Dennis Klocek, Astro-Climatology

Fred Mathews, From Embryology to Astronomy, The Relationship of the Natural Sciences

Walter & Rhetta Baumgartner, Vortexian Mechanics and Implosion Research

The entire congress was videotaped. These tapes were mastered on a 3/4" system that only took one hour tapes. While it provided high quality, some of the presentations went slightly over an hour so a few minutes at the end were cut off. Also, due to lighting during slides, etc., a couple of the speakers are in the darkness at times while speaking. We apologize for any inconvenience, and if you are not happy with any tape return it for a full refund.

List price for audio tapes is \$7 each, video tapes are \$30 each. Borderland members may take advantage of the Congress prices of \$6/audio and \$20/video on all orders postmarked before December 31, 1990. P&H (parcel post): Audio tapes \$1./first, \$0.25/additional; Video tapes \$2/first, \$0.50/additional. Double P&H for First Class, triple for Air Mail. California residents add 6.25% sales tax.

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